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9
 10 SUPERIOR COURT OF THE STATE OF CALIFORNIA
 11 COUNTY OF LOS ANGELES - CENTRAL CIVIL WEST DISTRICT

12 In Re LOS ANGELES COUNTY MUNICIPAL) Lead Case No. **BS 080548**
 STORM WATER PERMIT LITIGATION) Related Cases: BS 080753, BS 080758
 13) BS 080791, BS 080792 and BS 080807
 14)
) Judge: Victoria Gerrard Chaney-D. 324
 15)
) **NOTICE OF ENTRY OF**
 16) **STATEMENTS OF DECISION**
 17)

18 TO ALL PARTIES AND THEIR ATTORNEYS OF RECORD:

19 PLEASE TAKE NOTICE THAT on March 23, 2005, the Court entered the Phase I and Phase
 20 II Statements of Decision in the above-entitled matter. The Phase I Statement of Decision is
 21 attached hereto as Exhibit A; the Phase II Statement of Decision is attached hereto as Exhibit B.

22 Dated: March 25, 2005

BILL LOCKYER, Attorney General
 of the State of California
 HELEN G. ARENS
 JENNIFER F. NOVAK
 Deputy Attorneys General

26 By: [Original Signature on File with the Court]
 HELEN G. ARENS
 27 Attorneys for Respondents/Defendants Regional
 Water Quality Control Board, Los Angeles Region
 28 and State Water Resources Control Board



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PROOF OF SERVICE

Re: IN RE L.A. COUNTY MUNICIPAL STORM WATER PERMIT LITIGATION [*Cities Of Arcadia, et al. v. RWQCB*, LASC Case No. BS080548; *City of Los Angeles v. RWQCB*, LASC Case No. BS080753; *County of Los Angeles v. RWQCB*; LASC Case No. BS080758; *City of Alhambra v. RWQCB*, LASC Case No. BS080791; *Los Angeles County EDC v. RWQCB*, LASC Case No. BS080792; *City of Monrovia, et al. v. RWQCB*, LASC Case No. BS 080807]

I declare as follows:

I am employed in the County of Los Angeles, California. I am 18 years of age or older and not a party to the within entitled cause. My business address is 300 South Spring Street, 11th Floor-North, Los Angeles, California 90013.

On March 25, 2005, at my place of business, at Los Angeles, California, I served the attached:

NOTICE OF ENTRY OF STATEMENTS OF DECISION

on the interested parties in this action.

[X] **By Verilaw** - a true and correct copy of the document was electronically served to counsel of record by electronic transfer of the document file via the Internet to Verilaw on March 25, 2005 [Pursuant to "Order Authorizing Electronic Service of Court-filed Documents" entered in this litigation on June 18, 2003].

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on March 25, 2005 at Los Angeles, California.

[Original Signature on File with the Court]

HELEN G. ARENS

RB-AR23156



EXHIBIT A



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FILED
LOS ANGELES SUPERIOR COURT
MAR 24 2005
JOHN A. CLARKE, CLERK
BY E. SABALBURO, DEPUTY

SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF LOS ANGELES - CENTRAL CIVIL WEST COURTHOUSE

In Re LOS ANGELES COUNTY
MUNICIPAL STORM WATER PERMIT
LITIGATION

Lead Case No. **BS 080548**
Related Cases: BS 080753, BS 080758 BS
080791, BS 080792, and 080807
Judge: Hon. Victoria Gerrard Chaney

STATEMENT OF DECISION FROM
PHASE I TRIAL ON PETITIONS FOR
WRIT OF MANDATE

Statement of Decision from Phase I Trial
Hearing: January 7, 2005
Ruling: March 16, 2005
Department: 324-Central Civil West
Date Actions Filed: January 15 & 17, 2003

On May 19-20, 2004, trial was held on Phase I of this bifurcated action, known as *In the Matter of the Los Angeles County Municipal Stormwater Permit*, which involves five coordinated Petitions for Writ of Mandate filed by Petitioners County of Los Angeles and the Los Angeles County Flood Control District (County Petitioners); Petitioners the Cities of Arcadia, Baldwin Park, Bell Gardens, Bellflower, Cerritos, Claremont, Commerce, Covina, Diamond Bar, Downey, Gardena, Hawaiian Gardens, Irwindale, Lawndale, Montebello, Paramount, Pico Rivera, Pomona, Rosemead, San Gabriel, Santa Fe Springs, Sierra Madre, Signal Hill, South Pasadena, Temple City, Vernon, Walnut, West Covina, Whittier, Building Industry Legal Defense Foundation, and Construction Industry Coalition on Water Quality



1 (Arcadia Petitioners); Petitioners Cities of Monrovia, Norwalk, Rancho Palos Verdes, Artesia,
2 Beverly Hills, Carson, La Mirada, Westlake Village, Agoura Hills, Hidden Hills, San Fernando,
3 and San Marino (Monrovia Petitioners); Petitioner City of Alhambra (Alhambra); and Petitioners
4 Los Angeles County Economic Development Corporation and the Cities of Industry, Lakewood,
5 Santa Clarita and Torrance (LAEDC Petitioners) against the Regional Water Quality Control
6 Board, Los Angeles Region (Regional Board). The Natural Resources Defense Council, Santa
7 Monica Baykeeper, and Heal the Bay (Intervenors) intervened as Respondents in Intervention in
8 support of the Permit.

9 After full briefing and oral argument, the Court, the Honorable Victoria Gerrard Chaney
10 presiding, issues the following Statement of Decision on the Phase I issues. All parties were
11 present and represented by counsel. Howard Gest appeared on behalf of the County Petitioners;
12 Rufus C. Young and Amy Morgan appeared for the Alhambra and LAEDC Petitioners; Richard
13 Montevideo and Peter Howell appeared for the Arcadia Petitioners; John J. Harris and Evan J.
14 McGinley appeared for the Monrovia Petitioners; Jennifer Novak and Helen Arens, Deputy
15 Attorneys General appeared for the Regional Board; David Beckman, Anjali Jaiswal and Leslie
16 Mintz appeared for the Intervenors. This Statement of Decision applies only to the Phase I
17 issues presented to this Court. All remaining issues are addressed in the Phase II Statement of
18 Decision.

19 Phase I of this bifurcated proceeding involved the following issues, as framed in the Joint
20 Statement Regarding Briefing and Hearing Schedule, filed on March 2, 2004:

- 21 1. Petitioners' allegations that Part 2 of the Permit ("Receiving Water Limitations") is
22 ambiguous, arbitrary, unsupported by the Record, and contrary to the "good faith" safe
23 harbor intentions of the Respondent and renders compliance with the Permit impossible
24 and impracticable;
- 25 2. Petitioners' allegations that the Permit exceeds the Respondent's authority under
26 the federal Clean Water Act and California's Porter-Cologne Water Quality Act by
27 imposing requirements that go beyond the Clean Water Act's "maximum extent
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1 practicable” (“MEP”) standard and/or the Porter-Cologne Act’s “reasonably achievable”
2 standard;

3 3. Certain Petitioners’ allegations that the Permit unlawfully regulates discharges
4 “into”, as opposed to only “from”, the municipal separate storm sewer system contrary to
5 the Clean Water Act and without authority under the Porter-Cologne Act;

6 4. Petitioners’ allegations that Respondent acted without authority by adopting
7 Permit terms that unlawfully direct Petitioners to modify their General Plans and/or their
8 CEQA guidelines, and that unlawfully compel Petitioners to review development projects
9 in a manner that is contrary to or different from the process provided for by the California
10 Legislature, with Respondent violating the Separation of Powers doctrine under the
11 California Constitution;

12 5. Certain Petitioners’ allegations that the Permit unlawfully interferes with their
13 land use authority; and

14 6. Petitioners’ allegations that the Permit was adopted in violation of CEQA, as
15 Respondent failed to comply with the environmental review requirements of CEQA. (To
16 what extent was the Respondent required to comply with CEQA in adopting the Permit
17 and did the Respondent so comply.)

18
19 **Holding**

20 With some caveats, the Court denies the petitions for writ of mandate as they relate to the
21 Phase I issues.

22 To obtain a writ of mandate under Code of Civil Procedure section 1094.5, Petitioners
23 must prove that Respondent, the Regional Board: 1) proceeded without or in excess of
24 jurisdiction; 2) issued its Permit without first holding a fair hearing; or 3) prejudicially abused its
25 discretion. Abuse of discretion is established if the Respondent: a) has not proceeded in a
26 manner required by law; b) the Permit is not supported by findings; or c) the findings are not
27 supported by the evidence.



1 Petitioners failed to demonstrate that Respondent exceeded its jurisdiction.

2 Petitioners do not appear to argue that the Permit was issued without a fair hearing. If
3 this argument were made, 80,000 pages of the administrative record (“the Record”) and
4 approximately 50 meetings between Regional Board staff and interested parties would confute
5 the argument.

6 Neither have Petitioners demonstrated that Respondent failed to proceed in a manner
7 required by law, that the Permit is unsupported by the findings, or that the findings are
8 unsupported by the evidence. Therefore, the Court finds no prejudicial abuse of discretion.

9
10 **Permit Part 2: Receiving Water Limitations**

11 Petitioners assert several arguments with respect to Part 2 of the Permit, Receiving
12 Waters Limitations. In particular, Petitioners assert that subparts 2.1, 2.2, 2.3, and 2.4 of Part 2
13 create ambiguity, that Part 2 must include a “safe harbor” provision, and that the Permit,
14 including Part 2, unlawfully exceeds the MEP standard.

15 The Permit cannot be read in a vacuum. In interpreting the Permit the Court looks to the
16 content of Part 2, other language and provisions in the Permit, other related statutes and
17 regulations, and the technical and specialized nature of NPDES permits together with the
18 expertise of those who implement them. (See *Department of Alcoholic Beverage Control v.*
19 *Alcoholic Beverage Control Appeals Bd.* (2003) 109 Cal.App.4th 1687, 1696; see also *Northwest*
20 *Environmental Advocates v. Portland* (9th Cir. 1995) 56 F.3d 979, 982; *United States v.*
21 *Weitzenhoff* (9th Cir. 1994) 35 F.3d 1275, 1289.)

22 The terms of the Permit are governed by 33 U.S.C. section 1342, subdivision (p)(3)(B) of
23 the Clean Water Act, which includes the “requirement to effectively prohibit non-stormwater
24 discharges into the storm sewers”; the Maximum Extent Practicable standard¹; and the separate

25
26 ¹ See Permit at 57 citing (*In the Matter of the Petitions of the Cities of Bellflower et al.* (Oct. 5,
27 2000) SWRCB WQ 2000-11 at 20 (R007511); see Memorandum from Elizabeth Miller
28 Jennings, Senior Staff Counsel, SWRCB, *Definition of Maximum Extent Practicable* (Feb. 11,
1993) at 3 (R0028353); 40 C.F.R. §122.26(d)(2)(iv); *NRDC v. Costle* (D.C. Cir. 1977) 568 F.2d
1369, 1375; *NRDC v. U.S. EPA* (9th Cir. 1992) 966 F.2d 1292, 1296, 1308; *Browner* 191 F.3d at



1 authority of the Regional Board to require “such other provisions” necessary to meet water
2 quality standards. The Permit is governed also by the Porter-Cologne Act section 13263, to the
3 extent it is not inconsistent with federal law; and Part 2 should be interpreted in light of the
4 findings of experts, including the Regional Board,² precedential orders,³ and related Clean Water
5 Act provisions, such as those that provide for the adoption of TMDLs.⁴

6 Pursuant to these authorities and guides, the Court rejects Petitioners’ assertion that the
7 MEP standard is the sole standard that applies to municipal storm water discharges and their
8 related contention that MEP is a substantive upper limit on requirements that can be imposed to
9 meet water quality standards. In *Defenders of Wildlife v. Browner* (9th Cir. 1999) 191 F.3d 1159
10 (*Defenders of Wildlife*), the Ninth Circuit noted: “Under that discretionary provision [of Section
11 402(p)(3)(B)], the EPA has the authority to determine that ensuring strict compliance with state
12 water-quality standards is necessary to control pollutants. The EPA also has the authority to
13 require less than strict compliance with state water-quality standards.” (191 F.3d at p. 1166.)
14 The Regional Board, which is authorized to enforce the Clean Water Act pursuant to Water Code
15

16 1168-67 (permitting authority’s broad discretion to specify BMPs and determine whether MEP is
satisfied).

17 ² See, e.g., Long Beach Municipal Stormwater Permit (Los Angeles RWQCB Order 99-060 at 6-
18 7 (R0008599-600); Ventura County Municipal Stormwater Permit (Los Angeles RWQCB Order
00-108) at 9 (R0008753); Caltrans Stormwater Permit (State Board 99-06) at 10-11 (R0003225);
19 Ltr from Alexis Strauss, Acting Director, Division of Water, EPA Region IX (Mar. 17, 1998) at
20 2 (R0008582); 61 Fed.Reg. 43,761 *EPA Interim Permitting Approach*; Memorandum from
Michael A.M. Lauffer, Staff Counsel, SWRCB, *Legal Issues Concerning Renewal of Order 96-
054* (Nov. 9, 2001) at 12 (R0007374); Memorandum from Regional Board Staff for Nov. 29,
21 2001 Meeting at A.9-A.10 (R0006796-97).

22 ³ See, e.g., *Own Motion Review of the Petition of Environmental Health Coalition* SWRCB WQ
98-01 at 5 (R0001973) amended by *Own Motion Review of the Petition of Environmental Health
23 Coalition* SWRCB WQ 99-05 at 1-2 (R0001965-66) (“as a precedent decision, the following
24 receiving water limitation language shall be included in future municipal storm water permits”
without a safe harbor) (R0001965-66); *In the Matter of the Petitions of BIA*, SWRCB WQ 2001-
25 15 at 5-7 (R0007530-32); see also *In the Matter of the Petition of Citizens for a Better
Environment, et al.* SWRCB order 91-03 at 36 (R0066466).

26
27 ⁴ See Fact Sheet 14-15 (R0008047-48); 40 C.F.R. § 122.44(a)(1) (TMDL implementation in
28 stormwater management plans), 40 C.F.R. § 130.6(c)(1); Cal. Water Code § 13263.



1 sections 13370 and 13377, can also require compliance with water quality standards. (See
2 *Building Industry Association of San Diego County v. State Water Resources Control Board*
3 (2004) 124 Cal. App. 4th 866 (*Building Industry Association*) [rejecting the claim that the MEP
4 standard is the exclusive measure that may be applied to municipal storm sewer discharges].)

5 It seems clear that the Regional Board followed these principles when it established
6 subparts 2.1 and 2.2 as the basic receiving water requirements for Los Angeles area waters and
7 subparts 2.3 and 2.4 as the procedure the Board intends to implement to resolve any violations
8 those requirements. (See *Building Industry Association, supra*, 124 Cal.App.4th at p. 890
9 [“Although the Permit allows the regulatory agencies to enforce the water quality standards
10 during this process, the Water Boards have made clear in this litigation that they envision the
11 ongoing iterative process as the centerpiece to achieving water quality standards.”]; see generally
12 *Defenders of Wildlife, supra*, 191 F.3d 1159; *NRDC v. Costle* (D.C. Cir. 1977) 568 F.2d 1369,
13 1375; *NRDC v. U.S. EPA* (9th Cir. 1992) 966 F.2d 1292, 1296, 1308.)

14 Under this process, the first step to correct water quality violations that occur, even if a
15 permittees’ SQMP has been designed to achieve standards and BMPs have been timely
16 implemented, is set forth in subpart 2.3, the “iterative” process. Should that not be sufficient, the
17 parties would move to subpart 2.4, Best Management Practices (BMP) requirements. The
18 process requires cooperation from the Regional Board, State Board and local government entities
19 and impliedly requires that all parties work together in good faith.

20 This reading is consistent with the requirements of the Clean Water Act generally and
21 section 402 specifically, as well as the Porter-Cologne Act. (See 33 U.S.C. § 1342(p)(3)(B)(iii);
22 33 U.S.C. §§ 1341(a)(1)-(2), 1342(a)(2), 1342(p)(3)(B)(ii); 40 C.F.R. 122.4(d); Cal. Water Code
23 §§ 13000, 13263(a).) It is also consistent with State Board orders WQ 2001-15 and WQ 99-05
24 and the Francine Diamond letter, found at Exhibit B to Petitioners’ Request for Judicial Notice.

25 Reading the Receiving Waters Limitations language in this manner, there is no tension
26 between the subparts and no ambiguity.



1 Petitioners assert that the Regional Board was required under the Porter-Cologne Act and
2 CEQA to consider certain factors when issuing the Permit, including economics, reasonably
3 achievable water quality conditions, potential and environmental impacts, alternatives to the
4 proposed requirements and mitigation measures for any requirements adopted. In a later section
5 of this Statement of Decision and in the Statement of Decision from Phase II of trial the Court
6 rejects these arguments but finds that in any event the Regional Board met any such obligations
7 by considering these factors in addressing the MEP standard. In addition, where applicable, the
8 Total Maximum Daily Load (TMDL) procedures allow for correction of water quality problems
9 in a graded manner over a period of years. The TMDL procedures provide some protection from
10 unreasonable enforcement by the Regional Board.

11 In sum, the Regional Board acted within its authority when it included Parts 2.1 and 2.2
12 in the Permit without a "safe harbor," whether or not compliance therewith requires efforts that
13 exceed the "MEP" standard. (*Defenders of Wildlife*, supra, 191 F.3d 1159; *Building Industry*
14 *Association* 124 Cal. App. 4th at p. 884.) In so concluding, the Court gives deference to State
15 Board order 99-05, a precedential decision under Government Code section 11425.60, and notes
16 the EPA's objection to specific safe harbor language. (See *Own Motion Review of the Petition of*
17 *Environmental Health Coalition* SWRCB WQ 99-05 at 1-2 (R0001965-66); see also Letter from
18 Alexis Strauss, Acting Director, Division of Water, EPA Region IX (Mar. 17, 1998) at 2
19 (R0008582).) The Court emphasizes the importance of good faith on the part of all parties in
20 implementing Part 2.

21 22 **Maximum Extent Practicable Standard**

23 Further, Petitioners assert that the Permit cannot go beyond the maximum extent
24 practicable ("MEP") standard under the Clean Water Act and this Permit is inconsistent with the
25 MEP standard. As noted, even if the Permit did exceed the MEP standard, the Regional Board
26 was within its authority in requiring more stringent standards. However, the Court finds that the
27 administrative record contains significant evidence showing that the terms of the Permit taken, as
28



1 a whole, constitute the Regional Board's definition of MEP, including, but not limited to, the
 2 challenged Permit provisions. There is significant evidence in the administrative record that the
 3 Regional Board looked to both other states and jurisdictions, and conducted its own independent
 4 studies regarding various methods for compliance with MEP.⁵ This Court specifically finds that
 5 the Regional Board conducted considerable research and review to ensure that the best
 6 management practices ("BMPs") were available and reasonable.⁶ For example, the
 7 administrative record contains *The Fundamentals of Urban Runoff Management: Technical and*
 8 *Institutional Issues*, which demonstrated an effective and available method for removing
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10
 11 ⁵ See, e.g., Permit at 14 (development and redevelopment activities); Permit at 18
 12 (implementation of all BMPs in SQMP); Final Fact Sheet/Staff Report (Dec. 13, 2001) ("Fact
 13 Sheet") at 15-17 (public education and participation) (R0008048-50); Fact Sheet at 19-25
 14 (industrial/commercial program and inspections) (R0008052-58); Fact Sheet at 38-40 (public
 15 agency activity) (R0008071-73); Fact Sheet at 40-45 (development and redevelopment activity)
 16 (R0008073-78); Long Beach Municipal Stormwater Permit (Los Angeles RWQCB Order 99-060
 17 (R0008599-600); Ventura County Municipal Stormwater Permit (Los Angeles RWQCB Order
 18 00-108) (R0008753); Caltrans Stormwater Permit (State Board 99-06) at 10-11
 19 (R0003225). Comparison of Permit with Orange County and Santa Clara Permit (R0031402);
 Orange County Permit Proposed Monitoring Program (R0054938); Riverside Permit (R0055287-
 88); Denver Urban Stormwater Drainage Manual (R0056744-46); San Francisco BMPs
 (R0057414); Watershed Ordinance for Austin, TX (R0058074); Orange County DAMP
 (R0058399); San Bernardino Permit (R0061460); Ventura Permit (R0061493); Fresno Permit
 (R0061511); Sacramento Permit (R0061585); San Francisco Bay Area Permit (R0061636);
 Santa Cruz Region Permit (R0061652); Sarasota Permit (R0061666); Tulsa Permit (R0061773);
 Anchorage Permit (R0061805) (New York State Stormwater Management Design Manual
 (R0009514); Virginia Stormwater Management Manual (R0009529).

20 ⁶ See, e.g., Allison, Robin, Effectiveness of Two Storm Water Trash Trapping Systems
 21 (R0068962-63); Leecaster, Molly K., Assessment of Efficient Sampling Designs for Urban
 22 Stormwater Monitoring (R0022854-60); Radulescu, Dan, Storm Water Quality Task Force BMP
 23 Guide for Retail Gasoline Outlets (Nov. 2001) (R0007546-50); Radulescu, Dan, Retail Gasoline
 24 Outlets: New Development Design Standards for Mitigation of Storm Water Impacts (Dec.
 25 2001) (R0007598-607); Dallman, Suzanne, Storm Water: Asset not Liability (Dec. 3, 1999)
 26 (R0068878-913); Pitt, Robert, Illicit Discharge Detection and Elimination (May 2001)
 27 (R0011273); Swamikannu, Xavier, SUSMPs Presentation to the Regional Board (Jan. 26, 2000)
 28 (R0068726-40); Othmer, Edward F., Performance Evaluation of Structural BMPs: Drain Inlet
 Inserts (R0007566-78); Los Angeles County Requirements, Section Three (R0068875-77);
 Schueler, Thomas, R., Better Site Design: Changing Development Rules to Protect the
 Environment (1999) (R0068693-95); A Guide to Better Site Planning (R0068868-73); Urban
 Runoff: New Development Management Measure (R0068713-22); Ferguson, Bruce K.,
 Stormwater Infiltration (R0068914-15); Horner, Richard R., Fundamentals of Urban Runoff
 Management: Technical and Institutional Issues (Aug. 1994) (R0068930-61); Ltr from NRDC to
 Regional Board re: SUSMPs (Jan. 14, 2000) (R0068840-61).



1 pollutants. (Horner, R., *Fundamentals of Urban Runoff Management: Technical and*
2 *Institutional Issues* (Aug. 1994) (R0068930).) The administrative record also shows that the
3 Regional Board considered State Board order 2000-11, which held that the Standard Urban
4 Stormwater Mitigation Plans ("SUSMPs") "are consistent with MEP and therefore are federally
5 mandated." (*In Re Cities of Bellflower, et al.* (2000) SWRCB Order 2000-11 (R0007506).)
6 Additional challenges to the SUSMPs are rejected in the Statement of Decision from Phase II of
7 trial in deciding Issue 6.
8

9 The Court finds that there was no issue of impossibility. The administrative record
10 demonstrates that there are (1) BMPs available to meet the terms of the Permit consistent with
11 the MEP standard, and (2) that those BMPs are reasonable. The administrative record supports
12 the conclusion that the research and review were conducted by the Respondent.⁷
13

14 This Court finds based on the administrative record that the Regional Board made
15 considerable findings regarding (1) the positive effects of storm water management and (2) the
16 cost of potential programs and BMPs. (See e.g. Permit at 2-4, 8-10, 12-14; Fact Sheet at 3-7
17 (R0008036-40).) The Regional Board considered the history of implementation costs, both in
18 prior permits for Petitioners and costs in other states.⁸
19

20 ⁷ See *supra* notes 7 and 8; see also Addendum (consideration of EPA documents).

21 ⁸ See, e.g., Yamaguchi, Marianne, *Comparative Cost of the LA County Storm Water*
22 *Management Program* (June 10, 1996) (R0031426-30; R0031431-44); Regional Board, Slide
23 Presentation of MS4 Permit (Dec. 13, 2001) (R0007660); SUSMPs, *BMP Cost Estimates* (Nov.
24 30, 1999) (R0068731-33); Santa Monica Bay Tourism and Recreational Beach Use (1994)
25 (R0031447); Los Angeles 1998 Economic and Demographic Info. (1998) (R0010984-85);
26 Permit Costs, City of Manhattan Beach (June 17, 1996) (R0031445); U.S. EPA, *Economic*
27 *Benefits of Runoff Controls* (Sept. 1995) (R0010711-12); U.S. EPA, *Data Summary of Urban*
28 *Stormwater Best Management Practices* (Aug. 1999) (R0010735-36); *Cost and Benefits of Storm*
Water BMPs (Sept. 14, 1998) (R0073087-135); U.S. EPA, *Economic Analysis of the Storm*
Water Phase II Rule (Aug. 1, 1997) (R0010281-82); U.S. EPA, *Liquid Assets: A Summertime*
Perspective on the Importance of Clean Water to the Nation's Economy (May 1996)
(R0066961); *The Role of Metropolitan Areas in the National Economy* (R0011017); *The*
Benefits of Better Site Design in Commercial Development (R0011499-508); Billingsley, Janice,
Study Nails Building Costs (Sept. 4, 2000) (R0010703); U.S. Dept. of Commerce, *Economic*
Valuation of Natural Resources: A Handbook for Coastal Resource Policymakers (June 1995)



1 CEQA Compliance

2 Several Petitioners assert that the Court should invalidate the action of the Regional
3 Board on the grounds that the Regional Board failed to comply with the California
4 Environmental Quality Act (CEQA), and failed to conduct the necessary environmental review
5 required by CEQA. They acknowledge that in issuing a National Pollutant Discharge
6 Elimination System (NPDES) permit, the Regional Board is exempt from complying with
7 CEQA's requirement to prepare Environmental Impact Reports or negative declarations. (See
8 Wat. Code, § 13389; Cal. Code of Regs., Title 14, § 15263; *Committee for a Progressive Gilroy*
9 *v. State Water Resources Control Board* (1987) 192 Cal.App.3d 847, 862.) Petitioners allege
10 that the Regional Board was to comply with the "policy" requirements of CEQA, pointing to
11 Public Resources Code sections 21000 and 21001.
12

13
14 The Court rejects the argument that the Regional Board violated CEQA. The Court
15 agrees with the Regional Board that the issuance of the subject Permit was exempt from all
16 aspects of CEQA. The Court acknowledges the State Board's finding that complying with
17 CEQA's "policy" provisions means that in adopting the Permit, the Regional Board should
18 consider any environmental reports or similar documents submitted during the adoption process.
19 (See State Board Orders WQ 75-8 & 84-7, attached to Petitioners' Request for Judicial Notice as
20 Exhibits D & E.) This interpretation of CEQA is consistent with the Legislature's stated intent
21 that the environmental review documents contain the discussion of any adverse environmental
22 impacts, alternatives, mitigation possibilities, etc. (Pub. Resources Code, §§ 21002.1, 21003.1;
23
24

25 (R0042398); Griffin, Adrian, *Economic Issues in Water Quality Regulation* (R0010706-07); U.S.
26 Conference of Mayors, *U.S. Metro Economies: The Engines of America's Growth* (July 2001)
27 (R0010916, R0010918); Washington State Dept. of Transport. and Ecology, *Cost Analysis,*
28 *Washington Dept. of Ecology Year 2001* (Aug. 30, 2001) (R0010780); Virginia Dept. of
Conservation and Recreation, *The Economic Benefits of Protecting Virginia's Streams, Lakes,*
and Wetlands (Oct. 2001) (R0010880-85; R0010909-11).



1 cf. Cal. Code of Regs., title 14, § 15063.) CEQA requires public agencies to generate
2 sufficiently informative documents so that decisions are made with full consideration of the
3 environmental consequences. (*Laurel Heights Improvement Assn. v. Regents of University of*
4 *California* (1988) 47 Cal.3d 376, 392.) This makes the environmental impact report the “heart”
5 of CEQA, (*Sierra Club v. State Bd. of Forestry* (1994) 7 Cal.4th 1215, 1229 [citation omitted]).
6
7 Petitioners’ arguments cannot be accepted because they would render the Regional Board’s
8 exemption from this requirement illusory. Petitioners have not argued that the Regional Board
9 failed to consider existing environmental documents as provided in State Board orders 75-8 and
10 84-7. The Court finds that the Regional Board had before it and considered the necessary
11 information concerning the environment.

12
13 In addition, having found the Permit is consistent with the Clean Water Act with respect
14 to the MEP standard and other Phase I issues, the Court respectfully disagrees with Petitioners’
15 contention that the Permit goes “far beyond” the Clean Water Act’s mandates. Also, a finding
16 that the Permit’s adoption was not bound by these CEQA reporting requirements is consistent
17 with Congress’ intent to streamline environmental regulation. (See 33 U.S.C. § 1371, subd. (c);
18 *Pacific Legal Foundation v. Quarles* (C.D. Cal. 1977) 440 F.Supp 316, 320-21 & fn. 2.) Under
19 the Porter-Cologne Act, a California-issued NPDES permit must be consistent with federal law
20 and intent. (See Wat. Code, §§ 13370, 13372; *Pacific Water Conditioning v. City Council of*
21 *Riverside* (1977) 73 Cal.App.3d 546, 556.)
22

23 The Court therefore finds that in adopting the Permit, the Regional Board did not act in a
24 manner that was contrary to law, outside the scope of its authority or without the support of the
25 weight of evidence in the record with respect to Petitioners’ CEQA violation claim.
26
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28



1 **CEQA Amendment Claim**

2 Turning next to Petitioners' claim that the Permit violates the separation of powers and
3 unlawfully "amends" the CEQA process, the Court finds that Petitioners have not met their
4 burden under section 1094.5. Petitioners' argument rests on the belief that CEQA occupies the
5 field of environmental review. Petitioners present no authority to demonstrate this alleged
6 legislative intent.
7

8 Public Resources Code section 21003 demonstrates that the Legislature intended CEQA
9 to be *an* environmental review process, not the *only* one. When more than one review occurs,
10 these should be coordinated as much as possible. The plain language of this statute supports this
11 reading. Given the powers vested in the Regional Board to implement water quality control and
12 coordination under the Porter-Cologne Act, the Regional Board can require additional
13 environmental reviews consistent with this authority and it can specify and require actions to
14 ameliorate the impacts of polluted runoff without offending CEQA. (See, e.g., Pub. Resources
15 Code, § 21174; *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 274.)
16

17 The Court also finds that the equitable doctrines of estoppel, laches and waiver apply
18 here. When applying for their 1996 permit, the permittees advised the Regional Board that much
19 of their storm water consideration could be "channeled" through the compliance effort of CEQA.
20 (R0060482.) They proposed coordination with their existing CEQA processes, finding that the
21 CEQA checklist to assess initial studies could also indirectly address potential impacts to storm
22 water, with additions to the form. (R0060482, 0060555, 0060629.) The 1996 permit therefore
23 included a requirement that permittees amend their CEQA review process to include storm water
24 considerations. (R0008514.) Indeed, it imposed a deadline of 1998 to develop CEQA guidelines
25 and 1999 to incorporate them into the permittees' internal procedures. (R008514, R008510.)
26
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28



1 Yet none of these Petitioners availed themselves of the right to challenge this provision to
2 the State Board under Porter-Cologne Act section 13320. At argument, Petitioners represented
3 that they complied with the 1996 permit's requirements. In addition, when applying for the
4 subject Permit, they proposed that this provision be added to the Permit. (R0000032.) This
5 conduct is inconsistent with their current position. The equitable doctrines of waiver, laches and
6 estoppel can apply to municipalities. (See, e.g., *City of Los Angeles v. County of Los Angeles*
7 (1937) 9 Cal.2d 624, 628, 630; *Pettitt v. City of Fresno* (1973) 34 Cal.App.3d 813, 820.) The
8 Court is satisfied under these facts that those doctrines apply here to bar Petitioners' claims on
9 this issue.
10

11
12 **General Plan Amendment Claim**

13
14 Along a similar vein, Petitioners argue that the Permit, specifically the sections on new
15 development and redevelopment and General Plans, constitutes land use planning, infringing
16 upon the municipalities' land use authority. The Court respectfully disagrees with the Alhambra
17 and LAEDC Petitioners and follows *California Coastal Commission v. Granite Rock* (1987) 480
18 U.S. 572 [107 S.Ct. 1419] holding that an environmental regulation is not a land use regulation.
19 The Court finds that these are environmental regulations that do not dictate the manner in which
20 the permittees are to use the land. Instead, while there may be some limitations, this court finds
21 these sections represent environmental regulations, not land use regulations. These regulations
22 are clearly for the greater good. The Permit itself notes that the Regional Board did not intend
23 the Permit to restrict or control local land use decision-making authority, but contemplated that
24 while permittees exercised that authority, they fulfilled Clean Water Act requirements to reduce
25 the discharge of pollutants from new development and redevelopment activities. (Permit, at p.
26 14.)
27
28



1 In addition, the cases which Petitioners cite regarding land use planning stand for the
2 general proposition that land use planning falls within the authority of local governments and
3 agencies. Yet even then, land use planning must be consistent with general laws. The California
4 Constitution Article 11 section 7 states that a county or city may not enact laws that conflict with
5 general laws. This position is further supported by the case of *City of Los Angeles v. State of*
6 *California* (1982) 138 Cal.App.3d 526, 532 for matters of statewide concern. The Porter-
7 Cologne Act contains the Legislature's finding that water quality is a matter of statewide
8 concern, requiring a statewide program administered at a regional level. (See, e.g., Wat. Code, §
9 13000; see also generally *Southern California Edison v. State Water Resources Control Board*
10 (1981) 116 Cal.App.3d 751, 758.) 33 U.S.C. section 1251 has a companion policy statement in
11 the Clean Water Act, where Congress found that water quality is a matter of federal concern.
12

13
14 In this connection, the Court disagrees with the Arcadia Petitioners that the Regional
15 Board cannot act on behalf of the State Board. The Porter-Cologne Act sections 13001 and
16 13225 clearly authorize a regional board to act on behalf of the State Board. Additionally, it
17 makes more sense to allow a regional board to act on behalf of the State Board because a
18 regional board would be more aware of the specific problems in its area/region of the state as
19 compared to the State Board. If permittees and other interested parties had to deal with one large
20 board, as opposed to larger regional boards, then there would not necessarily be specialists in the
21 particular problems of that region, such as clay soil, mountains or other unique features not
22 occurring in different regions. (e.g. Northern California, the farming communities, Central
23 California, and Los Angeles County metropolis are unique.) Allowing regional boards provides
24 greater efficiency by processing the permits more expeditiously by specialists in specific areas.
25

26 Porter-Cologne Act section 13001 gives the Water Board primary responsibility to
27 control and coordinate water quality, with a broad grant of authority. However, Porter-Cologne
28



1 Act section 13225 empowers the Regional Board with regional duties and obligations to prevent
2 and abate problems and set water policies which deal with water pollution and nuisances.

3 Porter-Cologne Act section 13240 allows for the adoption of plans by the Regional Board, which
4 clearly gives the Regional Board authority to act in this instance, and Porter-Cologne Act section
5 13002 gives the Regional Board authority over local government entities.
6

7 The Court also finds that the equitable doctrines of waiver, laches and estoppel do apply
8 to bar Petitioners' land use allegations. This finding is based on Petitioners' own actions and
9 proposals, as well as the 1996 permit. As early as 1995, the permittees submitted an application
10 for the 1996 permit in which they indicated that their General Plans were the legal "backbone"
11 for the planning process and all development approvals must be consistent with the policies,
12 objectives and principles set forth in the General Plan. They further offered: "Discussion of
13 stormwater issues in the General Plan could greatly enhance the awareness of the issues and
14 encourage full assessment of possible adverse impacts on stormwater quality as the result of new
15 and redevelopment." (R0060556.) The 1996 permit, at section 3(b) included a requirement that
16 each permittee include watershed and storm water management considerations whenever the
17 relevant portions of its General Plan were amended. (R0008514.) None of the parties before the
18 Court today challenged, either administratively or judicially, this requirement in the 1996 permit.
19
20

21 Petitioners argue that they were not required to challenge this provision in the 1996
22 permit but were entitled to simply tolerate it. However, as with the CEQA arguments, their
23 current position regarding land use are contradicted by the fact that when applying for the current
24 permit, they specifically requested inclusion of this provision. In their proposed permit, they
25 included a requirement similar to the one found in the 1996 permit and virtually identical to the
26 one that the Regional Board eventually included in the challenged Permit. (See R00000032,
27 Permit at p. 41.) Respondent and Intervenors have noted that prior permits and the permittees'
28



1 application for a permit serve as the basis for drafting and adopting a subsequent permit. In
2 drafting and adopting the subject Permit, the Regional Board considered and relied upon
3 programs implemented and proposed by the permittees. This series of events and actions satisfy
4 the Court that the equitable doctrines of waiver, estoppel and laches apply.
5

6 **Discharges "Into" and "From" the Storm Drain System**

7
8 The Court denies the petitions for writ of mandate with respect to the "into" versus
9 "from" argument. First, Respondent and Intervenors have demonstrated that the Clean Water
10 Act itself uses the words "in" or "into," not just "from." (See, e.g., 33 U.S.C. § 1342(p)(3)(B)(ii);
11 40 C.F.R. § 122.26(d)(1)(ii), 122.26(d)(1)(v)(B), 122.26(d)(2)(iv)(D), 122(d)(2)(iv)(B);
12 122.26(d)(1)(v), 122.26(d)(2)(iv)(A)(6), 122.26(d)(2)(iv)(A), 122.26(d)(2)(iv)(A)(2).)

13
14 Second, the Clean Water Act section 402(p)(3)(B)(ii) prohibits the discharge of non-
15 stormwater "into" storm sewers. (33 U.S.C. 1342(p)(3)(B)(ii).) The administrative record also
16 contains an admission by Petitioners that "the most effective way of dealing with stormwater
17 runoff is to deal with it at the source before it becomes a problem"—before it goes into the
18 system. (Ltr from Executive Advisory Committee (Aug. 6, 2001) (R0004878).) In addition,
19 State Board 2001-15, discusses the "into" versus "from" issue, stating, "It is important to
20 emphasize that dischargers into MS4s continue to be required to implement a full range of
21 BMPs, including source control." (*In re Building Industry Association of San Diego County, et*
22 *al.* (2001) SWRCB Order 2001-15 at 10 (R0007535).)

23
24 Third, although this Court recognizes that it may not always be possible to prevent
25 something from going into the system, it probably is the cheapest method. If something does not
26 go in, then there is no concern about it coming out the other end. If the contaminant does not
27 enter the system, there is no need to process it at the end of the system. If the system is
28



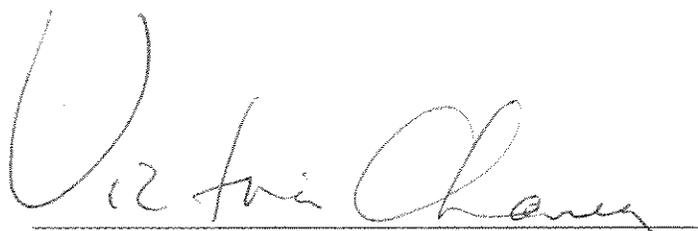
1 overloaded at the final point by flood, for example, there are less toxic materials which could
2 then enter the general water system.

3 Fourth, the Court does not look at the word "in" in quite as restrictive a manner as the
4 Arcadia and Monrovia Petitioners. The Arcadia and Monrovia Petitioners argued that the word
5 "in" only relates to the point of origin, and that this limits petitioner's ability to set regional
6 controls. However, what constitutes "in" depends on at what point one looks at the storm drain
7 system. Analogizing the storm drain system to a tree, any of the junctures between one little
8 leaf, the first little branch, twig, or a slightly larger branch, could be either from or into a regional
9 control or "from" that and "into" the larger system. The Court finds that the Permit's regulation
10 of what goes "into" the storm drain does not take away from the Petitioners' rights and needs to
11 control the process.
12

13
14 Finally, by regulating discharges into the storm drain system, Petitioners have the
15 opportunity to try to deal with it at the source of the contamination, like the car wash example
16 mentioned by the County Petitioners. It would allow Petitioners to review the car wash's
17 activities and stop the point of the contamination, while still permitting Petitioners to deal with
18 the regions. Petitioners could potentially control an area of five square miles at the source and
19 also operate a larger detention basin or treatment facility, as the Arcadia Petitioners referred to as
20 a regional approach. Regulating discharges "into" the storm drain system does not take away
21 from the regional approach as argued by the Arcadia Petitioners. Thus, this Court resolves this
22 issue in favor of the Regional Board and Intervenors.
23

24 IT IS SO ORDERED.

25 Dated: March ²⁴~~16~~, 2005

26
27 
28 VICTORIA GERRARD CHANEY
JUDGE OF THE SUPERIOR COURT



1 Addendum

2 Examples of Regional Board Consideration of US EPA Documents

- 3 US EPA, *Draft Data Summary for the Construction and Development Industry* (Feb. 2001)
(R0020445)
- 4 US EPA, *Estuarine and Coastal Marine Waters: Bioassessment and Biocriteria Technical
Guidance* (Dec. 2000) (R0022664)
- 5 US EPA, *National Conference on Tools for Urban Water Resource Management & Protection –
Proceedings*, Chicago, IL. Feb. 7-10, 2000 (July 2000) (R0019356)
- 6 US EPA, *Storm Water Phase II Compliance Assistance Guide* (March 2000) (R0010593)
- 7 US EPA, *Report to Congress on the Phase II Storm Water Regulations* (Oct. 1999) (R0010418)
- 8 US EPA, *Storm Water O&M Fact Sheet: Catch Basin Cleaning* (September 1999) (R0022652)
- 9 US EPA, *Storm Water Technology Fact Sheet: Sand Filters* (Sept. 1999) (R0022645)
- 10 US EPA, *Storm Water Technology Fact Sheet: Water Quality Inlets* (Sept. 1999) (R0022639)
- 11 US EPA, *Storm Water Management Fact Sheet: Record Keeping* (Sept. 1999) (R0017615)
- 12 US EPA, *Storm Water Management Fact Sheet: Coverings* (Sept. 1999) (R0017612)
- 13 US EPA, *Preliminary Data Summary of Urban Storm Water Best Management Practices* (Aug.
1999) (R0017609)
- 14 US EPA, *National Conference on Retrofit Opportunities for Water Resource Protection in
Urban Environments – Proceedings*, Chicago, IL, Feb. 9-12, 1998 (July 1999) (R0022320)
- 15 US EPA, *Guidance on Storm Water Drainage Wells* (Interim Final) (May 1998) (R0022206)
- 16 US EPA, *Economic Analysis of the Storm Water Phase II Proposed Rule: Initial Final Draft*,
(Aug. 1, 1997) (R0010281)
- 17 US EPA, Seminar Publication: *National Conference on Environmental Problem-Solving with
Geographic Information Systems*, Cincinnati, Ohio. Sept. 21-23, 1994 (September 1995)
(R0021617)
- 18 US EPA, *Economic Benefits of Runoff Controls* (Sept. 1995) (R0010711)
- 19 US EPA, Seminar Publication: *National Conference on Urban Runoff Management: Enhancing
Urban Watershed Management at the Local, County, and State Level – March 30-April 2,
1993 – Chicago, IL.* (April 1995) (R0015620)
- 20 US EPA, *Storm Water Discharges Potentially Addressed by Phase II of The National Pollutant
Discharge Elimination System Storm Water Program - Report to Congress* (March 1995)
(R0037330)
- 21 US EPA, *Storm Water Discharges Potentially Addressed By Phase II of the National Pollutant
Discharge Elimination System Storm Water Program – Report to Congress*, (March 1995)
(R0015026)
- 22 US EPA, *Changing the Course of California's Water* (1995) (R0033798)
- 23 US EPA, *NPDES Compliance Inspection Manual* (Sept. 1994) (R0014466)
- 24 US EPA, *A State and Local Government Guide to Environmental Program Funding Alternatives*
(Jan. 1994) (R0038104)
- 25 US EPA, *Guidance Manual for Implementing Municipal Storm Water Management Programs –
Chapters 1-4* (Aug. 17, 1994) (R0013925)
- 26 US EPA, Pitt, Robert, Clark, Shirley, and Parmer, Keith, *Potential Groundwater Contamination
from Intentional and Nonintentional Stormwater Infiltration* (May 1994) (R0022959)
- 27 US EPA, *Overview of the Storm Water Program* (Oct. 1993) (R0010064 – 66)
- 28 US EPA, *Handbook – Urban Runoff Pollution Prevention and Control Planning* (September
1993) (R0009753 – 54)
- US EPA, NPDES Storm Water Program: Question and Answer Document, Volume II (July
1993) (R0008386 – 87)
- US EPA, *Coastal Nonpoint Pollution Control Program – Program Development and Approval
Guidance* (Jan. 1993) (R0039770); US EPA, *Investigation of Inappropriate Pollutant
Entries into Storm Drainage Systems – A User's Guide* (Jan. 1993) (R0022861)



- 1 US EPA, *Guidance Manual for the Preparation of Part 2 of the NPDES Permit Applications for Discharges from Municipal Separate Storm Sewer Systems* (Nov. 1992) (R0009927, R0009930 – 33)
- 2 US EPA, *Report on The EPA Storm Water Management Program* (Oct. 1992) (R0009871, 73)
- 3 US EPA, *Storm Water Management for Industrial Activities -Developing Pollution Prevention Plans and Best Management Practice* (Sept. 1992) (R0043866)
- 4 US EPA, *Storm Water Management For Construction Activities – Developing Pollution Prevention Plans and Best Management Practices* (Sept. 1992) (R0043388)
- 5 US EPA, *NPDES Storm Water Sampling Guidance Document* (July 1992) (R0037924)
- 6 US EPA, *Guidance Manual for the Preparation of NPDES Permit Applications for Storm Water Discharges Associated with Industrial Activity* (April 1991) (R0043657)
- 7 US EPA, *Remedial Action, Treatment, and Disposal of Hazardous Waste – Proceedings of the Sixteenth Annual RREL Hazardous Waste Research Symposium* (August 1990) (R0042527)
- 8 US EPA, *Contributions of Urban Roadway Usage to Water Pollution* (March 1975) (R0027336)
- 9 US EPA, *Urban Runoff Management Information/Education Products* (R0036525)
- 10 Federal Register, Part II EPA – *Final Reissuance of National Pollutant Discharge Elimination System (NPDES) Storm Water Multi-Sector General Permit for Industrial Activities; Notice* (October 30, 2000) (R0019785)
- 11 Federal Register, Part III EPA – 40 CFR Part 131, *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule* (May 18, 2000) (R0019104)
- 12 Federal Register – Part II EPA – 40 CFR Parts 9, 122, 123, and 124, *National Pollutant Discharge Elimination System – Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges; Final Rule* (Dec. 8, 1999) (R0018093)
- 13 Federal Register – Part III EPA – 40 CFR Part 122, *Interpretative Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems; Final Rule* (Aug. 9, 1996) (R0008344 – 46)
- 14 Federal Register – Part XIV EPA – *Final National Pollutant Discharge Elimination System Storm Water Multi-Sector General Permit for Industrial Activities; Notice* (Sept. 29, 1995) (R0016080)
- 15 Federal Register – Part II EPA – *Water Pollution Control, NPDES General Permits and Fact Sheets: Storm Water Discharges from Industrial Activity; Notice* (Nov. 19, 1993) (R0008341 – 42)
- 16 Federal Register – Part II EPA – 40 CFR Parts 122, 123, and 124, *National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges; Final Rule* (Nov. 16, 1990) (R0008238 – 39)
- 17 Letter from Alexis Strauss, Director Water Division, US EPA Region IX to Dennis A. Dickerson, Executive Officer, California Regional Water Quality Control Board, Los Angeles Region (Dec. 19, 2000) (R0008828)
- 18 US EPA, *NPDES Program Implementation Review*, California Regional Water Quality Control Board 4, Los Angeles Region (Oct. 1999) (R0018019)
- 19 Letter from Alexis Strauss, USEPA Region IX, to Walt Pettit, Executive Director, California State Water Resources Control Board, (Mar. 17, 1998) (R0008581)
- 20 Comparison of Los Angeles County Draft Storm Water Permit with Similar Permits in Orange and Santa Clara Counties; EPA Region 9 (June 10, 1996) (R0031402)
- 21 Memorandum from Eugene Bromley, EPA Region 9, to Maryann Jones, Storm Water Section, California State Water Resources Control Board, re: Role of Municipalities in Implementation of State General NPDES Permits for Storm Water Associated with Industrial Activity (Dec. 1993) (R0008388)
- 22 Memorandum from E. Donald Elliott, USEPA, to Nancy J. Marvel, US EPA Region IX, re: Compliance with Water Quality Standards in NPDES Permits Issued to Municipal Separate Storm Sewer Systems (Jan. 9, 1991) (R0008378)
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1 US EPA, EPA Industry Sector Notebooks on Various Industries, totaling 34 Sector Notebooks,
2 ((R0074054); (R0074257); (R0074442); (R0076608); (R0078502); (R0074609);
3 (R0074743); (R0075090); (R0075259); (R0075769); (R0077054); (R0077213);
4 (R0077805); (R0078059); (R0078280); (R0078820); (R0074847); (R0074938);
5 (R0075397); (R0075526); (R0075641); (R0075930); (R0076085); (R0076222);
6 (R0076369); (R0076508); (R0076775); (R0076909); (R0077411); (R0077524);
7 (R0077661); (R0077944); (R0078209); (R0078378))

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RB-AR23177



EXHIBIT B



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FILED
LOS ANGELES SUPERIOR COURT

MAR 24 2005

JOHN A. CLARKE, CLERK

BY E. SABALBURO, DEPUTY

SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF LOS ANGELES - CENTRAL CIVIL WEST COURTHOUSE

In Re LOS ANGELES COUNTY
MUNICIPAL STORM WATER PERMIT
LIGITATION

Lead Case No. **BS 080548**

Related Cases: BS 080753, BS 080758 BS
080791, BS 080792, and 080807

Judge: Hon. Victoria Gerrard Chaney-D. 324

STATEMENT OF DECISION FROM
PHASE II TRIAL ON PETITIONS FOR
WRIT OF MANDATE

Hearing: January 7, 2005

Time: 1:30 p.m.

Department: 324-Central Civil West

Date Actions Filed: January 15 & 17, 2003

Ruling: March 16, 2005

PROCEDURAL HISTORY

This case, known as *In the Matter of the Los Angeles County Municipal Stormwater Permit*, arises from six coordinated Petitions for Writ of Mandate filed in January 2003 by the *Arcadia* Petitioners, *County* Petitioners, *Alhambra*, *LAEDC* Petitioners, *Monrovia* Petitioners and the City of Los Angeles against the State Water Resources Control Board (State Board) and the Regional Water Quality Control Board, Los Angeles Region (Regional Board).



1 The Court sustained the State Board's Demurrer to the *Alhambra*, *LAEDC* and *County*
2 Petitions for Writ of Mandate on all causes of action without leave to amend. As to the
3 *Monrovia* Petition, the Court initially sustained without leave to amend as to all causes of action
4 except the Fourth and Seventh, and later sustained without leave to amend the State Board's
5 Demurrer to the *Monrovia* First Amended Petition on those causes of action. Accordingly, the
6 Court will enter judgment in favor of the State Board as part of its decision on this matter.

7 The Cities of Los Angeles and El Segundo dismissed their petitions, without prejudice, in
8 September 2003 and April 2004, respectively.

9 The Court struck the Cities of Monterey Park and South Gate as Petitioners in granting
10 the Intervenors' Motion to Strike the First Amended Petition of the *Arcadia* Petitioners.

11 As referenced above, the Regional Board and Intervenors challenged all Petitions for
12 Writs, as well as the Amended Petitions, by way of Demurrers and Motions to Strike. As a
13 result, the Court sustained Demurrers to the Fourth, Eleventh and Thirteen Causes of Action of
14 the *Alhambra* and *LAEDC* Petitioners, and struck references to Code of Civil Procedure section
15 1085 from both Petitions. The Court sustained Demurrers to the Second, Third, Fourth and Fifth
16 Causes of Action of the *Arcadia* Petition, and struck references to the Administrative Procedures
17 Act, Health & Safety Code section 57004, a study by the University of Southern California, an
18 extra-record letter from Francine Diamond, prayers for permanent injunctive relief, unfunded
19 mandates claims and the claim that the Regional Board lacked authority to issue the Permit. The
20 Court sustained Demurrers to the Second, Third, Fifth and Sixth Causes of Action from the
21 *County* Petition and struck references to Code of Civil Procedure section 1085. Finally, the
22 Court sustained Demurrers to the First, Fourth, Sixth and Seventh Causes of Action of the
23 *Monrovia* Petitioners, and struck references to Health & Safety Code section 57004, the
24 Administrative Procedures Act, the federal Paperwork Reduction Act, the federal Regulatory
25 Flexibility Act, unfunded mandates and Code of Civil Procedure section 1085.

26 On May 19, 2004 and May 20, 2004, this Court held trial on Phase I of this bifurcated
27 proceeding. (The Court's ruling denying the petitions for writs of mandate on those issues is
28



1 included in a separate Statement of Decision.) Phase I involved the following issues, as framed
2 in the Joint Statement Regarding Briefing and Hearing Schedule, filed on March 2, 2004:

3 1. Petitioners' allegations that Part 2 of the Permit ("Receiving Water Limitations"),
4 as written, is ambiguous, is arbitrary and is not supported by the Record, and is contrary
5 to the "good faith" safe harbor intentions of the Respondent and renders compliance with
6 the Permit impossible and impracticable.

7 2. Petitioners' allegations that the Permit unlawfully exceeds the Respondent's
8 authority under the federal Clean Water Act and California's Porter-Cologne Water
9 Quality Act by unlawfully imposing requirements that go beyond the Clean Water Act's
10 "maximum extent practicable" ("MEP") standard and/or the Porter-Cologne Act's
11 "reasonably achievable" standard.

12 3. Certain Petitioners' allegations that the Permit unlawfully regulates discharges
13 "into", as opposed to only "from", the municipal separate storm sewer system contrary to
14 the Clean Water Act and without authority under the Porter-Cologne Act.

15 4. Petitioners' allegations that Respondent acted without authority by adopting
16 Permit terms that unlawfully directs Petitioners to modify their General Plans and/or their
17 CEQA guidelines, and that unlawfully compels Petitioners to review development
18 projects in a manner that is contrary to or different from the process provided for by the
19 California Legislature, with Respondent violating the Separation of Powers clause under
20 the California Constitution.

21 5. Certain Petitioners' allegations that the Permit unlawfully interferes with
22 Petitioners' land use authority as Petitioners contend Respondent's Permit improperly
23 infringes on Petitioner's local land use authority, an area of authority that Petitioners
24 maintain is within their exclusive purview.

25 6. Petitioners' allegations that the Permit was adopted in violation of CEQA, as
26 Respondent failed to comply with the environmental review requirements of CEQA. (To
27
28



1 what extent was the Respondent required to comply with CEQA in adopting the Permit
2 and did the Respondent so comply.)

3 THE PHASE II TRIAL

4 In the Schedule referenced above, the parties agreed that Petitioners would present all
5 non-Phase I issues during a second phase of trial. In their joint opening trial brief, Petitioners
6 identified the issues to resolved as Issues 1-14, outlined below. Although the *Monrovia* and
7 *Arcadia* Petitioners alleged causes of action for Injunctive Relief in their Amended Petitions for
8 Writ of Mandate (respectively, the Eighth and Sixth Causes of Action) and the *County*
9 Petitioners prayed for Injunctive Relief (Amended Petition, at p. 24: 11-13), they did not present
10 this issue for trial. Therefore, the Court hereby dismisses this cause of action, as well as all
11 issues not presented at trial, for failure of proof.

12 Petitioners presented the following issues for trial on August 10 and 11, 2004:

- 13 1. Issue One: "The inspections and facility control program requirements under the
14 Permit for industrial and commercial facilities, and for construction sites, are
15 provisions that are outside of the authority of the Regional Board and are contrary to
16 law, and their adoption constitutes an abuse of discretion;"
- 17 2. Issue Two: "The Regional Board failed to conduct the requisite cost/benefit analysis
18 and failed to consider whether the burdens of the various portions of the Permit,
19 including their costs, bear a reasonable relationship to the need for such provisions
20 and the benefits to be obtained therefrom;"
- 21 3. Issue Three: "The Regional Board failed to fully and properly consider 'economics'
22 as required under State law and the Clean Water Act, in adopting numerous
23 provisions under the Permit;"
- 24 4. Issue Four: "The Regional Board failed to properly consider the need for developing
25 housing within the region, including the need and importance of low or moderate-
26 income housing, as required by State law;"



- 1 5. Issue Five: "The Regional Board adopted terms and provisions that are contrary to the
2 Prohibition under Water Code section 13360, imposed upon Regional Boards, from
3 adopting permit terms that 'specify the design, location, type of construction, or
4 particular manner in which compliance may be had';"
- 5 6. Issue Six: "The Regional Board's adoption of the Development Planning Program
6 requirements, also known as the Standard Urban Storm Water Mitigation Plan
7 ('SUSMPs') provisions under Part 4.D of the Permit, was action in excess of the
8 Regional Board's authority and constitutes an abuse of discretion;"
- 9 7. Issue Seven: "The Regional Board acted in excess of its authority and abused its
10 discretion in imposing Permit terms that require the Permittees under the Permit to
11 regulate and control the 'potential contribution' and the 'potential to discharge'
12 pollutants in the storm water;"
- 13 8. Issue Eight: "Part 3.C of the Permit violates federal and state law in that it allows the
14 Executive Officer to modify the Permit without notice or public hearing;"
- 15 9. Issue Nine: "The Regional Board exceeded its authority and abused its discretion in
16 adopting part 4.e of the Permit entitled 'development construction program';"
- 17 10. Issue Ten: "The Regional Board acted contrary to law and abused its discretion in
18 adopting the sanitary sewer maintenance overflow and spill prevention provisions of
19 the Permit;"
- 20 11. Issue Eleven: "The Regional Board acted contrary to law and abused its discretion in
21 failing to exempt certain discharges from the permit;"
- 22 12. Issue Twelve: "The Permit's requirement that Peak Flow is the parameter that should
23 be controlled (Permit, Part 4.D.1) is not supported by evidence in the record;"
- 24 13. Issue Thirteen: "Requiring Permittees to initiate investigations of facilities within
25 one business day (Permit, Part 4.C.3.D(3) is arbitrary, capricious and unsupported by
26 evidence in the record;"
- 27
- 28



1 14. Issue Fourteen: "Respondent violated Permittees right to fair hearing and due process
2 of law by making substantial material revisions to the permit without providing
3 adequate notice and a right to be heard;"

4 Trial on Phase II began at 8:30 a.m., on August 10, 2004 in Department 324 of the
5 Central Civil West branch of the Los Angeles Superior Court. The Honorable Judge Victoria
6 Gerrard Chaney presided over this matter. All parties were present and represented by counsel.
7 Howard Gest appeared on behalf of the *County* Petitioners; Rufus C. Young and Amy Morgan
8 appeared for the *Alhambra* and *LAEDC* Petitioners; Richard Montevideo and Peter Howell
9 appeared for the *Arcadia* Petitioners; John J. Harris and Evan J. McGinley appeared for the
10 *Monrovia* Petitioners; Jennifer F. Novak and Helen G. Arens, Deputy Attorneys General and
11 Michael Lauffer of the State Water Resources Control Board, Office of Chief Counsel, appeared
12 for the Regional Board; David Beckman, Anjali Jaiswal, Dan Gildor and Leslie Mintz appeared
13 for the Intervenors.

14 **BACKGROUND**

15
16 In addition to the Court's file in this matter, the Court received and reviewed volumes of
17 briefs from all parties, in addition to Requests for Judicial Notice,¹ excerpts of Administrative
18 Records Citations, Non-California Authorities, Declarations and other pleadings filed before the
19 trial date, as well as the supplemental briefs requested by the Court following trial. The Court
20 also received pleadings during the course of trial and has reviewed those as well. This Statement
21 of Decision is based upon the Court's consideration of those documents, as well as the argument
22 and presentations by counsel during numerous days of trial.
23
24
25

26 ¹ The Court granted Petitioners' Requests for Judicial Notice, filed on June 14, July 30,
27 August 11 and August 31, 2004 in support of their Phase II briefs and supplemental briefs. The
28 Court granted the joint Requests for Judicial Notice submitted by Respondent Regional Board
and Intervenors, filed on July 19 and September 21, 2004. The Court granted Intervenors'
separate Request for Judicial Notice, filed July 19, 2004.



1 In reaching its decision, the Court has followed the guiding principles established by both
2 our federal and state governments. Foremost among these is the Clean Water Act. Title 33 of
3 the United States Code, section 1251, subdivision (a), entitled, "Restoration and maintenance of
4 chemical, physical and biological integrity of Nation's waters; national goals for achievement of
5 objective," states:

6 ¶ The objective of this chapter is to restore and maintain the chemical, physical
7 and biological integrity of the nation's waters. In order to achieve this objective it
8 is hereby declared that consistent with the provisions of this chapter-- ¶ (1) *it is*
9 *the national goal that the discharge of pollutants into the navigable waters be*
eliminated by 1985[.]

10 (33 U.S.C. § 1251, subd. (a) [emphasis added].) The Court notes that the year is now 2004.

11 Subpart (3) of section 1251, subdivision (a) states: "it is the national policy that the discharge of
12 toxic pollutants in toxic amounts be prohibited[.]" (*Id.* at subd. (a)(3).) There is a companion
13 section in California's Porter-Cologne Act, Water Code section 13000, that reads, in part:
14

15 The Legislature finds and declares that the people of the state have a primary
16 interest in the conservation, control, and utilization of the water resources of the
17 state, and that the *quality of the waters of the state shall be protected for use and*
18 *enjoyment by the people of the state. . .* ¶ The Legislature further finds and
19 declares that the health, safety, and welfare of the people of the state requires that
20 there be a statewide program for the control of the quality of all waters of the
21 state; *that the state must be prepared to exercise its full power and jurisdiction to*
22 *protect the quality of waters in the state from degradation originating inside or*
23 *outside the boundaries of the state[.]*

24 (Wat. Code, § 13000 [emphasis added].) Also, Water Code section 13142.5 states, in part:

25 In addition to any other policies established pursuant to this division, the policies
26 of the state with respect to water quality as it relates to the coastal marine
27 environment are that: ¶ Wastewater discharges shall be treated to protect present
28 and future beneficial uses, and, *where feasible, to restore past beneficial uses of*
the receiving waters. Highest priority shall be given to improving or eliminating
discharges that adversely affect any of the following: ¶ (1) Wetlands, estuaries
and other biologically-sensitive areas. ¶ (2) Areas important for water contact
sports. . . ¶ (4) Ocean chemistry and mixing processes, marine life conditions,
other present or proposed outfalls in the vicinity and relevant aspects of areawide
waste treatment management plans and programs *but not of convenience to the*
discharger[.]



CHALLENGES TO THE REGIONAL BOARD'S EVIDENCE

1
2 In briefing and at trial, Petitioners asked this Court to disregard the Administrative
3 Record on the grounds that it was not formally introduced into evidence during the Permit's
4 December 13, 2001 adoption hearing, that the Record was improperly compiled and that it
5 contains irrelevant materials.
6

7 Looking to the issues involved with the Administrative Record, to resolve them, it is
8 important to examine the history of the Permit's adoption. According to the Record, there were
9 approximately 40 meetings held between Regional Board staff members and other interested
10 parties. These included mediations with the Environmental Protection Agency of the U.S.
11 Government, there was a public workshop, there was a full-day workshop for Regional Board
12 members on July 26, 2001, and a public hearing before the Board members on December 13,
13 2001.
14

15 There were three drafts of the Permit, issued: on April 13, June 26 and October 11, 2001.
16 For each draft, the Regional Board received written comments from up to 38 cities, three
17 environmental groups, the County Department of Public Works, the Los Angeles City Fire
18 Department, up to nine legal groups and other interested parties. Overall, the Permit process
19 covered about an 11-month period. There were approximately 2,470 pages of comment letters
20 from the permittees, many of whom are litigants in this matter, and other interested parties. (AR
21 2035, 2740, 4377-4973, 5431-6610.)
22

23 In August 2003, the Court considered Petitioners' Motion to Strike and Augment the
24 Administrative Record. One ground for the Motion was that the Administrative Record
25 allegedly contained irrelevant material (not the same allegedly irrelevant material challenged
26 here). The Court denied the Motion. As part of the Court's decision, filed August 14, 2003, it
27 cited *Hand v. Board of Examiners* (1977) 66 Cal.App.3d 605, that held: "Generally, a party must
28



1 object to the admission of evidence at the administrative hearing; otherwise, the evidentiary
2 objection will be waived.” (66 Cal.App.3d at p. 613.) The Court found that the Petitioners’
3 challenge was untimely, as they did not object to admission of the Administrative Record during
4 the Permit’s December 13, 2001 adoption hearing. The same reasoning bars the Petitioners’
5 challenge here.
6

7 The entire Administrative Record was incorporated by reference at the time of the
8 hearing, “All board files pertaining to the items on this agenda are hereby made a part of the
9 record submitted to the Regional Board by staff for its consideration prior to action on the related
10 items.” (Respondent’s Request for Judicial Notice, Exhibit 2.) The Petitioners never objected to
11 incorporation of the record before or during the adoption hearing or in their later administrative
12 challenges before the State Board. Therefore, they have waived the objection now.
13

14 Even if Petitioners’ challenge to the Administrative Record was timely, the Court
15 disagrees with Petitioners’ contention that an agency must reference each specific item in a
16 record during the hearing. Petitioners themselves acknowledged at the hearing that their prior
17 comment letters were “already part of the administrative record.” (See, e.g., AR 7828-7829.)
18 Moreover, an agency has no affirmative obligation to reference every book, report, pamphlet,
19 table, study, etc. that is in the administrative record. (*Ray v. Parker* (1940) 15 Cal.2d 275, 310.)
20 Consequently, the Regional Board staff and board members did not have to, and do not have to,
21 reference every document in the Administrative Record.
22

23 The entire Administrative Record is properly before this court. “[D]esignation of the
24 Administrative Record, like any established administrative procedure, is entitled to a
25 presumption of administrative regularity.” (*Bar MK Ranches v. Yuetter* (10th Cir. 1993) 994
26 F.2d 735, 740.) This is consistent with Evidence Code section 664, which states: “An agency is
27 presumed to regularly perform its duty.”
28



1 *Bar MK* defines the materials to include in an administrative record: “A complete
2 administrative record consists of all documents and materials directly or *indirectly* considered by
3 the agency.” (994 F.2d at p. 739 [emphasis added].) The Court finds that it was reasonable for
4 the Regional Board to rely on studies and findings nationally in assessing problems with the Los
5 Angeles Basin. While not every page of every document may discuss the issues challenged here,
6 certainly it is reasonable to look to matters in other states if they experience problems similar to
7 problems suffered here. And if pages within a document discuss those common issues, the Court
8 understands that the whole document will be part of the Record. The Court finds that the
9 Regional Board did not “pad” the record, even though not every page of the Record is on point.
10 In addition, under the federal regulations, a permitting agency must rely on information and
11 experience gained during the prior permit term. (61 Fed. Reg. 41,698-41,699.) Therefore, it was
12 appropriate for the Board to have reviewed the permits issued in 1990 and 1996, and the
13 documents supporting them. There are also studies and other documents in the Record that
14 contain information which may guide the Regional Board staff and the Regional Board. The
15 Court cannot assume that simply because the Regional Board did not refer to every study or
16 report, that the Regional Board did not rely on it directly or indirectly. (See, *Ray v. Parker*,
17 *supra*, 15 Cal.2d at p. 310.)
18
19

20
21 It is enough that the Regional Board’s staff reviewed, processed and culled down the
22 documents within the record. In *Browning-Ferris Indus. v. City Council* (1986) 181 Cal.App.3d
23 852, the Court held: “An agency may also rely upon the opinion of its staff in reaching decisions,
24 and the opinion of staff has been recognized as constituting substantial evidence.” (181
25 Cal.App.3d at p. 866.) Here, it is clear that staff did present their recommendations, conclusions
26 and research in the Fact Sheets/Staff Reports and the various hearings before the Regional Board
27
28



1 members. The Court finds, therefore, that the Regional Board members acted properly in
2 carrying out their duties.

3 The basic rights of procedural due process . . . are reasonable notice of a hearing,
4 a reasonable opportunity to be heard, and these quasi-judicial proceedings
5 [concerning special use permits] do not invoke the full panoply of procedures
6 required in regular judicial proceedings, civil or criminal, many of which would
be plainly inappropriate in quasi-judicial settings.

7 (*Mohilef v. Janovici* (1996) 51 Cal.App.4th 267, 299.) The *Mohilef* Court also held that:

8 However, there is no precise manner of hearing which must be afforded; rather,
9 the particular interests at issue must be considered in determining what kind of
10 hearing is appropriate. A formal hearing with full rights of confrontation and
cross-examination is not necessarily required.

11 (*Id.* at p. 286.) In *Governing Board of the Alum Rock Union Elementary School District*
12 *v. Superior Court* (1985) 167 Cal.App.3d 1158, the petitioner argued that he was not
13 seeking to probe the mental processes of a board, but rather to determine whether
14 procedural requirements were met. In response, the court held:

15 The administrative board should state findings. If it does, the rule of *United*
16 *States v. Morgan, supra*, 313 U.S. 409, 422 . . . precludes inquiry outside the
17 administrative record to determine what evidence was considered and reasoning
18 employed by the administrators. . . Just as a judge cannot be subjected to such a
scrutiny, so the integrity of the administrative process must be equally respected.

19 (167 Cal.App.3d at p. 1161.) Here, it is not within the province of this Court to examine
20 the individual Board members' thought processes or question which specific documents
21 they relied on in making their decision. The issue is whether the decision was correct.
22 Therefore, this Court declines to hold the Regional Board to a standard of needing to
23 specify every document upon which it relied in adopting various provisions of the Permit.
24

25 Next, the Court disagrees with Petitioners' argument that the Administrative
26 Record violates federal regulations. Code of Federal Regulations, title 40, section 124.6,
27 subdivision (e) reads: "Draft permits prepared by a State shall be accompanied by a fact
28



1 sheet if required under § 124.8.” (40 C.F.R. § 124.6, subd. (e).) The federal regulations
2 do not require that every document be referenced in the record. However, even if these
3 regulations applied, and the Court finds they do not, the Record complies in this case
4 with the standards set forth. Code of Federal Regulations, title 40, section 124.9,
5 subdivision (b), sets forth the requirements for an administrative record. (*Id.* at § 124.9,
6 subd. (b).) Based on the evidence presented, it appears that the Regional Board’s
7 Administrative Record meets these requirements. Moreover, subdivision (c) provides
8 that certain documents need not be physically included in the Record. (*Id.* at subd. (c).)
9 Therefore, this Court finds assembly of the Administrative Record did not run afoul of
10 any federal regulations.
11

12 Finally, this Court finds that the staff accumulated the Administrative Record throughout
13 the permit drafting process, revisions and adoptions, and has certified the record as correct.
14 Again, “it is not within the province of the Court to inquire into what evidence was or was not
15 examined or relied on by an agency member in reaching his or her decision.” (See *Southern*
16 *Cal. Underground Contractors, Inc. v. City of San Diego* (2003) 108 Cal.App.4th 553, 548.)
17 “The mental processes of agency members is ‘irrelevant’ to the validity of their decision.” (*City*
18 *of Vernon v. Board of Harbor Comrs.* (1998) 63 Cal.App.4th 677, 688.) Evidence Code section
19 664 states that an agency is presumed to regularly perform its duty. And in *Topanga Assn. for*
20 *Scenic Community v. County of Los Angeles* (1989) 214 Cal.App.3d 1348, the Court held, in
21 part, that, an agency’s “findings are to be liberally construed to support rather than defeat a
22 decision under review.” Again, these are more principles which guide this Court’s decision.
23

24 Evidence in the Administrative Record supports the Board’s Permit adoption. (See AR
25 7003, 7016, 70296.) The Permit, Regional Board Order 01-182, dated December 13, 2001, also
26 contains numerous findings about sources of pollution, and the problems caused by development
27
28



1 and urbanization, which increase pollutant load volume and discharge velocity. The Court notes
2 that increased volume and velocity and discharge duration accelerates downstream erosion and
3 impairs stream habitat in natural drainages. (See, e.g. Findings No. B.3, B.4, B.5, B.6.) As a
4 further example, Finding E.18 states:

5
6 The Regional Board adopted and approved requirements for new development
7 and significant redevelopment projects in Los Angeles County to control the
8 discharge of storm water pollutants in post-construction storm water on January
9 26, 2000, in Board Resolution R-00-02. The Regional Board Executive Officer
10 issued the approved Standard Urban Stormwater Mitigation Plans (SUSMPs) on
11 March 8, 2000. The State Board in large part affirmed the Regional Board action
12 and SUSMPs in State Board Order No. WQ 2000-11 issued on or about October
13 5, 2000.

14 The Permit also found:

15 The objective of this order is to protect the beneficial uses of receiving waters in
16 Los Angeles County. To meet this objective, this Order requires that the SQMP
17 specify BMPs that will be implemented to reduce the discharge of pollutants in
18 storm water to the maximum extent practicable. . . . The SQMP required in this
19 Order builds upon the programs established in Order Nos. 90-079, and 96-054,
20 consists of the components recommended in the USEPA guidance manual and
21 was developed with the cooperation of representatives from the regulated
22 community and environmental groups.

23 (Permit, at p. 13.) This finding underscores what the Court previously has noted, that it was
24 appropriate to look at the earlier permits issued to the permittees in 1990 and 1996.

25 Although Petitioners contend that the Regional Board had to make specific findings,
26 nothing in Water Code sections 13241 or 13263 required the Regional Board to make any
27 specific findings. It is clear that the Legislature knows how to say something when it wants to
28 do so. (See *City of Milwaukee v. Illinois and Michigan* (1981) 451 U.S. 304, 329 fn. 22.) This is
seen in both in the Clean Water Act and the Porter-Cologne Act, as well: when the Legislature
wanted something, they made it quite clear.



1 Petitioners specifically challenged the Permit's Finding E.25, which states in part that:

2 "The Regional Board has considered the requirements of Section 13263 and 13241 and
3 applicable plans, policies, rules and regulations in developing these waste discharge
4 requirements." The Court finds this language to be sufficiently specific and not boilerplate.

5
6 *Topanga Assn. for Scenic Community v. County of Los Angeles* (1989) 214 Cal.App.3d 1348
7 holds, in part:

8 It would exact needless time, effort and ingenuity to require the board to
9 paraphrase the provisions of Section 22.56.215(F) in making findings in support
10 of its approval of a conditional use permit. We refuse to impose such a
11 requirement which, in addition to causing wasted time and effort, likely would
12 result in inadvertent omissions and misstatement of necessary facts.

13 (214 Cal.App.3d at p. 1364.) In addition, in *Pick v. Santa Ana-Tustin Community Hospital*
14 (1982) 130 Cal.App.3d 970, the court found, in part: "Nor do we find the essential findings so
15 conclusory" (the central finding here being E.25) "as to be legally insufficient; it is a finding of
16 ultimate fact." (130 Cal.App.3d at p. 978.)

17 This Court disagrees with Petitioners' reading of *Topanga*. That case holds that an
18 agency's findings must "bridge the gap" between raw evidence and its ultimate decision, and an
19 agency should not "randomly leap from evidence to conclusions." (*Topanga Assn. for Scenic*
20 *Community v. County of Los Angeles* (1974) 11 Cal.3d 506, 515, 517.)

21 This Court finds that the Board did not "randomly leap" from point A to point Z in
22 adopting the Permit. Moreover, an agency's findings come with a strong presumption of
23 correctness. (*Fukuda v. City of Angels, supra*, 20 Cal.4th at p. 812.) With respect to the
24 findings made by an administrative agency, contrary to Petitioners' assertions, they need not be
25 as precise or formal as would be required in a court of law. (*McMillan v. American General*
26 *Finance Corp.* (1976) 60 Cal.App.3d 175, 185.)



1 In summary, after reviewing the files, pleadings and hearing the arguments presented,
2 this Court finds that the Administrative Record properly includes the Regional Board's file for
3 drafting and adopting a permit. The Record contained documents that are clearly relevant to the
4 Regional Board's drafting and adoption of the Permit. In compiling the Record, the Regional
5 Board's staff met all applicable regulations. And, the Regional Board fully incorporated the
6 Record into the record of the adoption hearing. By not objecting to inclusion of the
7 Administrative Record by reference at the adoption hearing, Petitioners' challenge is untimely
8 and was waived by their failure to object.

10 The Court further finds that the Regional Board did not leap randomly from evidence to
11 determinations and the Petitioners have failed to sustain their burden to demonstrate otherwise.

12 **ISSUE ONE**

13
14 As stated above, the Court acknowledges the overriding principles guiding this Court: the
15 clear legislative intent in both the Clean Water Act and the Porter-Cologne Act. While the
16 permittees, including Petitioners, have done a very good job thus far of working on the problem,
17 the evidence clearly showed that the storm water pollution problem is not corrected and needs
18 more work. (AR 7777, 8055-8056.) The briefs and presentation of all parties at trial,
19 referencing the Administrative Record, demonstrated that sources of pollution include industrial,
20 commercial, construction sites and residential areas. (AR 9754.) Certain commercial and
21 industrial sites can be responsible for a disproportionate contribution of some pollutants, such as
22 grit, oils, grease, and toxic materials into the storm water drainage system. (*Ibid.*) The Fact
23 Sheet/Staff Report accompanying the Permit states, in part:

25 Critical source data for facilities such as auto salvage yards, primary metal
26 facilities and automotive repair shops show that total and dissolved heavy metals
27 and total suspended solids exceeded state and federal water quality criteria by as
28 much as two orders of magnitude.



1 (AR 8038.) Interestingly, light industrial and commercial and transportation land uses show the
2 highest range of exceedances. (*Ibid.*) This clearly shows that industrial and commercial
3 activities need to be regulated and controlled and monitored more than they have been in the
4 past.

5
6 The Court finds that the Permit contains reasonable inspection requirements for these
7 types of facilities. (See Permit, at p. 31.) The Permit requires each permittee to confirm that
8 operators of these facilities have a current waste discharge identification number and is
9 effectively implementing Best Management Practices (BMPs) in compliance with County and
10 municipal ordinances, Regional Board Resolution 98-08 and the Stormwater Quality
11 Management Plans (SQMPs). (*Ibid.*) Addressing pollution after it has entered the storm sewer
12 system is not working to meet legislative goals. More work is required at the source of pollution,
13 and that is partially the basis on which this Court finds that the Permit's inspection requirements
14 are reasonable, and not onerous and burdensome. The Court also notes that in including this
15 requirement, the Regional Board looked at inspection programs across the country. (AR 3868,
16 7082, 8056.)

17
18 Federal law requires permittees to inspect dischargers. (40 C.F.R. § 122.26, subds.
19 (d)(2)(i)(A) & (F), (d)(2)(iv)(C)(1).) Nothing in the regulations precludes the inspections of
20 facilities with state-issued permits. (See *Allied Local and Regional Mfrs. Caucus v. EPA* (D.C.
21 Cir. 2000) 215 F.3d 61, 78.) Certainly, no Petitioner has cited such a regulation to the Court.

22
23 The Court agrees with Respondent and Intervenors that the United States EPA considers
24 obligations under state-issued general permits to be separate and distinct. Despite the similarity
25 between the general permits and the local storm water ordinances, both must be enforced. (AR
26 1994 [letter from Alexis Strauss of EPA].) EPA requires permittees to conduct inspections of
27 commercial and industrial facilities, as well as of construction sites. (AR 10011, 10017.) This
28



1 was stated as part of the testimony of Laura Gentile from EPA at the July 26, 2001 workshop
2 before the Regional Board. (AR 4308.) This Court finds that the state-issued general permits do
3 not preempt local enforcement of local storm water ordinances. (See State Board Order No. 99-
4 08, General Construction Activities Storm Water Permit, at ¶¶ 3, 4.)

5
6 Therefore, this Court finds that requiring permittees to inspect commercial and industrial
7 facilities and construction sites is authorized under the Clean Water Act, and both the Regional
8 Board and the municipal permittees or the local government entities have concurrent roles in
9 enforcing the industrial, construction and municipal permits. The Court finds that the Regional
10 Board did not shift its inspection responsibilities to Petitioners.

11 The Court finds that the Permit requirements are reasonable, that the permittees are not
12 being significantly burdened, and notes that during the drafting process, the Permit requirements
13 that the Regional Board initially set forth were lessened. (See AR 7592, 7939-40; see also
14 Permit at pp. 28-29.)

15
16 The Court further finds that inspection obligations were increased to meet legal
17 obligations, namely, failure to meet the goals of the Clean Water Act and Porter-Cologne Act,
18 contrary to Petitioners' speculation that the inspection obligations were increased or "ramped up"
19 due to budgetary reasons. (AR 4308, 6790, 6651-6652, 7777, 8055-8056.)

20
21 The Court further notes that the Permit issued to local entities, who are Petitioners here,
22 does not refer to any inspection obligations related to state-issued permits. (AR 8056, 8060.)
23 There is no duplication of efforts and no shifting of inspection responsibility in derogation of the
24 Regional Board's responsibility here. The Regional Board is not giving up its own
25 responsibilities, and there is nothing arbitrary or capricious about the Permit's inspection
26 provisions.



1 The Court disagrees with Petitioners' interpretation of the Porter-Cologne Act, and finds
2 Water Code sections 13225 and 13267 do not apply to the present situation. Instead, Water Code
3 section 13383 governs the permitting process here. As noted in *Silkwood v. Kerr-McGee Corp.*
4 (1984) 464 U.S. 238, the Court held, in part: "state law is still preempted . . . where the state law
5 stands as an obstacle to the accomplishment of the full purposes and objectives of Congress."
6 (464 U.S. at p. 248.) Applying Water Code sections 13225 and 13267 would stand, in the words
7 of *Silkwood* as: "an obstacle to the accomplishment of the full purposes and objectives of [the
8 federal law]." (*Ibid.*; see also Wat. Code, §§ 13370, 13377.) The Court refers to its prior
9 citations, regarding the full purposes and objectives of the Clean Water Act and permits such as
10 the one challenged here.
11

12 Even if the Regional Board was required to consider the costs and benefits of the Permit,
13 there is substantial evidence in the Record of this consideration. (See, e.g., Permit p. 5; AR
14 1291, 1541, 1988, 1999, 2776, 2882, 6611 [documenting Regional Board meetings]; 8078, 8080
15 [discussion of effectiveness in Fact Sheet]; 2884, 2886, 2778, 20765, 32490, 45329, 47928,
16 48306.)
17

18 The Court finds that Petitioners' objections to the Permit's trash monitoring requirements
19 to be without support. Trash monitoring was already developed and mandated under a separate
20 Regional Board order. The Permit in this case attempts to be consistent with the trash
21 TMDL. (AR 7973.) The Regional Board did examine the costs and compared the benefits for
22 trash monitoring. For example, the Regional Board modified the monitoring requirement for
23 unimpaired watersheds to eliminate trash sampling and requires only photographic evidence.
24 (AR 79595.)
25

26 Therefore, as to Issue Two, the Court finds that the Petitioners failed to carry their
27 burden, and respectfully declines to grant the request for a writ.
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ISSUE THREE

The Court finds that California's Porter-Cologne Act, as codified in the Water Code, did not require the Regional Board to consider economics when issuing the Permit because the Board considered economics at an earlier stage in setting water quality objectives in the Los Angeles County Basin Plan. (Wat. Code, § 13241.) The State Board has followed the practice that no consideration of Water Code section 13241 factors are required during the permitting process. (*Hampson v. Superior Court* (1977) 67 Cal.App.3d 472, 482; *In the Matter of the Petition of Pacific Water Conditioning Association, Inc.*, State Board Order No. WQ 77-16.)

The permitting scheme set forth in the Porter-Cologne Act requires the Regional Board to conduct a two-step process. Step one is to establish water quality objectives in the basin plan, and step two is to implement water quality objectives. Water Code section 13241 covers the establishment of water quality objectives in a basin plan. That statute reads, in part, that: "Factors to be considered by a regional board in establishing water quality objectives shall include but not necessarily be limited to," and then sets forth the factors to consider, including subdivision (d), "Economic considerations." (Wat. Code, § 13241, subd. (d); Los Angeles County has a Basin Plan; see AR 47540, 47552.) This Court is under the impression that when the Regional Board adopted the Basin Plan, it took economic considerations into account. (See Wat. Code, § 13241.)

Looking to step two of the statutory scheme, Water Code section 13263 implements water quality objectives in the Permit, after the Regional Board has considered economics as part of the Basin Plan adoption. Water Code section 13263 reads, in part:

The requirements shall implement any relevant water quality control plans that have been adopted and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance and the provisions of Section 13241.



1 The plain meaning of these words is consistent with the *Hampson* decision. (*Hampson v.*
2 *Superior Court, supra*, 67 Cal.App.3d at p. 482; see also Wat. Code, § 13241.)

3 The Court notes that where these statutes required “consideration” of economics, the
4 requirement is just that: a consideration. Water Code section 13241 does not require a “cost-
5 benefit analysis,” as Petitioners suggest. Economics is merely a factor to be considered.
6

7 Moreover, although the Regional Board was not required to consider economics in its
8 adoption of the Permit, as opposed to the Basin Plan, there are numerous findings and documents
9 in the Administrative Record that show that there were economic considerations. First, the
10 Permit contains findings on economics. For example, the Permit states findings that: “This
11 permit is intended to develop, achieve, and implement a timely, comprehensive, cost-effective
12 stormwater pollution control program” and is to “implement cost-effective measures.” (Permit,
13 at pp. 7, 13.) The Fact Sheet/Staff Report that accompanied the Permit also contained findings
14 on issues of economics. (AR 8039, 8073.) The Permit also specifically states that: “The
15 Regional Board has considered the requirements of Section 13263 and 13241 and applicable
16 plans, policies, rules and regulations in developing these waste discharge requirements.” (Permit,
17 at p. 12.)
18

19 In addition, the Court previously has noted that the Regional Board looked to pollution
20 control programs nationally. The extensive Administrative Record shows that the Regional
21 Board did consider and use national studies from locations around the country, looking to what
22 those locations and water boards found in terms of costs and benefits of various best
23 management practices used in their permits. (AR 4163, 10739, 10735, 10757, 11676, 12200,
24 66969, 66966.) The Record also contains evidence of the permittees’ self-reported local costs in
25 their Permit application. (AR 7936-7937, 8048.) Turning to specific Permit requirements, there
26 is evidence of economic consideration for Part 4.C, the Permit’s industrial and commercial
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1 facilities inspections programs. (See, e.g., AR 7604.) The same is true for Part 4.D, where the
2 Regional Board considered economics in terms of the development planning program and the
3 SUSMP programs. (See, e.g., AR 10736.) In the State Board's decision in *In the Matter of the*
4 *Petitions of the Cities of Bellflower, et. al, the City of Arcadia and Western States Petroleum*
5 *Association*, Order WQ 2000-11, it held that: "The Regional Water Board considered the costs of
6 the SUSMPs, and acted reasonably in requiring these controls in light of the expected benefits to
7 water quality." (AR 1862; see also 10739.) Economic consideration also was given to Part 4.E,
8 the Development Construction Program. (See AR 20794, 58963, 72257, 72276.) Finally,
9 economics was also considered in developing Permit Part 4.F.5 Storm Drain Management. (AR
10 32680-32681, 32634-32636, 73109-73110.) The Regional Board had some, albeit minimum,
11 discussions of economics in various meetings with permittees and interested parties. (AR 7937-
12 7938.) In short, there are numerous findings and documents in the Administrative Record
13 demonstrating that Regional Board considered economics in testimony, comment letters, local
14 studies, national studies, the EPA reports, and self-reported costs from the Petitioners. (See, e.g.,
15 AR 2108, 2129, 6066.)

16
17
18 Consequently, the Court finds that the Petitioners did not carry their burden as to Issue
19 Three, and declines to grant the writ.

20 21 **ISSUE FOUR**

22 Similar to Issue Three, above, Petitioners alleged that in adopting the Permit, the
23 Regional Board was required to consider the need for housing in Los Angeles County. They rely
24 on Water Code section 13241. The Court disagrees that the statute applies to the Regional
25 Board's actions in adopting the Permit. In *Hampson v. Superior Court, supra*, 67 Cal.App.3d
26 472, the Court found a water board must consider certain factors under Water Code section
27 13241 when it does not have a basin plan for the region. (67 Cal.App.3d at p. 482.) Here, the
28



1 Regional Board has adopted its Basin Plan for the region, therefore it was not necessary to
2 consider the section 13241 factors, including the need for housing, in adopting the Permit.

3 Even if Water Code section 13241 applied and required the Regional Board to consider
4 the need for housing in adopting the Permit, there is evidence in the Record that shows that the
5 issues of housing was considered. (AR 2037 [comments of Building Industry Association], 7954-
6 7955 [comments made during December 13, 2001 adoption hearing].) It is clear that the
7 Regional Board considered such things as population and demographics. (AR 10984-10986,
8 20809-20810, 42545.) The Board also considered housing costs generally, including the
9 Permit's impact on housing costs and low-income development. (AR 10691-10702, 10711-
10 10724, 10735-10799, 10910-10915, 20778, 20781, 73087-73145.)

11
12 An administrative agency is presumed to have considered all documents in the record
13 dealing with a particular decision. (*City of Santa Cruz v. Local Agency Formation Company*
14 (1978) 76 Cal.App.3d 381, 392.) The Court finds that the Regional Board did consider issues
15 relating to the Permit's impact on housing. Moreover, Finding E.25, as discussed above, states
16 that the Regional Board considered section 13241 factors in adopting the Permit. (See Permit, at
17 p. 12.)

18
19 Therefore, as to Issue Four, the Court finds that the Petitioners failed to carry their
20 burden, and declines to issue a writ.

21 22 **ISSUE FIVE**

23 Petitioners contended that: "The Regional Board adopted terms and provisions that are
24 contrary to the Prohibition under Water Code section 13360, imposed upon Regional Boards,
25 from adopting permit terms that 'specify the design, location, type of construction, or particular
26 manner in which compliance may be had.'"



1 The Court again notes the general principles in the Clean Water Act and Porter-Cologne
2 Act, which are to clean up water that currently is in a sad condition. In addition, "Any limitation
3 on a polluter forces him to modify his conduct and operations." (*NRDC v. Costle* (D.C. Cir.
4 1977) 568 F.2d 1369, 1380.)

5 This Court finds that the Permit imposes no specific "fix" upon the local entities. Permits
6 may include specific conditions and limitations and must include tailored controls to attain water
7 quality standards. (See 132 Cong. Rec. S32381 (Oct. 16, 1986); 61 Fed. Reg. 43,761.)

8 The Court is guided by *NRDC v. U.S. EPA* (9th Cir. 1992) 966 F.2d 1292), where the
9 Ninth Circuit determined that the United States EPA's regulations should not set forth specific
10 requirements for permits because individual MS4 permit writers would determine the
11 requirements adequate for their specific situations. (966 F.2d at p. 1308.) The Court further is
12 guided by the language in *NRDC v. Costle, supra*, which held that:

13 The authority to prescribe limits consistent with the best practicable technology
14 may be tantamount to prescribing that technology . . . But this ambitious statute is
15 not hospitable to the concept that the appropriate response to a difficult problem is
not to try at all.

16 (568 F.2d at p. 1380.) The Court finds that California's municipal NPDES permits must be
17 consistent with federal law. Water Code section 13370, subdivision (c) holds, in part:

18 It is in the interest of the people of the state, in order to avoid direct regulation by
19 the federal government of persons already subject to regulation under state law
20 pursuant to this division, to enact this chapter in order to authorize the state to
implement the provisions of the Federal Water Pollution Control Act.

21 (Wat. Code, § 13370, subd. (c).)

22 This Court is aware from argument on Phase I's Receiving Waters Limitations issues,
23 that in another California region, the federal government did take over local control of a storm
24 water permit where U.S. EPA disagreed with the permit's provisions. This Court strongly
25 believes that it is in the best interests of the local entities represented by Petitioners, as well as in
26 the interest of the Regional Board, and in that of the State Board, to do
27
28



1 everything it can to keep control of local water pollution problems within California's
2 boundaries, within the Regional Board's boundaries, and not to cede control to the federal
3 government. This Court therefore is interpreting the Regional Board's Permit with these
4 concepts in mind.

5
6 A municipal storm water permit must ensure compliance with the Clean Water Act.
7 Water Code section 13372, subdivision (a) states, in part:

8 This chapter shall be construed to ensure consistency with the requirements for
9 state programs implementing the Federal Pollution Control Act and acts
10 amendatory thereof or supplementary thereto.

11 (Wat. Code, § 13372, subd. (a); see also *id.* at § 13377.)

12 The Court finds that specific programs required under the Clean Water Act must take
13 precedence over any statutes within the Water Code. Water Code section 13360 is not part of the
14 Porter-Cologne Act's Chapter 5.5, which authorizes issuance of permits under the Clean Water
15 Act. Chapter 5.5 takes precedence over any conflicting statutes found elsewhere in the Water
16 Code. Water Code section 13372 reads, in part: "The provisions of this chapter shall prevail
17 over other provisions of this division to the extent of any inconsistency." (Wat. Code, § 13372.)

18 If, as Petitioners suggest in their argument to the Court, Water Code section 13360 *prohibits*
19 programs necessary to comply with the federal requirements, then as a matter of statutory
20 construction and preemption, federal requirements must take precedence over Water Code
21 section 13360.

22
23 However, the Court finds that even if Water Code section 13360 applied, the Permit does
24 not violate that statute. Water Code section 13360, subdivision (a) states, in part:

25 No waste discharge requirement or other order of a regional board or the state
26 board or decree of a court issued under this division shall specify the design,
27 location, type of construction, or particular manner in which compliance may be
28 had with that requirement, order or decree, and the person so ordered shall be
permitted to comply with the order in any lawful manner. However, the



1 restrictions of this section shall not apply to waste discharge requirements or
2 orders or decrees with respect to any of the following.

3 (Wat. Code, § 13360, subd. (a).) In addition, while Petitioners have challenged Permit
4 requirements pertaining to “numeric design criteria,” the Court finds the term to be an
5 unfortunate use of words. Despite the use of the word “design,” the criteria are guidelines or
6 standards. They do not set forth a specific method or “fix” to address problems, but set forth
7 general goals to be achieved or attained.

8
9 The Court also notes that it was Petitioners who suggested the manner of compliance
10 developed under the 1996 permit, having proposed best management practices (BMPs) to
11 implement for construction, development and industrial and commercial facilities. Under the
12 1996 permit, Petitioners proposed SUSMP requirements to control the pollutants coming from
13 development and redevelopment activities. The permittees also proposed additional programs
14 under their ROWD, which is certified under federal law. (See AR 30, 33, 793, 810.)

15
16 Notably, the Permit allows some flexibility in how permittees are to meet the
17 requirements set forth. (See, e.g., Permit at pp. 14, 22, 24-25, 43.) For example, if a permittee
18 believes that a requirement within the Permit is not cost effective or efficient, it can choose to
19 implement another best management practice.

20 This Order provides flexibility for Permittees to petition the Regional Board
21 Executive Officer to substitute a BMP under the SQMP with an alternative BMP,
22 if they can provide information and documentation on the effectiveness of the
23 alternative, equal to or greater than the prescribed BMP in meeting the objectives
24 of this Order.

25 (Permit, at p. 14, ¶ 7.) The Permit does require that Petitioners provide information and
26 documentation on the effectiveness of the alternative BMP, equal to or greater than the
27 prescribed BMP. So, the permittees may have to obtain approval of that best management
28 practice from the Regional Board, but the Court finds that such an approval requirement is not



1 unreasonable. The Court believes that the Regional Board will carry out its obligations and act
2 according to its duties, as presumed by Evidence Code section 664. This Court also believes that
3 if the Regional Board is presented with a reasonable alternative, it will act reasonably. (See
4 Permit at p. 23, Part 4.A.1.c & p. 14, ¶ 7.)
5

6 The Court again keeps in mind the goals of both the Clean Water Act and the Porter-
7 Cologne Act in making these findings. As a general guideline, the Court further looks to *Tahoe-*
8 *Sierra Preservation Council v. SWRCB* (1989) 210 Cal.App.3d 1421 in determining that the
9 Permit does not impose impermissible controls on the permittees. *Tahoe-Sierra* held, in part,
10 that: "Section 13360 is meant to 'preserve the freedom of persons who are subject to a discharge
11 standard to elect between strategies to comply with that standard.'" (210 Cal.App.3d at p. 1438.)
12 It continues: "Section 13360 is a shield against unwarranted interference with the ingenuity of
13 the parties subject to a waste discharge requirement; it is not a sword precluding regulation of
14 discharges of pollutants." (*Ibid.*) This Court reads the Permit as setting forth guidelines or
15 standards and not as absolutely mandating the method to comply. Therefore, it is consistent with
16 *Tahoe-Sierra*.
17

18 Moreover, State Board precedential orders have held that MS4 permits must include
19 specific programs and controls. In the *Bellflower* decision, the Board held: "The addition of
20 measurable standards for designing the BMPs provides additional guidance to developers and
21 establishes a clear target for the development of the BMPs." (AR 1852.) State Board Orders 91-
22 03 and 91-04 state, in part: "It is appropriate and proper to issue a permit regulating municipal
23 separate storm sewer systems which requires specific practices." (Respondents' Supplemental
24 Authorities, Exhibits 64 & 63.)
25

26 Finally, the Court finds that Water Code section 13360 does not prohibit a permit from
27 including programs and requirements designed to meet federal law, as the instant Permit does.
28



1 Adopting a permit that includes programs and requirements proposed by the Petitioners here, and
2 required by law and necessary to meet water quality standards, is neither arbitrary, capricious, or
3 a prejudicial abuse of discretion.

4
5 The Court finds that as to Issue Five, the Petitioners have not carried their burden, and the
6 Court declines to grant the writ.

7 ISSUE SIX

8 This Court previously has found that the Administrative Record shows that the Regional
9 Board considered State Board Order 2000-11, which held, in part, that: "The standard urban
10 storm water mitigation plans, or SUSMPs, are consistent with the maximum extent practicable
11 standards and are therefore federally mandated." (AR 7506.) This Court finds that the SUSMPs
12 being challenged are substantially similar to the permittees' previous proposal, and notes that the
13 permittees have suggested the standards in their ROWD. (See, e.g., AR 809 compared with
14 Permit at pp. 36-37, § 3.A.1-3; AR 810 and 786 compared with Permit at p. 37, § 4C; AR 786
15 compared with Permit, at p. 38.) Given the similarities, this Court finds that the Petitioners
16 cannot now complain of requirements that they themselves suggested. The Court finds that for
17 those Petitioners who were part of the joint ROWD submission, the doctrines of estoppel and
18 waiver apply.
19

20
21 The Court also finds that in setting forth the scope of the SUSMPs, the Regional Board
22 followed the State Board's *Bellflower* decision in Water Quality Order No. 2000-11. (AR 8077-
23 8078.) The Court further finds and agrees that the Permit amended the SUSMP requirements to
24 clarify their implementation consistent with recent Regional Board actions, and where
25 appropriate to correct procedural and other deficiencies identified by the State Board in
26 *Bellflower*. (*Ibid.*) Under prior State Board orders, the Regional Board had discretion to include
27 additional types of development in future Permits' SUSMP requirements. As the State Board's
28



1 Chief Counsel has stated, in interpreting *Bellflower*: “The Order allows broader discretion by the
2 Regional Water Boards to decide whether to include additional types of development in future
3 SUSMPs.” (*Ibid.*; AR 1858-1861, 3337, 7531.) The Court finds that the SUSMP order allows
4 the Regional Board more discretion than what Petitioners contend.

5
6 Next, the numeric standard referenced by Petitioners and Respondents is permissible
7 under the *Bellflower* decision:

8 The crux of the disagreement is that the Regional Water Board added numeric
9 design standards to establish the amount of runoff that must be treated or
10 infiltrated, and required the mandatory application of these standards to categories
11 of development . . . The numeric criteria the Regional Board adopted essentially
12 requires that 85 percent of the run-off from the development be infiltrated or
13 treated . . . The State Board continued: “In adopting these standards, the Regional
14 Water Board based its decision on a research review of standards in other states
15 and a statistical analysis of rainfall in Los Angeles County. The standard was set
16 to gain the maximum benefit in mitigation while imposing the *least* burden on
17 developers. In light of the evidence of the use of this or more stringent standards
18 in other states, the expert testimony supporting this standard, the endorsement by
19 the U.S. EPA in its comments, and the cost effectiveness of its implementation, []
20 the Regional Water Board acted appropriately in determining that these standards
21 reflect the MEP.

22 (AR 1852-1853 [emphasis added].) Consistent with its finding in Issue Five, this Court
23 finds that the numeric design standards set forth at pages 36-37 of the Permit are
24 standards or goals and do not set forth a “cure,” in violation of Water Code section
25 13360. It is appropriate for a permit to have either a volumetric- or flow-based treatment
26 control design standard to mitigate the volumetric treatment control of best management
27 practices. (See AR 17674, 17682, 68930.) Therefore, a flow-based treatment control
28 best management practice is an appropriate requirement.

The Court finds, consistent with its ruling in Issue Five, that the Permit provides
flexibility for permittees to petition the Regional Board Executive Officer to substitute a best
management practice under the SQMP with an alternative best management practice. (Permit, at



1 p. 14.) Again, this Court must presume that the Regional Board will act reasonably and carry out
2 its required obligations. (See Evid. Code, § 664.)

3 In addition, the Court finds that these provisions are federally required. (33 U.S.C. §
4 1342, subds. (a)(1) & (p)(3)(b)(iii); 40 C.F.R. § 122.44, subd. (k)(2).) Code of Federal
5 Regulations, section 122.26 requires that permittees must control pollutants from industrial
6 activities, through ordinance, permit, contract, order or similar means. (40 C.F.R. § 122.26,
7 subds. (b)(5) & (b)(8), (d)(1)(i)(A)(2), (d)(2)(ii) & (d)(2)(i)(A).) Industrial activity is a
8 significant source of pollutants. (Permit, at p. 4; AR 1853.) The Court notes that industrial
9 activity SUSMPs are not limited to both commercial and residential areas. (See 40 C.F.R. §
10 122.26, subds. (d)(2)(iv)(A) & (d)(2)(iv)(D).) Therefore, these requirements prevail over any
11 prohibition in Water Code section 13360. (Wat. Code, §§ 13370, 13372, 13377.)

12
13
14 This Court agrees with Respondent and Intervenors that the Clean Water Act represents
15 minimum, not maximum, requirements. In *Warren v. U.S. EPA* (D.C. Cir. 1998) 159 F.3d 616,
16 the Court rejected such a limited reading:

17 Petitioners do not direct our attention to anything in the text or structure to
18 indicate that Congress intended to preclude EPA from considering additional
19 factors.

20 (159 F.3d at pp. 623-624.) Also, “the reasonable inference taken by the EPA is that while it must
21 consider the five listed factors, it is not barred from considering additional ones.” (*Allied Local
22 Regional Manufacturers Caucus v. U.S. EPA* (D.C. Cir. 2000) 215 F.3d 61, 78.) Here, the same
23 is true for the Regional Board. It made findings regarding industrial activities. (AR 6799-6801,
24 7948-7956, 8073-8078.) The Regional Board explicitly stated that: “The new permit amends
25 the SUSMP requirements to clarify implementation, make it consistent with recent Regional
26 Board actions, and where appropriate.” (AR 8077-8078.) It clarified that “the 100,000 square
27 feet commercial development definition includes heavy industrial development. The category is
28



1 designated 'industrial/commercial.'" (*Ibid.*) The Court notes that industrial and commercial
2 activities are sources of pollution. (AR 6644, 8055, 11599.)

3 Turning to the issue of environmentally-sensitive areas (ESAs), the Court finds that the
4 Regional Board's inclusion of ESAs in the Permit is justified. (AR 6800, 7071-7077, 7084,
5 72623-72624.) As the Record notes, the "Regional Board staff has proposed thresholds for
6 ESAs to be responsive to the State Board decision in Order No. 2000-11." (AR 7077.) One of
7 Petitioners' arguments is that responsibility for environmentally-sensitive areas lies with other
8 agencies and laws and that the State Board and Regional Board should not interfere with that
9 regulation. This Court, however, finds that it is appropriate for more than one agency to deal
10 with an issue of such major importance as environmentally-sensitive areas, which are covered by
11 multiple statutes, both state and federal. (See AR 6800, 7073-7074, 7084, 7542.) Sites that
12 adjoin an environmentally-sensitive area can impact the sensitive area. Further, just because an
13 area is environmentally sensitive does not mean that no development will occur there; therefore,
14 an agency may still have concerns with how the area is developed and any adverse effects. (See
15 AR 7073-7074.)

16 Among the many studies in the Administrative Record is a report titled "The Mitigation
17 of Stormwater Impacts From New Development In Environmentally-Sensitive Areas." At one
18 part, it reads:
19

20 [Environmentally-sensitive areas] are inherently sensitive habitats containing
21 unique, rare, threatened, or endangered species and/or assemblages of species.
22 Their unique and sensitive nature merits a higher standard of environmental
23 protection than more common areas with common and abundant species.
24

25 (AR 7074.) It also reads:

26 Under the [Clean Water Act], the Regional Board is responsible for 'restoring and
27 maintaining the chemical, physical and biological integrity of the Nation's
28 waters.' Clearly, the [memorandum of understanding] contemplates cooperation



1 and coordination of the Regional Board's regulatory programs to enhance the
2 relationship between the [Clean Water Act] and [environmentally-sensitive areas].

3 (AR 7069.) For these areas, the Court finds there is no duplication of efforts, even though
4 multiple agencies may be involved. Each agency may have a different focus. Notably, water
5 coming from one area impacts others. The California Coastal Commission's policies support this
6 findings. (AR 72623-72624.) An October 2, 2000 letter in the Administrative Record reads:

7 The California Coastal Commission believes that the SUSMPs should be applied
8 to all projects within or adjacent to environmentally-sensitive areas.
9 Development activities in and around environmentally-sensitive areas can have a
10 significant impact on the water quality.

11 (AR 72624, see also 7073.)

12 In summary, the Court finds that the numeric design standard, the industrial and
13 commercial category and the environmentally-sensitive area category are consistent with the
14 State Board's *Bellflower* decision, general statutory laws in California, federal statutory law and
15 the evidence in the Administrative Record.

16 The federal regulations set forth requirements for municipalities to apply for a storm
17 water discharge permit. One such requirement is that the permittees, including Petitioners, are
18 required to prepare:

19 A description of structural and source control measures to reduce pollutants from
20 runoff from commercial and residential areas that are discharged from the
21 municipal storm sewer system that are to be implemented during the life of the
22 permit, accompanied with an estimate of the expected reduction of pollutant loads
23 and a proposed schedule for implementing such controls.

24 (40 C.F.R. § 122.26, subd. (d)(2)(iv)(a).) In reviewing the Permit application, and basing the
25 Permit upon it, the Regional Board analyzed the effectiveness of the SUSMP program, and
26 fulfilled any responsibility to assess the effectiveness of the SUSMP program. (See, e.g., AR
27 68961.)
28



1 With respect to the proper definition of “redevelopment,” Petitioners argue that it should
2 be defined as “one acre,” as opposed to “5,000 square feet” as defined in the Permit. The Court
3 finds that the Permit definition is appropriate where it defines “redevelopment” as: “Land-
4 disturbing activity that results in the creation, addition, or replacement of 5,000 square feet more
5 of impervious surface area on an already developed site.” (Permit, at pp. 59-60.) This Court
6 rejects the suggestion that “redevelopment” must be defined as “one acre.”
7

8 First, the reality is that most parcels within the County of Los Angeles, at least in the
9 urban areas, are clearly smaller than an acre. Also, the Court refers back to its acknowledgment
10 that although the local governmental entities have conducted a Herculean effort and made
11 significant headway with water problems, Los Angeles County still has a long way to go. If this
12 Court accepted Petitioners’ view, it would mean that no change need be made even though
13 technical knowledge in 2004 is far advanced from where it was 50 or 60 or 70 years ago when
14 some of the initial development occurred. Now, more is known about urbanization’s effect on
15 water pollution problems. (Permit, at pp. 2-3.) It is appropriate that when that initial
16 development is redeveloped, society uses that opportunity to make an appropriate change.
17 Adopting the one-acre standard is not workable in this urban area. The Court finds that the 5,000
18 square foot standard is appropriate given the nature of the problem, the goals of the Clean Water
19 Act and the Porter-Cologne Act and the fact that Los Angeles County has a long way to go in
20 meeting those goals.
21
22

23 Aside from the policy reasons for the definition, this Court finds evidence in support of
24 the Regional Board’s redevelopment definition. In its response to comments to the Permit’s June
25 29, 2001 draft, the Regional Board stated:

26 The intent of the Regional Board in adopting SUSMP requirements was expressly
27 to ensure that when highly developed communities, such as those in Los Angeles
28



1 County, replace themselves through generations, the opportunity to mitigate the
2 adverse impacts of storm water pollution from urbanization is not lost.

3 (AR 7084.) As the Court found above, this is a reasonable goal. The Regional Board also
4 explained its rationale for defining redevelopment as “5,000 square feet” of impervious surfaces,
5 looking to other locations around the country. (AR 1863, 7595.)

6 The Court disagrees with Petitioners that federal regulations require a different definition.
7 This is a Phase I permit, even if some municipalities in Los Angeles County would, standing
8 alone, fit Phase II definitions. The one-acre definition comes from the regulations governing
9 Phase II permits. Therefore, it does not apply. (Compare 40 C.F.R. §§ 122.30-122.37 with 40
10 C.F.R. § 122.26, subd. (d).) The Court finds that the Permit’s definition of “redevelopment” is
11 appropriate and permissible in this Phase I permit to achieve the goals of the Clean Water Act
12 and Porter-Cologne Act.
13

14 In addition, this Permit does allow, contrary to Petitioners' arguments, for regional
15 solutions. The permittees clearly have the responsibility to propose regional solutions
16 themselves, as opposed to waiting for the Regional Board to so do. In its *Bellflower* decision, the
17 State Board held:
18

19 We recommend that the *cities and the County*, along with other interested
20 agencies, *work to develop regional solutions* so that individual dischargers are not
21 forced to create numerous small-scale projects. While the SUSMPs are an
22 appropriate means of requiring mitigation of storm water discharges, we also
23 encourage innovative regional approaches.

24 (AR 1856 [emphasis added].) This concept allows the permittees to make regional solutions.
25 (See also AR 7369; Permit at p. 40.) The Court notes that the permittees have not submitted any
26 specific regional proposals for regional solutions or programs. (AR 7369.) Certainly, they
27 presented no evidence of such proposals at trial. The Court finds that the Permit provides
28 sufficient flexibility for any regional solution proposed by the permittees.



1 Finally, looking again to the Bellflower decision, the State Board has held:

2 The concept of a mitigation fund or “bank” is a positive idea for obtaining
3 regional solutions to stormwater runoff. . . It would be appropriate for *the County*
4 *to consider developing a program* with the appropriate flood control agency, or as
a model for the separate cities to develop.

5 (AR 1862 [emphasis added].) In short, it appears that it is the County’s, not the Regional
6 Board’s responsibility to develop such a fund. In Petitioners’ Reply Brief, at page 53, lines 18-
7 20, they argue that they specifically requested that the Regional Board build into the Permit the
8 flexibility to allow the fund to be used for a full range of projects and programs. The Permit
9 complied with this request, should the permittees propose such a fund or program. (Permit at p.
10 40.) The Court therefore finds that the Permit provides sufficient flexibility for a mitigation
11 waiver fund. The Court further finds that an urban area like Los Angeles County must have a
12 SUSMP program in place that will effectively deal with long-term stormwater control issues.
13

14 The Court finds that the Petitioners have not met their burden on Issue Six, and declines
15 to grant the writ as to Issue Six.

16 **ISSUE SEVEN**

17
18 By a separate written stipulation, signed into order by the Court, the parties resolved
19 Issue Seven as follows:

20 As to Issue Seven, the Parties stipulate that in implementing the legal authority
21 requirements under Permit Parts 3.G.2.c-d, the permittees may exercise their discretion to
22 determine what is necessary to meet these provisions, including the determination of “potential
23 contribution” and “potential to discharge.” The Parties further stipulate that “potential
24 contribution” and “potential to discharge,” as used in Parts 3.G.2.c-d, means adequate legal
25 authority to prevent an actual discharge of pollutants to the municipal separate storm sewer
26 system.
27
28



1 structural and non-structural best management practices to reduce pollutants in storm water run-
2 off from construction sites to the municipal storm sewer system.” These permits are to include
3 ways of dealing with construction sites. As previously noted, the Court finds that construction
4 sites generally release significant amounts of pollution of various types. (See, e.g., AR 6801,
5 8059.) Even small construction sites cause significant amounts of pollution, especially after rain.
6

7 Under the Stormwater Phase II Compliance Assistance Guide, MS4 permits must include
8 controls for construction activities, even if construction sites are regulated under a general
9 permit. (AR 10667.) Because of inconsistent permitting of smaller construction sites, some
10 permittees did not manage sediments until after they left the construction site. (AR 8059-8060.)
11 The lack of a uniform permitting process is a legitimate basis to require consistent local control
12 and supervision by municipalities of smaller construction sites not covered by the General
13 Permit.
14

15 State Water Resources Control Board Order 99-08, the General Construction Permit,
16 indicates that the General Permit does not preempt or supercede the authority of local storm
17 water management agencies, such as the Regional Board, “to prohibit, restrict or control storm
18 water discharges to separate storm sewer systems or other water courses within their jurisdiction
19 as allowed by State and Federal law.”
20

21 The General Construction Permit recognizes the permittees’ and the petitioners’
22 responsibility under the Clean Water Act to regulate run-off from construction sites. The Court
23 believes that local government entities may be required to make the smaller construction sites
24 meet Clean Water Act guidelines. There are management programs that have been developed to
25 comply with any permits issued by the Regional Water Boards to local agencies under the Clean
26 Water Act.
27
28



1 The Permit's Development Construction Program at Part 4.E is consistent with the
2 General Construction Permit in that they regulate different entities and are not in conflict.

3 A local SWPPP may substitute for a state SWPPP if the local is at least as inclusive in
4 controls and best management practices as the state SWPPP. Petitioners have failed to
5 demonstrate that the Regional Board acted either arbitrarily or capriciously abused its discretion
6 or exceeded its authority. The Development Construction Program at Part 4.E provides in part
7 that each permittee must implement a program to control run-off from construction activity at all
8 construction sites within its jurisdiction.

9
10 Petitioners argue that the program is excessive in part because Part 4.D prohibits grading
11 during the wet season. They argue that this section is a hardship on the local grading
12 subcontractors and is an economic hardship to the community. Given the mandate from the
13 Clean Water Act and Porter-Cologne Act, this requirement is not excessive. Further, the
14 limitation on grading in the wet season is only one suggestion among several in Part 4.D as to
15 management of this significant source of pollution. Part 4.D gives Petitioners discretion, but that
16 does not render it ambiguous. The best management practice of limiting grading during the wet
17 season is contained in the Construction Handbook developed by municipalities and developers.
18 (AR 34427.)

19
20 The Court finds, therefore, that the Regional Board did not abuse its discretion by
21 specifying that grading be limited during the wet season. The Development Construction
22 Program of Part 4.D provides that sediments generated on a project shall be retained using
23 adequate treatment control or structural best management practices. Petitioners contend that this
24 restriction on sediments is excessive and is really a way to adopt a Total Maximum Daily Load
25 (TMDL).
26
27
28



1 The Court disagrees. Sediment from construction is a major source of pollution in the
2 storm sewer systems. The Clean Water Act allows for limitations on such discharges. (33
3 U.S.C. section 1342, (p)(3)(B)(ii).) The limitation is consistent with a General Construction
4 Permit prohibition of discharges of material other than storm water. This Court finds that the
5 argument that the limitation is in effect a TMDL is incorrect; it is not a TMDL in disguise. The
6 Court finds that Petitioners have failed to support their contentions with any legal support and
7 therefore disregards these allegations and contentions. (See *Kim v. Sumitomo* (1993) 17
8 Cal.App.4th 974, 979.)

10 In addition, looking at the language of Part 4.E of the Permit, the Court finds that subpart
11 d) is essentially the same as the permittees' Report of Waste Discharge. (AR 32.) Both state that
12 construction-related materials, wastes, spills or residues shall be retained on the project site. The
13 relevant language of the Development Construction Program provides:

- 15 1. Each permittee shall implement a program to control runoff from the
16 construction activity at all construction sites within its jurisdiction. The
17 program shall insure the following minimum requirements are effectively
18 implemented at all construction sites:
- 18 a) Sediments generated on the project site shall be retained using
19 adequate treatment control or structural BMPs [Best Management
20 Practices];
 - 21 b) Construction-related materials, waste, spills or residues shall be
22 retained at the project site to avoid discharge to streets, drainage
23 facilities, receiving waters or adjacent properties by wind or
24 runoff;
 - 25 c) Non-storm water runoff from equipment and vehicle washing and
26 any other activity shall be contained at the project site; and;
 - 27 d) Erosion from slopes and channels shall be controlled by
28 implementing an effective combination of BMPs [Best
Management Practices], (as approved in Regional Board
Resolution No. 99-03), such as the limiting of grading scheduled
during the wet season; inspecting graded areas during rain events;



1 planting and maintenance of vegetation on slopes; and covering
2 erosion susceptible slopes.

3 (Permit, at Part 4.E.1, p. 42.) Subpart b) is similar to the permittees' Report of Waste Discharge
4 (ROWD). Subpart d) is similar to the ROWD that states construction-related materials, wastes,
5 spills or residues shall be retained on the project site. (AR 32.)

6 As to this section, the Court finds that no special understanding or knowledge is required
7 to understand its meaning. It is clear and not ambiguous. Further, the Permit's terms are not
8 vague for individuals knowledgeable in the field, where seemingly vague terms have meaning in
9 the context of the EPA's regulatory scheme. (See *United States v. Weitzenhoff* (9th Cir. 1994) 35
10 F.3d 1275, 1289.)

11
12 Subpart b) of the Development Construction Program reads: "construction related
13 materials spills or residues shall be retained at the project site to avoid discharge to streets,
14 drainage facilities, receiving waters or adjacent properties by wind or run-off." Petitioners have
15 questioned whether "construction related materials" includes sand, gravel or other natural
16 material. The Court reads subpart B in the context of subpart A's requirement that sediments
17 generated on a project site be retained using adequate treatment control or structural best
18 management practices. Read together, there is no ambiguity and "construction related materials"
19 does include sand, gravel or other natural materials.

20
21 Overall, the Court finds that Petitioners have failed to establish that the adoption of the
22 Development Construction Program, Part 4.D. of the Permit, was improper. Petitioners'
23 contentions are conclusory, without any relevant citation to statutes, regulations or case law.
24 Under *Kim v. Sumitomo Bank*, the Court disregards these contentions and denies the writ as to
25 Issue Nine as to the Petitioners.
26

27 **ISSUE TEN**



1 By a separate written stipulation, signed into order by the Court, the parties resolved
2 Issue Ten as follows:

3 As to Issue Ten, the Parties stipulate that on April 12, 2004, a letter issued from Dennis
4 Dickerson, Executive Officer of the Regional Board, addressed to Rufus Young in response to a
5 Request for Clarification as to Part 4.F.1, subdivision (a) of the Permit. The Court has
6 previously incorporated that five-page letter into the record by reference, and it is attached as
7 Exhibit "A" to the parties' stipulation and Court's order. The Parties agree that the letter sets
8 forth how Part 4.F.1, subdivision (a) is to be construed.

9
10 **ISSUE ELEVEN**

11 By a separate written stipulation, signed into order by the Court, the parties resolved Issue
12 Eleven as follows:

13 As to Issue Eleven, the Regional Board and Petitioners stipulate that Part 3.E of the Permit
14 should be read in light of Findings D.1 and D.2, so that a permittee is not responsible for
15 discharges from facilities over which it has no legal jurisdiction, or for agricultural return flows
16 which are not included under the Clean Water Act. For the purposes of the resolution of this
17 case, Intervenors do not object to this clarification for purposes of the stipulation and entry of
18 judgment.

19 **ISSUE TWELVE**

20 By a separate written stipulation, signed into order by the Court, the parties resolved Issue
21 Twelve as follows:

22 As to Issue Twelve, the Parties stipulate that Part 4.D.1 requires the principal permittee to
23 conduct a study to develop numeric peak flow criteria for application in six areas. The County
24 has indicated that its peak flow study is expected to be completed in December 2004. The
25 Regional Board will consider the results of the County's study in evaluating the permittees'
26 determination of appropriate numeric peak flow criteria for the natural drainage systems
27 identified in Part 4.D.1. This stipulation shall not be construed as a waiver of the petitioners'
28



1 right to comment on and object to future basin plan amendments related to hydromodification or
2 peak flow or the right to comment on and object to the hydromodification resolution pending
3 before the Regional Board.

4 The Parties recognize that the stipulation set forth in Paragraph 15 does not resolve certain
5 Petitioners' challenge to the Regional Board's legal authority to regulate peak flow through a
6 municipal storm water permit, an issue the Court will address in its statement of decision on
7 Phase II, Issue 6. This stipulation shall not be construed as a waiver or an estoppel, now or in the
8 future, as to any Party's contentions, or rights to pursue those contentions, on other issues
9 litigated in Phases I and II of this litigation.

10
11 **ISSUE THIRTEEN**

12 By a separate written stipulation, signed into order by the Court, the parties resolved Issue
13 Thirteen as follows:

14 As to Issue Thirteen, the Parties stipulate that Part 4.C.3.d.3 is intended to apply only to
15 critical sources and requires that permittees initiate an investigation at critical sources within one
16 business day of referral by the Regional Board. The Permit provision identifies certain core
17 components of an investigation, but it does not require that these components be completed
18 within that one business day. Permittees can comply with the Permit by taking initial steps (such
19 as logging, prioritizing, and tasking) to "initiate" the investigation within that one business day.
20 However, the Regional Board would expect that the initial investigation, including a site visit, to
21 occur within four business days. If the Regional Board identifies an emergency condition when
22 referring a matter under Part 4.C.3.d.3, the Executive Officer would expect the permittee to
23 respond appropriately.

24 The Parties' stipulation regarding Part 4.C.3.d.3 shall not preclude, in future municipal
25 storm water permit revisions, any party from challenging a successor provision to Part 4.C.3.d.3
26 or revising this interpretation of Part 4.C.3.d.3.
27
28



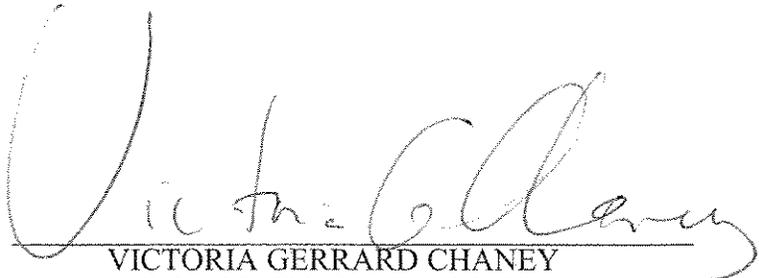
1 failure to do that here does not negate the Permit and is not sufficient for the Court to remand the
2 Permit for re-hearing.

3 Finally, the Court finds that there was substantial compliance with the administrative
4 hearing requirements and due process requirements. (See *United Systems of Arkansas, Inc. v.*
5 *Stamison* (1998) 63 Cal.App.4th 1001, 1011; *Pulaski v. Occupational Safety & Health Stds. Bd.*
6 (1999) 75 Cal.App.4th 1315, 1327-1328; *Southern Pac. Transportation Co. v. State Bd. of*
7 *Equalization* (1985) 175 Cal.App.3d 438, 442.) There was the opportunity for substantial
8 written comment by the municipalities. Petitioners considered their comment letters and
9 documents to be part of the Record and as an opportunity to comment in lieu of oral comment
10 time before the Regional Board. (AR 7900, 7829, 7887-7888.)

11
12 The Court is not satisfied that, had the Regional Board provided better notice or more
13 time for comment, that the outcome would have been different, despite numerous requests of this
14 Court to the Petitioners in that regard. (See *NRDC v. USEPA* (9th Cir. 2002) 279 F.3d 1180,
15 1186; *Environmental Defense Center v. EPA* (9th Cir. 2003) 344 F.3d 832, 851.) In addition, at
16 trial, counsel for the Regional Board presented various drafts of the Permit, which demonstrated
17 that the requirements regarding TMDLs and the one-business day inspection were logical
18 outgrowths of these previous drafts and, in some cases, arose in response to comments. (See,
19 e.g. AR 5110-5127, 5143-5144, 6468, 6479-6480, 6508, 6568, 7285; Permit pp. 27-34, 48-49.)
20
21 Therefore, the Court cannot find that there was prejudice to the Petitioners.
22

23
24
25 IT IS SO ORDERED.

26 Dated: March ²⁴16, 2005

27 
VICTORIA GERRARD CHANEY
28 JUDGE OF THE SUPERIOR COURT

Filed 10/5/06

CERTIFIED FOR PARTIAL PUBLICATION*

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

SECOND APPELLATE DISTRICT

DIVISION FIVE

COUNTY OF LOS ANGELES et al.,

Plaintiffs and Appellants,

v.

CALIFORNIA STATE WATER
RESOURCES CONTROL BOARD et al.,

Defendants and Respondents.

B184034

(Los Angeles County
Super. Ct. No. BS080792)

APPEAL from an order of the Superior Court of Los Angeles County, Victoria G. Chaney, Judge. Affirmed in part; reversed in part with directions.

Raymond G. Fortner, Jr., Los Angeles County Counsel, Judith A. Fries, Principal Deputy County Counsel, and Burhenn & Gest, Howard Gest, and David W. Burhenn for Plaintiffs and Appellants County of Los Angeles and Los Angeles County Flood Control District.

Rutan & Tucker, Richard Montevideo, and Peter Howell, for Plaintiffs and Appellants The Cities of Arcadia et al.

Burke, Williams & Sorensen, Leland C. Dolley, Rufus C. Young, and Amy E. Morgan for Plaintiffs and Appellants City of Industry, City of Santa Clarita, and City of Torrance.

* Pursuant to California Rules of Court, rules 976(b) and 976.1, this opinion is certified for publication with the exception of part IV (G)-(L).

Richards, Watson & Gershon, Lisa Bond, Matthew F. Cohen, and John J. Harris for Plaintiffs and Appellants The Cities of Monrovia, Norwalk, Rancho Palos Verdes, Artesia, Beverly Hills, Carson, La Mirada, and Westlake Village.

Bill Lockyer, Attorney General, Tom Greene, Chief Assistant Attorney General, Mary E. Hackenbracht, Assistant Attorney General, Richard Magasin, Helen G. Arons, and Jennifer Faye Novak, Deputy Attorneys General, for Defendants and Respondents California Regional Water Quality Control Board, Los Angeles Region and State Water Resources Control Board.

David Saul Beckman, Anjali I. Jaiswal, and Michelle S. Mehta, for Defendants and Respondents Natural Resources Defense Council, Santa Monica Baykeeper, and Heal the Bay.

I. INTRODUCTION

Plaintiffs, 32 cities,¹ the County of Los Angeles (the county), the Los Angeles County Flood Control District (the flood control district), the Building Industry Legal Defense Fund, and the Construction Industry Coalition on Water Quality, appeal from a March 24, 2005 judgment in favor of defendants, California Regional Water Quality Control Board, Los Angeles Region (the regional board) and the State Water Resources Control Board (the state board) and intervenors, Natural Resources Defense Council, Inc., Santa Monica Baykeeper, and Heal the Bay. Plaintiffs challenge the legality of the regional board's issuance of Order No. 01-182 adopting the National Pollutant Discharge Elimination System Permit No. CAS004001 (the permit) which is entitled, "Municipal

¹ The following cities have appealed Arcadia, Artesia, Bellflower, Beverly Hills, Carson, Cerritos, Claremont, Commerce, Covina, Diamond Bar, Downey, Gardena, Hawaiian Gardens, Industry, Irwindale, La Mirada, Lawndale, Monrovia, Norwalk, Paramount, Pico Rivera, Rancho Palos Verdes, Rosemead, Santa Clarita, Santa Fe Springs, Signal Hill, South Pasadena, Torrance, Vernon, Walnut, West Covina, Westlake Village, and Whittier.

Storm Water And Urban Runoff Discharges Within The County Of Los Angeles, And The Incorporated Cities Therein, Except The City Of Long Beach.” The December 13, 2001 permit was issued to the county, the flood control district, and 84 incorporated cities in Los Angeles County.

We agree with plaintiffs the regional board was required to conduct environmental review pursuant to Public Resources Code section 21080.5. We disagree with every other contention raised by plaintiffs. Upon issuance of the remittitur, the trial court is to set aside its orders denying the administrative mandate petitions. The trial court is to order the regional board to conduct environmental review pursuant to Public Resources Code section 21080.5.

II. THE PERMIT

A. Overview

The permit was issued pursuant to the obligations imposed by the Clean Water Act which will be discussed in greater detail later in this opinion. The Clean Water Act was originally entitled the Federal Water Pollution Control Act. (62 Stat. 1115; 1948 U.S. Code Cong. & Admin. News at pp. 2215-2220.) For purposes of clarity and consistency, the federal applicable water pollution statutes will collectively be referred to as the Clean Water Act. The 72-page permit is divided into 6 parts. There is an overview and findings followed by: a statement of discharge prohibitions; a listing of receiving water limitations; the Storm Water Quality Management Program; an explanation of special provisions; a set of definitions; and a list of what are characterized as standard provisions. The county, the flood control district, and the 84 cities are designated in the permit as the permittees. The findings and permit are as follows.

B. Findings

The permit found that the county, the flood control district, and the 84 cities discharge and contribute to the release of pollutants from “municipal separate storm sewer systems” (storm drain systems). These discharges were the subject of permits issued by the regional board in 1990 and 1996. The 1996 order served as the National Pollutant Discharge Elimination System permit for the discharge of municipal storm water.

The regional board found that storm drain systems in the county discharged cyanide, indicator bacteria, total dissolved solids, total suspended solids, turbidity, nutrients, total aluminum, dissolved cadmium, copper, lead, total mercury, nickel, zinc, bis(2-ethylhexyl)phthalate, polycyclic aromatic hydrocarbons, diazinon, and chlorpyrifos. According to the regional board, there were certain pollutants present in urban runoff which resulted from sources over which the permittees had no control. Among the runoff sources over which the permittees have no control are polycyclic aromatic hydrocarbons which are the products of internal combustion engines or copper from brake pad wear. Various reports prepared by the regional board, the Los Angeles County Grand Jury, and academic institutions indicated pollutants are threatening to or actually impairing the beneficial uses of water bodies in the Los Angeles region.

The regional board concluded that urbanization: increased the velocity, volume, and duration of water runoff; increased erosion; and adversely affected natural drainages. The regional board found: “The [county] has identified as the seven highest priority industrial and commercial critical source types, (i) wholesale trade (scrap recycling, auto dismantling); (ii) automotive repair/parking; (iii) fabricated metal products; (iv) motor freight; (v) chemical and allied products; (vi) automotive dealers/gas stations; [and] (vii) primary metal products.” Also, the regional board concluded “auto repair facilities” contribute “significant concentrations of heavy metals” to storm waters. Moreover, paved surfaces such as those outside fast food establishments or parking lots “are

potential sources of pollutants” in storm water runoff. Further, storm water runoff from retail gas establishments “have concentrations” of heavy metals and hydrocarbons.

The regional board further made findings concerning the background of the permit and its coverage area. The essential components of a Storm Water Management Program are: adequate legal authority; fiscal resources; the actual Storm Water Quality Management Program itself; and a monitoring program. A Storm Water Quality Management Program consists of: a Public Information and Participation Program; an Industrial/Commercial Facilities Program; a Development Planning Program; a Development Construction Program; a Public Agency Activities Program; and an Illicit Connection and Illicit Discharges Elimination Program. The permittees filed a Report of Waste Discharge dated January 31, 2001, which contained a proposed Storm Water Quality Management Program.

C. Prohibited And Allowable Discharges

In the prohibited discharges portion of the permit, the county and the cities were required to “effectively prohibit non-storm water discharges” into their storm sewer systems. This prohibition contains the following exceptions: where the discharge is covered by a National Pollutant Discharge Elimination permit for non-storm water emission; natural springs and rising ground water; flows from riparian habitats or wetlands; stream diversions pursuant to a permit issued by the regional board; “uncontaminated ground water infiltrations” as defined by 40 Code of Federal Regulations, part 35.2005(b)(20) (1990); and waters from emergency fire fighting flows. Another category of permissible discharges were flows incidental to urban activities consisting of: reclaimed and potable landscape irrigation runoff; potable drinking water discharges which comply with the American Water Works Association guidelines for dechlorination and “suspended solids reduction practices”; drains for foundations, footings, and crawl spaces; air conditioning condensate; “dechlorinated/debrominated”

swimming pool discharges; dewatering of lakes and decorative fountains; non-commercial car washing by residents or non-profit organizations; and sidewalk rinsing.

The regional board's executive officer was granted authority to add or remove categories of non-storm water discharges. If one of the foregoing categories was determined to be "a source of pollutants" by the regional board's executive officer, the discharge was to be no longer exempt. The executive officer retained the authority to impose conditions on the city or county to ensure that the discharge was "not a source of pollutants." Also, the executive director was given the authority to impose additional "prohibitions on non-storm water discharges" after considering either of two factors. The first factor the regional board's executive officer could consider is anti-degradation policies. The second factor the regional board's executive officer could consider is the total maximum load an impaired water body can receive and still meet applicable water quality standards and protect beneficial uses. (33 U.S.C. § 1313(d)(1).)

D. Receiving Water Limitations

Receiving waters are defined thusly, "Receiving waters' means all surface water bodies" Discharges from storm sewer systems that "cause or contribute" to violations of "Water Quality Standards" objectives in receiving waters as specified in state and federal water quality plans were prohibited. Storm or non-storm water discharges from storm sewer systems which constitute a nuisance were also prohibited. The term nuisance is defined, "Nuisance' means anything that meets all of the following requirements: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; (2) affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; (3) occurs during, or as a result of, the treatment or disposal of wastes." In order to comply with the receiving water limitations, the permittees were required to implement control measures in accordance with the

permit. If the Storm Water Quality Management Program did not assure compliance with the receiving water requirements, the permittee was required to: immediately notify the regional board; submit a Receiving Water Limitations Compliance Report that described the best management practices that were currently being used and proposed changes to them; submit an implementation schedule as part of the Receiving Water Limitations Compliance Report; and, after approval by the regional board, promptly implement the new best management practices. If the permittee makes the foregoing changes, even if there were further receiving water discharges beyond those addressed in the Water Limitations Compliance Report, additional changes to the best management practices need not be made unless directed to do so by the regional board.

E. Storm Water Quality Management Program

The permittees were to implement the Storm Water Quality Management Program which meet the standards of 40 Code of Federal Regulations, part 122.26(d)(2) (2000) and reduce the pollutants in storm waters to the maximum extent possible with the use of best management practices. Further, the permittees were required to revise the Storm Water Quality Management Program to comply with specified total daily maximum load allocations. If a permittee modified the countywide Storm Water Quality Management Program, it was required to implement a local management program. Each permittee was required by November 1, 2002, to adopt a storm water and urban runoff ordinance. By December 2, 2002, each permittee was required to certify that it had the requisite legal authority to comply with the permit through adoption of ordinances or municipal code modifications.

The county was designated as the “Principal Permittee” and was given coordination responsibilities of the Storm Water Quality Management Program. Among other things, the county was to convene Watershed Management Committees which were to meet at least four times per year. Each permittee was entitled to have a voting

representative on the committees. The committees were to coordinate and monitor implementation of the Storm Water Quality Management Program. Each permittee was required to designate a technically knowledgeable representative to the appropriate Watershed Management Committees. Each permittee was required to prepare a budget summary of moneys spent on the Storm Water Quality Management Program.

The permit granted each permittee the “necessary legal authority” to prohibit non-storm water discharges into the storm drain system. That authority extended to prohibiting discharges from: illicit connections of all kinds; wash waters from gas stations and automotive service facilities; runoff from mobile cleaning businesses; areas where oil, fluid, or antifreeze was dripping from machinery; storage areas containing hazardous substances; swimming pool waters; washing of toxic materials; and washing impervious surfaces in industrial and commercial areas. The authority also extended to the discharge of concrete and cement laden wash waters and prohibition of dumping of materials into storm drain systems. The legal authority extended to: requiring persons to comply with permittees’ ordinances; holding dischargers to storm drain systems accountable; controlling pollutants and their potential contributors; inspecting, watching, and monitoring procedures to insure compliance with the permit including prohibition of illicit discharges into storm drain systems; and requiring the use of best management practices to reduce pollutant discharge into the storm drain systems to the maximum extent possible.

F. Special Provisions

The regional board’s executive officer had the power to alter a best management practice under specified circumstances. The county, as the principal permittee, was required to implement a public information and participation program. The program included: marking all storm drains with “no dumping” signs; instituting a county-wide hotline to report illicit discharges and other environmental hazards; public education;

every year, requiring 50 percent of all school children to be educated on storm water pollution; assessments of education; and other outreach programs.

Each permittee was required to maintain a database of entities that are “critical sources” of storm water pollution. Each permittee was required to inspect under specified circumstances critical facilities including: restaurants; automotive service businesses; retail gasoline outlets; and automotive dealerships. Further, each permittee was to evaluate best management practices and increase their severity if appropriate. Violations of the Storm Water Quality Management Program were to be investigated within specified time periods. By August 1, 2002, the permittees were to amend their ordinances or municipal codes to implement the standard urban storm water mitigation plans contained in the permit. Special requirements were imposed when discharges occur in environmentally sensitive areas.

Each permittee was required to consider storm water quality impacts as part of their California Environmental Quality Act assessments. Each permittee was required to update its general plan to include “considerations and policies” of watershed and storm water quality and quantity management. The permittees were required to educate employees involved in development planning regarding the permit’s requirements.

G. Development Construction Program

The permittees were required to implement programs to “control” runoff from construction sites. Runoff from construction sites was prohibited. Non-storm water runoff from equipment washing on construction sites was to be contained on-site. Special requirements were imposed on construction sites of one acre or greater in area. Additional requirements were imposed on developments which were five acres or larger including securing a General Construction Activity Storm Water Permit. The permit imposed “Numerical Design Criteria” which required that post construction best management practices incorporate “either a volumetric or flow based treatment control

design standard, or both” under specified circumstances. If there is a violation of a General Construction Activity Storm Water Permit, the permittee may refer the violator to the state board.

H. Public Agency Activities Program

The permittees were required to minimize storm water pollution impacts. The requirements extended to: sewer systems; public construction; vehicle related facilities; landscape and recreational facilities; storm drain management; and street maintenance. The permittees were also required to participate in a study concerning possible dry weather discharges and the use of alternative treatment control best management practices.

I. Illicit Discharges And Connections

The permit states, “Permittees shall eliminate all illicit connections and . . . discharges to the storm drain system, and shall document, track, report all such cases” The elimination and reporting of such discharges required: development of an implementation program; by February 3, 2003, the municipalities provide the county with a list of all approved connections in the storm drain system; the county to conduct an annual evaluation of illicit discharges; and training of personnel in the identification and investigation of such discharges. The permittees were to complete the screening of illicit connections as follows: open channels, no later than February 3, 2003; underground pipes by February 1, 2005; and underground pipes with a diameter of 36 inches or greater by December 12, 2006. By December 12, 2006, the permittees were to complete a review of all “permitted connections” to the storm drain system to insure eliminating illicit discharges. Upon receipt of a report an illicit connection, an investigation was to be initiated within 21 days to determine the source and the

responsible party. Within 180 days, the permittees were required to “ensure termination of the connection” using appropriate enforcement authority. As to illicit discharges, a permittee was required within one business day to respond to a report and clean up a discharge. Illicit discharges were to be investigated as soon as possible and appropriate enforcement action was to be pursued.

III. NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMITS, PROCEDURAL HISTORY, AND STANDARDS OF REVIEW

The present appeal arises from the issuance of the permit. The legal genesis of the National Pollutant Discharge Elimination System permits for the discharge of municipal storm water has previously been described in some detail in other decisions. (*City of Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 619-621; *City of Rancho Cucamonga v. Regional Water Quality Control Board* (2006) 135 Cal.App.4th 1377, 1380-1381.) In *City of Rancho Cucamonga*, our colleagues in the Division Two of the Fourth Appellate District summarized the complex federal and state relationship: “Part of the Federal Clean Water Act [33 U.S.C. § 1251 et seq.] is the National Pollutant Discharge Elimination System (NPDES), “[t]he primary means” for enforcing effluent limitations and standards under the Clean Water Act. (*Arkansas v. Oklahoma* (1992) 503 U.S. 91, 101.) The NPDES sets out the conditions under which the federal [Environmental Protection Agency] or a state with an approved water quality control program can issue permits for the discharge of pollutants in wastewater. (33 U.S.C. § 1342(a) & (b).) In California, wastewater discharge requirements established by the regional boards are the equivalent of the NPDES permits required by federal law. (§ 13374.)’ (*Burbank, supra*, 35 Cal.4th at p. 621.) [¶] California’s Porter-Cologne Act (Wat. Code, § 13000 et seq.) establishes a statewide program for water quality control. Nine regional boards, overseen by the State Board, administer the program in their respective regions. (Wat. Code, §§ 13140, 13200 et seq., 13240, and 13301.) Water

Code sections 13374 and 13377 authorize the Regional Board to issue federal NPDES permits for five-year periods. (33 U.S.C. § 1342, subd. (b)(1)(B).)” (*City of Rancho Cucamonga v. Regional Water Quality Control Board*, *supra*, 135 Cal.App.4th at pp. 1380-1381.)

After the board issued the aforementioned December 13, 2001 permit, on January 17, 2003, a series of legal challenges, consisting of the filing administrative mandate and mandate petitions and complaints, were instituted by plaintiffs. Judgments in favor of the regional and state boards were entered on March 24, 2005. After the judgments were entered, notices of appeal were filed on June 21 and 22, 2005. The parties stipulated to the maximum extensions of time to brief the matter as allowed by California Rules of Court, rule 15(b)(1). This court had no authority to deny the stipulated to extensions of time to file briefs. (Cal. Rules of Court, rule 15(b) [“The reviewing court may not shorten a stipulated extension”].) No extension of time request was ever granted by any member of this court. The final reply brief was filed on August 1, 2006. Oral argument was held on September 6, 2006.

There are varying standards of review. Many of the challenges to the content of the permit involve review of the denial of Code of Civil Procedure section 1094.5 administrative mandate petitions filed pursuant to Water Code section 13330, subdivision (b). We review the trial court’s factual findings for substantial evidence. (*Fukuda v. City of Angels* (1999) 20 Cal.4th 805, 824; *Drummey v. State Bd. of Funeral Directors* (1939) 13 Cal.2d 75, 86.) Further, it is presumed the regional board considered the documents before it. (*City of Santa Cruz v. Local Agency Formation Com.* (1978) 76 Cal.App.3d 381, 393-394.) All reasonable doubts are resolved in favor of upholding the regional board’s decision. (*Laurel Heights Improvement Assn. v. Regents of the University of California* (1988) 47 Cal.3d 376, 393; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656, 674.) We (and trial courts) examine the regional board’s interpretation of legal matters utilizing a de novo standard of review. But we defer to the regional board’s expertise in

construing language which is not clearly defined in statutes involving pollutant discharge into storm drain sewer systems. (*Yamaha Corp. of America v. State Board of Equalization* (1998) 19 Cal.4th 1, 7-8; *City of Rancho Cucamonga v. Regional Water Quality Control Board, supra*, 135 Cal.App.4th at p. 1384.) Finally, the trial court's denials of plaintiffs' new trial and to enter a new judgment motions and declaratory relief requests are reviewed for an abuse of discretion. (*Ashcraft v. King* (1991) 228 Cal.App.3d 604, 616 [new trial motion]; *Bess v. Park* (1955) 132 Cal.App.2d 49, 52 [declaratory relief].)

IV. DISCUSSION

A. The Jurisdiction of the Regional Board To Issue The Permit

Plaintiffs contend the regional board did not have jurisdiction to issue the permit. Plaintiffs rely on language appearing in the Code of Federal Regulations. For example, the permittees cite to 40 Code of Federal Regulations part 123.1(g)(1) (1998) which states, "NPDES authority may be shared by two or more State agencies but each agency must have Statewide jurisdiction over a class of activities or discharges."² Further the permittees refer to the following language in 40 Code of Federal Regulations part 123.22(b) (1998), "If more than one agency is responsible for administration of a

² 40 Code of Federal Regulations part 123.1(g)(1) (1998) states in its entirety: "(g)(1) Except as may be authorized pursuant to paragraph (g)(2) of this section or excluded by § 122.3, the State program must prohibit all point source discharges of pollutants, all discharges into aquaculture projects, and all disposal of sewage sludge which results in any pollutant from such sludge entering into any waters of the United States within the State's jurisdiction except as authorized by a permit in effect under the State program or under section 402 of [Clean Water Act]. [National Pollutant Discharge Elimination System] authority may be shared by two or more State agencies but each agency must have Statewide jurisdiction over a class of activities or discharges. When more than one agency is responsible for issuing permits, each agency must make a submission meeting the requirements of § 123.21 before [the Environmental Protection

program, each agency must have statewide jurisdiction over a class of activities.”³ Moreover, 40 Code of Federal Regulations part 123.1(f) (1998) states, “Any State program approved by the Administrator shall at all times be conducted in accordance with the requirements of this part.”

Plaintiffs reason that under state law, the regional board does not have statewide jurisdiction. Water Code section 13100 states that the state and regional boards are part of the California Environmental Protection Agency. Water Code section 13200 identifies the scope of jurisdiction of the nine regional boards. The regional board’s limited jurisdiction is defined in Water Code section 13200, subdivision (d).⁴ The powers of the

Agency] will begin formal review. [¶] (2) A State may seek approval of a partial or phased program in accordance with section 402(n) of the [Clean Water Act].”

³ 40 Code of Federal Regulations part 123.22(b) (1998) states in its entirety: “A description (including organization charts) of the organization and structure of the State agency or agencies which will have responsibility for administering the program, including the information listed below. If more than one agency is responsible for administration of a program, each agency must have statewide jurisdiction over a class of activities. The responsibilities of each agency must be delineated, their procedures for coordination set forth, and an agency may be designated as a ‘lead agency’ to facilitate communications between [the Environmental Protection Agency] and the State agencies having program responsibility. If the State proposes to administer a program of greater scope of coverage than is required by Federal law, the information provided under this paragraph shall indicate the resources dedicated to administering the Federally required portion of the program. [¶] (1) A description of the State agency staff who will carry out the State program, including the number, occupations, and general duties of the employees. The State need not submit complete job descriptions for every employee carrying out the State program. [¶] (2) An itemization of the estimated costs of establishing and administering the program for the first two years after approval, including cost of the personnel listed in paragraph (b)(1) of this section, cost of administrative support, and cost of technical support. [¶] (3) An itemization of the sources and amounts of funding, including an estimate of Federal grant money, available to the State Director for the first two years after approval to meet the costs listed in paragraph (b)(2) of this section, identifying any restrictions or limitations upon this funding.”

⁴ Water Code section 13200, subdivision (d) states: “The state is divided, for the purpose of this division, into nine regions: [¶] Los Angeles region, which comprises all

regional boards are set forth in Water Code section 13225 with the caveat that the powers exist “with respect to its region.”⁵ Because the regional board is not a statewide agency, plaintiffs argue the permit is void.

This argument has no merit. Effective September 22, 1989, the authority to issue National Pollutant Discharge Elimination System permits was vested by the federal Environmental Protection Agency in the state board. (54 Fed. Reg. 40664, 40665 (Oct. 3, 1989); see *Building Industry Assn. of San Diego County v. State Water Resources Control Bd.* (2004) 124 Cal.App.4th 866, 875.) The state board is organized into nine regional boards which are part of the California Environmental Protection Agency. (Wat.

basins draining into the Pacific Ocean between the southeasterly boundary, located in the westerly part of Ventura County, of the watershed of Rincon Creek and a line which coincides with the southeasterly boundary of Los Angeles County from the ocean to San Antonio Peak and follows thence the divide between San Gabriel River and Lytle Creek drainages to the divide between Sheep Creek and San Gabriel River drainages.”

⁵ Water Code section 13225 states in its entirety: “Each regional board, with respect to its region, shall: [¶] (a) Obtain coordinated action in water quality control, including the prevention and abatement of water pollution and nuisance. [¶] (b) Encourage and assist in self-policing waste disposal programs, and upon application of any person, advise the applicant of the condition to be maintained in any disposal area or receiving waters into which the waste is being discharged. [¶] (c) Require as necessary any state or local agency to investigate and report on any technical factors involved in water quality control or to obtain and submit analyses of water; provided that the burden, including costs, of such reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained therefrom. [¶] (d) Request enforcement by appropriate federal, state and local agencies of their respective water quality control laws. [¶] (e) Recommend to the state board projects which the regional board considers eligible for any financial assistance which may be available through the state board. [¶] (f) Report to the state board and appropriate local health officer any case of suspected contamination in its region. [¶] (g) File with the state board, at its request, copies of the record of any official action. [¶] (h) Take into consideration the effect of its actions pursuant to this chapter on the California Water Plan adopted or revised pursuant to Division 6 (commencing with Section 10000) of this code and on any other general or coordinated governmental plan looking toward the development, utilization or conservation of the water resources of the state. [¶] (i) Encourage regional planning and action for water quality control.”

Code, §§ 174 et seq. 13100; see *City of Arcadia v. State Water Resources Control Bd.* (2006) 135 Cal.App.4th 1392, 1405.) The nine regional boards are authorized under this state's laws to issue National Pollutant Discharge Elimination System permits. (*Building Industry Assn. of San Diego County v. State Water Resources Control Bd.*, *supra*, 124 Cal.4th at p. 875; Wat. Code, § 13374.) The federal Environmental Protection Agency memorandum of agreement with the state board complies with the statewide jurisdiction requirements imposed by the federal regulations. The fact the state board is organized into nine regional boards is legally irrelevant. The state board has statewide jurisdiction.

Further, we agree with the Attorney General that plaintiffs may not challenge the regional board's authority to issue a National Pollutant Elimination System permit in this proceeding. Such an indirect challenge to the board's authority is barred by the de facto officer doctrine. The Supreme Court has described the de facto officer doctrine, which bars a challenge to an agency's action based on a purported lack of legal authority to act, thusly: "[W]e conclude that under the 'de facto officer' doctrine prior actions of the Commission cannot be set aside on the ground that the appointment of the commissioners who participated in the decision may be vulnerable to constitutional challenge. As this court explained in *In re Redevelopment Plan for Bunker Hill* (1964) 61 Cal.2d 21, 41-42: 'The de facto doctrine in sustaining official acts is well established. [Given the existence of] a de jure office, "[p]ersons claiming to be public officers while in possession of an office, ostensibly exercising their function lawfully and with the acquiescence of the public, are *de facto* officers. . . . The lawful acts of an officer *de facto*, so far as the rights of third persons are concerned, are, if done within the scope and by the apparent authority of office, as valid and binding as if he were the officer legally elected and qualified for the office and in full possession of it." [Citations.]' (See also *Pickens v. Johnson* (1954) 42 Cal.2d 399, 410 ['There is no question but that . . . the status of a judge de facto attached to his action. The office to which he was assigned was a de jure office. By acting under regular assignment under a statute authorizing it he was acting under color of authority as provided by law. His conduct in trying the cases and rendering judgment

therein cannot here be questioned.’.]’” (*Marine Forests Soc. v. California Coastal Com.* (2005) 36 Cal.4th 1, 54; original italics.) Here, plaintiffs are challenging the permit by attacking the regional board’s authority. Under these circumstances, this they may not do in what amounts to a licensing proceeding. (*Ibid.*; *In re Redevelopment Plan for Bunker Hill, supra*, 61 Cal.2d at pp. 41-42.)

Finally there is no merit to the contention that because the regional board is not an elected body, it cannot make the financial decisions of the scope entailed by the permit. The board’s powers exist because of: the Clean Water Act which was adopted and amended by elected members of Congress and signed into law by elected presidents; provisions of the Water Code which were enacted by elected legislators and approved by elected governors; and the members, who must have special competence, are appointed by an elected governor and confirmed by the elected State Senate. (Wat. Code, § 13201, subds. (a)-(b).) The democratic processes of government control every aspect of the creation of the board, its legal authority, and the selection of its members. Further, the decisions of regulatory institutions such as the regional board, are entitled by law to a presumption of competence and propriety. (*City of Rancho Cucamonga v. Regional Water Quality Control Bd., supra*, 135 Cal.App.4th at p. 1384; *Communities for a Better Environment v. State Water Resources Control Bd.* (2003) 109 Cal.App.4th 1089, 1104.)

B. The Motions To Strike

Plaintiffs argue that the trial court erroneously granted the regional board’s motions to strike portions of the petition. Plaintiffs contend: the motions to strike were in fact disguised summary adjudication motions; the orders granting the motions to strike did not resolve entire causes of action; and hence, the orders violated Code of Civil Procedure section 437c, subdivision (f)(1). This contention has no merit. Code of Civil Procedure section 436 allows a court to strike portions of a cause of action. (*City of*

Rancho Cucamonga v. Regional Water Quality Control Bd., *supra*, 135 Cal.App.4th at p. 1386; *PH II, Inc. v. Superior Court* (1995) 33 Cal.App.4th 1680, 1682-1683.)

C. The State Board's Demurrer

Plaintiffs argue that the trial court erroneously sustained the state board's demurrer to the petitions. The state board contended it was not properly joined as a party to the litigation. A group of plaintiffs alleged the state board required the regional boards to adopt terms and conditions on National Pollutant Discharge Elimination System permits without complying with Government Code sections 11340.5, subdivision (a)⁶ and 11352, subdivision (b) which are part of the Administrative Procedure Act. Plaintiffs had a duty to specifically allege every fact that would give rise to liability by the state board. (*Covenant Care, Inc. v. Superior Court* (2004) 32 Cal.4th 771, 790; *Lopez v. Southern Cal. Rapid Transit Dist.* (1985) 40 Cal.3d 780, 795.) The state board refused to assume jurisdiction over this case. There were thus no specific allegations as to the state board to hold it liable as it engaged in no independent activity. Hence, this contention has no merit and the demurrer was properly sustained. (*City of Rancho Cucamonga v. Regional Water Quality Control Bd.*, *supra*, 135 Cal.App.4th at p. 1383; *People ex rel Cal. Regional Wat. Quality Control Bd. v. Barry* (1987) 194 Cal.App.3d 158, 177.)

⁶ Government Code sections 11340.5, subdivision (a) states, "No state agency shall issue, utilize, enforce, or attempt to enforce any guideline, criterion, bulletin, manual, instruction, order, standard of general application, or other rule, which is a regulation as defined in Section 11342.600, unless the guideline, criterion, bulletin, manual, instruction, order, standard of general application, or other rule has been adopted as a regulation and filed with the Secretary of State pursuant to this chapter."

D. The Declaratory Relief Claims

The trial court sustained the regional board's demurrers to the declaratory relief claims. Plaintiffs argue they were entitled to declaratory relief as to whether: the permittees were required to "go beyond the [maximum extent practicable]" standard to comply with part 2 of the permit which relates to receiving water limitations; part 2 contained a "safe harbor" if the permittees were acting in good faith in implementing best management practices to control excessive discharge of pollutants and nuisance conditions; the requirement in part 4 of the permit that each permittee's general plan and California Environmental Quality Act review take into account storm water runoff is lawful; the regional board was required to consider the economic impact of the proposed permit and its effect on housing; and the regional board was required to perform a "cost/benefit analysis" of the monitoring and reporting program.

When a remedy has been designated by the Legislature to review an administrative action, declaratory relief is unavailable. (*State of California v. Superior Court* (1974) 12 Cal.3d 237, 249; *Scott v. City of Indian Wells* (1972) 6 Cal.3d 541, 546.) Water Code section 13330, subdivision (b) provides that a regional board order may be reviewed by a Code of Civil Procedure section 1094.5 administrative mandate petition filed within 30 days after the state board denies review. Therefore, the demurrer was correctly sustained to the declaratory relief claims. (*Hill v. City of Manhattan Beach* (1971) 6 Cal.3d 279, 287; *Hostetter v. Alderson* (1952) 38 Cal.2d 499, 500.)

E. The Regional Board Has Not Unlawfully Interfered In Local General Plans And California Environmental Quality Act Review

The permit requires the permittees to update their general plans to include watershed and storm water runoff as considerations in the land use, housing, conservation, and open space planning. Further, the permittees were required to amend

their California Environmental Quality Act process to insure review of the effect of commercial and residential development on storm water runoff. Plaintiffs argue these aspects of the permit violate the separation of powers doctrine. This contention has no merit. As noted, the regional boards are part of a joint state and federal process to enforce the Clean Water Act. (*City of Burbank v. State Water Resources Control Bd.*, *supra*, 35 Cal.4th at pp. 619-620; *City of Rancho Cucamonga v. Regional Water Quality Control Bd.*, *supra*, 135 Cal.App.4th at pp. 1380-1381.) The general plan powers and duties of cities and counties are limited by statewide law. (Cal. Const., art. XI, § 7; Gov. Code, § 65030.1; *Jackson v. City of Los Angeles* (2003) 111 Cal.App.4th 899, 907-908; *Suter v. City of Lafayette* (1997) 57 Cal.App.4th 1109, 1118.) Further, the Clean Water Act supersedes all conflicting state and local pollution laws. (*Arkansas v. Oklahoma* (1992) 503 U.S. 91, 101; *City of Burbank v. State Water Resources Control Bd.*, *supra*, 35 Cal.4th at p. 621.) The state and regional boards are vested with the primary responsibility of controlling water quality. (Wat. Code, § 13001; see *Arkansas v. Oklahoma*, *supra*, 503 U.S. at p. 101; *Hampson v. Superior Court* (1977) 67 Cal.App.3d 472, 484.) Regional boards are explicitly granted the authority to issue orders for purposes of enforcing the federal Clean Water Act. (Wat. Code, § 13377.) Federal law requires that permits include controls to reduce pollutant discharge in areas of new development and significant redevelopment—the very area where regional board review occurs. (40 C.F.R. § 122.26(d)(2)(iv)(A)(2) (2006).) So long as the regional boards’ decisions carry out federal and state water quality mandates resulting from express legislative action as the challenged orders in this case in fact do, no separation of powers issue is present. (*Kugler v. Yocum* (1968) 69 Cal.2d 371, 375-377; *Salmon Trollers Marketing Assn. v. Fullerton* (1981) 124 Cal.App.3d 291, 300.) Given the foregoing, we need not address the waiver, laches, and estoppel contentions of the regional and state boards and the intervenors.

F. Failure To Comply With the California Environmental Quality Act

Plaintiffs argue that the permit issuance process violates provisions of the California Environmental Quality Act. Plaintiffs rely on Water Code section 13389 which provides that chapter 3 of the California Environmental Quality Act does not apply to National Pollutant Discharge Elimination Systems permit proceedings: “Neither the state board nor the regional boards shall be required to comply with the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code prior to the adoption of any waste discharge requirement, except requirements for new sources as defined in the Federal Water Pollution Control Act or acts amendatory thereof or supplementary thereto.” California Code of Regulations, title 23, section 3733 also states, “Environmental documents are not required for adoption of waste discharge requirements under Chapter 5.5, Division 7 of the Water Code, except requirements for new sources as defined in the Federal Water Pollution Control Act. This exemption is in accordance with Water Code Section 13389 which does not apply to the policy provisions of Chapter 1 of CEQA.” Plaintiffs argue that the California Environmental Quality Act applies to: the receiving water limitations; the revision of the Storm Water Quality Management Program; and the Development Planning Program. (See *City of Arcadia v. State Water Resources Control Bd.*, *supra*, 135 Cal.App.4th at pp. 1420-1426; *Committee for Progressive Gilroy v. State Water Resources Control Bd.* (1987) 192 Cal.App.3d 847, 862.)

We agree that Water Code section 13389 explicitly excludes chapter 3 of the California Environmental Quality Act. But as plaintiffs argue, chapters 1 and 2.6 of the California Environmental Quality Act required the regional board to engage in specified environmental assessments. We agree with the analysis of our Fourth Appellate District, Division One colleagues set forth in *City of Arcadia v. State Water Resources Control Bd.*, *supra*, 135 Cal.App.4th at pages 1420-1430 that regional board permits for basin plans which may have a significant impact on the environment are subject to limited

California Environmental Quality Act review. The Storm Water Quality Management Program portion of the permit imposes considerable requirements on development in residential and business settings including: development and redevelopment planning; conserving natural areas; protecting slopes and channels; altering surface flows of storm waters; and developing flow based treatment control designs to mitigate by infiltrating, filtering, or treating of storm water runoff. Such matters, which can involve significant construction, project development, and urban planning are commonly subject to California Environmental Quality Act review. (Pub. Resources Code, § 21065; Cal. Code Regs., tit. 14, §§ 15378, subd. (a), 15382; *Association for a Cleaner Environment v. Yosemite Community College Dist.* (2004) 116 Cal.App.4th 629, 639 [removal of firing range]; *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1600-1607 [city approval of a subdivision]; *Terminal Plaza Corp. v. City and County of San Francisco* (1986) 177 Cal.App.3d 892, 899-907 [ordinance which could lead to future construction]; *Erven v. Board of Supervisors* (1975) 53 Cal.App.3d 1004, 1012-1014 [road]; *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 802-806 [groundwater extraction project].)

But as in *City of Arcadia*, there is no requirement that a full environmental impact report be prepared as would be required for a project subject to chapter 3 of the California Environmental Quality Act. Rather, the regional board must prepare a certification pursuant to Public Resources Code section 21080.5. (*Mountain Lion Foundation v. Fish & Game Com.* (1997) 16 Cal.4th 105, 127-128; *City of Arcadia v. State Water Resources Control Bd.*, *supra*, 135 Cal.App.4th at pp. 1421-1426.) Upon issuance of the remittitur, subject to our discussion below concerning potential mootness, the trial court is to direct the regional board to prepare a certification pursuant to Public Resources Code section 21080.5.

There is no merit to the regional board's argument that the permit is not subject to California Environmental Quality Act review. The exemptions to California Environmental Quality Act review authorized by Public Resources Code section 21084,

subdivision (a) and title 14 California Code of Regulations sections 15307 and 15308 are inapplicable.⁷ The Legislature has clearly indicated in Water Code section 13389 that only chapter 3 of the California Environmental Quality Act does not apply to National Pollutant Discharge Elimination System permits. Insofar as title 14 California Code of Regulations sections 15307 and 15308 are in conflict with Water Code section 13389, they are unenforceable. (Gov. Code, § 11342.2 [“Whenever by the express or implied terms of any statute a state agency has authority to adopt regulations to implement, interpret, make specific or otherwise carry out the provisions of the statute, no regulation adopted is valid or effective unless consistent and not in conflict with the statute and reasonably necessary to effectuate the purpose of the statute”]; *Wildlife Alive v. Chickering* (1976) 18 Cal.3d 190, 205-206.) In *Wildlife Alive*, the Supreme Court explained the limited scope of the categorical exemption regulations: “Even if section 15107 was intended to cover the commission’s hunting program, it is doubtful that such a categorical exemption is authorized under the statute. We have held that no regulation is valid if its issuance exceeds the scope of the enabling statute. (See Gov. Code, § 11374; *Whitcomb Hotel, Inc. v. Cal. Emp. Com.* (1944) 24 Cal.2d 753, 757.) The secretary is

⁷ Public Resources Code section 21084 states: “The guidelines prepared and adopted pursuant to Section 21083 shall include a list of classes of projects which have been determined not to have a significant effect on the environment and which shall be exempt from this division. In adopting the guidelines, the Secretary of the Resources Agency shall make a finding that the listed classes of projects referred to in this section do not have a significant effect on the environment.” Title 14 California Code of Regulations section 15307 states: “Class 7 consists of actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment. Examples include but are not limited to wildlife preservation activities of the State Department of Fish and Game. Construction activities are not included in this exemption.” Title 14 California Code of Regulations section 15308 provides: “Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption.”

empowered to exempt only those activities which do not have a significant effect on the environment. (Pub. Resources Code, § 21084.) It follows that where there is any reasonable possibility that a project or activity may have a significant effect on the environment, an exemption would be improper.” (*Wildlife Alive v. Chickering*, *supra*, 18 Cal.3d at pp. 205-206.) Here, the statutory and regulatory inconsistency is even more pronounced—Water Code section 13389 makes it clear only chapter 3 of the California Environmental Quality Act does not apply to the “adoption of any waste discharge requirement” which by its very terms would include the permit. To construe title 14 of the California Code of Regulations sections 15307 and 15308 to bar limited environmental review prior to issuance of a National Pollutant Discharge Elimination System permit would conflict with Water Code section 13389.

Further, there is nothing in federal law that excludes this case from California Environmental Quality Act coverage. None of the applicable forms of federal preemption principles apply to Water Code section 13389. There are three different ways a state statute can be preempted by a federal law: where Congress has made its intent known through explicit statutory language; where state law regulates conduct in a field that Congress intended the federal government to occupy exclusively; and where it is impossible for a party to comply with both state and federal requirements or where state law stands as an obstacle to the accomplishment and execution of the full congressional purposes and objectives. (*English v. General Electric Co.* (1990) 496 U.S. 72, 78-79; *Dowhal v. SmithKline Beecham Consumer Healthcare* (2004) 32 Cal.4th 910, 923.) None of these factors are present. Congress has never explicitly addressed California’s limited environmental review process in the context of National Pollutant Elimination System permit issuance procedures. The manner in which National Pollutant Elimination System permits are issued by state agencies such as the regional board is not a field occupied exclusively by the federal government—it is a partnership between federal and state governments. (*Arkansas v. Oklahoma*, *supra*, 503 U.S. at p. 101 *City of Burbank v. State Water Resources Control Bd.*, *supra*, 35 Cal.4th at p. 620.) There is no evidence in

this case limited environmental review conducted pursuant to chapter 2.6 of the California Environmental Quality Act will stand as an obstacle to the accomplishment of congressional objectives. If there is a case where the facts are that limited environmental review pursuant to chapter 2.6 of the California Environmental Quality Act will frustrate Congress's purposes and objectives, then certainly, federal preemption can potentially occur. But in the context of this case, we respectfully conclude that the arguments of the regional and state boards and the intervenors that requiring compliance with chapter 2.6 of the California Environmental Quality Act stands as an obstacle to the full accomplishment and execution of congressional purposes and objectives or that it is impossible to comply with both state and federal law are based on speculation. (*Solorzano v. Superior Court* (1992) 10 Cal.App.4th 1135, 1148 [“mere speculation about a hypothetical conflict is not the stuff of which preemption is made”]; *Consumer Justice Center v. Olympian Labs, Inc.* (2002) 99 Cal.App.4th 1056, 1062 [“preemption cannot be based on a belief in phantoms, i.e., speculation”].)

Finally, contrary to the regional board's contention, there is nothing in the National Environmental Policy Act that requires the permit be excluded from California Environmental Quality Act review. Neither title 33 United States Code section 1342(b) nor the federal regulations speak to California Environmental Quality Act review.

At oral argument we raised the question of whether by the time our remittitur issues, the present permit will have expired. If the present permit is no longer in effect, it would seem that it would be a moot point to require limited environmental review. It is unclear what will happen in the future. The best course of action is to leave this matter in the good hands of the trial court. It is entirely possible the present permit will have to be replaced by another permit by the time our remittitur issues. If so, the trial court is free to conclude it would be moot to require limited environmental review in connection with the present permit and may then deny the mandate petition. (*Youngblood v. Board of Supervisors* (1978) 22 Cal.3d 644, 657; *MHC Operating Limited Partnership v. City of San Jose* (2003) 106 Cal.App.4th 204, 214.)

[The portions of the opinion that follow, parts IV (G)-(L) are deleted from publication.

See *post* at page 46, where publication is to resume.]

G. Sufficiency Of The Evidence Contentions

1. Overview

Many of plaintiffs' contentions are overtly stated or deftly disguised sufficiency of the evidence arguments. We agree with the intervenors that plaintiffs in making these assertions have failed in every respect to set forth all of the relevant evidence. As such, all evidence sufficiency contentions have been waived. (*State Water Resources Control Bd. Cases* (2006) 136 Cal.App.4th 674, 749; see *Foreman & Clark Corp. v. Fallon* (1971) 3 Cal.3d 875, 881.)

2. The reasonableness of the permit requirements

Plaintiffs argue that the permit violates the statutory requirement it be reasonable. Plaintiffs contend that four parts of the permit exceed federal requirements which only require that a permit restrict pollutant discharges to the maximum extent possible. Plaintiffs identify three parts of the permit which exceed the federal maximum extent possible limit and reason as follows. Part 2.1 of the permit, which involves receiving water restrictions, prohibits all water discharges which violate water quality standards or objectives regardless of whether the best management practices are reasonable. Part 2.4, also part of the receiving water restrictions, permits the regional board to adopt best management practices without any reasonableness restriction. Part 3.C requires the permittees to revise their storm water quality management programs in order to

implement the total maximum daily loads for impaired water bodies. As a result, according to plaintiffs, parts 3.G and 4 authorize the regional board to require strict requirements with numeric limits on pollutants which are incorporated into the total maximum daily load restrictions. Because these four parts of the permit exceed federal requirements, plaintiffs argue the permit violates a state law requirement derived from Water Code sections 13000, 13241, and 13263, subdivision (a)⁸ that restrictions on storm water system discharges be reasonable.

⁸ Water Code section 13000 states: “The Legislature finds and declares that the people of the state have a primary interest in the conservation, control, and utilization of the water resources of the state, and that the quality of all the waters of the state shall be protected for use and enjoyment by the people of the state. [¶] The Legislature further finds and declares that activities and factors which may affect the quality of the waters of the state shall be regulated to attain the highest water quality which is reasonable, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible. [¶] The Legislature further finds and declares that the health, safety and welfare of the people of the state requires that there be a statewide program for the control of the quality of all the waters of the state; that the state must be prepared to exercise its full power and jurisdiction to protect the quality of waters in the state from degradation originating inside or outside the boundaries of the state; that the waters of the state are increasingly influenced by interbasin water development projects and other statewide considerations; that factors of precipitation, topography, population, recreation, agriculture, industry and economic development vary from region to region within the state; and that the statewide program for water quality control can be most effectively administered regionally, within a framework of statewide coordination and policy.” The portions of Water Code section 13241 upon which plaintiff rely state: “Each regional board shall establish such water quality objectives in water quality control plans as in its judgment will ensure the reasonable protection of beneficial uses and the prevention of nuisance; however, it is recognized that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses. Factors to be considered by a regional board in establishing water quality objectives shall include, but not necessarily be limited to, all of the following: [¶] . . . (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area. [¶] (d) Economic considerations. [¶] (e) The need for developing housing within the region. [¶] (f) The need to develop and use recycled water.” Water Code section 13263, subdivision (a) states: “The regional board, after any necessary hearing, shall prescribe requirements as to the nature of any proposed discharge, existing discharge, or

These contentions have no merit. To begin with, insofar as these contentions involve sufficiency of the evidence contentions, they are waived because of a failure to set forth all of the applicable evidence. (*Foreman & Clark Corp. v. Fallon, supra*, 3 Cal.3d at p. 881; *State Water Resources Control Bd. Cases, supra*, 136 Cal.App.4th at p. 749.) In any event, regardless of whether the permit imposed requirements beyond what plaintiffs contend is the maximum extent feasible, the regional board has the authority to impose additional restrictions. As the intervenors explain, title 33 United States Code section 1342(p)(3)(B) states in part: “Permits for discharges from municipal storm sewers— [¶] . . . (ii) shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers; and [¶] (iii) shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the . . . State determines appropriate for the control of such pollutants.”

In fact, the regional board had the duty to place limits on the release of pollutants into certain waters. Our colleagues in Division One of the Fourth Appellate District have explained: the Clean Water Act requires that states identify a level of permissible pollution, the “total maximum daily load”; the total maximum daily load must be established at a level to achieve certain water standards; and the National Pollutant Elimination System permits must be consistent with the amount of pollutants described in the state specified total maximum daily load. (*City of Arcadia v. State Water Resources Control Bd., supra*, 135 Cal.App.4th at p. 1404; 33 U.S.C. § 1313(d).) The federal Clean Water Act requires the following, “Except as in compliance with this section and

material change in an existing discharge, except discharges into a community sewer system, with relation to the conditions existing in the disposal area or receiving waters upon, or into which, the discharge is made or proposed. The requirements shall implement any relevant water quality control plans that have been adopted, and shall take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241.”

sections . . . [1312, 1316, 1317, 1328, 1342, and 1344] of this Act, the discharge of any pollutant by any person shall be unlawful.” (33 U.S.C. § 1311(a).) In terms of the regional board’s statutory duty in setting a total maximum daily load, the Clean Water Act requires: “Each State shall establish for the waters identified in paragraph (1)(A) of this subsection, and in accordance with the priority ranking, the total maximum daily load, for those pollutants which the Administrator identifies under section [1314(a)(2)] as suitable for such calculation. Such load shall be established at a level necessary to implement the applicable water quality standards” (33 U.S.C. § 1313(d)(1)(C).) As can be noted, the regional board is permitted to take into account the maximum extent practicable limitation in setting the total maximum daily load. (*City of Arcadia v. State Water Resources Control Bd.*, *supra*, 136 Cal.App.4th at p. 1428.) The regional board’s total maximum daily load specification in this case was entirely consistent with federal water quality law. Nothing in the Water Code can circumvent the foregoing federally imposed requirements as to the calculation of the total maximum daily load. (See *City of Burbank v. State Water Resources Control Bd.*, *supra*, 35 Cal.4th at pp. 618, 626-627.) And the regional board’s authority in setting the total maximum daily load extended to imposing requirements beyond the maximum extent practicable. (*City of Arcadia v. State Water Resources Control Bd.*, *supra*, 135 Cal.App.4th at p. 1428; *Building Industry Assn. of San Diego County v. State Water Resources Control Bd.*, *supra*, 124 Cal.App.4th at pp. 885-886.)

There is substantial evidence the permit imposes reasonable pollutant discharge requirements. The regional board had before it the study entitled “Fundamentals of Urban Runoff Management” which detailed the feasibility of the restrictions at issue. In footnote 6 of the trial court’s March 24, 2005 statement of decision are 16 separate studies or analyses that evaluate the reasonableness of the restrictions at issue. Further, as described below, there was a vast array of reports and official papers that addressed the reasonableness issue in varying contexts ranging from economics to housing. Substantial evidence supports the trial court’s finding that the permit’s restrictions on pollutant

discharge are reasonable. It is presumed the regional board examined these reports. (*City of Santa Cruz v. Local Agency Formation Com.*, *supra*, 76 Cal.App.3d at pp. 393-394; see *Laurel Heights Improvement Assn. v. Regents of the University of California*, *supra*, 47 Cal.3d at p. 393.)

There is likewise no merit to the factually unsupported theory of the county and the flood control district that they cannot comply with the permit. The county and the flood control district assert, without citation to any evidence in the record, they cannot comply with the permit thereby rendering it, as matter of law, unreasonable. We agree with the intervenors that there is insufficient facts to permit an evidentiary challenge of the type asserted by the county and the flood control district. (*Building Industry Assn. of San Diego County v. State Water Resources Control Bd.*, *supra*, 124 Cal.App.4th at p. 888; Cal. Rules of Court, rule 14(a)(1)(C).)

3. Failure to consider the economic effects of the permit and engage in a proper cost benefit analysis

Plaintiffs argue that the regional board failed to consider the economic impact of issuance of the permits. A regional board is authorized to issue a permit which imposes more protective restrictions on waste water discharge than required by the Clean Water Act. (Wat. Code, § 13377.⁹) As noted, Water Code section 13241, subdivision (d) requires that the regional board consider the economic effect including the cost of compliance of the issuance of the permit. (See fn. 6, *supra*.) Plaintiffs argue the permit

⁹ Water Code section 13377 states, “Notwithstanding any other provision of this division, the state board or the regional boards shall, as required or authorized by the Federal Water Pollution Control Act, as amended, issue waste discharge requirements and dredged or fill material permits which apply and ensure compliance with all applicable provisions of the act and acts amendatory thereof or supplementary, thereto, together with any more stringent effluent standards or limitations necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance.”

imposes conditions more stringent than required by the federal Clean Water Act. Therefore, they reason that the regional board was required to consider the economic effect of the permit. (*City of Burbank v. State Water Resources Control Bd.*, *supra*, 35 Cal.4th at p. 618 [“When, however, a regional board is considering whether to make the pollutant restrictions in a wastewater discharge permit *more stringent* than federal law requires, California law allows the board to take into account economic factors, including the wastewater discharger’s cost of compliance” (orig. italics)]; *City of Arcadia v. State Water Resources Control Bd.*, *supra*, 135 Cal.App.4th at pp. 1415-1418 [finding sufficient consideration of economic effect of total daily maximum loads for trash restriction imposed in 2001 permit].) Further, plaintiffs argue that the regional board failed to conduct a cost benefit analysis as required by Water Code sections 13165¹⁰, 13225, subdivision (c)¹¹, 13267, subdivision (b)¹² before imposing monitoring and reporting obligations as part of the permit.

¹⁰ Water Code section 13165 states, “The state board may require any state or local agency to investigate and report on any technical factors involved in water quality control; provided that the burden, including costs, of such reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained therefrom.”

¹¹ Water Code section 13225, subdivision (c) states: “Each regional board, with respect to its region, shall: [¶] (c) Require as necessary any state or local agency to investigate and report on any technical factors involved in water quality control or to obtain and submit analyses of water; provided that the burden, including costs, of such reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained therefrom.”

¹² Water Code section 13267, subdivision (b)(1) states: “In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard

These contentions have no merit. To begin with, insofar as plaintiffs argue that there was no substantial evidence these issues were considered, they have waived their opportunity to do so because they failed to set forth all of the documents considered by the regional board. Plaintiffs have failed to detail an extensive array of reports and analysis appearing in the administrative record. (*Foreman & Clark Corp. v. Fallon*, *supra*, 3 Cal.3d at p. 881; *State Water Resources Control Bd. Cases*, *supra*, 136 Cal.App.4th at p. 749.)

Nonetheless this contention is without merit. The permit explicitly states it is intended to provide a cost-effective storm water pollution program to the maximum extent possible. The permit applies the same cost-effective analysis to efforts to reduce the flow of pollutants into receiving waters. Moreover, the regional board in its findings referred to a report specifying how the “maximum extent practicable” requirement includes considerations of costs and benefit. The regional board had before it: a study of costs prepared by the Maryland Department of Environment; a 58-page study prepared for Parsons Engineering Service on the costs and benefits of storm water best management practices; the extensive federal Environmental Protection Agency data summary of best management practices and their costs which include programs incorporated into the permit; a federal Environmental Protection Agency fact sheet showing the cost effectiveness of reductions in storm water run-off; a federal Environmental Protection Agency document detailing the economic benefits of run off controls; a 44-page federal Environmental Protection Agency document detailing cost analyses of various best management practices; a 99-page report entitled “Cost Analysis” on storm water programs in the state of Washington; a similar analysis prepared for the Commonwealth of Virginia; a federal Environmental Protection Agency analysis of the economic effects of clean water; a lengthy analysis prepared by the federal

to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

Environmental Protection Agency on the effects of restrictions of runoff on housing values; and an 11-page study entitled, “The Economics of Watershed Protection.” It is presumed the regional board examined these reports. (*City of Santa Cruz v. Local Agency Formation Com.*, *supra*, 76 Cal.App.3d at pp. 393-394; see *Laurel Heights Improvement Assn. v. Regents of the University of California*, *supra*, 47 Cal.3d at p. 393.) This constitutes substantial evidence the regional board considered the costs and benefits of implementation of the permit. Finally, for the foregoing reasons, the trial court did to abuse its discretion when it denied the posttrial motions which asserted the regional board did not consider the economic consequences of the permit.

4. Failure to consider the effect of the permit on housing

Plaintiffs argue that the regional board neglected to consider the effect of the permit on the need to develop housing as required by Water Code section 13241, subdivision (e). (See fn. 6, *supra*.) Plaintiffs argue that the Legislature has determined that all state agencies such as the regional board must “facilitate the improvement and development” of affordable housing. (Gov. Code, § 65580, subds. (c)-(d).) Plaintiffs argue: the permit is designed to impose new storm runoff limitations on future residential projects; the Standard Urban Water Mitigation Plan portion of the permit applies to both development and redevelopment projects; the permit requires that runoff mitigation occur on single family residences occupying one acre or more and 10-unit or more housing developments; among the mitigation requirements are retention of runoff and erosion from construction sites; transfers of property were subject to maintenance agreements; and the permit will require a significant amount of land to comply with treatment control best management practices.

Plaintiffs have failed to detail an extensive array of reports and analyses appearing in the administrative record. Thus, the issue of whether there is substantial evidence the regional board considered the effect of the permit on housing has been waived.

(*Foreman & Clark Corp. v. Fallon*, *supra*, 3 Cal.3d at p. 881; *State Water Resources Control Bd. Cases*, *supra*, 136 Cal.App.4th at p. 749.) Nonetheless, there is substantial evidence the regional board considered housing issues prior to issuing the permit. The regional board had before it: the May 16, 2001 expression of concerns by the Building Industry Association; demographic analyses; a scholarly discussion of the effects of environmental regulation and housing availability; the federal Environmental Protection Agency analysis of the potential effects of restrictions of runoff on housing values; a technical analysis of runoff controls on housing design and planning; a National Association of Homebuilders guide for residential storm water runoff; an analysis of site design and watershed management in the context of residential subdivisions; the document entitled, “Storm Water Management in Washington” which discusses the technical requirements for small and large parcel developments; the regional board staff analysis; an analysis of the experiences in Virginia; and an article on additional housing costs resulting from storm water regulation. It is presumed the regional board examined these reports. (*City of Santa Cruz v. Local Agency Formation Com.*, *supra*, 76 Cal.App.3d at pp. 393-394; see *Laurel Heights Improvement Assn. v. Regents of the University of California*, *supra*, 47 Cal.3d at p. 393.) Thus, there is substantial evidence the regional board considered housing related issues before it issued the permit.

H. Improper Specifications Of Design Characteristics.

Plaintiffs argue that the regional board improperly specified the “design or the particular manner” as to how there was to be compliance with waste discharge requirements. Plaintiffs rely on Water Code section 13360, subdivision (a) which states: “No waste discharge requirement or other order of a regional board . . . issued under this division shall specify the design, location, type of construction, or particular manner in which compliance may be had with that requirement, order, or decree, and the person so ordered shall be permitted to comply with the order in any lawful manner.” Plaintiffs

contend two provisions of the permit violate Water Code section 13360, subdivision (a). First, plaintiffs argue that the permit improperly imposes a series of specific design criteria for “Volumetric Treatment Control” and “Flow based Treatment Control” best management practices. Second, plaintiffs challenge the requirement that some of them place and maintain trash receptacles at transit stops.

These contentions have no merit. As held in *City of Rancho Cucamonga v. Regional Water Quality Control Bd.*, *supra*, 135 Cal.App.4th at page 1389, the federal Clean Water Act authorizes National Pollutant Discharge Elimination Systems permits to set forth specific practices which will restrict polluted storm water runoff. (33 U.S.C. § 1342(a)(1), (p)(3)(B)(iii).) In *City of Rancho Cucamonga*, Associate Justice Barton C. Gaut explained: “Rancho Cucamonga’s reliance on Water Code section 13360 is misplaced because that code section involves enforcement and implementation of state water quality law, (Wat. Code, § 13300 et seq.) not compliance with the Clean Water Act (Wat. Code, § 13370 et seq.) The federal law preempts the state law. (*Burbank, supra*, 35 Cal.4th at p. 618.) The Regional Board must comply with federal law requiring detailed conditions for NPDES permits.” (*City of Rancho Cucamonga v. Regional Water Quality Control Bd.*, *supra*, 135 Cal.App.4th at p. 1389.) Thus, nothing in state law in general or Water Code section 13360 in particular is violated by the specific pollution control requirements imposed on the permittees. We need no address the parties’ remaining contentions concerning trash receptacles.

I. Hearing Related And Due Process Arguments

1. Overview of arguments

Plaintiffs contend that the December 13, 2001 hearing failed to comply with due process requirements in the following particulars: the notice did not comply with the requirements for an adjudicative hearing specified in Government Code section 11425.10, subdivision (a)(2); no sworn testimony was presented nor any documentary evidence admitted into evidence; the permittees were not given the opportunity to present evidence, cross-examine witnesses, or present a rebuttal in accordance with Government Code section 11425.10, subdivision (a) and California Code of Regulations, title 23, sections 648.4 and 648.5; the permit was not based on evidence offered at the hearing in violation of Government Code section 11425.50, subdivision (c) and California Code of Regulations, title 23, sections 648.2 and 648.3; technical and scientific matter was relied upon without complying with California Code of Regulations, title 23, section 648.2; and substantive changes were made to the permit after the hearing was concluded without giving the permittees an opportunity to comment on the amendments; most of the administrative record was never set forth at the hearing and was not identified until four months after the December 13, 2001 hearing.

2. Adequacy of the hearing notice

Plaintiffs contend that they did not receive an adequate notice that an adjudicative hearing would be conducted. As to state law requirements, plaintiffs argue the notice never states an adjudicative hearing was going to be held. Plaintiffs argue: Government Code section 11440.20, subdivision (a)¹³ requires that written notice be given of an

¹³ Government Code section 11440.20, subdivision (a) states: “Service of a writing on, or giving of a notice to, a person in a procedure provided in this chapter is subject to

adjudicatory hearing; the “Notice Of Public Hearing” did not comply with Government Code section 11425.10, subdivision (a)(2);¹⁴ the written notice does not state that what evidence would be relied upon; the notice does not state that there would a waiver of the formal regulatory hearing and evidentiary requirements as permitted by California Code of Regulations, title 23, section 648, subdivision (d)¹⁵; and the written notice did not indicate an informal hearing would be held as permitted by Government Code section 11445.20 et seq. and California Code of Regulations, title 23, section 648.7.¹⁶

the following provisions: [¶] (a) The writing or notice shall be delivered personally or sent by mail or other means to the person at the person’s last known address or, if the person is a party with an attorney or other authorized representative of record in the proceeding, to the party’s attorney or other authorized representative. If a party is required by statute or regulation to maintain an address with an agency, the party’s last known address is the address maintained with the agency.”

¹⁴ Government Code section 11425.10, subdivision (a)(2) states: “(a) The governing procedure by which an agency conducts an adjudicative proceeding is subject to all of the following requirements: [¶] . . . (2) The agency shall make available to the person to which the agency action is directed a copy of the governing procedure, including a statement whether Chapter 5 (commencing with Section 11500) is applicable to the proceeding.”

¹⁵ California Code of Regulations title 23, section 648, subdivision (d) states: “(d) Waiver of Nonstatutory Requirements. The presiding officer may waive any requirements in these regulations pertaining to the conduct of adjudicative proceedings including but not limited to the introduction of evidence, the order of proceeding, the examination or cross-examination of witnesses, and the presentation of argument, so long as those requirements are not mandated by state or federal statute or by the state or federal constitutions.”

¹⁶ California Code of Regulations, title 23, section 648.7 states: “Unless the hearing notice specifies otherwise, the presiding officer shall have the discretion to determine whether a matter will be heard pursuant to the informal hearing procedures set forth in article 10, commencing with section 11445.20, of chapter 4.5 of the Administrative Procedure Act. [¶] Among the factors that should be considered in making this determination are: [¶] The number of parties, [¶] The number and nature of the written comments received, [¶] The number of interested persons wishing to present oral comments at the hearing, [¶] The complexity and significance of the issues involved, and [¶] The need to create a record in the matter. [¶] An objection by a party, either in writing or at the time of the hearing, to the decision to hold an informal hearing shall be

We agree with the regional board that the December 13, 2001 hearing was an adjudicative, quasi-judicial, proceeding. (*City of Rancho Cucamonga v. Regional Water Quality Control Bd.*, *supra*, 135 Cal.App.4th at p. 1385; see *Sommerfield v. Helmick* (1997) 57 Cal.App.4th 315, 320.) As an adjudicative proceeding, a National Pollutant Discharge Elimination Systems permit hearing is exempt from the rulemaking procedures of the Administrative Procedures Act. (Gov. Code, § 11352, subd. (b)¹⁷; *City of Rancho Cucamonga v. Regional Water Quality Control Bd.*, *supra*, 135 Cal.App.4th at p. 1385.) Thus, Government Code sections 11400 through 11475.70 and 11513 apply to regional board permit issuance proceedings. (Cal. Code Regs., tit. 23, § 648, subd. (b)¹⁸; *City of Rancho Cucamonga v. Regional Water Quality Bd.*, *supra*, 135 Cal.App.4th at p. 1385.)

The permittees received a document entitled “Notice of Public Hearing” sent by the regional board on September 27, 2001. The notice stated: “The hearing will start at 9:00 a.m. Regional Board’s staff will present an overview of the proposed permit. Interested persons are invited to attend and to testify in front of the Regional Board. For the accuracy of the record, comments should also be submitted in writing. The Regional Board may ask questions of staff and persons who testify prior to making a decision on

resolved by the presiding officer before going ahead under the informal procedure. Failure to make a timely objection to the use of informal hearing procedures before those procedures are used will constitute consent to an informal hearing. A matter shall not be heard pursuant to an informal hearing procedure over timely objection by the person to whom agency action is directed unless an informal hearing is authorized under subdivision (a), (b), or (d) of section 11445.20 of the Government Code.”

¹⁷ Government Code section 11352, subdivision (b) states: “The following actions are not subject to this chapter: [¶] (b) The issuance . . . of waste discharge requirements and permits pursuant to Sections 13263 and 13377 of the Water Code. . . .”

¹⁸ California Code of Regulations, title 23, section 648, subdivision (b) states: “(b) Incorporation of Applicable Statutes. Except as otherwise provided, all adjudicative proceedings before the State Board, the Regional Boards, or hearing officers or panels appointed by any of those Boards shall be governed by these regulations, chapter 4.5 of the Administrative Procedure Act (commencing with section 11400 of the Government Code), sections 801-805 of the Evidence Code, and section 11513 of the Government Code.”

the adoption of the proposed.” On October 11, 2001, the regional board sent a “Announcement of a Public Hearing and Transmittal of the Tentative Draft—County of Los Angeles Municipal Storm Water NPDES Permit” scheduling the hearing on the permit for November 29, 2001. The October 11, 2001 announcement stated: “Following the consideration of written comments and oral testimony, the Board may take action to adopt tentative Order No. 01-XXX during a public meeting on November 29, 2001. At its discretion, however, the Board may direct further investigation.” The October 11, 2001 announcement: indicated a agenda would be posted on the regional board’s website by November 19, 2001; stated the permittees were operating under a permit which expired on July 30, 2001; contained a summary of the principal changes to be made to the permit that expired on July 30, 2001; referred to an attached staff report; and requested comments to the tentative draft of the proposed permit. Attached to the announcement was the notice of hearing which: identified when and where the hearing would be held; explained where documents pertinent to the hearing could be located; and indicated interested persons could testify and submit comments in writing.

The November 29, 2001 regional board meeting was continued to December 13, 2001 after an unsuccessful effort at achieving settlement through mediation. On November 30, 2001, the regional board gave notice on its website of the December 13, 2001 hearing. The regional board’s meeting agenda posted on its website on December 13, 2001, listed as item No. 10 under the heading “**STORM WATER – NPDES PERMIT RENEWAL**” (original bold and underscore): “Consideration of a proposed renewal of the municipal storm water permit for the County of Los Angeles and incorporated cities therein, except the City of Long Beach. (After a public hearing, the Board will consider renewal of the existing municipal permit for the County and 83 cities.) [¶] [Xavier Swamikannu, 576-6654] . . . Board [¶] Action” (Original italics.) Above the listing of the agenda items, the following appears, “All Board files pertaining to the items on this agenda are hereby made a part of the record submitted to the [regional board] by staff for its consideration prior to action on the related items.” The regional board adopted the

permit at the December 13, 2001 hearing. Plaintiffs through their counsel appeared at the December 13, 2001 hearing.

There is no merit to the state law inadequate notice contention. There was no requirement that the notice state an adjudicative hearing would be held. As a matter of law, an adjudicative hearing would be held in connection with any renewal or issuance of a National Pollutant Discharge Elimination Systems permit. (*City of Rancho Cucamonga v. Regional Water Quality Control Bd.*, *supra*, 135 Cal.App.4th at p. 1385.) Further, the notices complied with the requirements imposed by California Code of Regulations, title 23, section 647.2, subdivisions (a) through (c) and (e).¹⁹

Plaintiffs contend that the foregoing notice was deficient because it violates federal and state laws. Plaintiffs argue that the notice fails to comply with federal law. Plaintiffs rely on the following provisions of 40 Code of Federal Regulations part 124.8 (2001) which states: “(a) A fact sheet shall be prepared for every draft permit The fact sheet shall briefly set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit. The Director shall send this fact sheet to the applicant and, on request, to any other person.

¹⁹ California Code of Regulations, title 23, section 647.2, subdivisions (a) through (c) and (e) states: “(a) Purpose. Government Code Section 11125 requires state agencies to provide notice at least one week in advance of any meeting to any person who requests such notice in writing except that emergency meetings may be held with less than one week’s notice when such meetings are necessary to discuss unforeseen emergency conditions as defined by published rule of the agency. The purpose of this section is to establish procedures for compliance with Government Code Section 11125 by the State Board and the Regional Boards. [¶] (b) Contents of Meeting Notice. The notice for all meetings of the State Board and Regional Boards shall specify the date, time and location of the meeting and include an agenda listing all items to be considered. The agenda shall include a description of each item, including any proposed action to be taken. [¶] (c) Time of Notice. Notice shall be given at least one week in advance of the meeting. When the notice is mailed, it shall be placed in the mail at least eight days in advance of the meeting. [¶] (e) Distribution. Notice shall be given to all persons directly affected by proceedings on the agenda and to all persons who request in writing such notice. Notice shall be given to any person known to be interested in proceedings on the agenda.”

¶ (b) The fact sheet shall include, when applicable: ¶ . . . (6) A description of the procedures for reaching a final decision on the draft permit including: ¶ . . . (ii) Procedures for requesting a hearing and the nature of that hearing . . .” We agree with the Attorney General that these provisions do not apply to a regional board National Pollutant Discharge Elimination Systems permit renewal and issuance proceedings.

Finally, in terms of the notice issues, plaintiffs argue the permittees’ due process rights were violated. The state and federal due process provisions require that “some form of notice” be given. (*Sommerfield v. Helmick, supra*, 57 Cal.App.4th at p. 320; *B. C. Cotton, Inc. v. Voss* (1995) 33 Cal.App.4th 929, 954.) The notices that were provided complied with all due process requirements applicable to an adjudicative hearing.

3. Adequacy of the hearing

Plaintiffs contend the proceedings before the regional board were not conducted as a proper adjudicative hearing. Plaintiffs argue they were denied the opportunity to present or rebut evidence. Government Code section 11425.10, subdivision (a)(1) states in part: “(a) The governing procedure by which an agency conducts an adjudicative proceeding is subject to all of the following requirements: ¶ (1) The agency shall give the person to which the agency action is directed notice and an opportunity to be heard, including the opportunity to present and rebut evidence.” The mode of presentation of evidence at adjudicatory hearing is spelled out in California Code of Regulations, title 23, sections 648.4, subdivision (a) and 648.5.²⁰ Because there was no evidence produced at

²⁰ California Code of Regulations, title 23, section 648.4, subdivision (a) provides: (a) It is the policy of the State and Regional Boards to discourage the introduction of surprise testimony and exhibits. ¶ (b) The hearing notice may require that all parties intending to present evidence at a hearing shall submit the following information to the Board prior to the hearing: the name of each witness whom the party intends to call at the hearing, the subject of each witness’ proposed testimony, the estimated time required by the witness to present direct testimony, and the qualifications of each expert witness. The required information shall be submitted in accordance with the procedure specified in the

hearing notice. [¶] (c) The hearing notice may require that direct testimony be submitted in writing prior to the hearing. Copies of written testimony and exhibits shall be submitted to the Board and to other parties designated by the Board in accordance with provisions of the hearing notice or other written instructions provided by the Board. The hearing notice may require multiple copies of written testimony and other exhibits for use by the Board and Board staff. Copies of general vicinity maps or large, nontechnical photographs generally will not be required to be submitted prior to the hearing. [¶] (d) Any witness providing written testimony shall appear at the hearing and affirm that the written testimony is true and correct. Written testimony shall not be read into the record unless allowed by the presiding officer. [¶] (e) Where any of the provisions of this section have not been complied with, the presiding officer may refuse to admit the proposed testimony or the proposed exhibit into evidence, and shall refuse to do so where there is a showing of prejudice to any party or the Board. This rule may be modified where a party demonstrates that compliance would create severe hardship. [¶] (f) Rebuttal testimony generally will not be required to be submitted in writing, nor will rebuttal testimony and exhibits be required to be submitted prior to the start of the hearing.” California Code of Regulations, title 23, section 648.5 provides: “a) Adjudicative proceedings shall be conducted in a manner as the Board deems most suitable to the particular case with a view toward securing relevant information expeditiously without unnecessary delay and expense to the parties and to the Board. Adjudicative proceedings generally will be conducted in the following order except that the chairperson or presiding officer may modify the order for good cause: [¶] (1) An opening statement by the chairperson, presiding member, or hearing officer, summarizing the subject matter and purpose of the hearing; [¶] (2) Identification of all persons wishing to participate in the hearing; [¶] (3) Administration of oath to persons who intend to testify; [¶] (4) Presentation of any exhibits by staff of the State or Regional Board who are assisting the Board or presiding officer; [¶] (5) Presentation of evidence by the parties; [¶] (6) Cross-examination of parties’ witnesses by other parties and by Board staff assisting the Board or presiding officer with the hearing; [¶] (7) Any permitted redirect and recross-examination; [¶] (b) Questions from Board members or Board counsel to any party or witness, and procedural motions by any party shall be in order at any time. Redirect and recross-examination may be permitted. [¶] (c) If the Board or the presiding officer has determined that policy statements may be presented during a particular adjudicative proceeding, the presiding officer shall determine an appropriate time for presentation of policy statements. [¶] (d) After conclusion of the presentation of evidence, all parties appearing at the hearing may be allowed to present a closing statement.”

the hearing, the permittees argue the findings were inadequate. (*English v. City of Long Beach* (1950) 35 Cal.2d 155, 158; *Southern Cal. Edison Co. v. State Water Resources Control Bd.* (1981) 116 Cal.App.3d 751, 760.)

We have read the transcript of the hearing. Those who wished to address the regional board were placed under oath. Presentations were made by the county, the City of Los Angeles, the Coalition for Practical Regulation, and a council representing the interests of various cities. Other individuals were permitted to present their views. The permittees' counsel made no request to call witnesses or objected to the manner in which the hearing proceeded as is argued on appeal. The permittees' counsel were given an opportunity to be heard. Further, extensive written comments were made by the permittees and their counsel. In light of the extensive notice given to them, if the permittees' counsel had any objections akin to those raised on appeal, they should have asserted them. No due process, statutory, or regulatory violation occurred. (*Mohilef v. Janovici* (1996) 51 Cal.App.4th 267, 285-287; Cal. Code Regs., tit. 23, § 648, subd. (d).)

4. Belated findings

Plaintiffs contend that untimely findings were made by the regional board. The changes made without an opportunity and comment were: an amendment to the total daily maximum loads for trash; the insertion of a requirement that complaints referred by the regional board be investigated within one business day; and significant changes to the inspection program. We agree with the Attorney General that the modifications in the permit were not of such gravity that a due process or other violation occurred. The final permit was a logical outgrowth of the draft permit. Hence, there was no violation of any right to notice or a hearing. (See *Natural Resources Defense Council v. U.S. E.P.A.* (9th Cir. 2002) 279 F.3d 1180, 1186 [applying federal notice and hearing provisions in the administrative context]; *Center for Biological Diversity v. Bureau of Land Management* (N.D. Cal. 2006) 422 F.Supp.2d 1115, 1155-1156 [same].)

J. Inspection Requirements

Plaintiffs argue the inspection requirements imposed in the permit are unlawful. The permit requires the permittees to inspect to insure there are no illicit discharges into the storm sewer system and critical sources of pollutants in runoff. We agree with the intervenors—no statute or regulation prohibited the regional board from imposing the inspection requirements. Further, there is federal regulatory authority that required the regional board consider imposing the inspection requirements. (40 C.F.R. 122.26(d), (g) (2000).) This contention has no merit.

K. Propriety Of The Regional Board Considering The Administrative Record In The Long Beach Case

Plaintiffs contend that the regional board should not have considered the administrative record in proceedings involving the 1996 issuance of a National Pollutant Discharge Elimination System permit to the City of Long Beach. According to plaintiffs, the administrative record was prepared in connection with the challenge by the City of Long Beach to the National Pollutant Discharge Elimination System Permit issued in 1996. Plaintiffs assert most of the administrative record in the Long Beach case is unrelated to the present case. Plaintiffs argue that consideration of the Long Beach records: are surprise evidence received in violation of title 23, California Code of Regulations, section 648.4, subdivision (a); violated the requirement that the regional board's presentation of exhibits be followed by the parties' presentation of evidence as required by title 23, California Code of Regulations, section 648.5, subdivisions (a)(4) and (5); and the process for admitting public records by reference pursuant to California Code of Regulations, section 648.3 was violated.

We disagree. The regional board certified the administrative record as including documents relevant to a National Pollutant Discharge Elimination System permit issued for the City of Long Beach. It is presumed the regional board considered the documents pertinent to the Long Beach National Pollutant Discharge Elimination System permit. (*Mason v. Office of Admin. Hearings* (2001) 89 Cal.App.4th 1119, 1131; see *Bar MK Ranches v. Yuetter* (10th Cir. 1993) 994 F.2d 735, 740.) Admissibility of evidence is controlled by Government Code sections 11400 and 11513, subdivision (c). Government Code section 11513, subdivision (c) states: “The hearing need not be conducted according to technical rules relating to evidence and witnesses, except as hereinafter provided. Any relevant evidence shall be admitted if it is the sort of evidence on which responsible persons are accustomed to rely in the conduct of serious affairs, regardless of the existence of any common law or statutory rule which might make improper the admission of the evidence over objection in civil actions.” What is unclear is the standard of judicial review of the regional board’s decision to consider the Long Beach National Pollutant Discharge Elimination System permit. It would appear the standard of judicial review is that set forth in Code of Civil Procedure section 1094.5, subdivision (b) whether: the regional board’s evidentiary ruling was in excess of jurisdiction; there was a fair trial; or there was any prejudicial abuse of discretion. Insofar as we are examining the trial court’s ruling allowing the Long Beach evidence to be part of the record, as with any relevancy issue, we apply an abuse of discretion standard of review. (*People v. Panah* (2005) 35 Cal.4th 395, 474; *People v. Kipp* (2001) 26 Cal.4th 1100, 1123.) Under any standard of review, the Long Beach evidence is relevant. The actions taken in imposing runoff conditions on the second largest city in the county are pertinent to what conditions to impose on the remainder of the county. Finally, there is insufficient evidence to support plaintiffs’ surprise contention. There is no evidence that any of the permittees’ attorneys were prohibited from examining the entire administrative record prior to the December 13, 2001 hearing.

L. The Trial Court Did Not Abuse Its Discretion In Refusing To Augment The Record

Plaintiffs contend the trial court improperly refused to augment the record to include petitions they had filed with state board. This issue is in essence an issue of relevance which is reviewed for an abuse of discretion. (*Western States Petroleum Assn. v. Superior Court* (1995) 9 Cal.4th 559, 573, fn. 3; *People v. Panah, supra*, 35 Cal.4th at p. 474; *People v. Kipp, supra*, 26 Cal.4th at p. 1123.) The documents at issue were all prepared after the regional board issued the permit. Without abusing its discretion, the trial court could conclude that the post permit issuance papers were irrelevant. (*Cynthia D. v. Superior Court* (1993) 5 Cal.4th 242, 250, fn. 7; *People v. Rowland* (1992) 4 Cal.4th 238, 268.)

[The balance of the opinion is to be published.]

V. DISPOSITION

The judgment is reversed. Upon issuance of the remittitur, the trial court is to issue its writ of administrative mandate which solely directs defendant, California Regional Water Quality Control Board, Los Angeles Region, to set aside its permit and conduct limited California Environmental Quality Act review as discussed in the body of this opinion. In exercising its equitable discretion, if plaintiffs' environmental review contentions become moot either when the writ of mandate is issued or on a later date because another permit is issued, the trial court retains the authority to decline to order limited environmental review. All other aspects of the orders denying the administrative mandate petitions, dismissing the complaints, and denying the post trial motions are affirmed. Defendants, California Regional Water Quality Control Board, Los Angeles Region and the State Water Resources Board, are to recover their costs incurred on appeal jointly and severally from plaintiffs, the Cities of Arcadia, Artesia, Bellflower,

Beverly Hills, Carson, Cerritos, Claremont, Commerce, Covina, Diamond Bar, Downey, Gardena, Hawaiian Gardens, Industry, Irwindale, La Mirada, Lawndale, Monrovia, Norwalk, Paramount, Pico Rivera, Rancho Palos Verdes, Rosemead, Santa Clarita, Santa Fe Springs, Signal Hill, South Pasadena, Torrance, Vernon, Walnut, West Covina, Westlake Village, and Whittier, and the County of Los Angeles, Los Angeles County Flood Control District, Building Industry Legal Defense Fund, and the Construction Industry Coalition on Water Quality.

CERTIFIED FOR PARTIAL PUBLICATION

TURNER, P. J.

We concur:

ARMSTRONG, J.

KRIEGLER, J.

Filed 11/6/06

CERTIFIED FOR PARTIAL PUBLICATION*

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

SECOND APPELLATE DISTRICT

DIVISION FIVE

COUNTY OF LOS ANGELES et al.,

Plaintiffs and Appellants,

v.

CALIFORNIA STATE WATER
RESOURCES CONTROL BOARD et al.,

Defendants and Respondents.

B184034

(Los Angeles County
Super. Ct. No. BS080792)

ORDER MODIFYING OPINION

[CHANGE IN JUDGMENT]

The published portion of the opinion filed on October 5, 2006 is modified as follows.

1. On page 1, delete:

“Affirmed in part; reversed in part with directions.”

In its place, insert:

“Affirmed.”

2. After the first paragraph of page 2, insert the following sentence:

“We affirm the judgment in its entirety.”

* Pursuant to California Rules of Court, rules 976(b) and 976.1, this opinion is certified for publication with the exception of part IV (G)-(L).

3. Delete in its entirety the second paragraph on page 2 beginning with “We agree with plaintiffs”

4. Delete: the second paragraph on page 21, beginning with “We agree that Water Code”; all of page 22 including the footnote; and all of pages 23 through 25. In its place, insert:

“Chapter 3 of the California Environmental Quality Act was originally adopted in 1970. (Stats. 1970, ch. 1433, § 1, pp. 2781-2782.) The original chapter 3 of the California Environmental Quality Act required all state agencies, boards, and commissions, that proposed a project which would have a significant effect on the environment to prepare a “detailed statement” setting forth the environmental effect of the contemplated undertaking.¹ (See *Russian Hill Improvement Assn. v. Board of Permit Appeals* (1974) 44 Cal.App.3d 158, 166; *City of Orange v. Valenti* (1974) 37 Cal.App.3d 240, 246.) Water Code section 13389 was adopted as urgency legislation to comply with certain provisions of the Clean Water Act provisions establishing the National Pollution Discharge Elimination System. (Stats. 1972, ch. 1256, § 3, p. 2490.) Expressly for that purpose, the California Legislature enacted chapter 5.5, the “Water Quality” division, which includes Water Code section 13389. (Wat. Code, § 13370²; *City of Brentwood v.*

¹ Public Resources Code section 21100 as enacted in 1970 stated: “All state agencies, boards, and commissions shall include in any report on any project they propose to carry out which could have a significant effect on the environment of the state, a detailed statement by the responsible state official setting forth the following: [¶] (a) The environmental impact of the proposed action. [¶] (b) Any adverse environmental effects which cannot be avoided if the proposal is implemented. [¶] (c) Mitigation measures proposed to minimize the impact. [¶] (d) Alternatives to the proposed action. [¶] (e) The relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity. [¶] (f) Any irreversible environmental changes which would be involved in the proposed action should it be implemented.” (Stats. 1970, ch. 1433, § 1, pp. 2781-2782.)

² Water Code section 13370 states: “The Federal Water Pollution Control Act (33 U.S.C. Sec. 1251 et seq.), as amended, provides for permit systems to regulate the

Central Valley Regional Water Quality Control Bd. (2004) 123 Cal.App.4th 714, 723; *Sierra Club v. Union Oil Co. of California* (9th Cir.1987) 813 F.2d 1480, 1483.) When Water Code section 13389 became effective on December 19, 1972, chapter 2.6 of the California Environmental Quality Act had just been enacted, also as urgency legislation, and it consisted of Public Resources Code sections 21080 through 21090. The new chapter 2.6 of the California Environmental Quality Act became effective on December 5, 1972. (Stats. 1972, ch. 1154, § 19, p. 2280.) Chapter 3 of the California Environmental Quality Act was also amended effective December 5, 1972, and it which applied to all environmental assessments by state agencies, boards, and commissions. Former Public Resource Code section 21100, the core provision of the 1972 version of the California Environmental Quality Act as it related to state agencies, boards, and commissions, stated: “All state agencies, boards, and commissions shall prepare, or cause to be prepared . . . and certify the completion of an environmental impact report on any project they propose to carry out or approve which may have a significant effect on the environment.” (Stats. 1972, ch. 1154, § 2.5, p. 2274; see *Desert Environment Conservation Assn. v. Public Utilities Com.* (1973) 8 Cal.3d 739, 742; *San Francisco Ecology Center v. City and County of San Francisco* (1975) 48 Cal.App.3d 584, 594, fn. 8.) Beyond question, the Legislature intended that chapter 3 of the California

discharge of pollutants and dredged or fill material to the navigable waters of the United States and to regulate the use and disposal of sewage sludge. [¶] (b) The Federal Water Pollution Control Act, as amended, provides that permits may be issued by states which are authorized to implement the provisions of that act. [¶] (c) It is in the interest of the people of the state, in order to avoid direct regulation by the federal government of persons already subject to regulation under state law pursuant to this division, to enact this chapter in order to authorize the state to implement the provisions of the Federal Water Pollution Control Act and acts amendatory thereof or supplementary thereto, and federal regulations and guidelines issued pursuant thereto, provided, that the state board shall request federal funding under the Federal Water Pollution Control Act for the purpose of carrying out its responsibilities under this program.”

Environmental Quality Act not apply to National Pollution Discharge Elimination System permits—in that respect Water Code section 13389 is entirely clear.

But on December 19, 1972, when Water Code section 13389 was enacted, chapter 2.6 of the California Environmental Quality Act, which contains generalized requirements for the preparation of environmental impact reports for discretionary projects, had just been adopted effective December 5, 1972. Chapter 2.6 of the California Environmental Quality Act applies to discretionary projects proposed by public agencies. (Former Pub. Resources Code, § 21080.) Pursuant to new chapter 2.6 of the California Environmental Quality Act, all public agencies were required to adopt by ordinance, resolution, or the like procedures for preparation of environmental impact reports. (Former Pub. Resources Code, § 21082.) The Office of Planning and Research was directed to adopt proposed guidelines for the preparation of environmental impact reports including a listing of projects determined not to have a significant impact on the environment. (Former Pub. Resources Code, §§ 21083-21088.) Finally, chapter 2.6, as adopted in 1972, allowed a public agency to charge fees for the preparation an environmental impact report and defined public and private developments pursuant to a redevelopment plan as a single project. (Former Pub. Resources Code, §§ 21089-21090.)

It can be argued that even though chapter 3 with its environmental impact preparation requirement for state agencies, boards, and commissions was not to apply to National Pollution Discharge Elimination System permits, the discretionary projects requirements in chapter 2.6 of the California Environmental Quality Act mandated environmental review. Hence, the argument would be that the Legislature in enacting Water Code section 13389 did not intend to obviate the duty pursuant to chapter 2.6 of the California Environmental Quality Act to prepare an environmental impact report. We are unpersuaded by this analysis. Former Public Resources Code section 20180, subdivision (a), the core provision relating to discretionary projects, stated: “(a) Except as otherwise provided in this division, this division shall apply to discretionary projects proposed to be carried out or approved by public agencies including, but not limited to,

the enactment and amendment of zoning ordinances, the issuance of zoning variances, the issuance of conditional use permits and the approval of tentative subdivision maps (except where such a project is exempt from the preparation of an environmental impact report pursuant to Section 21166).” (Stats. 1972, ch. 1154, § 2.3, p. 2272; see *People v. County of Kern* (1974) 39 Cal.App.3d 830, 839; *Friends of Lake Arrowhead v. Board of Supervisors* (1974) 38 Cal.App.3d 497, 510.) As can be noted, Public Resources Code section 21080, subdivision (a) established that a discretionary project was subject to the environmental impact requirement. But the requirement that a state agency, board, and commission prepare an environmental report was found in Public Resources Code section 21110 which was, and is now, located in chapter 3 of the California Environmental Quality Act. The obligation imposed on a state agency, board, and commission to prepare an environmental impact report existed in chapter 3 before the adoption of Water Code section 13389 and it remained there after the 1972 amendments to the California Environmental Quality Act. No doubt, since 1972 when the Legislature adopted Water Code section 13389 and the then new chapter 2.6, the California Environmental Quality Act has been repeatedly amended. But defendants cite no evidence the Legislature ever intended to: impose a duty on regional boards to prepare environmental impact reports; require regional boards to engage in any other form of environmental review specified in the California Environmental Quality Act; or to otherwise modify Water Code section 13389.

Defendants rely on the analysis of our colleague Presiding Justice Judith D. McConnell of Division One of the Fourth Appellate District in *City of Arcadia v. State Water Resources Control Bd.*, *supra*, 135 Cal.App.4th at pages 1420-1430 that regional board basin plans are subject to limited California Environmental Quality Act review. The *City of Arcadia* decision does not involve the issuance of a National Pollution Discharge Elimination System permit. Rather, it involves the development of a basin plan. (*Ibid.*) We agree with the Attorney General that a basin plan is subject to limited environmental review pursuant to Public Resources Code section 21080.5. Public

Resources Code section 21080.5, subdivision (a) vests the Secretary of the Resources Agency with the authority to require limited environmental review: “(a) Except as provided in Section 21158.1, when the regulatory program of a state agency requires a plan or other written documentation containing environmental information and complying with paragraph (3) of subdivision (d) to be submitted in support of an activity listed in subdivision (b), the plan or other written documentation may be submitted in lieu of the environmental impact report required by this division if the Secretary of the Resources Agency has certified the regulatory program pursuant to this section.” The secretary’s authority extends to requiring limited environmental review when an agency adopts “standards, rules, regulations, or plans for use” in a regulatory program. (Pub. Resources Code, § 21080.5, subd. (b)(2).) The secretary has certified the regional boards’ basin plan program as requiring limited environmental review. (*City of Arcadia v. State Water Resources Control Bd.*, *supra*, 135 Cal.App.4th at p. 1422; Cal. Code Regs. tit.14, § 15251, subd. (g).³) The resources secretary has never identified the National Pollution Discharge Elimination System permit system as a Public Resources Code section 21080.5 certified program. Thus, *City of Arcadia* does not require California Environmental Quality Act review prior to the issuance of a National Pollution Discharge Elimination System permit.

[The portions of the opinion that follow, parts IV (G)-(L) are deleted from publication.

See *post* at part V, where publication is to resume.]”

³ California Code of Regulations, title 14, section 15251, subdivision (g) states: “The following programs of state regulatory agencies have been certified by the Secretary for Resources as meeting the requirements of Section 21080.5: [¶] . . . (g)

5. On page 46, delete the first four sentences under DISPOSITION. In their place, insert:

“The judgment is affirmed. “

The unpublished portion of the opinion filed October 5, 2006, is modified as follows:

1. On page 29, line 3, delete: “is permitted” and insert in its place “may not”
2. On page 29, line 5, delete: “136” and insert in its place “135”

Renumber all subsequent footnotes affected by the insertion of the new footnotes.

TURNER, P. J.

ARMSTRONG, J.

KRIEGLER, J.

BOARD MEETING
STATE OF CALIFORNIA
LOS ANGELES
REGIONAL WATER QUALITY CONTROL BOARD

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA
BOARD ROOM
700 NORTH ALAMEDA STREET
LOS ANGELES, CALIFORNIA

THURSDAY, SEPTEMBER 14, 2006

9:20 A.M.

JAMES F. PETERS, CSR, RPR
CERTIFIED SHORTHAND REPORTER
LICENSE NUMBER 10063

PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

APPEARANCES

BOARD MEMBERS

Ms. H. David Nahai, Chairperson
Ms. Francine Diamond, Vice Chairperson
Ms. Susan Cloke
Ms. Bonny Herman
Ms. Maribel Marin
Mr. Bradley Mindlin
Mr. F.W. Dick Richardson
Mr. Leo VanderLans

STATE WATER RESOURCES CONTROL BOARD

Mr. Gerald Secundy, Vice Chairperson

STAFF

Mr. Jonathan Bishop, Executive Officer
Ms. Debbie Smith, Chief Deputy Executive Officer
Mr. David Bacharowski, Assistant Executive Officer
Mr. Stephen Cain
Ms. Renee DeShazo
Ms. Ronji Harris, Executive Assistant
Mr. Michael Levy, Senior Staff Counsel
Mr. Robert Sams, Staff Counsel
Dr. Xavier Swamikannu

APPEARANCES CONTINUED

ALSO PRESENT

Ms. Larissa Aumand, Weston Solutions
Ms. Michelle, Baccay, Natural Resources Defense Council
Ms. Jose Bacauss
Mr. Dave Beckman, Natural Resources Defense Council
Ms. Lili Boyle
Ms. Lisa Boyle
Ms. Valerie Burkholder
Mr. Diego Cadena, County of Los Angeles
Ms. Kelly Chapman-Meyer, Heal The Bay
Mr. Matthew Cohen, Richards, Watson & Gershon
Ms. Tracy Egoscue, Baykeeper
Mr. Nicholas Fash
Ms. Laurie Feldman
Mr. Steve Fleischli, Waterkeeper Alliance of New York
Mr. Howard Gest, Los Angeles County Flood Control District
Ms. Madelyn Glickfield
Dr. Mark Gold, Heal The Bay
Ms. Dorothy Green, Heal The Bay, Los Angeles and San Gabriel Rivers Watershed Council
Mr. Paul Herzog, Ballona Wetlands Land Trust
Ms. Heather Hoecherl, Heal The Bay
Ms. Kirsten James, Heal The Bay
Mr. Daniel Lafferty, County of Los Angeles

APPEARANCES CONTINUED

ALSO PRESENT

Mr. Grant Noie, Malibu Surfing Association

Mr. Frankie Orrata

Mr. Dana Palmer, Santa Monica Baykeeper

Mr. Dusty Peak

Dr. Linwood Pendleton, University of California Los Angeles

Mr. Mark Pestrella, County of Los Angeles

Dr. Robert Pousman, University of California Los Angeles

Mr. Patrick Rowen, Malibu Surfing Association

Mr. Ken Schiff, Southern California Coastal Water Research Project

Ms. Alexis Strauss, United States Environmental Protection Agency

Mr. Ray Tahir, TECS Environmental

Mr. Jim Thorsen, City of Malibu

Ms. Anne Tobin

Mr. Marcus Weakley, Senator Sheila Kuehl's Office

Ms. Deborah Weinstein, Los Angeles City Councilman Bill Rosendahl's office

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Reporter's Certificate

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PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

1 PROCEEDINGS

2 CHAIRPERSON NAHAI: Let's come to order please.

3 Come on, everybody. Take your seats. We're going to
4 commence.

5 Sit down please.

6 Thank you.

7 All right. We're going to start with the Pledge
8 of Allegiance. I'd like to ask Board Member Brad Mindlin
9 to lead us in the Pledge.

10 (Thereupon the Pledge of Allegiance was
11 Recited in unison.)

12 CHAIRPERSON NAHAI: Let's have the roll call
13 please.

14 EXECUTIVE ASSISTANT HARRIS: Ms. Cloke?

15 BOARD MEMBER CLOKE: Present.

16 EXECUTIVE ASSISTANT HARRIS: Ms. Diamond?

17 VICE CHAIRPERSON DIAMOND: Here.

18 EXECUTIVE ASSISTANT HARRIS: Ms. Herman?

19 Ms. Lutz?

20 Ms. Marin?

21 BOARD MEMBER MARIN: Here.

22 EXECUTIVE ASSISTANT HARRIS: Mr. Mindlin?

23 BOARD MEMBER MINDLIN: Here.

24 EXECUTIVE ASSISTANT HARRIS: Mr. Nahai?

25 CHAIRPERSON NAHAI: Yes.

1 EXECUTIVE ASSISTANT HARRIS: Mr. Richardson?

2 BOARD MEMBER RICHARDSON: Here.

3 EXECUTIVE ASSISTANT HARRIS: Mr. VanderLans?

4 BOARD MEMBER VANDERLANS: Here.

5 CHAIRPERSON NAHAI: Let's go into the order of
6 the agenda.

7 Mr. Bishop.

8 EXECUTIVE OFFICER BISHOP: Good morning.

9 I have a recommendation, given the length of
10 today's hearing, that Items 4.b, Board Member Reports,
11 Item 6, Public Forum, be moved to the end of the agenda.
12 Those don't require a quorum to be heard; that items 4c,
13 which is the Brownfields Subcommittee Report, and Item 5,
14 the Executive Officer's Report, be continued to a future
15 meeting; and then Items 9 and 10 be continued to the
16 October 12th meeting.

17 CHAIRPERSON NAHAI: All right. Could I have a
18 motion for approval of the changes in the order of the
19 agenda?

20 BOARD MEMBER RICHARDSON: I'll so move.

21 BOARD MEMBER MINDLIN: Second.

22 CHAIRPERSON NAHAI: All in favor?

23 (Ayes.)

24 CHAIRPERSON NAHAI: Carried.

25 All right. So what about -- but No. 3, Jon, did

1 you ask for that one to be moved? Or let's --

2 EXECUTIVE OFFICER BISHOP: No, let's go forward
3 with that since it requires a quorum.

4 CHAIRPERSON NAHAI: Okay. Could I have a motion
5 for the approval of the draft minutes?

6 Are there any comments on it?

7 BOARD MEMBER RICHARDSON: I had one correction.
8 Just in the spelling of the Cusamano. It's
9 C-u-s-a-m-a-n-o.

10 VICE CHAIRPERSON DIAMOND: With that correction,
11 I'll move the approval of the minutes.

12 BOARD MEMBER VANDERLANS: Second.

13 CHAIRPERSON NAHAI: All in favor?

14 (Ayes.)

15 CHAIRPERSON NAHAI: Carried.

16 We'll go on now to --

17 EXECUTIVE OFFICER BISHOP: -- this would be ex
18 parte communications.

19 CHAIRPERSON NAHAI: -- Okay; ex parte
20 communications.

21 And then we'll hear from our State Board liaison.

22 And then we can move right into No. 15.

23 EXECUTIVE OFFICER BISHOP: We'll have the consent
24 calendar part.

25 CHAIRPERSON NAHAI: All right. Ex parte

1 communications. Let's start.

2 BOARD MEMBER CLOKE: I have two -- oh, no. I'm
3 waiting for -- I don't think either one of these are ex
4 parte. I have two things to talk about, but not ex parte.

5 CHAIRPERSON NAHAI: The general reports we're
6 going to leave till the end of the day -- the
7 communications. We're just going to cover ex parte right
8 now.

9 BOARD MEMBER CLOKE: Okay. Since I'm not sure,
10 I'm just going to say them.

11 CHAIRPERSON NAHAI: Okay. Go ahead.

12 BOARD MEMBER CLOKE: I attended a meeting of the
13 Women of Water meeting where we talked about recycled and
14 reclaimed water which could affect future Board actions or
15 could be -- will be a policy issue that will come in the
16 future but is not on the agenda yet.

17 And I met with Susan Nissman of Supervisor
18 Yaroslavsky's office discussing beach water quality and
19 the monitoring programs that are part of the previous
20 permit -- an already approved permit.

21 CHAIRPERSON NAHAI: Maribel.

22 BOARD MEMBER MARIN: None.

23 CHAIRPERSON NAHAI: Bradley.

24 BOARD MEMBER MINDLIN: There's a matter I believe
25 you gave to -- but there's a laundry cleaner on Peco

1 Boulevard. It's a brownfield, a very friendly charity
2 that now has some economic benefits to it. I've talked to
3 them a few times. I introduced them to some people here.
4 And I'm at a point now that if I ever -- if they ever came
5 in front of us, I would have to excuse myself.

6 CHAIRPERSON NAHAI: Okay.

7 BOARD MEMBER VANDERLANS: Nothing.

8 CHAIRPERSON NAHAI: Ms. Diamond.

9 VICE CHAIRPERSON DIAMOND: I also attended the
10 Women of Water meeting which discussed recycled water. I
11 don't believe it was ex parte. But since it potentially
12 could be, I would just say that I was also at that same
13 meeting.

14 CHAIRPERSON NAHAI: All right. And I'll report
15 on two conversations. First, I had lunch, I don't know,
16 perhaps three weeks or a month ago, with the Mayor of
17 Signal Hill, Mr. Larry Forrester. It was a productive
18 dialogue. We were very careful not to talk about today's
19 permit and we were not to talk about any permits as such.
20 But we did talk about the region's TMDL program and other
21 matters concerning just the relationship between the
22 Regional Board and the municipalities altogether. I don't
23 think we resolved anything. But it was good to have a
24 dialogue, and I hope that we'll sit down together again
25 some time in the future.

1 Second thing I wanted to report on is I did
2 receive a call from Supervisor Yaroslavsky. The purpose
3 of the call was to inform me of the progress that the
4 County feels that it has made in connection with the
5 protection of the north bay. We did not talk about
6 today's proceedings with any specificity at all.

7 So those are the two matters that I wanted to
8 report on.

9 Okay. And with that, let's hear from our State
10 Board's liaison, Mr. Secundy.

11 Then we'll do the consent calendar, and then
12 we'll go on to No. 15.

13 SWRCB VICE CHAIRPERSON SECUNDY: Good morning,
14 Mr. Chairman, members of the Board. As always, it's a
15 pleasure to be here. I'll try to be fairly brief this
16 morning. I know you have a very calendar.

17 This past Monday there was a meeting of the
18 various chairs of the regional boards, as well as the
19 executive officers, basically to start planning for our
20 WQCC meeting, which will occur on October the 30th and
21 31st in Sacramento. As always, I would urge each and
22 every one of the Board members to attend that meeting.

23 There are number of items that were discussed at
24 the meeting, including various proposals in terms of
25 restructuring the regional boards. Items that were

1 discussed were things of the nature of:

2 Reducing the board member's to seven.

3 Reducing the number of board members that would
4 constitute a quorum.

5 Giving good compensation to the board members --
6 the regional board members, who indeed put in countless
7 hours as volunteers and really get very little
8 compensation for that.

9 There were also proposals to have the executive
10 officers report directly to Celeste Cant, our Executive
11 Officer. I think that was one of the few items that was
12 unanimously agreed upon to reject, if Mr. Bishop is
13 telling me that correctly.

14 (Laughter.)

15 SWRCB VICE CHAIRPERSON SECUNDY: There were also
16 proposals as to whether or not chairs of the regional
17 boards should be appointed by the Governor. There was no
18 unanimity of opinion on that.

19 So these are also items that we will be
20 discussing at our WQCC on October 30th and 31st.

21 In addition to that, a number of members of the
22 environmental justice community have asked to give a
23 presentation at the WQCC, and we have tentatively agreed
24 to that for a one-hour presentation, kind of a panel
25 discussion, at this point in time.

1 Also this week I attended the first meeting of
2 the steering committee of the Ocean Protection Council.
3 This is a relatively new organization, just within the
4 last year or so. Drew Bohan, who was formerly with the
5 Administration, is now the Executive Director of the Ocean
6 Protection Council.

7 Mike Chrisman, Linda Adams attended this
8 particular steering committee meeting, along with
9 representatives of, oh, DTSC, Fish and Game. I represent
10 obviously the Water Board.

11 The first action item from the OPC was simply to
12 get a handle on how much are we doing for the oceans right
13 now. And they were trying to quantify that in terms of
14 direct monetary contributions.

15 To give you an example, in the last fiscal year,
16 05-06, the State Water Bored directly expended
17 approximately \$17 million on ocean items. But if we look
18 at things that are related to the ocean but not direct,
19 for example, if we are cleaning up a river body that is
20 upstream of the ocean and are spending money on that, if
21 we looked at items like that, that figure goes from 17
22 million to \$217 million. And if we look at the amount of
23 money that's been spent under Propositions 13, 40, and 50,
24 then it's nearly three-quarters of a billion dollars over
25 the last few years.

1 Well, each of the agencies is going to go back
2 and try to quantify that a little bit more and determine
3 just how much we are spending; and, more importantly,
4 whether or not we are spending the money most efficiently,
5 most wisely, are we duplicating efforts, are we tripping
6 over each other, if you like. And we will find that out
7 in our next meeting.

8 We all know that there will be a new legislative
9 session come this January, and there are a number of
10 proposals that are being kicked around. The state and
11 regional water boards are now in a position to propose
12 legislation, but we can give technical advice to people.
13 And one of technical pieces of advice that we are looking
14 at is this wonderful 10-percent rule, which disqualifies
15 qualifies a number of board members from serving on
16 regional and state boards.

17 One of the proposals that is being studied at
18 this point in time is that the disqualification would only
19 take place if the 10-percent rule impacted you in your
20 particular region. In other words, if you were getting
21 more than 10 percent of your income from an NPDES permit
22 holder within your region, you would be disqualified. But
23 if it were from another region, you would not be
24 disqualified.

25 This would, frankly, give a lot more leeway in

1 terms of finding qualified board members on a statewide
2 basis. It is currently very, very difficult to get people
3 to serve, as I think all of you know.

4 Finally, there are four issues that are still
5 percolating, if you like. And within the next year, if
6 the schedule holds firm, we at the State Board will be
7 making final recommendations -- or final decisions on
8 regulations regarding 316B, once through cooling; numeric
9 limits for storm water; ASBSs; sediment; as well as septic
10 systems. So it is going to be an extremely active year
11 for the State Board. And I know that the folks in the
12 audience here are very interested in each of those
13 subjects.

14 The final comments on at least 316B, numeric
15 limits, ASBSs are due tomorrow. Some were due September
16 1st and the rest are finally due tomorrow. Once we have
17 these comment staff, we'll be going over those,
18 consolidating them and then making recommendations to the
19 Board itself.

20 And, finally, I think many of you are aware that
21 there will be a world ocean conference, California and the
22 World Ocean - 2006, that will take place in Long Beach
23 this coming Sunday, the 17th, 18th, 19th and 20th. It's a
24 jampacked agenda. There are already over a thousand
25 people that are signed up for the conference. If you have

1 not done so yet, please do so. I think it's going to be
2 absolutely wonderful. You're going to get great
3 attendance from members of the administration, members of
4 the State Water Board, I know of some regional board
5 members, et cetera. And we will be covering a plethora of
6 topic.

7 Are there any questions I can answer?

8 If not, thank you very much.

9 CHAIRPERSON NAHAI: Thank you very much.

10 Okay. The uncontested calendar.

11 BOARD MEMBER CLOKE: I'd like to move the
12 calendar. But I would like to ask staff that when they
13 get the report in on Item No. 13, which is Northrop
14 Grumman Systems Corporation in Hawthorne, that I would
15 like them to include that in the Executive Officer's
16 report. I'd like to follow the progress of this
17 remediation.

18 EXECUTIVE OFFICER BISHOP: And that's fine.

19 Let me clarify what items are on the calendar.

20 There are Items 8, 11, 12, 13.1, 13.2, 14.1 and 14.2.

21 CHAIRPERSON NAHAI: We have a motion.

22 Do we have a second?

23 BOARD MEMBER VANDERLANS: Second.

24 CHAIRPERSON NAHAI: All in favor?

25 (Ayes.)

1 CHAIRPERSON NAHAI: Okay. And with that, I think
2 we can move into Item No. 15, which is the proposed
3 reopener for the Los Angeles County Municipal Storm Water
4 Discharge Permit.

5 I'm going to read the opening statement on this
6 matter, because we're going to be following an
7 adjudicatory process, and a rather lengthy opening
8 statement that's been prepared for it. So I'll read it at
9 this time.

10 This is the proposed reopener of the Los Angeles
11 County Municipal Storm Water Discharge Permit, Order No.
12 01-182, NPDES No. CAS004001.

13 This public hearing is being held before the
14 members of the Los Angeles Regional Water Quality Control
15 Board. I'm David Nahai and I'm the Chair of the Regional
16 Board and will be conducting this hearing.

17 If you wish to address the Regional Board today,
18 please promptly fill out a speaker card and hand it to the
19 clerk.

20 Pursuant to the Notice of Hearing Procedures on
21 page 4 of the agenda, the Regional Board received two
22 timely requests for alternative hearing procedures. These
23 were from Howard Gest on behalf of the County of Los
24 Angeles and the Los Angeles County Flood Control
25 District -- we'll refer to them both as the County -- and

1 Mark Gold on behalf of Heal the Bay, Santa Monica
2 Baykeeper, and NRDC. We'll refer to them as the
3 Environmental Groups.

4 In response to these requests, the following
5 procedures will be employed at the hearing today:

6 This will be an adjudicative proceeding pursuant
7 to Section 648 of Title 23 of California Code of
8 Regulations.

9 Chapter 5 of Division 3 of Title 2 of the
10 Government Code, commencing with Section 11500, will not
11 apply to this proceeding.

12 The Environmental Groups are hereby granted party
13 status pursuant to Section 648.1 of Title 23 of the
14 California Code of Regulations.

15 A list of documents upon which the Board will
16 rely for this proceeding was posted on line on Friday,
17 September 8th 2006. That posting is without prejudice to
18 the addition of further materials by the parties and the
19 Board as making necessary to respond to comments and
20 testimony or inquiries at this hearing.

21 As stated in previous hearing notices, before or
22 after the documents are posted the public had the
23 opportunity to inspect and copy the files of the Regional
24 Board staff pertaining to this matter. The entirety of
25 the Board's files as designated in the September 8th,

1 2006, posting, whether present at this hearing or not,
2 will be incorporated into the administrative record
3 pursuant to Section 648.3.

4 The need to formally introduce these documents as
5 exhibits is waived pursuant to Section 648 Subsection D.

6 At the end of the hearing we will close the
7 record on this matter and this Board will discuss and
8 arrive at a decision on this matter. It is expected that
9 today this Board will either adopt, reject or modify the
10 recommendation of the staff.

11 I would like to remind everyone that the validity
12 of the Santa Monica Bay beach's bacteria TMDL is not an
13 issue that is before the Regional Board in this
14 proceeding. Any argument about the validity of that TMDL
15 or the water quality standards that it implements is
16 irrelevant to this proceeding.

17 The only matter before the Board is the adoption
18 of provisions that expressly implement that TMDL and
19 associated water quality objectives into the municipal
20 separate storm sewer system permit for the County of Los
21 Angeles; that being Order No. 01-182.

22 Here are the order of proceedings and the
23 estimated time:

24 Following this opening statement there will be an
25 opening statement by staff. Following that, there will be

1 an opening statement by the County. That will be followed
2 by an opening statement by the Environmental Groups. The
3 opening statements of staff, the County and the
4 Environmental Groups are to be limited to five minutes
5 each.

6 Following the opening statements there will be
7 staff presentation. That has a time limit of 40 minutes.
8 After that, the County will have an hour to make its
9 presentation. Following the County, other permittees will
10 make their presentations if they so wish and will be
11 accorded five minutes each. After that, the Environmental
12 Groups will have their opportunity to make their
13 presentation, and they too will be limited to one hour.
14 Following the Environmental Groups, other interested
15 persons may address the Board. But we would like to limit
16 them please to three minutes each.

17 After that, there will be an an opportunity for
18 cross-examination. For those who wish to conduct
19 cross-examination -- and as of this time I believe only
20 the County and the Environmental Groups have indicated
21 that they would want to do so -- we would limit that to 30
22 minutes each.

23 SENIOR STAFF COUNSEL LEVY: Pardon me, Mr. Chair.

24 And staff.

25 CHAIRPERSON NAHAI: And staff, 30 minutes each.

1 And after that, we would have closing statements
2 again from those who wish to present them. And we
3 understand that to be staff, the Environmental Groups and
4 the County. And that would be limited to 20 minutes
5 apiece.

6 After that, we'll have Board deliberation.

7 These times are intended to reflect the
8 anticipated limits for the respective presentations, and
9 are subject to limitation or extension by me if there's a
10 showing of a very good cause.

11 We understand that the presentations are going to
12 be coordinated. And we would ask everybody not to give us
13 repetitive or duplicative presentations.

14 Any objections to the proceedings as I've just
15 outlined them should have been submitted in writing to
16 Xavier Swamikannu by noon on Wednesday, September 13th,
17 2006.

18 The Regional Board received one timely objection
19 by the County of Los Angeles. The procedures described
20 above endeavor to accommodate the County's objections.

21 If any party has any further objections that were
22 not timely raised -- that were timely raised but have not
23 been addressed, I'll hear them at this time.

24 Okay. Going on then, I will now administer the
25 oath.

1 If you intend to speak or provide testimony on
2 any of these matters, please stand, raise your right hand.

3 MR. GEST: Excuse me, Mr. Chairman, members of
4 the Board.

5 CHAIRPERSON NAHAI: Yeah.

6 MR. GEST: My name is Howard Gest on behalf of
7 the County of Los Angeles and the Los Angeles County Flood
8 Control District.

9 I have some procedural motions that we would like
10 to make pursuant to Code of Civil Procedures Section
11 485 --

12 CHAIRPERSON NAHAI: Let me ask everybody behind
13 you to sit down while we --

14 MR. GEST: Right. Well, that was going to be my
15 question, as to whether you wanted to do the oath first
16 and then I should make the motions, or whether we
17 should -- whether you want to hear the motions first. And
18 I would like to address some of the matters raised with
19 respect to the order of proceedings.

20 CHAIRPERSON NAHAI: I think we can take your
21 motions first, and then we'll go on with the other.

22 MR. GEST: All right. First of all, the
23 County -- and I will refer to the Flood Control District
24 and the County of Los Angeles collectively as the
25 County -- has made a motion to continue this proceeding.

1 I would like to have Mr. Pestrella from the County speak
2 with respect to the bases for this request. It was set
3 forth both in a letter, and we believe there's an
4 important reason why a continuance would be appropriate at
5 this time.

6 SENIOR STAFF COUNSEL LEVY: Mr. Chair?

7 For the record, in the last two days -- on
8 September 12th we received a letter from the County. We
9 sent a response, which all of the Board members should
10 have in front of them, on September 13th in the morning.
11 We received a subsequent letter by the County on September
12 13th, and we replied to that letter yesterday as well.
13 And we believe they adequately address the County's
14 comments and objections. And we can discuss them one at a
15 time as they're brought to your attention. But I would
16 just formally like to ask the Chair to ensure that those
17 letters are made a part of the record.

18 CHAIRPERSON NAHAI: We'll admit them as part of
19 the record. And we've seen copies of that correspondence.
20 But I will hear the County's motions.

21 Go ahead please, Mr. Pestrella.

22 MR. PESTRELLA: Chairman Nahai and Board members.
23 Thank you for taking a moment to let me speak on this
24 continuance. And I'd like to just take one minute to talk
25 to you about the regret that the County of Los Angeles has

1 in being here today in this setting.

2 First, the reason for continuance, the request
3 to --

4 CHAIRPERSON NAHAI: Excuse me. Did you state
5 your name for the record?

6 MR. PESTRELLA: I'm sorry, David. I will do
7 that.

8 My name is Mark Pestrella. I'm a professional
9 engineer with the County of Los Angeles. I'm the
10 Assistant Deputy Director of the Department of Public
11 Works. And I'm here today representing the L.A. County
12 Flood Control District and the County of Los Angeles,
13 referred to as the County. Thank you for reminding me to
14 do so.

15 Well, first of all, the matter that our attorney,
16 Howard, brought up on continuance is that we would like to
17 have the Board take an action on that request. And the
18 request is based on the fact that we received documents
19 late on September 8th, that were numerous, to consider.

20 But more importantly to the Board of Supervisors
21 from the County of Los Angeles and the Chief Engineer from
22 the L.A. County Flood Control District, we are concerned
23 that all of our lawyers are out here. We are concerned
24 that we have not had enough dialogue with your staff to a
25 point that we could come to some agreement about how to

1 implement -- or to bring in the bacteria TMDL into our
2 permit, which we are not objecting to.

3 The crux of this matter is that the County would
4 like to see an iterative adaptive approach taken to the
5 bacteria TMDL, and that we have offered language in the
6 reopener to allow for that to happen. And, in fact, we
7 believe that the language that's currently proposed to you
8 is actually a punitive approach rather than a
9 collaborative approach to the problem.

10 Everyone sitting behind me I know very well.
11 Chairman Nahai, we've been working very closely with each
12 other. And it's very unfortunate that we have come here
13 and have this tense moment together, when we probably
14 should have done that behind closed doors and came here
15 and celebrate the fact that we've had great achievement in
16 reducing the bacteria in the Santa Monica Bay.

17 If you'd look at what the records are showing in
18 the south bay and you'd look at the devices that we've
19 installed, to the tune of \$20 million, in the south bay,
20 you see the reduction.

21 Chairman Nahai, you mentioned that Supervisor
22 Yaroslavsky's office has spoken to you about a bacteria
23 source ID program that we're about to embark upon in the
24 north Santa Monica Bay, all a very positive approach to
25 this problem that we share with you, to this objective

1 that we share with you and, that is, this water quality
2 objective. And I'm surprised, and in fact was a little
3 stunned, and still trying to figure out what the intent of
4 this reopener is if you're going to put it in to position
5 to be punitive and to fine.

6 I understand you may want to be getting the
7 attention of certain individuals or certain permittees,
8 but it certainly can't be the County of Los Angeles. You
9 have our attention. You have our attention. We have
10 joined with you, as you know, over the last 15 years to
11 take on these issues. I am spending a massive amount of
12 resources and money to look at this issue and actually try
13 to own the issue rather than be in a situation we're
14 adversarial with you. I have hired many scientists and
15 engineers. And those scientists and engineers believe an
16 iterative adaptive approach is the right way to address
17 this issue.

18 We are not arguing over the bacteria TMDL. I'm
19 very happy that you made the statement the hearing is not
20 about the bacteria TMDL, it is not about whether or not
21 we're concerned about the swimmers at the Santa Monica
22 Bay. We are very concerned. I'm a year-round surfer. I
23 understand that situation. But what I'd really like to do
24 is have you continue this hearing so that we can make
25 further progress in coming up with an NPDES permit that

1 actually addresses this issue in a collaborative approach
2 rather than an adversarial approach.

3 CHAIRPERSON NAHAI: You've stated the motion.
4 I'd like to hear from our counsel on this. And then I'll
5 make a ruling on the motion as Chair.

6 SENIOR STAFF COUNSEL LEVY: I believe, Mr. Chair,
7 that the request was for a procedural motion to continue
8 based upon the letter of September 12th, which raised
9 timely objections, though we think they're meritless
10 objections.

11 The claims that were just raised are not part of
12 those objections. That sounds more like a presentation.
13 The County's free to present that during its presentation
14 time. But that would not be in the nature of a motion on
15 the order of the proceedings, which is what it was
16 characterized as. So we would object.

17 MR. PESTRELLA: If I could just close.

18 My concern --

19 MS. EGOSCUE: Mark, I apologize.

20 THE REPORTER: Can she identify.

21 CHAIRPERSON NAHAI: No, she's not at the podium.
22 You see, if necessary, I'll call on you.

23 Okay. I don't want -- during these proceedings I
24 don't want people standing up and making off-the-cuff
25 comments. We're going to proceed in a very orderly way.

1 We're going to respect the decorum of this hearing.

2 MR. PESTRELLA: I apologize if you see it that
3 way. I hope that you're not referring to the County of
4 Los Angeles and our comments as off the cuff.

5 We actually are your partner in this. And I got
6 up here because I see what's going to happen is a train
7 wreck in about 15 minutes, and I just don't want that to
8 happen. And I'm coming to you from the Board of
9 Supervisors and the Chief Engineer of the Flood Control
10 District to tell you, whether it's in a motion and our
11 attorneys believe it or not, there's still work that could
12 be done in which we could achieve this water quality
13 objective. I'd like you to consider it today.

14 CHAIRPERSON NAHAI: I've heard your motion and
15 I've read the correspondence.

16 Really the crux of the motion is that because
17 there were these documents that were presented, that
18 somehow the County has not had an opportunity to review
19 them, digest them, respond to them.

20 I've looked at the correspondence that came from
21 your counsel and which is responded to by the Board's
22 counsel, and I found that contention to be unpersuasive.
23 The documents that were referred to, many of them, the
24 County was quite aware of previously. Many of them the
25 County had itself originated. And so I found that

1 argument to be, as I said, not convincing.

2 Regarding the additional comments that you've
3 made, I think those are suitable comments to be made
4 during this hearing. To the extent that we're precluded
5 by law or should be swayed by policy considerations to
6 follow an adaptive, an iterative path rather than having
7 what it is that staff recommends, those are matters that
8 we can have a dialogue about during the course of today's
9 hearing.

10 So with a great deal of respect, I'm going to
11 decline your motion to continue.

12 MR. PESTRELLA: Understood.

13 CHAIRPERSON NAHAI: Thank you.

14 SENIOR STAFF COUNSEL LEVY: Mr. Chair, since the
15 objection related also to the fact of records being
16 present in the room at this time, I would just like to
17 represent for the record that the records supporting the
18 Santa Monica Bay bacteria dry weather TMDL are physically
19 in the hearing room at this time. The records supporting
20 the MS-4 permit are physically in the room on a CD.

21 And for the record I'll also represent that the
22 County is very well aware of these records, as they were
23 litigants in that proceeding challenging the MS-4 permit.
24 And, in fact, I just attended oral argument in the Court
25 of Appeal last week with Mr. Gest arguing the contents of

1 the record in that proceeding, which again is here by
2 compact disk. And we have computer access if anybody
3 would like to view any of those records.

4 And as to the remainder of the additional
5 records, they consist of the County's submittals. Their
6 precise name here, the -- Xavier, please -- the annual
7 reports from the County, the monitoring reports and the
8 annual reports from the County. They're the County's own
9 documents. And just for the sake of having them present
10 to respond to the County's objection, we have an Internet
11 access. They're all posted on line. And they can be
12 accessed on line at the County's website right here by
13 consulting Mr. Price in the corner over here.

14 So all of the records for all intents and
15 purposes are physically here in the room. And we believe
16 that adequately responds to any objections raised.

17 We do not believe there's a legal requirement to
18 have all of these records here. The reason they're
19 incorporated into the record is largely to be able to
20 respond to contentions should there be a legal challenge
21 so the Court has the background of these proceedings.

22 However, we do want them formally part of the
23 record as you have already incorporated them. So they're
24 present. And anybody who desires can access them here.

25 Thank you, Mr. Chair.

1 CHAIRPERSON NAHAI: You have additional motions
2 you'd like to --

3 MR. GEST: Yes, Mr. Chairman. And this is being
4 said in accordance with your directions. I would like to
5 go over the motions and discuss the procedure that's going
6 to happen today, so that once we actually open the hearing
7 we will not have to, you know, unduly object or speak over
8 top of anybody or anything like that.

9 And I really did come up here to address other
10 matters. But I almost feel compelled -- and I do in fact
11 feel compelled -- that since there's been additional
12 discussion about the record and what was available, I need
13 to address for the record what the status of what was
14 presented so that the record is clear. I wasn't going to
15 do that, except for the fact that there have been
16 additional comments, because the Chairman had already
17 ruled on the motion for continuance.

18 So just so that the record is clear, when this
19 matter was originally noticed for hearing in July, there
20 were approximately six documents posted on the website as
21 the documents that were to be submitted in support of this
22 motion. That website and those documents were posted from
23 a time before the July hearing up until last Friday. And
24 it was not until last Friday, late in the afternoon, that
25 we received notice that there would be additional

1 documents presented.

2 It is true that one of the documents on the list
3 was the administrative record for the permit itself. It's
4 also true that one -- it's also true that one of the other
5 documents is the administrative record for the TMDL.

6 Contrary to the statement, Burhenn & Gest was not attorney
7 of record with regard to any appeals or litigation on the
8 TMDL because there was not any TMDL.

9 Contrary to what has been represented, there were
10 documents that were new. And just for the record, if we
11 can go through it, in addition to the matters that were
12 stated, there was the index of coordinated shoreline
13 monitoring change, there was the coordinated shoreline
14 monitoring plan. Now, we were aware of monitoring plans,
15 so that -- there was no prejudice with respect to that.

16 There was posted the annual program reports.
17 They were our reports, so there was no prejudice with
18 respect to that. Although we had no indication before
19 these were posted how these would be used. And so we
20 didn't have any reason to look at any of these other
21 documents to determine how that might impact the findings
22 that this Board is being asked to make today. So even
23 though we were aware of the documents, we didn't know that
24 we should be looking at that to determine how it was going
25 to impact what is being requested. But I'm just saying

1 this for the record.

2 There were Clean Water Act 13267 letters
3 requesting information. That was new. We had never seen
4 all of those letters before. And there was the responses.
5 Those responses certainly -- as counsel, we had no
6 opportunity to see those beforehand.

7 There was --

8 CHAIRPERSON NAHAI: Who were those 13267 letters
9 addressed to?

10 MR. GEST: Some were addressed to the County, and
11 we were aware of those. Some were addressed to other
12 cities and other permittees, and they were not necessarily
13 addressed to the County.

14 There was a tentative fact sheet, which the staff
15 is going to request this Board to adopt by reference.
16 That was issued not on Friday. It was issued a couple
17 weeks before. But that was new -- wasn't there originally
18 in July.

19 There was listed three scientific studies, which
20 had never been disclosed and we had never seen before. I
21 had the opportunity to review two of those when I
22 requested the opportunity to see it. But of course we
23 have had no opportunity for any experts to come in and
24 look at those documents or analyze those documents.

25 There was a third scientific study. When I

1 requested to look at it, I was given the abstract. Last
2 night -- yesterday afternoon we received a copy of that
3 scientific study.

4 And then, finally, there was the implementation
5 plans for the bacteria for the jurisdictions, which we
6 were aware of. So --

7 CHAIRPERSON NAHAI: Which you are aware of?

8 MR. GEST: Which we were aware of.

9 So for the record, there were a good number of
10 documents that are being presented to you today that we
11 either were aware of but did not know that they were going
12 to be relied on or studies that we had no knowledge of.
13 And we had particularly objected to any reliance on those
14 studies because we have been prejudiced. We have not had
15 the opportunity to have an expert look at that or respond
16 to that.

17 Now I've made my record.

18 CHAIRPERSON NAHAI: Okay. I think I'll give our
19 counsel an opportunity to respond to that. After that
20 though -- the motion's already been ruled upon. I think
21 for the most part you've graciously conceded that there
22 isn't prejudice to the County. So --

23 MR. GEST: Excuse me. I did not say that. I
24 graciously conceded that there was not prejudice with
25 respect to some documents. I vigorously argued that there

1 was prejudice with respect to the studies and we were
2 prejudiced because we were not told the full scope of the
3 record that would be submitted -- thank you. And then
4 after we get passed this I do want to talk about the
5 procedure we're going to follow today.

6 CHAIRPERSON NAHAI: Okay. Would you like to
7 respond?

8 SENIOR STAFF COUNSEL LEVY: Thank you, Mr. Chair.

9 First of all, there's no legal obligation for us
10 to identify every document in our administrative record.
11 If somebody requests that we spell out what there is, we
12 do it. And we spell it out and we identify it for them.

13 The County asked us for a list of our documents
14 at the very possible -- last possible time to do so.
15 Comment letter deadline was September 4th, which was a
16 holiday. And so we received comments through September
17 5th, close of business. The County submittal, which was
18 submitted at 5:01 or 4:58 on September 5th, they asked us
19 again to identify the records for this proceeding, and we
20 did that. We did not do it on the 6th because, as I
21 previously told you, most of your storm water staff was in
22 the Court of Appeal on September 6th with Mr. Gest arguing
23 the MS-4 permit case on appeal. And it was then posted on
24 line when we compiled the list on Friday.

25 In terms of the County's representations about

1 surprise -- first of all, the representation about what
2 was disclosed for a previous hearing, which was never
3 ruled on, July 13th, yes, there were a half a dozen items
4 which are primarily the same items which are before you
5 today, with the background material that Mr. Gest is
6 objecting to. It's just the background material. But the
7 Board never ruled upon what would be part of the record on
8 July 13th, and Mr. Gest knows that as well.

9 The records that are now before you are before
10 you in response to specific requests from commenters,
11 during the July 21st hearing and at other times, that we
12 include the background materials. And Mr. Gest was at the
13 July 21st hearing where we had a discussion about this
14 very proceeding now. So adding those records is in
15 response to commenters' requests that they be added.

16 As far as the Santa Monica Bay TMDL, the County
17 was represented in that proceeding, and the County did
18 appear and the County did submit comment letters, frankly,
19 favorable to the TMDL, at least not objecting to the
20 prohibition during summer dry weather. The contents of
21 that is before you. The fact though is that they were
22 parties to that proceeding as well and know the contents
23 thereof.

24 As far as the special studies, the County had
25 noticed both in the 13267 letters, where they were cited,

1 and in the fact sheet, which we produced an additional
2 document in response to the County's objections previously
3 that there was no fact sheet. So the studies were cited
4 and referenced in the fact sheet.

5 In terms of their use in the findings, the County
6 had the findings because the findings were posted and
7 circulated too. And so the County knew exactly how each
8 document is going to be used as well, and so there's no
9 prejudice there.

10 Finally, their claim that they didn't -- weren't
11 aware of the 13267 letters that were sent to the cities,
12 that is false. All of the 13267 letters, whether they
13 were directed to the city -- I mean to the counties or the
14 cities, were copied to the County, and the County had
15 those as well.

16 And so, frankly, all of their objections to
17 process are -- very similar to the objections to process
18 that were raised in the Court of Appeal in the MS-4 case,
19 are not well taken here. There is no prejudice to the
20 County, and we would ask you to deny their motion.

21 CHAIRPERSON NAHAI: Well, the motion's already
22 been denied. And I think we've talked about it --

23 MR. GEST: Right, I agree. I was going to say I
24 think we should move on to more substantive matters,
25 except that I want to talk about a little bit more

1 procedure, if you will.

2 And, for the record, I do not necessarily agree
3 with all that was said. There are certain other times --

4 CHAIRPERSON NAHAI: You've made your comments for
5 the record. Let's hear your other --

6 MR. GEST: Thank you very much.

7 I want to talk about the manner in which this
8 hearing is --

9 CHAIRPERSON NAHAI: Mr. Gest, just one second.

10 MR. GEST: Sure.

11 CHAIRPERSON NAHAI: Did you state your name for
12 the record when you first stood up?

13 MR. GEST: I did, I did. But I'm happy to state
14 it again.

15 CHAIRPERSON NAHAI: No, that's -- a Board member
16 posed the question, so I wanted to make sure that you
17 have.

18 Go ahead please.

19 MR. GEST: This is an adjudicative hearing. I
20 understand that -- or I assume that this Board doesn't
21 hold these types of adjudicative hearings that often,
22 although many of them are deemed to be adjudicative.

23 So I want to talk about the process and suggest
24 some procedures so that it actually goes in a more smooth
25 manner.

1 First of all, with respect to examination of
2 witnesses. We requested that this be handled in a way
3 that there is a person, a lawyer or representative, who
4 asks the witness a question and the witness respond. And
5 we did that for a very simple reason. If any party,
6 whether it's the County or the Environmental Groups or the
7 Regional Board staff, wants to object or has an issue with
8 regard to the evidence that's being testified, if it's not
9 in a question and answer format, that means that that
10 party has to stand up and, in essence, speak over the
11 party who's testifying and interject. That is not
12 something that I want to do.

13 But if we're not proceeding in a question and
14 answer type format, we'd be compelled to do that.

15 So, first of all, I'd ask that we set up the
16 procedure so that a witness is called, they're asked
17 questions, they're giving answers. If they want to
18 provide narrative testimony, that's fine. But some
19 procedure which doesn't put the other parties in the
20 position where, if they have to make a procedural motion
21 or if they have to object to what is being testified to in
22 order to preserve the record or to bring something to the
23 Board's attention, we have to speak over that witness.

24 CHAIRPERSON NAHAI: Do you have a response to
25 that?

1 SENIOR STAFF COUNSEL LEVY: Mr. Chair, this is an
2 administrative hearing. This is not a court of law. Even
3 though it's an adjudicative hearing, the Board's
4 obligation is not to provide a courtroom and a
5 courtroom-style proceeding.

6 We do have quasi-adjudicative hearings all the
7 time. They're not on the procedural basis -- or not
8 following the procedural rules that Mr. Gest is proposing
9 here, and they don't have to be. And we had tried at
10 every step to accommodate Mr. Gest's requests for
11 procedural due process at this proceeding, including
12 providing Mr. Gest a table to sit down and take notes at,
13 which was a specific request on the telephone that he made
14 to me. So we've accommodated him there too.

15 In terms of his request to object, there was no
16 request made or objection made to the inability to lodge
17 objections interposed between people's testimony. There
18 was a request that they be allowed to cross-examine.
19 There is no need for the Chair or the Board to allow
20 anybody to stand up and interrupt anybody else's testimony
21 via objections. Mr. Gest or anybody else who has an
22 objection may make a note of it. And when they have their
23 time on rebuttal, if they choose to reserve time for
24 rebuttal, they can raise those issues at that time or in
25 cross-examination.

1 And that's our response. We believe we've
2 adequately responded to all of the procedural objections
3 in the letters.

4 That's all I would say.

5 CHAIRPERSON NAHAI: All right.

6 MR. GEST: Do you want me to reply to that or --

7 CHAIRPERSON NAHAI: You can reply to it, please,
8 but briefly.

9 MR. GEST: It's not an appropriate response to
10 say that one can wait for the objection. Because if an
11 objection goes to the ability of the witness to testify to
12 what that witness is testifying to, you have to make that
13 objection now. I say this really most importantly because
14 it will actually make the process go easier rather than
15 make it more difficult if it's handled in the way that the
16 County suggests. But certainly, even if it's not handled
17 that way, it would be a violation of due process to say
18 that a party cannot object to testimony that is
19 inadmissible or to make them wait, and we will just handle
20 it as the Chair and the Board wants us to proceed.

21 CHAIRPERSON NAHAI: Well, I think this was just
22 stated. This is an administrative hearing. This is not a
23 court of law. I don't think -- we're not in a setting in
24 which people can jump up Perry-Mason-like and object on
25 the basis of leading a witness or that something is

1 hearsay. We don't -- this is not a setting that lends
2 itself to that kind of proceeding.

3 What you're -- if that happens, that would be
4 akin to heckling. And I don't want to hear catcalls
5 during this proceeding as we go ahead.

6 It appears to me that the proceedings that we
7 have in front of us provide the County with an opening
8 statement, with an hour to make its presentations. And it
9 can put on its presentations any way it chooses. If you
10 wish to have your witnesses come up and question them and
11 elicit their testimony in that way, there's no objection
12 to that that I can see. After that you've been provided
13 with a half an hour of cross-examination. If it's
14 appropriate, you can ask for additional time and I'll
15 consider it at that time. And then on top of that, you've
16 been provided with another 20 minutes of a closing
17 statement.

18 And let's not forget what this proceeding is
19 about. This proceeding is about a way to incorporate a
20 TMDL that is already affected into the MS-4 permit.

21 So it appears to me that what you're asking for
22 is more of an opportunity to disrupt these proceedings
23 than to make them go more smoothly, Mr. Gest. And so I'm
24 going to deny your motion. And to the extent that you
25 believe any witness has given us testimony that should not

1 be admitted, that is objectionable for some reason, I'll
2 make sure that you're able to enter that on the record.

3 And you should also know that this is an
4 experienced panel. We have very competent counsel, at
5 least three lawyers here who are able to advise us as to
6 the weight of the testimony that you're hearing. We hear
7 from a lot of people. We've been -- and we hear a lot of
8 testimony. And I think we're able to gauge the weight
9 that a particular presentation is to be given. And we're
10 also I think rather good at assessing the demeanor and
11 credibility of those who appeared before us.

12 So I really don't think you need to worry that
13 the County is going to be denied due process here. Not at
14 all. From what I see before us, the County is going to be
15 given a very full opportunity to present its case, to
16 object to others, and will be given a very fair hearing.
17 And as we go through, to the extent that additional time
18 is necessary, I think you'll find this panel very
19 solicitous and accommodating of the County.

20 And I just want to also say with respect to what
21 Mr. Pestrella was saying earlier on, this Regional Board
22 truly does appreciate all of the efforts that the County
23 has made in connection with the control of urban runoff
24 contamination. And I personally want to commend
25 Supervisor Yaroslavsky in particular for all of the

1 efforts and leadership which he's shown in that area. But
2 that's a completely different issue to the proceeding
3 today, going forward with it, and the procedures that have
4 been outlined.

5 So I'm going to deny your motion.

6 MR. GEST: I appreciate the fact that the County
7 will be given a full opportunity to present its case. And
8 of course -- my request was, so that it does proceed in an
9 orderly fashion -- there's certainly no intention ever to
10 be rude to anybody, and of course there is no -- you will
11 not hear catcalls from the County. I'm sure you didn't
12 mean to say that.

13 But we do reserve our right to object in order to
14 make the record, because we need to do that.

15 CHAIRPERSON NAHAI: And I'll provide you ample
16 time to do that, to object. There will be a period of
17 time to do that. I was referring to catcalls from the
18 audience. It wasn't intended to be with respect to any
19 particular presenter or any particular person.

20 So I'm saying that in order to have a smooth
21 proceeding, I would appreciate it if you would keep your
22 objections and voice them at the appropriate time and not
23 during the presentations. Because what will then happen
24 is that you will just be interrupting people who are at
25 the podium. This is not a court of law. It's not a

1 courtroom setting.

2 MR. GEST: No, it's not a court of law. But it
3 is a proceeding by which this Board must make findings of
4 fact and decisions based upon admissible evidence.

5 Admissible in administrative context, but it still has to
6 be admissible. And, you know, we will not -- we will do
7 this in an orderly and respectful fashion. If we have to
8 object to preserve our rights, we will do so.

9 I'd like to address another point, which is
10 cross-examination. We believe, again, it makes more sense
11 and it is more efficient to cross-examine the person who
12 testifies after they do so. That's for two reasons:

13 First of all, the testimony is fresh in the
14 Board's mind. If we're responding to what is being -- or
15 inquiring further into what is being testified to, it can
16 be addressed at that time rather than being deferred to a
17 time which could be hours afterwards.

18 Second of all, if the witness is not subject to
19 cross-examination at that time, that means every
20 witness -- no witness can be excused. Every witness has
21 to remain until the time for cross-examination. And there
22 may not be a reason to burden those witnesses. So that --

23 CHAIRPERSON NAHAI: The second point is not well
24 taken. The Board itself poses questions to people who
25 present here. And we pose our questions at the very end

1 of the proceeding. So we do ask people to remain and be
2 available for questioning at the end of the day.

3 With respect to the first point though, I'll ask
4 our counsel to respond.

5 SENIOR STAFF COUNSEL LEVY: We answered this
6 comment in our September 13th letter. We're trying to
7 monitor time. The parties have been given a limited
8 amount of time. And it's easier to monitor the time for
9 cross-examination if you don't have to have the clerk
10 counting backwards every time somebody steps up for a
11 witness and just let them do it all at once. And staff
12 recommends that the cross-examination take place
13 afterwards, all at the same time. And it will go a lot
14 quicker and more orderly that way, in the staff's opinion.
15 It's the Chair's discretion.

16 CHAIRPERSON NAHAI: We've set our procedures
17 here. It appears to me that they're fair. I don't think
18 that the County is going to be prejudiced in any way by
19 conducting its cross-examination once the presentations
20 are done.

21 MR. GEST: Thank you.

22 I would like to address the question part -- the
23 parties to the permit are the permittees and the Regional
24 Board staff. We had seen no written request by any
25 environmental organizations to join as parties; and so we

1 had no opportunity to respond to that in writing. This is
2 the first time -- well, actually I shouldn't say it's the
3 first time. When we received the Notice of the Order of
4 Proceedings was the first time we had an indication that
5 the environmental organizations would be designated as
6 parties. The County objects to that.

7 The regulations provide that the interested
8 parties -- interested persons -- excuse me -- certainly
9 have a time to speak and the Board can do it.

10 The regulations also provide that upon
11 application other persons can be designated parties. But
12 we object to the environmental organizations being made as
13 parties. We think that their interests are protected by
14 the Regional Board staff. They certainly are free to
15 comment on the proposed amendment. However, making them
16 formal parties will unduly complicate the proceeding, will
17 add another layer of persons or parties who will be asking
18 questions, taking time, but more so will unduly complicate
19 these proceedings; and submit that the County will be
20 prejudiced and we -- even though we understand that the
21 Board stated they were parties -- or the Chairman stated
22 they were going to be designated parties, we object to
23 that. And I believe it's the Board that has to appoint
24 the parties. At least the regulation says the Board. And
25 so we object to the environmental organizations being

1 designated as parties.

2 We have no objection to them being called as
3 witnesses. We have no objection to them commenting as
4 interested persons. But we do object to them as being
5 designated as formal parties.

6 CHAIRPERSON NAHAI: Thank you. I hear your
7 objection.

8 Mr. Levy.

9 SENIOR STAFF COUNSEL LEVY: Mr. Chair, first of
10 all, as with every decision, the Chair is delegated the
11 responsibility to make -- manage the order of the
12 proceedings and to conduct the meeting. Everything of
13 course the Chair does is subject to the Board's approval.
14 Not by express approval, but a motion could happen if they
15 disagreed with the Chair, if they think the Chair is doing
16 it unfairly or if they want something else. That's with
17 everything the Chair does, Mr. Chair.

18 And so when the reference in the regs to the
19 Board is a reference to the Chair by delegation, the
20 regulations specifically state, in Section 648.1, that the
21 party or parties to an adjudicative proceeding before the
22 Board shall include the person or persons to whom the
23 agency action is directed, which would include the
24 permittees, and any other person whom the Board determines
25 should be designated as a party.

1 We received first an oral request timely as well
2 as a follow-up e-mail request by these Environmental
3 Groups to be parties to this proceeding. In the Board
4 staff's opinion, the Santa Monica Baykeeper, Heal the
5 Bay -- Heal the Santa Monica Bay, the Natural Resources
6 Defense Council are interested -- more than interested
7 persons in the outcome of these proceedings, as their
8 organizations' mission is to protect the bay, which makes
9 them in a different status than other mere interested
10 members of the public. And so we have recommended that
11 they be designated as parties to this proceeding.

12 There's no provision for the County to legally
13 object to that or no requirement that we give them notice
14 ahead of time. We did give them notice of who was
15 intended and who we would recommend to be designated as
16 parties.

17 They've lodged their objection. We think it's
18 not well taken.

19 CHAIRPERSON NAHAI: I think these are
20 organizations that are intimately involved with this
21 particular issue. Far from complicating the matter, their
22 designating them as parties would actually lend to an
23 openness and an additional information which the Board may
24 find useful.

25 So --

1 MR. GEST: All right. Thank you.

2 CHAIRPERSON NAHAI: -- with respect, deny that
3 motion too.

4 MR. GEST: All right. We object to the
5 incorporation by reference of the administrative record.
6 Not only the administrative record for the permit and the
7 TMDL, but the statement the Board made -- and it was in
8 the Notice of Order -- that the administrative record is
9 going to be just incorporated by reference even if it's
10 not referred to in this proceeding.

11 This Board must make factual findings based upon
12 the evidence presented to it. And the evidence needs to
13 be presented to it. And it is a violation of due process
14 as well as a violation of the regulations and the
15 Government Code that regulate these proceedings to rely on
16 evidence that is actually not put before the fact finder.

17 And so I understand the Chairman read and said
18 what was in the letter in the order that it was issued.
19 But we object to that proceeding.

20 CHAIRPERSON NAHAI: Thank you for your motion.

21 SENIOR STAFF COUNSEL LEVY: Mr. Chairman, the
22 records are before the Board and they are under
23 consideration by the Board.

24 I will respond to the comments that it's a
25 violation of due process in the regulations by citing

1 specifically to the regulations. 648.3 says that public
2 records of the Board that are relevant to the subject of
3 the hearing and books, reports and other evidence that
4 have been prepared and published by a public agency, if
5 otherwise admissible, may in the discretion of the Board
6 be received in evidence as exhibits by reference without
7 supplying -- without the necessity of supplying copies to
8 the Board and other parties, provided the original or
9 copies in the possession of the Board and the specific
10 file folder or other exact location where it can be found
11 is identified. And as we've said already, they can all be
12 accessed here at this time.

13 I'll further cite the Board to Section 648D of
14 Title 23: "The presiding officer may waive any
15 requirement in these regulations pertaining to the conduct
16 of adjudicative proceedings, including, but not limited
17 to, the introduction of evidence" -- and I'll go on --
18 "the order of proceedings, the examination or
19 cross-examination of witnesses, and the presentation of
20 argument, so long as those requirements are not mandated
21 by state or federal statute or the state or federal
22 constitution."

23 CHAIRPERSON NAHAI: Which I think we've already
24 done.

25 And with respect to the incorporation of the

1 administrative record, that's by no means unusual for us
2 to do.

3 Michael?

4 SENIOR STAFF COUNSEL LEVY: I'm sorry?

5 CHAIRPERSON NAHAI: Regarding incorporation of
6 the administrative record by reference, do we not do that
7 as a matter of course?

8 SENIOR STAFF COUNSEL LEVY: We do that -- we do
9 it as a matter of course. And you've made that statement
10 in your opening statement that they would be received and
11 incorporated by reference and that you waive the
12 requirement for specific identification beyond the
13 identification that have been made of an item-by-item.

14 The records that we're referring to are
15 voluminous. We have a five-year proceeding on the
16 municipal separate storm sewer system, the MS-4 permit.
17 And to have each of those documents in paper form,
18 photocopied for the Board members and all of the parties,
19 would be a gross waste of paper.

20 To the extent the documents are necessary, we've
21 invited Mr. Gest to identify with specificity any
22 particular documents that he wanted us to have physically
23 in the room -- in the hearing room and we would
24 accommodate him. We did not receive a request in response
25 to that except an objection to the incorporation by

1 reference.

2 CHAIRPERSON NAHAI: Okay. I'm going to deny your
3 motion.

4 So let's --

5 MR. GEST: One more --

6 CHAIRPERSON NAHAI: Any other motion?

7 MR. GEST: Yes, one more. And it's -- I guess
8 you can term it a motion. And this is with regard to the
9 amount of time allocated for the presentations, including
10 the opening statement and a closing statement.

11 This is an important issue. It's important to
12 the Regional Board, it's important to the public, and it's
13 important to the permittees, including the County. We had
14 estimated that it could take up to 16 hours originally to
15 present the evidence that we think this Board should hear
16 and needs to hear to be fully informed. And that is our
17 intent, which was to fully inform the Board so that you
18 can make a reasoned decision, as I'm sure you will.

19 In response to requests to streamline the
20 process, we have made significant efforts to reduce the
21 number of witnesses who we would call and to streamline
22 the process. But we still estimate that this hearing will
23 take at least 6 hours -- 6 or 7 hours. And I can tell you
24 that, you know, we will -- the County will not be able to
25 present all of its evidence within one hour. And we

1 certainly will not be able to complete the
2 cross-examination within a half hour. And we would be
3 requesting so we can set forth all the issues that need to
4 be addressed approximately 20 minutes for opening
5 statement and the same for closing.

6 And certainly to put time limits when the Board
7 has not -- the evidence hasn't even been started to be
8 presented is fine as a guide, but cannot be binding, and
9 should not be binding, because it will -- if it prevents
10 parties from introducing evidence.

11 So I wanted to let the Board know from the
12 beginning that it's our belief, and looking at actually
13 what is going to be presented -- and we did not factor in
14 what would be included from the Environmental Groups --
15 that we thought this would take about six hours to
16 complete this proceeding.

17 And we would request proper time and adequate
18 time to do that. And certainly would say that it's a
19 violation of due-process rights if it's not.

20 I should add that certainly if the Environmental
21 Groups are parties, they are -- to a large extent share
22 the interests of the Regional Board staff. I assume
23 they're going to be speaking in support of the amendment.

24 And, you know, the County's time -- the County's
25 position is every party should be given adequate time to

1 present whatever they need to present without unduly
2 prolonging the proceedings, both the Regional Board staff,
3 the environmental organizations and the County. And we're
4 not asking to limit the environmental organizations' time.
5 But we are indicating that we think that this proceeding
6 will go about six hours. We're asking now for an
7 adjustment of the time limits so you can know what to
8 expect and we can handle this in a proper manner.

9 CHAIRPERSON NAHAI: Well, the entire proceeding
10 may well go six hours given what I'm seeing in front of me
11 here, because we have -- we're providing for other
12 permittees to make presentations, we're providing for
13 interested persons to make their remarks. And I already
14 have a stack of many cards here.

15 But in terms of the County's time, I think our
16 staff made the assessment that an hour to present the
17 County's case, given the fact that we already have
18 voluminous records that the Board members have seen and
19 read, that that should be adequate.

20 Are you saying that the County needs six hours to
21 make its presentation?

22 MR. GEST: I'm saying that the County will
23 probably take about four hours. That's what I'm saying.

24 CHAIRPERSON NAHAI: And I don't think that's
25 reasonable.

1 MR. GEST: Well, you haven't heard the evidence.
2 The Board hasn't heard the evidence. We haven't even had
3 an opportunity to start with opening statements. The
4 Regional Board staff before they made the recommendation
5 did not call the County and ask for -- they had our
6 estimate, but they did not make any inquiry as to what
7 actually was going to be presented or not. And you need
8 to hear the evidence and you need to hear the witnesses
9 before you can make an estimate as to whether the evidence
10 that's being presented is duplicative or not.

11 So I'm saying -- I'm requesting for the record
12 adequate time. I'm certainly saying that we're preserving
13 all our due-process rights. And we're entitled --

14 CHAIRPERSON NAHAI: You've made that very clear.
15 You've made the record. We've already spent a great deal
16 of time just on these motions. We've heard you
17 thoroughly. And, you know, we'll -- I think -- we'll
18 proceed. The opening statement that has been -- the time
19 that's been allocated is five minutes. Go ahead and make
20 your opening statement during that time. And then we can
21 make an assessment.

22 But having read, as I say, many rather voluminous
23 materials on this, having looked at the correspondence, I
24 would tend to agree with staff that your case should be
25 quite adequately presented in an hour. If some more time

1 is necessary, I'll consider that. But six hours and four
2 hours, that is just I believe beyond the pail.

3 MR. GEST: Well, let me respond --

4 CHAIRPERSON NAHAI: This is how we'll proceed.

5 MR. GEST: Let me respond, which is that it's the
6 County's intent to introduce evidence for these Board
7 members to hear what a permittee faces in terms of
8 addressing bacteria at the beaches; that is, with regard
9 to how these sources are identified, because they need to
10 be identified in order to address how they're going -- and
11 how it's going to be engineered. This Board -- because
12 the issue here is: Should this be subject to the
13 iterative process, should you go forward at all at this
14 time, or should you adopt the staff's recommendation?

15 CHAIRPERSON NAHAI: Yes. But you're making your
16 opening statement now.

17 MR. GEST: Fine.

18 CHAIRPERSON NAHAI: Let's stop.

19 MR. GEST: Thanks. Let's move on.

20 CHAIRPERSON NAHAI: And we'll move on to opening
21 statements. And you can make your opening statement and
22 you can tell us what evidence you wish to put before us.
23 As of this time, the statement that you've made is that
24 you want to talk about the -- whether the iterative
25 process is a suitable path to follow and what it is that a

1 permittee faces.

2 Okay. I understand that. That's not going to
3 take an hour to put on.

4 We'll wait till opening statement, we'll stop
5 there, and go on.

6 MR. GEST: Thank you very much.

7 CHAIRPERSON NAHAI: Thank you very much.

8 I'll now --

9 SENIOR STAFF COUNSEL LEVY: Mr. Chair, two more
10 matters. I'm terribly sorry.

11 The first one is just a brief response to the
12 comments that have repeatedly been made about alleged
13 identity of interest between Board staff and the
14 Environmental Groups. And as the Board knows from the
15 July 13th hearing, there's certainly no identity of
16 interest between the environmental organizations and the
17 staff. And they're quite capable of telling us when they
18 disagree with us and telling you when they disagree with
19 you. And staff is not here to represent the Environmental
20 Groups.

21 The second point is we've received a request from
22 certain cities, I don't though which cities, Hidden Hills,
23 et cetera, claiming they have objections to the
24 procedures. It would be at the Chair's discretion whether
25 to hear those objections. They were not made timely under

1 the agenda notice nor under the hearing notice that was
2 sent out on September 8th. It would be the Chair's
3 discretion whether to hear them, or the Chair could hear
4 them of course during their allotted time, whether they're
5 parties or interested persons, at the Chair's convenience.
6 The Chair can also address concerns if they raise them
7 subsequently at that time as well.

8 CHAIRPERSON NAHAI: I think we can hear those
9 objections during the hearing itself. If they were not
10 timely raised, I'm not inclined to hear them at this
11 point.

12 SENIOR STAFF COUNSEL LEVY: Thank you, Mr. Chair.

13 CHAIRPERSON NAHAI: All right. With that, I'm
14 going to administer the oath. And, please, every person
15 who's going to present on this matter, please rise.

16 Repeat after me.

17 Raise your right hand. Repeat after me.

18 "I promise to tell the truth" --

19 PROSPECTIVE WITNESSES: I promise to tell the
20 truth --

21 CHAIRPERSON NAHAI: -- "the whole truth" --

22 PROSPECTIVE WITNESSES: -- the whole truth --

23 CHAIRPERSON NAHAI: -- "and nothing but the
24 truth" --

25 PROSPECTIVE WITNESSES: -- and nothing but the

1 truth --

2 CHAIRPERSON NAHAI: -- "under penalty of
3 perjury."

4 PROSPECTIVE WITNESSES: -- under penalty of
5 perjury.

6 CHAIRPERSON NAHAI: Mr. Gest, we request that
7 everybody take the oath.

8 MR. GEST: Your Honor, I'm happy to take the
9 oath. I didn't mean not to. But I assumed that
10 statements of lawyers are not evidence, so I wasn't
11 testifying. But I'm happy to take the oath.

12 CHAIRPERSON NAHAI: I noted that you were
13 studiously looking at your papers as I was administering
14 the oath. Every person who presents before this Board is
15 required to take the oath. If something that you're going
16 to present to us today you know to be untruthful, okay,
17 you must not say it.

18 MR. GEST: I certainly would not. I apologize.

19 CHAIRPERSON NAHAI: The other thing that I would
20 like to stress before this hearing commences is that this
21 Board has contempt powers. We don't like to use them, but
22 we have them. I expect the testimony today to be
23 truthful.

24 Go ahead and take the oath.

25 "I swear to tell the truth" --

1 MR. GEST: I swear to tell the truth --

2 CHAIRPERSON NAHAI: -- "the whole truth" --

3 MR. GEST: -- the whole truth --

4 CHAIRPERSON NAHAI: -- "and nothing but the
5 truth" --

6 MR. GEST: -- and nothing but the truth --

7 CHAIRPERSON NAHAI: -- "under penalty of
8 perjury."

9 MR. GEST: -- under penalty of perjury.

10 CHAIRPERSON NAHAI: Thank you.

11 SENIOR STAFF COUNSEL LEVY: For the record, Mr.
12 Chair, Board's counsel has taken the oath as well.

13 CHAIRPERSON NAHAI: Thank you.

14 All right. I think with that, we can proceed
15 with opening statements.

16 First, five minutes for staff.

17 EXECUTIVE OFFICER BISHOP: Good morning, Chair,
18 members of the Board. My name is Jonathan Bishop. I'm
19 the Executive Officer for the Los Angeles Regional Board.

20 I will be making an opening statement to try and
21 frame this issue for the Board members. I will not be
22 making any objections or -- on process issues, because
23 that's not my role.

24 I just want to remind the Board what we're doing
25 here today. What we're doing here is amending a permit.

1 That permit is for the County and co-permittees for the
2 municipal storm system. That permit has a clause in it
3 for reopeners for new amendments to the basin plan.

4 We are proposing -- staff is proposing today to
5 incorporate waste-load allocations from a TMDL that was
6 adopted by this Board. That TMDL specifically indicated
7 that method of compliance would be through our municipal
8 storm system permit.

9 What we are not doing today is evaluating the
10 validity of the bacterial standards. Those were adopted
11 in 2001 by this Board. We are not revisiting the
12 appropriateness of the waste-load allocations. Those were
13 determined by a TMDL that was adopted by this Board and
14 went through the full procedure.

15 SO I wanted to just remind the Board that this is
16 an amendment to a permit.

17 Thank you.

18 CHAIRPERSON NAHAI: Thank you.

19 All right. Next, opening statement from the
20 County please.

21 MR. GEST: Mr. Chairman, members of the Board.

22 CHAIRPERSON NAHAI: Please activate the timer.

23 MR. GEST: We are here today on a motion to amend
24 the permit to include provisions of the Santa Monica Bay
25 beaches TMDL into this permit -- for the Los Angeles

1 County Storm Water System -- Flood Control System.

2 It's important to set forth what's at stake here
3 and what is not at stake.

4 The County shares the goal of the Santa Monica
5 Bay beaches TMDL. In fact, the County over the last three
6 years has spent over \$14 million, the permittees have
7 already spent in excess of \$18 million in implementing
8 this TMDL. The County was committed to the TMDL even
9 before it was finalized. You will hear evidence that
10 their employees were directed to implement it regardless
11 of when it was adopted, and they started working on it
12 immediately. The County has committed itself and its own
13 money to source identification, identifying the sources of
14 bacteria at the beaches.

15 And it has done all of this voluntarily, before
16 this amendment and without the need of this amendment.

17 The quality of the waters on Santa Monica Bay
18 beaches is now better than it was three years ago or four
19 years ago. And it is better as a result of the County and
20 the other permittees' efforts, all done voluntarily. As
21 has been stated, the implementation of the TMDL is not
22 what is at stake at this hearing.

23 But although this hearing is not only about the
24 TMDL, what it really is about is the relationship between
25 the Regional Board staff and the permittees. In order to

1 achieve the goals that everyone shares, there needs to be
2 cooperation and commitment to those goals by the Regional
3 Board and its staff, by the public, and by the permittees
4 who are implementing these programs that the Board is
5 directing. It is like a three-legged stool. You need all
6 three legs to have the stool stand properly.

7 But this amendment, as has been already stated by
8 other representatives of the County, puts the parties in
9 an adversarial position rather than a partnership, and it
10 does so unnecessarily.

11 The amendment comes and beats against the leg of
12 the permittees, puts everybody in an adversarial position.
13 And effort is spent on matters other than implementing the
14 TMDLs.

15 Why do I say that it's beating against the
16 permittees? After the County voluntarily undertook its
17 program and the other permittees took steps to implement
18 the TMDLs, after we spent, the permittees -- not we, but
19 all the permittees spent in excess of \$18 million
20 improving the quality of the water at the beaches, they
21 were simply presented in July with this proposed
22 amendment. No one from the Regional Board staff called
23 any representative of the Flood Control District as
24 principal permittee and said, "You know, we would like to
25 see how we can go about further implementing this TMDL.

1 We would like to determine whether there's a process that
2 can be followed. We would like to determine whether
3 there's a way that we could reach our goals and perhaps
4 present something to this Board jointly." But that was
5 not done.

6 We've made the requests for opportunities to do
7 that. Those requests have been denied. And so as a
8 result of that, we are here in an adversarial position.
9 But we reiterate, that that's not the County's choice. We
10 would rather go forward as a partnership.

11 And for that reason what we'll be asking the
12 Board is that you do not adopt the proposed amendment but
13 that you let the Flood Control District and other
14 permittees continue to meet with Regional Board staff to
15 determine whether there's a way to proceed which will meet
16 everybody's needs.

17 Now, you will no doubt be urged by some parties
18 to take action today. And in considering that request,
19 there are four myths that need to be debunked.

20 The first myth is that the permittees have not
21 been doing anything to address the presence of bacteria at
22 the beaches. That's not correct. The evidence will show
23 that the permittees have undertaken and built many
24 different diversions, have funded many different source
25 identification studies or will be funding them, and we are

1 taking steps.

2 The evidence will show that -- before there was
3 an amendment to this permit, that the water quality on the
4 Santa Monica Bay beaches has improved.

5 CHAIRPERSON NAHAI: How much more time do you
6 need for your opening statement?

7 MR. GEST: I need about 15 minutes, Mr. Chairman,
8 so I can identify the evidence and what will be said and
9 presented to this Board. And I would request the time to
10 do it.

11 SENIOR STAFF COUNSEL LEVY: Mr. Chairman, if it
12 is the intent of the County to structure its presentations
13 toward a four-hour presentation and towards a 20-minute
14 opening statement, I would suggest that that is not in
15 accord with the rulings that the Chair has made, even if
16 the purpose is to do so to make a record to generate an
17 attack on due process grounds. I believe that the County
18 has been afforded more than adequate time, assuming that
19 the County is in good faith trying to comply with the
20 rulings of the Chair about process.

21 And I would suggest that the Chair bear in mind
22 that its failure to adhere to those time limits should be
23 a good faith failure and not a willful failure.

24 CHAIRPERSON NAHAI: I will do this. I'll provide
25 you, Mr. Gest, with another five minutes. Please tell us

1 in five minutes what it is that your case is going to
2 cover. It's not necessary for you to say the myth that
3 you want to expose and then go through a very detailed
4 analysis of exactly how the evidence will show us how it
5 is that you're going to do that.

6 So, please, five minutes --

7 MR. GEST: With due respect --

8 CHAIRPERSON NAHAI: -- to finish your opening
9 statement.

10 MR. GEST: With all due respect, this is an
11 educational process. We need to present evidence and we
12 need to provide the information so that the Board members
13 can make reasoned decisions. And part of the educational
14 process is explaining what that evidence will be in the
15 context of that.

16 CHAIRPERSON NAHAI: All right.

17 MR. GEST: And I will continue with my five
18 minutes.

19 CHAIRPERSON NAHAI: All right. And you will stop
20 at the end of five minutes?

21 MR. GEST: I will stop at the end of five
22 minutes.

23 CHAIRPERSON NAHAI: Okay.

24 MR. GEST: There's a second myth that needs to be
25 debunked. The second is that the law requires that this

1 Board act today. There's no law or regulation that
2 requires this Board to adopt this particular amendment.
3 There are several water quality objectives that apply to
4 the permittees. And as this Board knows, there are
5 several TMDLs that have been adopted with respect to those
6 water quality objectives. This particular TMDL is no
7 different than any of the other TMDLs or water quality
8 objectives. There's no legal requirement that the Board
9 has to act today. We had suggested in our comments that
10 it was more appropriate to take it up either at the time
11 of the permit renewal or at some time when all of the
12 TMDLs can be considered together and a process put
13 together. But there is no legal requirement that you act
14 today. And if there was, you would have other requests to
15 amend the permit for the TMDLs, and you have not had that.

16 There's a third myth that needs to be debunked.
17 And, that is, that the Board was required to have amended
18 the permit in some way by July 15th, 2006. This is a myth
19 that has been published in press releases and newspapers,
20 without performing any critical analysis, and repeated by
21 those papers.

22 The fact is, the TMDL did not create any new
23 enforceable water quality standards. The State Board in
24 adopting this TMDL in Finding 9 said, "The numeric targets
25 in this TMDL are not water quality objectives and do not

1 create new bases for enforcement against dischargers apart
2 from the water quality objectives they translate." So
3 there was no need to meet the July 15th date.

4 When the Board originally adopted the TMDL the
5 County advised the Board at that time that it would not be
6 possible to construct all the diversions and meet the
7 requirements within three years. We made the record then.
8 And in fact -- but, nevertheless, the County took up every
9 effort to meet that three years. But in fact what the
10 County said at that time was true. The County's
11 experienced in engineering and constructing matters.

12 The evidence will show that the County has taken
13 every step it could, and other permittees have taken every
14 step they could. But the three-year period, which was a
15 time period -- and the July 15th date was an arbitrary
16 date. This Board at that time could have picked July
17 15th, 2007, 2008, 2009.

18 So when we're talking about should we go forward
19 with the iterative process, which is what one of the
20 issues is that will be before the Board, we will be
21 presenting evidence as to what actually happens out in the
22 field and what needs to be done in order to install, and
23 what barriers. For example, one diversion was delayed
24 over a year, a year and a half. It was delayed by an
25 agency of the State of California. The Coastal Commission

1 would not grant a permit. And without that permit that
2 could not be constructed. As a result, water quality at
3 the beach suffered. And it was delayed not through any
4 fault of any party. But that is something that bears on
5 the question of: How much time is needed in order to meet
6 these?

7 The fourth myth that needs to be debunked is that
8 no action will result in over 600,000 illnesses at a
9 projected cost of 21 to \$51 million. The evidence will
10 show that this estimate does not apply solely to the Los
11 Angeles County beaches. It applies to Orange County and
12 Los Angeles County. The evidence will further show that
13 the opinion stated in that article from which those
14 numbers were taken was based on water quality data from
15 the year 2000. Since that time the permit has been
16 placed, since that time water quality has improved. So
17 therefore this Board is not faced with risks of illness
18 based upon water quality in the year 2000, and those
19 numbers therefore are not -- have no bearing.

20 For these reasons the County has urged that
21 there's no reason to act now. But if you are going to go
22 forward, we urge that you make the following changes:

23 First of all, it has been said that this
24 amendment applies only to non-storm water. If that's the
25 case, we ask that you put the word "non-storm water" in to

1 Part 1B and 2.5. Because that's the intent, that should
2 be done.

3 As you heard, it also should be part of the
4 iterative process. And we will present you with evidence
5 as to why it should be part of the iterative process.

6 This TMDL is inconsistent with the Malibu Creek
7 and Ballona Creek TMDLs, and we'll present evidence as to
8 why that's the case.

9 I see that my time has expired. I do have other
10 matters that I would present to the Board. But in
11 accordance with the Chair's direction, I will stop at this
12 time.

13 Thank you.

14 CHAIRPERSON NAHAI: Thank you very much.

15 Let's go to the opening statement from the
16 environmental organizations.

17 MR. EGOSCUE: Good morning. My name is Tracy
18 Egoscue. It's spelled E-g-o-s-c-u-e. I am attorney for
19 Santa Monica Baykeeper.

20 Here with me today are also other attorneys that
21 I would like to introduce them at this time.

22 Please stand and introduce yourself.

23 MR. BECKMAN: I'm Dave Beckman with NRDC.

24 MR. FLEISCHLI: Steve Fleischli with Waterkeeper
25 Alliance of New York.

1 MR. PALMER: Dana Palmer with Santa Monica
2 Baykeeper.

3 MS. BACCAY: Michelle Baccay with NRDC.

4 MS. EGOSCUE: I would like to start my opening --
5 my brief opening statement this morning with the
6 definition of the word "deadline," from Meriam Webster
7 Dictionary. "A date or time before which something must
8 be done."

9 The matter before the Los Angeles Regional Water
10 Quality Control Board is about human health.
11 Unfortunately the theme of the opposition to this storm
12 water permit reopener is delay, delay, and more delay.
13 And as scenes stolen from the classic film Wizard of Oz,
14 Los Angeles County and other municipalities would like
15 this Board to ignore the man behind the iron curtain.

16 Ignore the fact that this community has been
17 working together since 2003, and arguably before. When
18 the bacteria TMDL was adopted this community has acted
19 together to clean up our beaches in anticipation of this
20 moment.

21 The County and other agencies would like you to
22 ignore the fact that discharges to Santa Monica Bay
23 continue to contribute to human health risks, and
24 dischargers would like to delay this reopener because they
25 are simply not ready.

1 Unfortunately, the July 15th deadline has come
2 and gone. And unbelievably, and quite remarkably, we are
3 still waiting for this reopener and, thus, the
4 enforceability of this TMDL.

5 The evidence that the Environmental Groups will
6 present today will prove that in a show of good faith and
7 true partnership exhibited by the grantors, Los Angeles
8 County has received massive amounts of money from various
9 agencies to tackle storm water pollution. The evidence
10 presented today will prove that although stormwater
11 runoff diversions can be a solution to bacteria pollution,
12 they are not the silver bullet and do not deserve to be a
13 safe harbor.

14 The evidence presented today will prove that
15 every single day, every single moment that this TMDL was
16 not enforced citizens of Los Angeles County, many of whom
17 who have come today to testify, become sick after swimming
18 in front of storm drains. People get sick when they swim
19 in Santa Monica Bay beaches.

20 The validity of the bacteria TMDL is not open for
21 debate. And thank you for granting us party status. And
22 We will reserve the right to object when the validity of
23 the TMDL is brought up for a debate.

24 Do not allow collateral attacks. The time for
25 challenges to this TMDL is gone. And, most importantly,

1 do not punish those dischargers that have worked and spent
2 millions trying to clean the beaches, trying to meet the
3 deadline, submitting grants asking for money with the
4 deadline specifically referenced in those grants, do not
5 punish those dischargers in favor of a group that simply
6 could not get their act together.

7 This reopener is required by law, supported by
8 economics, our community, public health and even political
9 concerns.

10 Contrary to the assertion in the opening
11 arguments from the County's attorney, the law does require
12 that you take action today. It's very clear in response
13 to comments, indeed in our letter, that Section 122.44 of
14 the Code of Federal Regulations leaves the Regional Board
15 with no discretion whatsoever in opening this permit and
16 setting waste-load allocations that reflect the TMDL.

17 I'd like to close with a quote from the Governor.
18 The Governor wrote a letter that is a part of this record
19 today, and he says, I quote, "If you" -- sorry, I'm
20 quoting next. He said that your action today sends,
21 quote, "a message that protecting our coast is one of our
22 most important responsibilities, for this generation and
23 for our children and grandchildren."

24 Thank you.

25 CHAIRPERSON NAHAI: Thank you very much.

1 Board members have requested a break. I think we
2 can do it in five minutes.

3 So let's take a five-minute break. And then
4 we'll resume with the staff presentation at that time.

5 (Thereupon a recess was taken.)

6 CHAIRPERSON NAHAI: All right. Please come to
7 order.

8 Okay. We're now going to proceed by hearing the
9 staff presentation. The time allocated for this is 40
10 minutes.

11 Okay. Please sit down.

12 Come on, everybody. Come to order please.

13 All right. Mr. Swamikannu, please continue.

14 DR. SWAMIKANNU: Good morning, Chairman Nahai and
15 members of the Board. I'm Dr. Xavier Swamikannu, Chief of
16 the Storm Water Permitting Program at the Los Angeles
17 Regional Water Board.

18 (Thereupon an overhead presentation was
19 Presented as follows.)

20 DR. SWAMIKANNU: Over the next few minutes I will
21 present staff recommendation to reopen the L.A. Municipal
22 Storm Water Permit, to incorporate the summer dry weather
23 bacteria total maximum daily load waste-load allocation
24 for Santa Monica Bay beaches.

25 --o0o--

1 DR. SWAMIKANNU: First, background on the more
2 than 15-year history of the Los Angeles County Municipal
3 Storm Water Permits.

4 Mr. Howard Gest made a statement that all the
5 actions of the permittees were voluntary. That is not in
6 fact true. This Board adopted the first Los Angeles
7 County Municipal Storm Water Permit in 1990. That permit
8 phased in about six watersheds into the program over a
9 three-year period. And the objective then was to identify
10 and implement best management practices to control storm
11 water pollution. A basic chemical monitoring program was
12 also introduced to characterize pollution. And that was
13 largely initiated through the County of Los Angeles.

14 In 1996 the L.A. County Municipal Storm Water
15 Permit was reissued, this time to require the adoption of
16 storm water quality control ordinances and the development
17 of countywide model programs in public involvement
18 education, industrial commercial inspections, new
19 development planning and construction, elicitation,
20 elicitation discharge elimination and public agency activities.

21 In addition, the monitoring program was enhanced
22 to evaluate the -- water impacts from storm water
23 pollution.

24 --o0o--

25 DR. SWAMIKANNU: In 2001, the L.A. County

1 Municipal Storm Water Permit was reissued, this time
2 incorporating State Board directed language to require
3 compliance with water quality standards. The new
4 development standards affirmed by the State Board in the
5 Suisun decision or the standard of storm water and
6 mitigation plan decision were consolidated and updated.
7 More comprehensive monitoring requirements were included
8 at that time to support participation in bio-assessment,
9 other regional surveys, such as by 2003, and also to
10 perform river tributary monitoring. We also at that time
11 directed default trash reduction controls.

12 That takes us to the present, which is the
13 subject of this hearing: Prohibition of summer dry
14 weather flows from municipal separate storm sewer systems
15 to Santa Monica Bay beaches.

16 --o0o--

17 DR. SWAMIKANNU: The TMDL, total maximum daily
18 load, was adopted by the Water Board over four and a half
19 years ago after extensive technical and policy input from
20 stakeholders, and ultimately went into effect on July
21 15th, 2003. That is Three years ago.

22 I present on the slide before you the sequence of
23 the approval dates.

24 --o0o--

25 DR. SWAMIKANNU: The Santa Monica Bay beaches

1 would be going after me, will be discussing.

2 On the vertical axis is a list of Los Angeles and
3 Orange County beaches. L.A. beaches on the top upper
4 two-thirds.

5 On the horizontal axis we have recorded beach
6 attendance for the year 2000, and the units are measured
7 in hundred thousand visitors. The orange shaded area is
8 the attendance during summer months, and your action today
9 is about that period.

10 Generally about 70 to 80 percent of beach visits
11 annually occur during the summer months of June through
12 September.

13 --o0o--

14 DR. SWAMIKANNU: We considered several options,
15 some of which were proposed by the municipal storm water
16 permittees, for incorporating the summer dry weather
17 bacteria waste-load allocations for Santa Monica Bay
18 beaches into the federal permit scheme. These are
19 requiring amendments to the Storm Water Quality Management
20 Program. This is the iterative approach within the
21 permit. But what we are talking about is not storm water.
22 It is dry weather flow, which is non-storm water.

23 Next, the prohibition of non-storm-water
24 discharges containing bacteria, that is, summer dry
25 weather flow.

1 example, in part 1.B, Discharge Prohibitions, what you see
2 before you is quite different from that which was first
3 proposed in July. The version before you is also slightly
4 different from that which was circulated with the public
5 notice for this Board hearing. The reason change
6 clarifies the limited scope of the proposed action to
7 Santa Monica Bay.

8 --o0o--

9 DR. SWAMIKANNU: I will now briefly go over the
10 legal and regulatory basis for the proposed action.

11 The 1987 amendments to the Federal Clean Water
12 Act for the first time required that storm-water
13 discharges from municipal separate storm sewer systems be
14 regulated as a point source under the federal NPDES
15 regulatory framework. Municipal storm-water permits are
16 to include provisions to effectively prohibit
17 non-storm-water discharges into the system.

18 Second, municipal storm-water permits are to
19 include provisions that require controls to reduce
20 pollutants in storm-water discharges to the maximum extent
21 practicable and any other provisions that the permitting
22 authority deems appropriate.

23 Notably, the 1987 amendments did not alter the
24 existing regulatory regime for non-storm-water discharges
25 from the municipal separate storm sewer system that caused

1 to contribute to the exceedances of water quality
2 standards.

3 --o0o--

4 DR. SWAMIKANNU: Next, when permit provisions
5 have been clarified for NPDES permits, those limitations,
6 numeric or some other, must be consistent with any
7 available waste-load allocation for the discharge that has
8 been approved by the U.S. EPA. The Santa Monica Bay
9 bacteria TMDL waste-load allocation was approved by the
10 U.S. EPA in June 2003.

11 --o0o--

12 DR. SWAMIKANNU: Several permittees have argued
13 that the proposed amendments are inconsistent with the
14 U.S. EPA's TMDL storm-water policy memorandum issued in
15 2002. A close reading of that memorandum clearly
16 indicates that the guidance is for storm-water discharges,
17 including MS-4 discharges. It does not address non-storm
18 water.

19 --o0o--

20 DR. SWAMIKANNU: Similarly, the U.S. EPA
21 storm-water permitting policy memorandum issued in 1996,
22 which discusses the iterative adaptive approach to the
23 regulation of storm-water discharges, is meant for storm
24 water. It says nothing about the regulation of non-storm
25 water from municipal separate storm sewer systems.

1 --o0o--

2 DR. SWAMIKANNU: Non-storm-water discharges and,
3 in the present case, summer dry weather flows containing
4 bacteria are subject to the strict compliance provisions
5 of federal NPDES regulations and not the maximum extent
6 practicable standard which applies to storm-water
7 discharges.

8 --o0o--

9 DR. SWAMIKANNU: Next I will briefly discuss the
10 significant comments received that remain unresolved for
11 the commenters and the staff response.

12 Comment 1: Await permit renewal. The deadline
13 for the summer dry weather bacterial waste-load allocation
14 has passed and the Water Board is obligated to make the
15 waste-load allocation enforceable.

16 The second comment: Use a memorandum of
17 understanding to incorporate the TMDL. A memorandum of
18 understanding is not a federally authorized and
19 enforceable document under the NPDES regulatory framework
20 and it's not consistent with the bacteria TMDL waste-load
21 allocation that was approved by you and the U.S. EPA.

22 Comment 3: Require changes to the Storm Water
23 Quality Management Program through the iterative approach.
24 Summer dry weather flows are not subject to U.S. EPA's
25 iterative approach, which is applicable only to

1 storm-water discharges. And this is not consistent with
2 the bacteria TMDL.

3 --o0o--

4 DR. SWAMIKANNU: Next comment: Some cities
5 express concern about including numerical limits in a
6 storm-water permit rather than using maximum extent
7 practicable criteria.

8 Respond is: Summer dry weather bacteria
9 waste-load allocation is enforced as a discharge
10 prohibition and receiving water limitations, not a
11 numerical end-of-pipe effluent limit. The maximum extent
12 practicable standard is only for storm-water discharges.

13 Comment 5: The proposed action is inconsistent
14 with Malibu Creek and Ballona Creek bacteria TMDLs. MS-4
15 discharges in the Ballona Creek and Malibu Creek are
16 subject to their respective TMDL compliance schedules,
17 which are different than those for Santa Monica Bay.

18 In addition, I would like you to note that
19 several editorial and text clarifications have been made
20 to findings in response to comments received from the
21 environmental community and other interested parties as
22 well as permittees too. These can be found in your agenda
23 package.

24 --o0o--

25 DR. SWAMIKANNU: So, finally, the proposed

1 amendment before you is limited to summer dry weather
2 flows through Santa Monica Bay beaches. Staff recommends
3 that the Board adopt the amendments to Part 1, Discharge
4 Prohibitions, and Part 2, Receiving Water Limitations, and
5 Part 5, Definitions.

6 I conclude my presentation.

7 Before I turn the podium over to Professor
8 Linwood, I would like to thank particularly Water Board
9 staff members Carlos Urrunaga, Renee DeShazo, Rebecca
10 Christmann, Theresa Rodgers, who greatly assisted with
11 preparations for these proceedings for several months.

12 Thank you.

13 Please stand up.

14 I want you to recognize them, because this took
15 quite an effort.

16 Professor Linwood.

17 SENIOR STAFF COUNSEL LEVY: Before you step down,
18 Dr. Swamikannu may I ask a couple questions, please,
19 further direct testimony.

20 First of all, Dr. Swamikannu, you referenced two
21 comment periods that the Board submitted. Was there any
22 page limit on the length of comments that could be
23 submitted to the Board?

24 DR. SWAMIKANNU: We did not provide any limit to
25 the number of pages that these comments should be

1 contained in.

2 SENIOR STAFF COUNSEL LEVY: The second question
3 is: At the July 21st hearing, was there anything
4 presented that was significantly different from what we
5 had previously heard about the manner of how the TMDL
6 should be incorporated into the permit?

7 DR. SWAMIKANNU: In terms of comments submitted
8 at the workshop, prior to the workshop, between that
9 workshop and today, we have not seen any substantial
10 differences in terms of the positions laid out by the
11 County of Los Angeles.

12 SENIOR STAFF COUNSEL LEVY: Thank you very much.

13 DR. PENDLETON: Good morning.

14 I prepared a typical ten-minute academic talk.
15 But I thought in the interests of the way things are
16 proceeding, I might just skip to the chase, if that's okay
17 with you. I'll just --

18 CHAIRPERSON NAHAI: That would be very okay with
19 us.

20 (Laughter.)

21 DR. PENDLETON: Yeah, okay. I'll get over the
22 methodology. I can say that the paper in question was
23 published in Environmental Science Technology, which is
24 probably the premier journal in environmental science in
25 the United States.

1 CHAIRPERSON NAHAI: You need to state your name
2 for the record.

3 DR. PENDLETON: Okay, yes.

4 For those of you who don't know me, I'm Linwood
5 Pendleton. I'm an associate professor at UCLA. I am here
6 at the invitation of the Regional Board, but I'm not
7 speaking on behalf of the Regional Board.

8 And by way of disclosure, I want to mention that
9 I have worked with virtually every government agency and
10 nonprofit in the room, including most recently I have been
11 working with people at L.A. County Sanitation,
12 peer-reviewing confidentially internal documents that have
13 to do with this kind of information.

14 I bring that up because over the last ten years
15 I've been working very closely with the people in the
16 room. My data have been made available. Mr. Gest
17 referred to three studies. He didn't mention them by
18 name. But I have a feeling that at least two, if not
19 three, of them were my studies, and these studies had been
20 shared with everyone including recently L.A. County San.

21 Now, I know the sanitation district is huge and
22 it's a multi-headed beast. And the heads I've been
23 working with may not be the same as the heads that are
24 represented here today. But the data are there. I've
25 been sharing the data actually with people from L.A.

1 County San. And it isn't true that these things have
2 suddenly come to light. So I wanted to make that pretty
3 clear.

4 (Thereupon an overhead presentation was
5 Presented as follows.)

6 DR. PENDLETON: I do want to address two issues
7 that Mr. Gest brought up, which are entirely correct, but
8 inappropriately termed "myths" and "opinions".

9 The first thing that Mr. Gest brought up was that
10 the numbers that were used in this study were wrong. So
11 let me mention how the numbers came about and put them in
12 context just a little bit.

13 How do I move forward in this presentation? Is
14 there a button up here?

15 --o0o--

16 DR. PENDLETON: For the last ten years I've been
17 spending my research time looking at the economic impacts
18 of reducing bacterial loads in local waters. And today
19 what I'm going to talk about is just one of the
20 triumvirate of reasons that there are good economic
21 reasons for reducing bacteria. I just wanted to mention
22 them here.

23 When there are bacterial problems at the beach,
24 fewer people go to the beach and they spend less money
25 locally. And that's important in Los Angeles.

1 public health costs would have been.

2 So the part that we're going to skip through is
3 the methods that we used. We got most of our
4 bacteriological data directly from L.A. County sanitation
5 districts, also Orange County sanitation districts. Using
6 a variety of epidemiological models from the literature,
7 we estimated the number of illnesses by beach and by
8 season. And then we aggregated it in the final sort of
9 discussion because that's the number we were going for,
10 what the regional impact was. But the paper has in fact
11 breakdowns by beach and by season.

12 And so what I want to do now is just orally share
13 those numbers with you.

14 For Los Angeles County alone, for the entire Year
15 2000 we estimated -- and this is -- in every case we used
16 the most conservative estimate possible -- we estimated
17 that there were 993,000 excess cases of gastrointestinal
18 illnesses from swimming. Excess means these are cases
19 that would not have been observed in the absence of
20 swimming in polluted water. This is recognizing that
21 people get GI illnesses all the time.

22 Nine hundred ninety-three thousand cases for the
23 whole year. But 804,000 of those cases occur during the
24 dry season. So the burden of the public impact is in the
25 dry season because this is when everyone goes to the

1 beach. And you have to keep in mind we have 80 million
2 beach visits in L.A. and Orange County on an average year,
3 probably -- I don't have the numbers in front of me. I'm
4 guessing about 50 million visits in L.A. County. And even
5 a very small percentage of people getting sick of a very
6 large number means a very large number of people getting
7 sick.

8 Eight hundred four thousand people in the dry
9 season alone. That accounts for at a minimum of
10 \$28,800,000 in public health costs. That's time lost from
11 work, that's time going -- that's money spent going to the
12 doctor and co-pays, that Pepto-Bismol. That's the bare
13 minimum. That doesn't include the willingness of people
14 to pay to avoid getting sick.

15 That also is a minimum estimate because that's
16 only gastrointestinal illnesses. We're unable to estimate
17 how many people were also getting respiratory illnesses,
18 eye infections, ear infections and skin rashes. So it's
19 an incredibly conservative estimate.

20 So the Myth No. 1 that was stated was that the
21 big number is L.A. and Orange County, so maybe it's really
22 not appropriate for L.A. Well, the fact is is that most
23 of that big number is in L.A. and most of that big number
24 is in L.A. during the dry season.

25 I just did a back-of-the-envelope calculation to

1 figure out how many people per day that means during the
2 dry season. That means 2,200 excess illnesses of
3 gastroenteritis a day in the dry season based on Year
4 2000.

5 Now, Mr. Gest also mentioned that because this
6 was estimated for the Year 2000, it is irrelevant to what
7 we're discussing today. And that simply isn't true. It
8 is relevant. It may not be the exact number for today.
9 But in the Year 2000, the majority of these illnesses, the
10 public health burden, was borne by a very small number of
11 beaches. And those beaches were -- I know them off the
12 top of my head -- Malibu, Malibu Surfrider Beach,
13 particularly Will Rogers State Beach, Santa Monica Beach,
14 Venice Beach and Cabrillo Beach. And it's my
15 understanding -- but I haven't checked the data for this
16 year -- that those beaches are not substantially better in
17 terms of bacteria than they were in the Year 2000.

18 So if these numbers need to be adjusted, they
19 need to be adjusted to see how those beaches have fared
20 bacteriologically since 2000. But to say that the
21 estimates for the Year 2000 are irrelevant is simply
22 wrong. These estimates are the best idea we have now of
23 how many people are likely to be getting sick in L.A. And
24 Orange County.

25 That's the bottom line. Okay, 2,200 people per

1 day in the dry season. That's roughly \$78,000 per day in
2 those very conservative costs for treating
3 gastroenteritis. It doesn't include any of those other
4 costs.

5 SENIOR STAFF COUNSEL LEVY: Dr. Pendleton, a few
6 more questions -- one more question.

7 You previously mentioned that you gave data to
8 County Sanitation District. You didn't mean that you gave
9 the data to L.A. County Department of Public Works, did
10 you?

11 DR. PENDLETON: No, I don't think it was Public
12 Works, it was L.A. County San. On July 15th, the paper in
13 question was published on the web, and the L.A. Times ran
14 an article about this on July 17th. Subsequent to that, I
15 did a talk show on KPCC with Mr. Nahai, I did talk shows
16 on KNX, KFI, KABC and a number of other places. And I
17 started immediately getting requests from L.A. County
18 Sanitation, both for the report -- well, for the report,
19 in one case the data. And I entered a relatively long
20 dialogue with people from L.A. County Sanitation on: What
21 did these numbers mean and where did they come from and
22 how did we get them?

23 So I've always participated with both the
24 nonprofit world here and the public agencies because I
25 believe they're all serving the public good in one way or

1 another. And the important thing is to make sure that
2 everyone understands the best available science.

3 So I can't remember who the people are, because I
4 would get these e-mails where ten people from various
5 parts of L.A. County were cc'd and I would send them all
6 the same responses.

7 SENIOR STAFF COUNSEL LEVY: Thank you very much.

8 Mr. Chair, other than asking just for the
9 formality of it that our demonstrative evidence, the two
10 PowerPoints, be received into the record.

11 That concludes our presentation.

12 CHAIRPERSON NAHAI: Thank you.

13 MR. GEST: I know I'm not supposed to object.
14 But since they moved the -- it in, should I address that
15 now or should I address it at another time?

16 CHAIRPERSON NAHAI: You mean the motion to allow
17 the PowerPoints into the record?

18 MR. GEST: Right.

19 CHAIRPERSON NAHAI: Our custom is that when
20 somebody makes a presentation and at the same time as
21 they're making their presentation they take us through a
22 PowerPoint, we allow that to happen.

23 Is that what you're objecting to?

24 MR. GEST: We're objecting to it being admitted
25 as evidence on which the Board can rely in making factual

1 findings in this adjudicative hearing.

2 CHAIRPERSON NAHAI: But what has been presented
3 to us is already part of our record.

4 MR. GEST: I did not understand the PowerPoint
5 was already part of the record. I understood he made a
6 motion that what was presented -- and correct me if I'm
7 wrong. I understood he made a motion that the PowerPoint
8 and the slides be admitted as part of the record. And my
9 objection is we object to it being admitted as evidence in
10 the adjudicatory hearing on which the Board can rely in
11 making a factual finding.

12 SENIOR STAFF COUNSEL LEVY: Yes. Mr. Chair, the
13 PowerPoints are summaries of material already in the
14 record. And you've seen it, you've watched it. And I
15 wanted to make it clear in case we were challenged in
16 court that the materials can be part of the record for
17 those purposes. Of course everything that is in the
18 testimony, in the presentations is supported by
19 documentary evidence in the record, which is what those
20 are. So it's -- essentially it's demonstrative evidence
21 only.

22 CHAIRPERSON NAHAI: Yeah, but given the fact that
23 all of this information is already in the record and that
24 Professor Pendleton's oral testimony is now part of the
25 record, is it necessary to admit the PowerPoint itself as

1 part of the record?

2 SENIOR STAFF COUNSEL LEVY: There's no prejudice
3 to admitting it. You've seen it. If you strike it, it
4 brings a disparity with what the Board is actually seeing.
5 The point is so the Board can see what the Board -- so the
6 Court, if there is a court proceeding, can see exactly
7 what the Board has seen. But it's all backed by evidence
8 in the record which is permissible.

9 CHAIRPERSON NAHAI: Well, but the issue becomes
10 we may have other demonstrative evidence throughout the
11 hearing. And I want to make sure that we rule
12 consistently on these issues.

13 SENIOR STAFF COUNSEL LEVY: Well, the rule about
14 hearsay -- and I presume that's part of the objection --
15 it might be about the substance of some of the evidence
16 that we're presenting, which can be addressed
17 subsequently -- the rule about hearsay is that hearsay is
18 admissible as long as it's backed by evidence in the
19 record.

20 So without evidence it wouldn't be admissible.
21 With evidence it is admissible.

22 There are photographs that were included that
23 wouldn't be in the record otherwise. And we'd like to
24 make sure they are in the record.

25 CHAIRPERSON NAHAI: Is your objection, Mr. Gest,

1 based on hearsay?

2 MR. GEST: My objection is based on hearsay and
3 also other -- lack of foundation with respect to the
4 materials. And that is my objection.

5 CHAIRPERSON NAHAI: Okay. Well, I'm going to
6 admit it. But if other presenters present similar
7 demonstrative evidence throughout the hearing, we will
8 admit that too. So we'll make sure that we're consistent.

9 MR. GEST: All right. Then let me say again for
10 the record, that we had asked for the opportunity to
11 object before materials are presented to the Board and we
12 were told not to do so. But we did not --

13 CHAIRPERSON NAHAI: Mr. Gest, you've objected.
14 We've heard your arguments. We've ruled on it. That's
15 the end of it.

16 MR. GEST: I understand. But counsel made a
17 statement that the Board should accept it because you've
18 heard it already. And we were trying to avoid that
19 problem. So I just wanted to indicate that that's what we
20 were trying to avoid earlier today.

21 Thank you very much.

22 CHAIRPERSON NAHAI: You've made your objection.
23 It's been addressed.

24 MR. GEST: Thank you very much.

25 CHAIRPERSON NAHAI: Thank you.

1 Do you have anything more to add?

2 DR. PENDLETON: No, I was just going to offer to,
3 if needed, go through the PowerPoint.

4 CHAIRPERSON NAHAI: I don't think that's
5 necessary. Thank you so much.

6 All right. With that, we can go to the County's
7 presentation, for which we've allotted an hour.

8 Mr. Gest, you said that you needed an additional
9 ten minutes for your opening statement. I'm going to add
10 that time to your hour time that is allotted to you here.
11 So an hour and ten minutes.

12 MR. GEST: Before I start, Mr. Chairman. We
13 brought exhibits. Before the hearing we'd asked whether
14 we should pass them up. We never got a direction.
15 They're in these notebooks that we would be -- the
16 witnesses would be referring to. Can we pass these out to
17 the Board members?

18 CHAIRPERSON NAHAI: What do these exhibits
19 contain? Are they already in the record or are they new
20 materials that you're trying to introduce?

21 MR. GEST: These exhibits, some of which are
22 demonstrative based upon material that -- should I go to
23 this?

24 CHAIRPERSON NAHAI: Yes.

25 MR. GEST: Some of which --

1 CHAIRPERSON NAHAI: I knew we weren't opening a
2 good door with Mr. Gest here regarding demonstrative
3 evidence.

4 Are the exhibits already in the record or are
5 they new items that you're trying to introduce into the
6 record?

7 MR. GEST: Some are in the record. Some have
8 been identified by the Regional Board, but we did not know
9 whether they were going to or not. And some are
10 demonstrative exhibits, for example, maps, charts and
11 graphs that summarize data. And that is what they are.
12 And I'll be happy again -- and some are studies.

13 CHAIRPERSON NAHAI: Okay. I have a question for
14 staff.

15 Have we -- has staff seen the exhibits that Mr.
16 Gest wishes to introduce here?

17 SENIOR STAFF COUNSEL LEVY: I don't know. We can
18 take them one at a time. And if we foresee a problem,
19 we'll let the Chair know. But --

20 CHAIRPERSON NAHAI: No, I'm not going to do that.

21 SENIOR STAFF COUNSEL LEVY: Well, Mr. Chair, to
22 the extent they're documents that are already in the
23 record, the fact that he's got them numbered might be
24 convenient for the Board. If they're PowerPoints like
25 we've presented, of course they deserve the same right to

1 present the same type of material as long as it's backed
2 by evidence in the record. If they're presenting
3 something new, it may or may not be something that staff
4 objects to. And I would want to not dismiss it out of
5 hand just because he's photocopied them. So I would want
6 to make sure that we're not unfairly denying him the
7 ability to present his case in as easy a fashion as
8 possible.

9 So we would actually just as soon let him pass
10 them out, let him show us where they are in the record,
11 and then give us an opportunity to --

12 CHAIRPERSON NAHAI: Some of them will not be in
13 the record. And once they're presented to us, they will
14 have been presented to us.

15 SENIOR STAFF COUNSEL LEVY: Well, we ask that you
16 admit the PowerPoints, which is demonstrative evidence.
17 If the documents he's submitting are not relevant, we can
18 make an objection or the other parties can make an
19 objection about the relevance of it if it's really
20 compelling. I don't anticipate that they're going to
21 present something that we would present an objection to
22 unless it's really far afield of what we're doing. We
23 would just as soon you indulge Mr. Gest for the purpose
24 of --

25 BOARD MEMBER MINDLIN: Mr. Chair, maybe our

1 counsel should look at the books first and then decide.

2 And if there is problems, then we will --

3 CHAIRPERSON NAHAI: I was thinking about that.

4 But it's rather voluminous and --

5 MR. GEST: I did offer before this hearing
6 started the opportunity for people to look at this and to
7 pass these out so it could be addressed.

8 CHAIRPERSON NAHAI: What he wants to do is --
9 correct me if I'm wrong -- is to give us the notebook and
10 then make his presentation and then refer to exhibits and
11 take us through the notebook. Is that correct?

12 MR. GEST: That's correct.

13 CHAIRPERSON NAHAI: Okay. Now, some of the items
14 that he's going to do that with would already be in our
15 record. And so that's permissible.

16 Other items are new. Normally we wouldn't allow
17 them because they're new and there's a deadline for
18 submitting them. However, what Mr. Gest is going to claim
19 is that they're demonstrative. And what he will then
20 claim is that if we allowed Mr. Pendleton's PowerPoint in,
21 we should allow his exhibits in, which is exactly the door
22 that I didn't want to open, but we're there. So -- but
23 let's proceed.

24 SENIOR STAFF COUNSEL LEVY: Mr. Chair, may I make
25 a distinction please just -- between my use of the term

1 "demonstrative," so we just don't have a definitional
2 problem.

3 Our PowerPoint is a summary of evidence in the
4 record. And to the extent Mr. Gest is presenting
5 documents that are summaries of evidence already in the
6 record, we certainly have no objection to him doing that.
7 To the extent he's presenting new evidence that he should
8 have submitted with his comments, we would object to that.
9 So that's --

10 CHAIRPERSON NAHAI: Well, we'll take that as we
11 go along.

12 MR. GEST: I appreciate it. And thank you very
13 much.

14 I want to say this also so the record is fully
15 clear. The regulations that govern this adjudicative
16 proceeding specifically incorporate the application of
17 Government Code 11513. Government Code 11513 specifically
18 gives the right to individuals to introduce exhibits in a
19 hearing. And that's all we're asking to do.

20 CHAIRPERSON NAHAI: Well, this is what we'll do.
21 I want to give the County every opportunity to present its
22 case fully. We want to hear the case fully. So we will
23 take your notebooks. If as to a particular exhibit our
24 counsel has an objection, we'll deal with it on an
25 exhibit-by-exhibit basis.

1 MR. GEST: Okay. I have sufficient copies.
2 Should I hand them to somebody? I think we'll need two,
3 four, six --

4 CHAIRPERSON NAHAI: Yes, if you could -- if
5 somebody from staff could bring them to us.

6 MS. EGOSCUE: I would request a copy as well.

7 CHAIRPERSON NAHAI: Yes.

8 I think the Board members need copies and so do
9 the other parties to the action.

10 BOARD MEMBER MINDLIN: And counsel.

11 CHAIRPERSON NAHAI: I'm sorry?

12 BOARD MEMBER MINDLIN: And our counsel.

13 CHAIRPERSON NAHAI: Yes, I'm sure they will.

14 MR. GEST: We are going to present our case
15 through witnesses. So we were going to -- we'd like to
16 get a chair so the witnesses can sit. It's a little
17 awkward, but that's how we would like to proceed.

18 So if you'd just give us one more -- we may take
19 one of those chairs and put it here.

20 Thank you.

21 BOARD MEMBER MINDLIN: Do you have a PowerPoint
22 too so we can see them on the screen? That's going to be
23 hard for us to see.

24 MR. GEST: Yes, we do -- one of them is very
25 concentrated, and that's why we made it there. But we

1 will try our best. There's the -- do you have a screen in
2 front of you?

3 BOARD MEMBER MINDLIN: We have screens right
4 here.

5 MR. GEST: Okay. In that case, we may not need
6 these.

7 CHAIRPERSON NAHAI: All right. Let's commence.
8 An hour and ten minutes.

9 MR. GEST: Thank you.

10 At this time the County would call Daniel
11 Lafferty.

12 Will you please state your name for the record.

13 MR. LAFFERTY: Daniel J. Lafferty.

14 MR. GEST: And by whom are you employed?

15 MR. LAFFERTY: Los Angeles County Department of
16 Public Works.

17 MR. GEST: And how long have you been employed at
18 the Los Angeles County Department of Public Works.

19 MR. LAFFERTY: Just over 20 years.

20 MR. GEST: And also for the record, since there
21 was testimony about the Los Angeles County Sanitation
22 District, is the Sanitation District a separate entity
23 from the County?

24 MR. LAFFERTY: It's a completely separate entity
25 and there is not affiliation between the Sanitation

1 District and the County Department of Public Works.

2 MR. GEST: Are you a Registered Professional
3 Engineer?

4 MR. LAFFERTY: Yes, I am. I'm a Registered Civil
5 Engineer in the State of California.

6 MR. GEST: And what is your position in the
7 Department of Public Works?

8 MR. LAFFERTY: I'm Assistant Division Engineer
9 with the Watershed Management Division within the
10 Department.

11 MR. GEST: And what are your duties?

12 MR. LAFFERTY: I oversee three sections within
13 the division. The first is our Water Quality Section.
14 And they have responsibility for participating in the TMDL
15 development process. They also administer the permit and
16 make sure that all the permit programs are being conducted
17 appropriately.

18 I oversee the Santa Monica Bay Watershed Section.
19 That section is responsible for implementing all of the
20 water quality elements that go with complying with TMDLs.
21 They also develop watershed management projects that have
22 multiple benefits separate from including water quality.

23 The last section that I oversee is the Data
24 Management Section and also the -- within that section we
25 do FEMA floodplain management compliance. The Data

1 Management Section, the data that they manage is all of
2 the water quality data that the County collects.

3 MR. GEST: Does the County share the goals of the
4 TMDL?

5 MR. LAFFERTY: Sure, absolutely we do. We think
6 that they're worthy goals and we support them completely.

7 MR. GEST: And why are you here?

8 MR. LAFFERTY: We're here today because we feel
9 that there is a better process for achieving the goals
10 that we all have in common; and, that is, improving water
11 quality within Santa Monica Bay. We feel that there is a
12 better approach where there is collaboration and
13 cooperation between government agencies and the general
14 public, rather than what we perceive to be sort of an
15 adversarial footing, that would result from the outcome of
16 the staff recommendations that's currently written.

17 MR. GEST: What directions was your division
18 given with respect to compliance with Santa Monica Bay
19 beaches bacteria TMDL?

20 MR. LAFFERTY: Well, we were told early on
21 actually that we were going to comply with every element
22 that was in that TMDL regardless of perceived
23 enforceability. So we've been working actually since
24 before the TMDL was adopted by the Board to begin meeting
25 the different compliance timelines and in the goals and

1 objectives contained within the TMDL.

2 MR. GEST: And who gave you those directions?

3 MR. LAFFERTY: It was our director at the time,
4 Jim Noyes. Our assistant director, Don Wolfe, who
5 eventually became our director, has maintained the same
6 perspective.

7 MR. GEST: And what steps has the Department of
8 Public Works taken in response to those directions?

9 MR. LAFFERTY: Well, actually quite a number of
10 steps.

11 With respect to the dry weather, we have looked
12 at some structural BMPs that could be in place that we
13 felt would address the water quality problems in the bay
14 and achieve the objectives of the TMDL. TMDL also has
15 obviously a wet-weather component. And we have been
16 working with all of the other responsible agencies
17 developing implementation plans for wet weather. Although
18 those implementation plans are specifically for wet
19 weather, many of the elements are going to provide dry
20 weather benefits as well when we begin implementing them.

21 And in addition to some of the structural
22 elements for dry weather, we've also begun some source
23 identification studies within the Santa Monica Bay region.

24 MR. GEST: Did the -- first of all, when we talk
25 about Department of Public Works, is that the department

1 that acts on behalf of the Flood Control District?

2 MR. LAFFERTY: Yes, it is.

3 MR. GEST: And does it also act on behalf of the
4 County in general?

5 MR. LAFFERTY: Yes. When it comes to water
6 quality we are sort of the implementing arm, if you will.

7 MR. GEST: And, you know, for the record, is the
8 Flood Control District also a separate legal entity?

9 MR. LAFFERTY: Yes, it is.

10 MR. GEST: Now, did the -- but when we refer to
11 the County, I'm going to refer to both the County and the
12 Flood Control district. And if there should be a
13 distinction made, please advise me and the Board.

14 MR. LAFFERTY: Okay.

15 MR. GEST: Did the County endeavor to work with
16 other municipalities or jurisdictions to implement the
17 Santa Monica Bay beaches bacteria TMDL?

18 MR. LAFFERTY: Yes, we did. You know, I've
19 already mentioned what we've done with respect to the
20 wet-weather implementation plans. But also in the dry
21 weather, the structural BMPs that we were proposing were
22 obviously located in the beach communities. There's very
23 little unincorporated county area in those south bay
24 communities -- south Santa Monica Bay communities. And
25 where we were locating structures there was official

1 approval processes for these projects and also
2 solicitation for partnership in terms of funding these
3 different projects.

4 MR. GEST: And were the other municipalities
5 willing to fund these projects with the County?

6 MR. LAFFERTY: The ones that the County were
7 proposing, by and large, no. There were a few instances
8 where we had some partnerships, most notably with the City
9 of L.A. and the City of Santa Monica. But, by and large,
10 most of the structural projects that we took on, we took
11 on solely and individually.

12 MR. GEST: Was a decision made whether they
13 should delay the project awaiting for them?

14 MR. LAFFERTY: Yeah, there was some debate
15 internally. We felt that since there was going to be sort
16 of joint mutual benefit, that it only made sense that
17 there be sort of joint funding.

18 But we sent a letter to the individual cities
19 where these projects were going to be located. When we
20 got sort of negative responses back, we had to make the
21 decision whether we were going to press the issue or
22 whether we were going to kind of just move forward and try
23 to implement on our own. Obviously we made the decision
24 to move forward on our own.

25 MR. GEST: I'd like you to look at what has been

1 marked as County's Exhibit No. 4. If you could look at
2 No. 4.

3 What is that exhibit?

4 MR. LAFFERTY: This is a summary table. It has a
5 listing of all of the different low flow diversions that
6 have been built by the County, by the municipalities, and
7 as sort of joint cooperative efforts.

8 MR. GEST: How do you read this spread sheet?

9 MR. LAFFERTY: Well, if you look along the left,
10 you have the TMDL drain numbers. Those are the drain
11 numbers that were in the -- that were referenced within
12 the TMDL itself.

13 Next to that you have the Flood Control District
14 project name, sort of a translation table between the TMDL
15 and our own internal records.

16 As you move to the right, you see some of the
17 project-related information, including the status of the
18 design plans, whether construction has been completed or
19 when we expect to start, as well as cost information.

20 MR. GEST: And how much -- what does this exhibit
21 show with regard to how much the permittees have spent on
22 diversion projects?

23 MR. LAFFERTY: If you look at the bottom
24 right-hand corner there's a sum total of just over \$18
25 million. I think it's also important to note that some of

1 these diversions predated the TMDL, and the cost
2 information was not available for those particular
3 projects. We began tracking the cost subsequent to the
4 TMDL.

5 MR. GEST: And how much has been spent by the
6 permittees to construct the diversion?

7 MR. LAFFERTY: To construct the loan?

8 MR. GEST: No, no. Total.

9 MR. LAFFERTY: Total is just over 18 million.

10 MR. GEST: And is that a fair representation of
11 all of the money, or is there more money that's being
12 spent?

13 MR. LAFFERTY: Well, there's obviously -- this is
14 sort of the capital costs. There are operations and
15 maintenance costs that are going to be ongoing. So it
16 does not include the operations and maintenance costs from
17 hereon out.

18 MR. GEST: Now, was this money spent pursuant to
19 any order of the Regional Board?

20 MR. LAFFERTY: No.

21 MR. GEST: And this program was undertaken
22 pursuant to the direction of the Director of Public Works
23 and the approval of the Board of Supervisors prior to the
24 time the TMDL was finalized by the State Board and EPA.

25 MR. LAFFERTY: Yeah, the process was begun before

1 the adoption of the TMDL by the Regional Board. There was
2 a lot of preliminary work that we had done to try to sort
3 of speed up the project planning timelines, some
4 investigations of availability for cross-connections and
5 those sorts of things that were begun ahead of time.

6 MR. GEST: I'd also ask you to turn to what's
7 been marked as County Exhibit 2. I'd like to just
8 identify it and explain how to read it. We'll be
9 referring to this throughout your testimony.

10 MR. LAFFERTY: Sure.

11 MR. GEST: What is County Exhibit No. 2?

12 MR. LAFFERTY: Exhibit No. 2 is a map. And it
13 shows what we refer to as the north Santa Monica Bay. If
14 you look at the outline, you see several of these have
15 watersheds outlined in red. Those are all within
16 Jurisdiction 1 under the TMDL. If you look to the left
17 you see Nicholas Canyon, and it is outlined in green.
18 That is the Jurisdiction 4 area.

19 MR. GEST: What is meant by jurisdictional group?

20 MR. LAFFERTY: The jurisdictional groups, when
21 the Regional Board adopted the TMDL, they split the
22 watersheds that are tributary to Santa Monica Bay into
23 various jurisdictions. And the intent there was to sort
24 of take similarly situated municipalities in the County
25 and create sort of a collective effort to address the

1 water quality problems.

2 MR. GEST: What else is reflected on this
3 exhibit?

4 MR. LAFFERTY: We also noted on here the various
5 compliance points that are part of the coordinated
6 shoreline monitoring. Those are the round dots.

7 MR. GEST: Let me interrupt. When you say
8 compliance points, those are the monitoring locations?

9 MR. LAFFERTY: Correct, the monitoring locations
10 in the shoreline -- the coordinated shoreline monitoring
11 program under the TMDL.

12 There's also a green triangle. That green
13 triangle is the structural BMP that is going to be built
14 at Marie Canyon.

15 And then there's another structural BMP that is
16 in private hands, that's in blue, which is at Paradise
17 Cove in Ramirez Canyon.

18 MR. GEST: Let me ask you to turn to what's been
19 marked as County's Exhibit No. 3.

20 Will you explain to the Board what this exhibit
21 is?

22 MR. LAFFERTY: Yeah, it's very similar to Exhibit
23 No. 2. The difference is that this is the South Bay
24 portion. Again, this is jurisdictional groups 2, 3, 5, 6,
25 and 7.

1 Again, in terms of what's depicted besides those
2 jurisdictional groups, we have the round dots that show
3 the compliance monitoring locations. We have yellow
4 triangles. Those were low flow diversions that were put
5 in prior to the TMDL, many of which we had go back and
6 revisit following the TMDL to redesign.

7 The green triangles are the low flow diversions
8 that the individual municipalities constructed. And then
9 the red triangles are those that the Flood Control
10 District financed.

11 MR. GEST: I want to bring your attention to the
12 process that the County faces in constructing and
13 installing dry weather diversions, because it goes to
14 whether it should be subject to the iterative process.
15 And I want you to explain that progress to the Regional
16 Board.

17 Did the County comment on the three-year
18 implementation period at the time the dry weather bacteria
19 TMDL was adopted in 2002?

20 MR. LAFFERTY: Yes, we did. We indicated at the
21 time that three years -- even though we had begun the
22 process prior to the adoption of the TMDL, we knew that
23 the project planning and then the construction timelines
24 were such with these types of projects that we were not
25 going to have them all on the ground by the time the

1 three-year dry weather compliance date was reached.

2 MR. GEST: Notwithstanding that concern, did the
3 County make every effort to comply with the three-year
4 period?

5 MR. LAFFERTY: Yes, we did. I can tell you that
6 I've sat in many budget meetings during these last three
7 years fighting for dollars to implement this program. And
8 there were many decisions that were made to defer some of
9 our maintenance activities so that we could devote more
10 money and more resources to meeting this particular
11 timeline.

12 MR. GEST: Now, what are the steps that a public
13 agency must -- like the County must take in order to
14 design, permit, and construct a dry weather diversion?

15 And before you do that, let's set the stage. Why
16 don't you describe what we're talking about when we talk
17 about a dry weather diversion.

18 MR. LAFFERTY: Sure. When we talk about a low
19 flow diversion or a dry weather division, what we're
20 really talking about is an inter-tie between the municipal
21 separate storm sewer system and the sanitary system that
22 underlie the County. In essence, it's a pipe that directs
23 the flows from the storm drains into the sanitary lines.

24 Typically that requires us to build storage
25 within the existing storm sewers. It also requires us to

1 build pump stations that would then pump that water over
2 to the sanitary lines, in addition to actually building
3 the physical diversion within the drain that backs the
4 flows up.

5 MR. GEST: All right. And now what is the
6 process that the County has to undertake in order to
7 permit, design and construct a dry weather diversion?

8 MR. LAFFERTY: Well, the first step is to figure
9 out where we need to build them. And that required some
10 field reconnaissance to go out multiple times during the
11 summer to see which of our facilities actually had dry
12 weather flows, because not all of them flow during the
13 summer. That sort of became the hit list of drains that
14 needed to have a diversion built within them.

15 Subsequent to the field investigation, Watershed
16 Management Division sort of oversees that process. And
17 once we had the list, we then forwarded that over to our
18 Programs Development Division. You may surmise by the
19 name, they actually program then the projects to make sure
20 that they're funded in the appropriate fiscal years and
21 take into account the timelines required for the design
22 and the permitting.

23 Programs Development Division is also sort of
24 responsible then for managing the more or less
25 administrative functions prior to construction, such as

1 acquiring the permits and all the different clearances and
2 approvals from the agencies that we deal with.

3 Our Design Division, once we had those locations,
4 then began the process of designing the individual
5 diversions for each location. And this is a dual track,
6 if you will. Our Design Division is working on the
7 individual designs while our Programs Development Division
8 is working on all of the administrative work to make sure
9 that, once the designs is finished, they're ready to go
10 for advertisement, award, and construction.

11 So if you want me to continue --

12 MR. GEST: Well, let's take -- we'll address both
13 tracks, but let's address one track at a time.

14 What does the Design Division have to do with it?

15 MR. LAFFERTY: Design Division, once they get the
16 list from us of -- or from Programs Development Division
17 of where they need these diversions, the first thing they
18 need to do is figure out what's the flow rate that they
19 need to design for, so that we are effective in diverting
20 all the flows that are in the storm drains over to the
21 sanitary lines. That requires some investigation on what
22 the flow rates are.

23 The difficulty -- and that's probably one of the
24 more difficult elements. Typically our Design Division
25 would request from Watershed Management Division a

1 seven-day flow measurement. And in order for us to do
2 that we would have our field folks go out and physically
3 build a structure within the storm drain that's backed-up
4 flows and then have them overtop through a flume, so that
5 we could take accurate measurements of what the flow rates
6 were within the drain.

7 Now, when I talk about building sort of an
8 obstruction, what that requires is sandbags. And so our
9 field staff had to fill individual sandbags, take them
10 down into the drain and lay them in a drain to a height
11 and a width that would be strong enough and high enough to
12 prevent the flows from blowing it out and then sort of
13 ruining our measurements. And then we were done, kind of
14 the reverse; all of those sandbags that had to be pulled
15 back out of drain.

16 We found that as we went through that process,
17 that there were several occasions where we had discharges
18 sort of -- of unknown origin from upstream that blew those
19 sandbag structures out, which then requires us to come
20 back in and again build a stronger diversion within there.

21 So once they had the flow rate, then they started
22 looking at sort of site characteristics, obtaining the
23 as-built drawings for the storm drains, obtaining the
24 as-built drawings for sanitary lines, looking to see where
25 the closest sanitary line was, was there capacity within

1 those lines for us to divert? Checking the hydraulic
2 characteristics within the drain, that once we build this
3 sort of permanent division structure, are we going to
4 adversely affect flood control within that drain? You
5 know, what's the maximum height of a diversion that
6 wouldn't compromise performance?

7 There were also power issues: How close was the
8 nearest power source to operate the pumps? There were
9 utility checks. Any time we're constructing something
10 subsurface -- and these are all subsurface facilities --
11 we have to take a look at all of the other utilities that
12 are in that right of way.

13 Often times the right of way itself was an issue.
14 Did we have enough existing right of way within the flood
15 control district easements for those drains to build this
16 type of a facility? Or did we have to go out and contact
17 a sort of overseeing, overlying landowner, whether it was
18 a municipality, the State of California or whomever, to
19 obtain more right of way to build these?

20 There were surveys that then had to be done,
21 physical surveys to create these plans to the survey crew
22 out there to make sure that we had everything located
23 correctly. There were utility searches. There were also
24 geotechnical investigations, subservice investigations to
25 see if there were contaminated soils on the site that

1 would be a problem during construction. And also just to
2 lay the foundations for these facilities, did we have the
3 right type of soil that would allow for that?

4 That then moved on to sort of the facility design
5 in itself, sizing the pumps to make sure that they were
6 appropriate to the expected flows, making sure that the
7 storage capacity within the drain was appropriate. We
8 then had to contact the sewer agencies to check for
9 capacity.

10 And that by and large sort of describes the
11 design process itself.

12 There were several places within the design
13 process where we had to go out and solicit comments from a
14 variety of agencies on the design plans as we were
15 proposing them, once at the 60 percent design plan level
16 and then once again at the 90 percent. And then finally
17 when the final plans were done, we would have to
18 distribute to each of the agencies for approval.

19 MR. GEST: How many diversions did the County
20 itself undertake to fill?

21 MR. LAFFERTY: Grand total was -- let me think --
22 I believe it's 18. It's on that list, that Exhibit 4.

23 MR. GEST: And was the County required to go
24 through this design process separately for each separate
25 diversion that's being built?

1 MR. LAFFERTY: Yeah, for each diversion it's a
2 unique situation. Site characteristics are different from
3 one to the other. There was no sort of paving the path by
4 doing one. What we did try to do is sort of stagger the
5 implementation schedule so that as we learned things
6 during the design and implementation of one, we could take
7 those lessons and apply them later, rather than doing like
8 all of them at once and then not having the benefit of
9 being able to sort of learn from our mistakes.

10 MR. GEST: Was there ever a circumstance where
11 you had to modify a design as you were going through the
12 process?

13 MR. LAFFERTY: Yeah, absolutely. There were many
14 instances where -- again, the approval process includes a
15 variety of entities. And any time that our design folks
16 would send out, we would ask for comments. Part of our
17 problem was that once you send it out and you set a date
18 for return of comments, that didn't always happen. Many
19 times the --

20 MR. GEST: Let me interrupt -- just interrupt.
21 What kind of agencies, or who are you asking
22 comments from?

23 MR. LAFFERTY: Again, our Programs Development
24 Division was responsible for this element. But all of the
25 municipalities. There's a requirement in the Flood

1 Control Act that says if we're building a project within a
2 city, we need city council approval for those plans.
3 Often times we had state beach right of way where we were
4 operating, so the state had to approve. If it was a
5 CalTrans right of way, CalTrans had to approve it. The
6 sanitation district or the Bureau of Sanitation within the
7 City of L.A., depending on whose storm -- or whose
8 sanitary line we were connecting, they had to approve it.
9 Edison or DWP, again depending on who was providing power,
10 they had to approve it.

11 Let's see. Am I forgetting anybody here?

12 Coastal Commission -- Coastal Commission permits.
13 They had to approve it. We actually had to come to the
14 Regional Board for dewatering permits on many of these.

15 MR. GEST: And you were starting to say sometimes
16 you asked for their comments or approvals?

17 MR. LAFFERTY: Correct.

18 MR. GEST: Did you get them in a timely fashion?

19 MR. LAFFERTY: Not always. You know, it's a
20 function of resources. They're as stretched as everybody
21 else. And while we would give them the timeframes, often
22 times we would not get the comments back timely. Though
23 what tended to happen is they would give us their
24 comments, but it would be after the deadline. And the
25 problem with that is our design division would be --

1 CHAIRPERSON NAHAI: Mr. Gest -- excuse me, let me
2 stop you.

3 You just posed this question about comments not
4 coming back timely. And the witness has already said that
5 comments often don't come back timely. We take that as
6 your testimony.

7 I'm concerned about your pacing. Because it
8 seems to me that points are being made again and again and
9 again, they're being made in a way that is more lengthy
10 that it needs be. Please try to pace yourself and your
11 witness so that you get your testimony that you want
12 presented within the allocated time.

13 There may be some additional time provided in
14 order to indulge you. But I'm concerned about your
15 pacing. You need to be the judge of that. But please
16 pace yourself and your witness to give us your total
17 presentation within the allocated time.

18 MR. GEST: I mean I think I could say for the
19 record that -- as I have said before, that we will be
20 requesting additional time.

21 CHAIRPERSON NAHAI: Okay. Within reason. But
22 right now it seems to me that you're allowing your witness
23 to ramble and you're posing the same questions again and
24 again. So I'm just --

25 MR. GEST: Okay. I don't believe it's been

1 duplicative. But I will try to keep my witness directed
2 to responding to the questions.

3 CHAIRPERSON NAHAI: Please continue.

4 MR. GEST: Thank you very much.

5 SENIOR STAFF COUNSEL LEVY: Pardon me. Mr.
6 Chair, would you instruct the clerk please to add three
7 minutes to Mr. Gest's testimony to exclude the comments
8 from the Chair. Thank you.

9 CHAIRPERSON NAHAI: Yes. As this happened, we'll
10 add more time.

11 Please let the record reflect that we've been
12 joined by Board Member Bonny Herman.

13 MR. LAFFERTY: The problem with --

14 MR. GEST: Okay. Let me ask you this question:

15 When you get comments back after the time period,
16 how does that affect the time it takes to complete the
17 design of a project?

18 MR. LAFFERTY: Our Design Division has already
19 begun making the revisions once the deadline for receiving
20 the comments has come. When we got comments that would
21 come after that, knowing that we had to go back to these
22 same entities for approval, we simply couldn't ignore
23 those late comments. We had to go back in the design
24 process and redesign what we'd already designed to
25 accommodate their comments.

1 MR. GEST: Now, you said that the Project
2 Management Division also is working along at the same
3 track. What is the Project Management Division required
4 to do?

5 MR. LAFFERTY: They're obtaining the permits and
6 the approvals. They're managing that process. So as our
7 Design Division would finish up their 60 percent design
8 plans or their 90 percent or final design plans, they'd
9 forward them over to our Programs Development Division,
10 that would then distribute them to all the different
11 agencies that we needed approvals from or permits from.

12 MR. GEST: And was the Project Management
13 Division also responsible for getting access?

14 MR. LAFFERTY: Yes. If there were easement
15 issues, they dealt with those as well.

16 MR. GEST: Was it usual that there would be
17 easement or access issues in installing these diversions?

18 MR. LAFFERTY: It was typical. These are fairly
19 large structures. Our flood control easements were put in
20 place for the purposes of the drain itself and not to
21 accommodate these sort of larger facilities. So it was
22 typical that we would have to go and get additional
23 easements from whoever the overlying fee owner was.

24 MR. GEST: And what type of entities would you
25 also need to get access from?

1 MR. LAFFERTY: It could be State Beaches, it
2 could be municipalities, it could be CalTrans. Those were
3 the folks that we tended to have to go to.

4 MR. GEST: Now, you mentioned that you needed to
5 get Coastal Commission permits, is that right?

6 MR. LAFFERTY: Yes, we did.

7 MR. GEST: And Project Management would be
8 responsible for getting Coastal Commission permits?

9 MR. LAFFERTY: Yes, they were.

10 MR. GEST: Were there ever a situation where the
11 Coastal Commission delayed in issuing a permit so that you
12 could proceed?

13 MR. LAFFERTY: There were times when the Coastal
14 Commission had requirements that took a great deal of time
15 to resolve, most notably Parker Mesa. If you look on
16 Exhibit 4, that is number one of a TMDL drain number.
17 Also the name of it is the Parker Mesa drain. That's at
18 Castle Rock. The issue there was the control panel. In
19 order to fit the controls for these low flow diversions,
20 typically it's a box. If you ever see sort of a signal
21 control at an intersection, it's a box similar to that,
22 about six feet tall and maybe three feet wide. The
23 Coastal Commission felt that there were negative visual
24 impacts as a result of having a box that large on the
25 beach. So we went through several iterations. You know,

1 our problem is that you can't elimination certain
2 controls. The size of the box in terms of the square
3 footage needed to be the same. So we went through several
4 iterations trying to find a configuration that was
5 acceptable to the Coastal Commission. And that process,
6 believe it or not, took a year and a half.

7 MR. GEST: Oh while you were waiting for this
8 Coastal Commission permit for a year and a half, could you
9 start construction of a diversion at Castle Rock or Parker
10 Mesa?

11 MR. LAFFERTY: No. We can't actually even
12 advertise the project for award until all of the permits
13 are in hand. That's to avoid, you know, a litigation by a
14 contractor who then has a contract that can't be built,
15 and their proposal tends to be time sensitive.

16 MR. GEST: So here was a situation where the
17 State of California was preventing the County from
18 installing a dry weather diversion?

19 MR. LAFFERTY: Correct.

20 MR. GEST: Were there other instances where the
21 Coastal Commission delayed issuing permits?

22 MR. LAFFERTY: There was always a time factor
23 involved. I wouldn't necessarily characterize it as
24 delay. Their review process was just very lengthy and
25 time consuming.

1 MR. GEST: Does project management have to do
2 anything else?

3 MR. LAFFERTY: They have to obtain the other
4 permits that are required and the other approvals from the
5 agencies that oversee it.

6 MR. GEST: Okay. So once Project Management has
7 completed their work and Design has completed their work,
8 what happens next?

9 MR. LAFFERTY: Then it moves to our Construction
10 Division. Our Construction Division takes those plans and
11 all the specifications and requirements for that project.
12 And often times those were including sort of special
13 considerations in terms of access to a site during given
14 periods of time that either a municipality or the Coastal
15 Commission or State Beaches had. They would package that
16 all together and submit that then for advertisement.
17 Contract would then bid on it and we would award it to the
18 low bid.

19 MR. GEST: Now, were there any limits placed on
20 these projects as to when they could be constructed? And
21 when I say "these projects," I mean the dry weather
22 diversion.

23 MR. LAFFERTY: Typically the Flood Control
24 District likes to do these types of projects outside of
25 the storm season, which ours runs from October 15th to

1 April 15th. The reason being, we don't want to compromise
2 public safety by having a storm drain opened up and then a
3 storm coming through and sort of blitzing the construction
4 site and folks downstream. That kind of works in conflict
5 with the beach communities and the state agencies, who
6 wanted the work done outside the summer period so that we
7 wouldn't adversely affect beachgoers. Oftentimes we got
8 restrictions where there would not be allowed work between
9 Memorial Day and Labor Day. So if you can kind of do the
10 math, that didn't leave us very much time in terms of a
11 construction window. A typical construction was about six
12 months; although if things went smoothly, we could get it
13 down to four.

14 Sort of the compromise there was then
15 understanding that it's sort of an unusual occurrence to
16 get early large storms in the storm season, we tended to
17 push that window in the fall further out into November and
18 early December.

19 MR. GEST: So Board members understand, generally
20 speaking the only time you could construct these
21 diversions was either between April 15th and May 31st or
22 September 15th and the end of October?

23 MR. LAFFERTY: Right.

24 MR. GEST: And so you had to -- in considering
25 how much time it will take to construct these, you had to

1 get all the permits in place and the design done in place
2 and have it ready at this period; and if it wasn't ready
3 at this period, then you have to wait until the next
4 season before the construction could occur?

5 MR. LAFFERTY: Correct, we had to wait for the
6 next window.

7 MR. GEST: And how did this impact the time it
8 takes to construct these diversions?

9 MR. LAFFERTY: Well, obviously it extended the
10 timelines in terms of -- you know, we couldn't construct
11 all of them in one given year. So that we had to sort of
12 space these out and get them built when we could. It
13 affected sort of the timelines getting them all in.

14 MR. GEST: Now, could the County or the
15 permittees install dry weather diversions at all
16 locations?

17 MR. LAFFERTY: Not within Santa Monica Bay, no.
18 First and foremost, you obviously need a sanitary line.
19 And there are many places specifically in the north Santa
20 Monica Bay where there simply aren't any sanitary lines to
21 divert to?

22 MR. GEST: Now, is that because the City of
23 Malibu doesn't have sanitary sewers?

24 MR. LAFFERTY: That's correct.

25 MR. GEST: And so there's no line to tie into for

1 the whole Malibu area?

2 MR. LAFFERTY: Correct.

3 MR. GEST: And are there other locations where
4 also there was no sanitary sewer?

5 MR. LAFFERTY: We really stretched sort of the
6 limits on how far we would go to do an inter-tie. In one
7 instance we built an inter-tie that was over a half mile
8 long to tie into a sanitary line. So where we had flowing
9 drains we really pushed, even though it drove cost up in
10 many instances, to make sure that there was a diversion
11 that was constructed.

12 MR. GEST: After construction is complete, what
13 happens next?

14 MR. LAFFERTY: Well, after construction's
15 complete there's an official transfer to our Flood
16 Maintenance Division. There's a walk-through of the
17 project site with the contractor who built it, our Flood
18 Maintenance Division and our Construction Division, so
19 that essentially the folks who were flipping the switches
20 and dialing the knobs know what each thing does and sort
21 of how it operates.

22 This way there's no confusion about, you know,
23 although they're built to plan, sometimes their
24 maintenance folks -- you know, there are changes that get
25 made during construction as a result of field conditions.

1 And before our Flood Maintenance Division accepts it, they
2 want to make sure that all of those issues are resolved.
3 If there's something that they think is going to be a
4 long-term problem either from an operations or a
5 maintenance perspective, we then instruct the contractor
6 to make that change before we would accept the project.

7 MR. GEST: So after our diversion is constructed,
8 that's not the end of it; it may have to be redesigned or
9 modified?

10 MR. LAFFERTY: Absolutely. There's that
11 post-construction walk-through. But even then, once we
12 own it, it's like anything, as you become familiar with
13 the way that it works, sometimes you find that the way it
14 got built does not meet your intentions in terms of how it
15 was supposed to work. So often times there's
16 modifications that need to be made even after we've
17 accepted the project.

18 MR. GEST: Now, the County has suggested that
19 there's no need for this amendment at this time. Why is
20 that?

21 MR. LAFFERTY: Well, from our perspective, we've
22 been doing this without this amendment. We've been
23 working very diligently and very hard to meet the
24 objectives of the TMDL. In fact, our first diversions
25 were built three years prior to the TMDL being adopted.

1 So we feel that we have accepted the responsibility of
2 improving the water quality and have taken significant
3 steps to do that without having this amendment in place.

4 We also feel that having the amendment in place
5 isn't going to change the timelines for getting these
6 projects built. There's just certain physical constraints
7 that are in place that take a certain period of time. And
8 those are not going to change because this amendment is
9 adopted.

10 MR. GEST: The County further suggested that if
11 there's going to be an amendment, any steps that the
12 amendment requires should be part of the iterative process
13 in Part 2 of the permit. Why has the County taken that
14 position?

15 MR. LAFFERTY: Well, We feel the iterative
16 process has worked. As I stated, we started these low
17 flow diversions about three years before the TMDL.
18 Unfortunately, many of those initial low flow diversions,
19 if you look on your Exhibit 3 -- those are the yellow
20 triangles -- you'll also notice that in almost every
21 instance there is another triangle overlaying that yellow
22 triangle. That was because those particular low flow
23 diversions did not operate the way that we had intended
24 them to operate and required in each case a
25 reconstruction. So, again, we recognized that there was a

1 problem. We then went out and sort of put in the next
2 generation for the low flow diversions.

3 Also, we are already -- as these have come on
4 line, made the modifications necessary to have them
5 operating correctly. So, again, there's a third iteration
6 at that point. And whatever modifications need to be made
7 down the road, we're going to make them. And it is I
8 think in the best interests of the community to follow
9 that iterative process to its conclusion.

10 MR. GEST: Does the County or other permittees
11 know the sources of bacteria at all the different
12 locations?

13 MR. LAFFERTY: No.

14 MR. GEST: Why is that important to know?

15 MR. LAFFERTY: Well, it's important to know that
16 if you're trying to do source reduction -- obviously
17 building low flow diversions is one solution. It's a
18 structural solution. But if you can avoid the
19 contribution of bacteria to begin with, that's a far
20 better way to go. And it also makes it -- when you do
21 have to build a structural solution, you can do so at a
22 lower cost.

23 MR. GEST: Is the County taking any steps to
24 identify the sources of bacteria at different locations?

25 MR. LAFFERTY: We are. Predominantly in the

1 north Santa Monica Bay we have Board approval actually as
2 of Tuesday to conduct source identification studies in
3 both Ramirez Canyon and in Escondido Canyon. And those
4 will be taking place shortly.

5 MR. GEST: All right. Let me ask you to move to
6 Exhibit 2. And maybe you can point out where Ramirez
7 Canyon and Escondido Canyon are.

8 MR. LAFFERTY: Well, you can see on the map
9 Ramirez Canyon is sort of in the middle, just above the
10 point. And then Escondido Canyon is directly next door,
11 the next watershed south.

12 MR. GEST: I don't know if there's -- maybe if
13 you could point, if you'll go up there and just point so
14 people can see exactly where it is.

15 MR. LAFFERTY: Sure.

16 Here's Ramirez and then here's Escondido.

17 MR. GEST: Thank you.

18 How much money did the Board of Supervisors for
19 the County of Los Angeles authorize on Tuesday to do these
20 bacteria source studies?

21 MR. LAFFERTY: Well, we estimated each of those
22 studies is going to cost \$500,000. So it's a million
23 dollar effort.

24 MR. GEST: And where are those funds coming from?

25 MR. LAFFERTY: They're coming from the County

1 General Fund.

2 MR. GEST: No other source?

3 MR. LAFFERTY: Not at this point, no.

4 MR. GEST: What steps can be taken to address
5 bacteria where when you cannot install a diversion?

6 MR. LAFFERTY: Well, there's a couple things you
7 can try. One of them that we're doing at Marie is sort of
8 a pocket plant, where we're diverting the flows. And
9 instead of a sanitary line, we're actually building sort
10 of a treatment facility. I think that's a great
11 illustration of a joint partnership between local agencies
12 and state agencies. Nine hundred thousand dollars of that
13 construction cost is coming from the state. That's not a
14 suitable solution in every instance. You need to make
15 sure that there's a flow rate that justifies that kind of
16 an expenditure.

17 Then there's also then source identification, in
18 trying to reduce the individual sources at their source
19 rather than treating at the downstream end.

20 MR. GEST: Does that take time to identify the
21 other alternative possible solutions where you can't do a
22 diversion?

23 MR. LAFFERTY: Yeah, it's not cheap. It's time
24 intensive and it's also labor intensive. So there's a
25 great deal of cost involved with that approach. Then

1 there's also the issue then of having authority to address
2 those individual sources depending on what they are.

3 MR. GEST: I want to ask you to look at what's
4 been marked as County's Exhibits 5. The first page.

5 Can you explain -- first just explain what the
6 chart is briefly, on the top and at the bottom.

7 MR. LAFFERTY: Sure. These are summary tables of
8 the water quality data that we've been collecting under
9 the TMDL coordinated shoreline monitoring plan.

10 The table at the top references to sites -- this
11 is Jurisdiction 1 and 4. So at the top you've got an
12 analysis that shows the percentage frequency of
13 exceedances and the number of exceedances based on the
14 different types of indicators.

15 MR. GEST: All right. Let me interrupt you here.

16 When you say Jurisdictions 1 and 4, is that north
17 bay or south?

18 MR. LAFFERTY: That's north Santa Monica Bay.

19 MR. GEST: So that's like Malibu area and that
20 area?

21 MR. LAFFERTY: It's Topanga Canyon north of the
22 county line.

23 MR. GEST: And when this is reporting the number
24 of exceedances, what do you mean by that?

25 MR. LAFFERTY: The TMDL contains -- in the basin

1 plan there are limits for bacteria based on the beneficial
2 use, which is body contact. This tracks the number of
3 times that a sample was taken. And when I say that,
4 it's their -- it's the initial sample, because there are
5 provisions for subsequent sampling if we get an
6 exceedance. And an exceedance is any bacterial counts
7 that are higher than the basin plan objectives.

8 MR. GEST: And what is the chart at the bottom of
9 Exhibit 5?

10 MR. LAFFERTY: The bottom is ordering this in a
11 way that then allows us to sort of identify the bad
12 actors, if you will. It's ranked from the most frequent
13 exceedance to the least frequent exceedance. And it
14 compares both Summer '05 with Summer '06. So you have a
15 two-year time period.

16 MR. GEST: Of course in Summer 2005 -- well,
17 strike that.

18 Let me ask you to look at what's been marked as
19 County Exhibit 6. Just the first page.

20 What is this exhibit?

21 MR. LAFFERTY: This is similar to the second
22 table. This however reflects Jurisdictions 2 and 3.

23 MR. GEST: And where are those jurisdictions?

24 MR. LAFFERTY: Jurisdictions 2 and 3 are Santa
25 Monica and about halfway down the coastline.

1 MR. GEST: And what is this chart?

2 MR. LAFFERTY: Again, it identifies the places
3 where we had the worst or the highest number of
4 exceedances.

5 MR. GEST: Now, in the Summer of 2005 diversions
6 were not in place, is that right?

7 MR. LAFFERTY: There were diversions in place,
8 but not --

9 MR. GEST: -- not as many?

10 MR. LAFFERTY: Correct.

11 MR. GEST: Summer 2006 more diversions were in
12 place?

13 MR. LAFFERTY: Correct.

14 MR. GEST: And what does this chart indicate with
15 respect to whether the permittees have been able to reduce
16 the number of exceedances at many of the locations where
17 diversions are in place?

18 MR. LAFFERTY: Well, it only reflects the data
19 that we've collected in April, May, June, and July of
20 2006.

21 But in those locations where we had diversions in
22 place, there is a trend toward improved water quality.

23 MR. GEST: And in fact many of those had zero
24 exceedances, is that right?

25 MR. LAFFERTY: Yes.

1 MR. GEST: Now, I want to ask you to look at
2 County Exhibit 8 for a minute. What is this exhibit
3 showing?

4 MR. LAFFERTY: This is another representation of
5 the data. It shows in bar chart form.

6 MR. GEST: Excuse me. I misspoke. Exhibit 9.

7 MR. LAFFERTY: Exhibit 9.

8 MR. GEST: Because we were talking about
9 Jurisdiction 2 and 3.

10 MR. LAFFERTY: Yes. Again, it is a different
11 representation, a bar chart form. You can see the summer
12 dry for '05 is in red, the summer dry for '06 is in blue.
13 Along the bottom axis are the sampling locations. Where
14 you see an asterisk, those are places where either a
15 diversion is in place or planned to be in place. And then
16 on the left axis you see the percentage of the samples
17 that exceeded the bacteria standard.

18 MR. GEST: So where there's a location where --
19 or a monitoring location where there's a red or maroon
20 line but no blue line, that means there was an exceedance
21 in summer of 2005 for this four-month period but no
22 exceedance in 2006?

23 MR. LAFFERTY: Correct.

24 MR. GEST: And it appears that there are many
25 such locations.

1 MR. LAFFERTY: There are.

2 MR. GEST: All right. And from that, can it be
3 taken that there has been improvement in the water
4 quality?

5 MR. LAFFERTY: I would say, yes, it has.

6 MR. GEST: Just for the record, I would like to
7 ask you to look at what's been marked as County Exhibit 7.
8 Can you tell the Board members what this exhibit
9 is?

10 MR. LAFFERTY: Yes. This is another tabular
11 representation of the data. This time it's for
12 Jurisdiction 5 and 6.

13 MR. GEST: And where are those jurisdictions?

14 MR. LAFFERTY: That's the more southerly portion
15 of the south Santa Monica Bay, excluding Palos Verdes.

16 MR. GEST: I'd like to go back to what's been
17 marked as County Exhibit No. 6. And I want to ask you
18 some questions about some of the locations that have the
19 greatest number of exceedances.

20 First of all, which of the locations where in the
21 summer of 2006 there was the greatest number of
22 exceedances?

23 MR. LAFFERTY: That would be Topanga Canyon.

24 MR. GEST: And what's the monitoring?

25 MR. LAFFERTY: The site ID?

1 MR. GEST: Yeah.

2 MR. LAFFERTY: That's SMB 1-18.

3 MR. GEST: I think you're looking at the wrong
4 chart, unless I -- Exhibit 6?

5 MR. LAFFERTY: Oh, I'm sorry. I was on Exhibit
6 5.

7 That's Jurisdiction 2 and 3.

8 MR. GEST: Yes.

9 MR. LAFFERTY: That's the Castle Rock storm
10 drain, which is again the Parker Mesa vicinity.

11 MR. GEST: Okay. That had -- in this summer had
12 15 top exceedances?

13 MR. LAFFERTY: Yes, it did.

14 MR. GEST: And this is the storm drain where the
15 Coastal Commission had held up the permit for a year and a
16 half?

17 MR. LAFFERTY: Yes, it is.

18 MR. GEST: And is there a diversion in place at
19 this drain at the present time?

20 MR. LAFFERTY: No, it's going to be constructed.
21 We've obtained all the approvals, but we have not yet
22 constructed it.

23 MR. GEST: And what jurisdiction is this drain
24 in?

25 MR. LAFFERTY: In terms of the municipal

1 jurisdiction or the TMDL jurisdiction?

2 MR. GEST: The TMDL jurisdiction.

3 MR. LAFFERTY: It's Jurisdiction 2.

4 MR. GEST: And who is responsible for
5 Jurisdiction 2?

6 MR. LAFFERTY: The lead in Jurisdiction 2 is I
7 believe Santa Monica.

8 No, I'm sorry. It's the City of L.A.

9 MR. GEST: Okay. Let me ask you to look at the
10 next storm drain where there's greatest number of
11 exceedances. Which one is that?

12 MR. LAFFERTY: That's Santa Monica Pier storm
13 drain.

14 MR. GEST: And I assume people know where the
15 Santa Monica Pier is.

16 Is there a diversion at the Santa Monica Pier?

17 MR. LAFFERTY: There is.

18 MR. GEST: And does that diversion work?

19 MR. LAFFERTY: Yes.

20 MR. GEST: And yet even though there's a
21 diversion in place, this has the second highest number of
22 exceedances?

23 MR. LAFFERTY: Correct.

24 MR. GEST: Does that indicate that even though
25 you may put in a diversion, you may not be able to address

1 the bacterial --

2 MR. LAFFERTY: I would characterize it that way,
3 yes.

4 MR. GEST: Do you know whether anyone -- or do
5 you know what might be causing these additional
6 exceedances at Santa Monica?

7 MR. LAFFERTY: I have no idea.

8 MR. GEST: But this is an indication that in
9 order to address the bacteria TMDLs, even just, say,
10 putting in a diversion may not simply answer the question?

11 MR. LAFFERTY: That's correct.

12 MR. GEST: Let me ask you about monitoring
13 location SMB 2-7. Where is that?

14 MR. LAFFERTY: Santa Monica Canyon. The channel
15 at Santa Monica Canyon.

16 MR. GEST: And there are still exceedances
17 occurring this summer at that location?

18 MR. LAFFERTY: There are.

19 MR. GEST: Is there a diversion at that location?

20 MR. LAFFERTY: Yes, there is.

21 MR. GEST: And do you know, is that diversion
22 working?

23 MR. LAFFERTY: It is.

24 MR. GEST: So again this is a second location and
25 another example where even if you put a diversion in, it

1 may not address the bacterial?

2 MR. LAFFERTY: Absolutely.

3 MR. GEST: Does the County know or -- well, we'll
4 back up.

5 Who is the jurisdiction that's responsible for
6 this?

7 MR. LAFFERTY: Jurisdiction 2. Again, City of
8 L.A. is the lead.

9 MR. GEST: And the city -- and who would be
10 responsible for the Santa Monica Pier storm drain?

11 MR. LAFFERTY: Santa Monica Pier, that's in
12 Jurisdiction 3. That's -- City of Santa Monica is the
13 lead. And in fact in that case the city actually owns the
14 diversion as well.

15 MR. GEST: Now, even though the County is not the
16 lead jurisdiction, to your knowledge do you know what is
17 causing the exceedances at the Santa Monica Canyon storm
18 drain?

19 MR. LAFFERTY: No.

20 MR. GEST: So what needs to be done in order to
21 address those exceedances?

22 MR. LAFFERTY: I think you'd probably have to do
23 again a source identification study of some sort to figure
24 out where it's coming from if it's not coming from the
25 MS-4 system.

1 MR. GEST: Okay. If you'd go back and look at
2 County Exhibit 2.

3 Now, this is the north bay area?

4 MR. LAFFERTY: Yes.

5 MR. GEST: Now, have there been diversions built
6 in the north bay area?

7 MR. LAFFERTY: No diversions, no.

8 MR. GEST: And, again, why is that?

9 MR. LAFFERTY: No sewers.

10 MR. GEST: All right. And now looking at County
11 Exhibit 5, which is our chart on monitoring results.

12 Are there exceedances occurring in the north bay
13 area?

14 MR. LAFFERTY: Yes, there are.

15 MR. GEST: Where is the location where there's a
16 greatest number of exceedances?

17 MR. LAFFERTY: That's Topanga Canyon.

18 MR. GEST: Is this a natural water course?

19 MR. LAFFERTY: Yes, it is.

20 MR. GEST: Because it's a natural water course,
21 is this amendment going to impact the bacterial levels at
22 the Topanga Canyon monitoring station?

23 MR. LAFFERTY: No.

24 MR. GEST: What's the next location where there's
25 a number of exceedances?

1 MR. LAFFERTY: Marie Canyon.

2 MR. GEST: And how many exceedances there?

3 MR. LAFFERTY: Marie Canyon has had ten in Summer
4 of '06 -- in the first four months of summer of '06.

5 MR. GEST: And can there be a diversion installed
6 at Marie Canyon?

7 MR. LAFFERTY: Not a diversion in the classical
8 sense of the term, no.

9 MR. GEST: It can't be tied into a sanitary
10 sewer --

11 MR. LAFFERTY: Correct.

12 MR. GEST: Has the County taken steps to address
13 bacteria at Marie Canyon?

14 MR. LAFFERTY: Yes, we're building a pocket plant
15 there.

16 MR. GEST: What do you mean by a pocket plant?

17 MR. LAFFERTY: That's a plant that is designed to
18 handle the summer dry weather flows. It's a series of
19 treatment steps. All the flows will be brought into that
20 device and it will sequentially go through a number of
21 steps that will clean the water up and then it will be
22 discharged.

23 MR. GEST: What's the location where there's the
24 next highest level of exceedances?

25 MR. LAFFERTY: That's Escondido Creek.

1 MR. GEST: And is Escondido Creek -- why don't
2 you maybe just point out again on the map where Escondido
3 Creek is.

4 MR. LAFFERTY: Sure.

5 MR. GEST: Maybe while you're up there also point
6 out where Marie Canyon was.

7 MR. LAFFERTY: Marie Canyon, let's see, is here
8 and Escondido is over here.

9 MR. GEST: Is Escondido Creek a natural water
10 course?

11 MR. LAFFERTY: Yes, it is.

12 MR. GEST: Does the County know the sources of
13 bacteria that are flowing from Escondido Creek?

14 MR. LAFFERTY: No, we do not.

15 MR. GEST: Has the County taken any additional
16 steps to identify the sources of bacteria --

17 MR. LAFFERTY: We have gotten approval to conduct
18 a source identification study in that particular canyon.

19 MR. GEST: As an engineer applying the -- going
20 through the construction process, is there still a need
21 for the iterative process even if you were just
22 constructing a diversion?

23 MR. LAFFERTY: Yes, there is. Again, simply
24 because you've designed something on paper, when you put
25 it out into the real world you often times find that there

1 are conditions you didn't anticipate or there are things
2 that occur that you aren't unaware of. And as you operate
3 that facility, you learn what those things are, and then
4 you make the modifications necessary to address whatever
5 that issue may be.

6 MR. GEST: Did that ever occur with respect to
7 any of these diversions?

8 MR. LAFFERTY: Yes. In fact it's still occurring
9 with some of these diversions.

10 MR. GEST: Can you give the Board some examples?

11 MR. LAFFERTY: Sure. I think sort of the poster
12 child for the iterative process is our Herondo Street
13 drain. That was one that we initially built back in 2000.
14 That drain -- that diversion unfortunately we located too
15 far downstream within the drain. The idea is you want to
16 capture all of the flow that's coming from a particular
17 drain. So you want to locate it as far downstream as
18 possible.

19 Unfortunately in this case, there were tidal
20 prism impacts on the diversion location. The problem with
21 that is, if you introduce saltwater into the sanitary
22 lines, it adversely affects the process in the treatment
23 plants. You begin killing off many of the organisms that
24 are used to treat the sanitary flows.

25 So in this process, subsequent in 2003, we began

1 the process for identifying a better location. So we
2 moved it further up the line. In doing so, unfortunately
3 we missed the most downstream lateral at Herondo. So we
4 constructed the drain -- or the diversion at Herondo.
5 Subsequent to constructing it we found that there were
6 some mystery flows that we couldn't explain but were very
7 large, way beyond the capacity of the low flow to handle.

8 We began investigating that to see where they
9 were coming from, because we hadn't seen them before in
10 taking the samples for the design purposes, only to find
11 that there is a water company in Redondo Beach that has a
12 discharge permit from the Regional Board that allows them
13 to periodically drain several tanks with about 70,000
14 gallons worth of water. In doing that, it eventually
15 reaches our storm drain and impacts that diversion
16 location. We had a meeting this week to try to resolve
17 what could be done to move their discharge points or to at
18 least move the discharge times outside of the period where
19 we're operating.

20 And sort of then the next step for us obviously
21 is now to address that last remaining lateral and trying
22 to figure out a way where we can capture those flows and
23 make sure that they're not reaching the ocean.

24 MR. GEST: So let me understand. At Herondo you
25 had to redesign the diversion that had been built

1 principally because of a permit that had been issued by
2 this Regional Board, which no one was aware would impact
3 this --

4 MR. LAFFERTY: Well, We haven't begun redesigning
5 it at this point. We're trying to find other solutions
6 first before we get to that step. But it may end up at
7 that point. But right now we're trying to see if there's
8 some administrative solutions that can be put into place.

9 MR. GEST: But the need to go through this
10 process is because of discharges permitted by this
11 Regional Board?

12 MR. LAFFERTY: Correct. And of which we were
13 completely unaware at the time that we designed it.

14 MR. GEST: Were there other locations where the
15 iterative process really has taken place?

16 MR. LAFFERTY: Yeah, there's a variety. In many
17 cases we found that our pump sizing was off. Again, when
18 you do these seven-day low flow tests, there's nothing to
19 say that the seven days you picked are necessarily
20 characteristic of the flows. You've picked seven days,
21 but it could be higher or it could be lower. And we found
22 that in some cases the storage capacity was insufficient,
23 since we have restrictions from the sanitation district on
24 when we can operate.

25 In other cases the pump sizing, which -- when you

1 begin to pick pumps, there's almost as much art as there
2 is science since they have sort of an optimal operating
3 range. And can you pick one pump or multiple pumps to
4 handle a situation. In some cases we found that the flows
5 were more than what we had anticipated. So our pumps were
6 cycling much more quickly than we had expected, which then
7 burns them out. So now we have to go back in and, based
8 on the information we found, redesign and reconfigure
9 those low flows to make sure that we're operating
10 efficiently.

11 MR. GEST: I'm going to read to you what a
12 proposed finding is that's being presented to the Board.
13 And this is Proposed Finding 31. I'm going to read part
14 of it. It says: "The iterative approach to regulating
15 municipal storm water is not an appropriate means of
16 implementing the SMB summer dry weather WLAs for any and
17 all the following reasons:" And it set forth reasons.
18 And No. C says, "Despite the fact that more than a decade
19 and a half has passed since MS-4 permittees were required
20 to eliminate illicit connections/discharges into their
21 MS-4s, few permittees have adopted an aggressive approach
22 to eliminating ICs/IDs and their measured approach has not
23 eliminated standards violations at the beaches."

24 Is that a true statement with respect to the
25 County Flood Control District?

1 MR. LAFFERTY: No, it's not.

2 MR. GEST: Why not?

3 MR. LAFFERTY: We have a very -- what I would
4 term an aggressive illicit connection/illicit discharge
5 program. Our permit indicates that we have to visit every
6 open channel flow once a year -- open channel once a year,
7 which we do. We investigate every pipe 36 inches and
8 larger once every three years; and for those that are less
9 than 36 inches, once every six years.

10 I can tell you that on a regular basis, I get a
11 report every month on the illicit connections that -- or
12 suspected illicit connections that we found, and there are
13 about a hundred each month, that we then take the time to
14 investigate and resolve. Many times we found that there
15 were permits for these and they weren't illicit, although
16 they looked suspicious when our crews were investigating.
17 But there are those that then we need to take enforcement
18 action. And that typically results in either blocking it
19 up or in some instances getting the District Attorney
20 involved to get the owner to eliminate that connection.

21 MR. GEST: Are there employees whose duties are
22 simply to inspect channels?

23 MR. LAFFERTY: Among some of their duties. But
24 we have underground crews who are trained in confined
25 space entry whose primary responsibility is to go in and

1 conduct these inspections.

2 MR. GEST: How much money does the County spend
3 each year on its illicit connection/illicit discharge
4 program?

5 MR. LAFFERTY: It averages about, oh, a little
6 over two million a year, two and a quarter, somewhere in
7 there.

8 MR. GEST: And the County inspects its open
9 channels every year?

10 MR. LAFFERTY: Yes, it does.

11 MR. GEST: The entirety?

12 MR. LAFFERTY: Right.

13 MR. GEST: And how much are the closed channels
14 inspected?

15 MR. LAFFERTY: Again, 36 inches and larger is
16 once every three years. Anything that's smaller than that
17 is once every six years.

18 MR. GEST: Now, this amendment was originally
19 proposed to be put before the Board in July. Prior to
20 that time, did the County to your knowledge receive any
21 contact from Regional Board staff with regard to the terms
22 of this amendment?

23 MR. LAFFERTY: No.

24 MR. GEST: Did any member of the Regional Board
25 staff call and inquire as to the steps the County had been

1 taking with regard to installation of the diversions?

2 MR. LAFFERTY: No.

3 MR. GEST: Had anyone from the Regional Board
4 called to determine what source identification studies the
5 County was undertaking?

6 MR. LAFFERTY: No.

7 MR. GEST: Do you believe that this permit
8 process that we're engaged in here today would be approved
9 if -- or would have been approved if members of the
10 Regional Board staff had worked with the Flood Control
11 District as principal permittee before bringing this
12 amendment before this Board?

13 MR. LAFFERTY: I think that's pretty clear, if
14 you take a look at what has actually taken place. There
15 was a proposal that was made for July that was postponed
16 until today. And if you look at the form of the
17 recommendation, many of the comments and suggestions from
18 the discharge community were taken into account and the
19 recommendation was modified.

20 I think had the Regional Board come to us, you
21 know, in the spring, these same modifications could have
22 taken place prior to July rather than after July.

23 MR. GEST: One of the County's comments is that
24 the proposed amendment is inconsistent with the Malibu
25 Creek TMDL and the Ballona Creek TMDL. Why is that?

1 MR. LAFFERTY: Well, there are locations within
2 the coordinated shoreline monitoring required under Santa
3 Monica Bay beaches bacteria TMDLs that are affected by
4 discharges from both Ballona Creek and Santa Monica -- I'm
5 sorry -- Malibu Creek.

6 MR. GEST: Can you point out on Exhibit 2 --
7 let's talk about 2 first -- where the discharge location
8 is for Malibu Creek --

9 MR. LAFFERTY: Sure.

10 MR. GEST: -- the monitoring locations?

11 MR. LAFFERTY: This is Malibu Creek watershed up
12 in through here. If you notice, there are three locations
13 marked SMB-MC-1, 2, and 3. Now, those are all directly
14 impacted by flows coming out of the Malibu Creek.

15 In Ballona it would appear -- this is Ballona
16 Creek coming in here. We have a location SMB BC-1, which
17 is right at the mouth of Ballona Creek. And that
18 particular location again is directly impacted by the
19 flows coming down Ballona Creek.

20 MR. GEST: Now, is it your understanding that the
21 Malibu Creek and Ballona Creek TMDLs are on a different
22 timeline than this Santa Monica Bay beach?

23 MR. LAFFERTY: They are -- or will be if they are
24 adopted as proposed in Ballona Creek's case.

25 MR. GEST: You don't need -- when is the Malibu

1 Creek TMDL supposed to be met?

2 MR. LAFFERTY: We have a minimum of three years,
3 which would be 2009. Although if we convince the
4 executive director that there are issues that merit a
5 longer timeframe, we get an additional three years beyond
6 that.

7 MR. GEST: And when is the Ballona TMDL supposed
8 to be met?

9 MR. LAFFERTY: That's three years from adoption,
10 which it has not yet taken place. So that would be
11 probably at a minimum 2010.

12 MR. GEST: But would discharges from Ballona
13 Creek or Malibu Creek impact the monitoring locations that
14 are subject to the San Monica Bay beaches TMDL?

15 MR. LAFFERTY: Yes. The ones that I've pointed
16 out specifically would be directly impacted. And then
17 depending upon coastal currents, you could have those
18 discharge flows impact other nearby locations.

19 MR. GEST: Has the Regional Board staff made any
20 proposal to modify this amendment in order to address this
21 issue?

22 MR. LAFFERTY: No.

23 MR. GEST: Okay. To summarize, why is it that
24 the County suggests that the permit amendment is not
25 appropriate at this time?

1 MR. LAFFERTY: Well, we think that the best
2 approach -- and when I say best, the approach that is in
3 the best interests from our perspective of the residents
4 of Los Angeles County -- is one where the governmental
5 agencies are working collaboratively and cooperatively. I
6 think we have that in the iterative process. I think --
7 it can improve obviously with closer coordination between
8 Regional Board staff and our department.

9 But I think the measure that's before the
10 Regional Board today puts us in a very different footing
11 where we are potentially adversarial. And I think that
12 that is going to drain resources -- or at least
13 potentially drain resources from my agency in particular.
14 And those resources I think would be better spent actually
15 doing the projects and programs that would improve water
16 quality rather than trying to address the issues that may
17 come about as enforcement actions under this proposal.

18 MR. GEST: And how much have the permittees spent
19 on diversions and other programs to date without the need
20 of this amendment?

21 MR. LAFFERTY: Again, the diversion program is 18
22 million -- a little over 18 million alone.

23 MR. GEST: And there's been other expenditures?

24 MR. LAFFERTY: There have been. There's been
25 preparation of wet weather plans. And while those are

1 directed towards wet weather compliance, many of those
2 provisions are obviously going to affect -- positively
3 affect dry weather components as well. And those projects
4 and programs are just beginning to begin rolling out.

5 MR. GEST: And all this has occurred without the
6 permit?

7 MR. LAFFERTY: All of them without the proposed
8 amendment, correct.

9 MR. GEST: I have no further questions of Mr.
10 Lafferty at this time.

11 I'd like to -- do you want to take a break for
12 lunch or should I call my next witness?

13 CHAIRPERSON NAHAI: Well, no. We need to talk
14 about what it is that we're doing here. That light was
15 the ten-minute light. And I presume it's what, about
16 another five minutes to go on the hour and ten minutes.

17 So how much time --

18 MR. GEST: Let me say to the Board that the
19 County would call the following additional witnesses: We
20 would call Ken Schiff of SCCWRP to talk about the studies
21 relating to bacteria and identification of bacteria, which
22 we believe is an important --

23 CHAIRPERSON NAHAI: Who else would you call?

24 MR. GEST: Okay. I'm sorry. I'll just give --

25 CHAIRPERSON NAHAI: Please, who else would you

1 call?

2 MR. GEST: We would call Larissa Aumand, who
3 would also talk about bacteria and whether conclusions can
4 be drawn from indicators of bacteria and whether bacteria
5 is associated with human pathogens. As well as we would
6 call Mr. Schiff on the same reason.

7 We would either call or on cross-examination call
8 Mr. Swamikannu.

9 We would call I believe it's Renee DeShazo, if
10 she's the person who was responsible for the TMDL, because
11 I have about three or four questions for her. But whoever
12 the person who is most knowledgeable about the adoption of
13 the TMDL.

14 And that would be basically who we'd call. We
15 reserve the right if we need to to call other members of
16 the Regional Board if we can't address these issues
17 through these witnesses.

18 CHAIRPERSON NAHAI: Well, I have to say, it
19 appeared to me that during your presentation just now, I
20 didn't think you made any effort to meet the time
21 allocation. It seemed to me that your questions were --
22 by long silences. You went to exhibits again and again,
23 asking the same questions over and over again. I must
24 have heard the \$18 million figure -- I forget how many
25 times.

1 And I think that you're trying to drag this out,
2 you're trying to waste time, and you're trying to delay
3 this. I don't know why. You should be trying, in my
4 opinion, to present your case to this panel succinctly,
5 concisely. And it could have been done within the time.

6 Still, in order to make sure that we give you
7 every indulgence -- your opening statement was 5 minutes.
8 We agreed to 10. Then we added another 10 minutes on the
9 hour time that was allocated to you.

10 I'll provide another 20 minutes. That should be
11 more than enough to call your other witnesses, to examine
12 them in a succinctly and a more rapid manner than you've
13 displayed so far. And so that's what we'll do.

14 So I'll ask my fellow Board members if they'd
15 like to break now, come back, or should we go the --

16 MR. GEST: May I just address the Chairman.

17 I would like to respectfully disagree with regard
18 to what's happening. And we actually shortened the
19 testimony. And in fact --

20 CHAIRPERSON NAHAI: I'm not expecting you to --
21 I'm telling you what my observations are.

22 MR. GEST: Thank you very much.

23 CHAIRPERSON NAHAI: The cafeteria is closing at
24 1:30. We could break now and then come back.

25 Okay. We'll break now and then come back in an

1 hour.

2 SENIOR STAFF COUNSEL LEVY: Mr. Chairman, we have
3 several items to discuss on closed session. These include
4 items 17.2, 17.3, 17.4, 17.8, and 17.9.

5 Thank you.

6 (Thereupon a lunch break was taken.)

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1 AFTERNOON SESSION

2 CHAIRPERSON NAHAI: Okay. Ladies and gentlemen,
3 we're going to resume.

4 EXECUTIVE OFFICER BISHOP: Chair Nahai, prior to
5 resuming I need to make two announcements.

6 CHAIRPERSON NAHAI: Yes.

7 Please come to order. We're going to start.

8 And prior the starting you have two announcements
9 to make. Go ahead.

10 EXECUTIVE OFFICER BISHOP: That's correct.

11 The first announcement is that during closed
12 session the Board voted to continue the Item No. 16. And
13 I will ask our legal counsel to give a very short
14 explanation so that the public understands.

15 SENIOR STAFF COUNSEL LEVY: It was from Item 17.2
16 on the agenda, which is a closed session item. Item 16 is
17 the reconsideration of the trash TMDL.

18 As the Board knows, the trash TMDL that was
19 originally adopted was set aside by the Court, or the
20 Court ordered us to set it aside. And The Court issued a
21 Writ of Mandate. And we filed a return to the Writ, which
22 for everybody's understanding is a formal report to the
23 court saying that we've complied with the Writ.

24 Mr. Montevedeo, representing the cities, filed a
25 motion in San Diego Superior Court asking that our return

1 be declared invalid and stricken. And yesterday afternoon
2 we received an order, which staff views as somewhat
3 ambiguous, but it clearly ordered that our return was
4 stricken.

5 And out of an abundance of caution of the
6 ambiguity in the order and until we clarify what it is
7 that the Court had intended, we recommended to the Board
8 that they continue the trash TMDL until the October Board
9 meeting. And the Board voted to do just that in closed
10 session.

11 So there will not be comment on this item. Of
12 course anybody's free to say whatever they like during
13 public comment at the end of the Board meeting.

14 EXECUTIVE OFFICER BISHOP: Okay. And then the
15 second item, Mr. Chair, is that we've had a number of
16 public members that have requested that could they
17 possibly have public comment after lunch because they've
18 been here for many hours. And it looks like there'd be
19 many hours more before the public comment period's
20 actually commenced. Of course it is up to you to make
21 that decision. But I would recommend, given the amount of
22 time that's gone on and the amount of time that's still
23 coming, that we allow the public to get there policy
24 statements in at this point.

25 CHAIRPERSON NAHAI: I think you're right. I

1 think we also have a duty to provide the public with an
2 opportunity to speak. And I think that is -- we have a
3 limit of three minutes per speaker for that.

4 So we'll do that. And then when we've done that,
5 then we'll come back to the County's remaining 20 minutes.

6 EXECUTIVE OFFICER BISHOP: Okay.

7 CHAIRPERSON NAHAI: Fine. We'll proceed that way
8 then.

9 And I also have three cards here that I want to
10 call upon at this point. Two of them are from
11 representatives of elected officials. And one of them is
12 Alexis Strauss of the U.S. EPA, who I'll call on now.

13 But first Mr. Marcus Weakley from Senator Sheila
14 Kuehl's office.

15 MR. WEAKLEY: Thank you very much.

16 I'm here on behalf of Senator Kuehl, and

17 I have a letter from her.

18 "Dear Chair Nahai and Board members:

19 I'm writing in strong support of
20 incorporating the bacteria total maximum

21 daily load into the Los Angeles County
22 Municipal Storm Water Discharge Permit.

23 As Chair of the Senate Committee on

24 Natural Resources and Water and author

25 of the legislation that created the

1 Santa Monica Bay Restoration Commission,
2 I urge you to do everything in your
3 power to restore Santa Monica Bay and
4 improve water quality for beachgoers in
5 Los Angeles County.

6 "I applaud you for your previous
7 actions that have served to improve
8 water quality. Unfortunately additional
9 actions must be taken. Recent tests
10 have resulted in the findings of more
11 than 25 percent of the beaches in Santa
12 Monica Bay have exceeded the new beach
13 bacteria standards, in violation of the
14 Clean Water Act.

15 "Since ocean swimmers can get sick
16 from elevated bacteria levels, it is
17 important to enforce high standards. It
18 is crucial that you incorporate the
19 bacteria TMDL into L.A. County Storm
20 Water Permit so that bacteria TMDL is
21 enforceable and Santa Monica Bay will
22 realize lower bacteria levels during dry
23 weather.

24 "I strongly urge you to enforce
25 bacteria pollution limits in the Santa

1 Monica Bay during summer and winter dry
2 weather and protect the public's health.

3 "Thank you for your consideration."

4 CHAIRPERSON NAHAI: Thank you very much.

5 Next is Deborah Weinstien from Councilman Bill
6 Rosenthal's office.

7 Next Ms. Alexis Strauss from EPA.

8 MS. STRAUSS: Good afternoon, Chairman Nahai and
9 Board members. I'm Alexis Strauss representing the U.S.
10 Environmental Protection Agency.

11 We support the proposed modification of the Los
12 Angeles County MS-4 permit and urge you to adopt the
13 modification.

14 Meeting the requirements of the dry weather TMDL
15 for bacteria for Santa Monica Bay beaches indeed poses
16 complex challenges, as we've heard. We also recognize
17 that the shoreline monitoring program shows that a number
18 of locations are particularly challenging where the TMDL
19 requirements that you had adopted are not being met as
20 required by the TMDL during the dry season. But,
21 nevertheless, the TMDL did set a compliance deadline of
22 July 2006. It's been four and a half years since the TMDL
23 was adopted, and I think we're all very aware that we at
24 the federal, state and local level have a shared
25 commitment to solving this problem to protecting public

1 health and to ensuring that we can do our best for water
2 quality.

3 The Board did request comment on how you may
4 choose to incorporate the TMDL into the MS-4 permit if you
5 so choose to do so. And as noted earlier, there are five
6 options. We do support the preferred option, to
7 incorporate the TMDL requirements into the receiving water
8 limitations language of the permit in Part 2 and adopt the
9 discharge prohibition in Part 1. We believe that this is
10 fully consistent with the federal NPDES regulations which
11 require that the permit be consistent with the TMDL and
12 that the permit limits will ensure consistency in the most
13 straightforward manner possible.

14 I'm committed to working with state and local
15 agencies to make this happen. I think that adoption of
16 the proposed modification will strengthen implementation
17 of the permit, which is something we have all together
18 been focused on for the last ten years. I think we have
19 much to do to solve this pervasive problem. And I'd like
20 to offer our continuing support to the Board and the
21 partner agencies in restoring the beneficial uses of the
22 Board's water resources.

23 Thank you.

24 CHAIRPERSON NAHAI: Thank you very much.

25 I should also say that the card that we did have

1 for Deborah Weinstien of Council Member Bill Rosendahl's
2 office indicated support for the staff recommendation.

3 I'll now go to the cards that we have from
4 interested persons or members of the public. Three
5 minutes each.

6 I would ask that to the extent you believe that
7 somebody else's testimony is duplicative of what you're
8 going to say, there's no need to be repetitive. You can
9 just indicate support or opposition and we can go from
10 there.

11 So the first card is from Mr. Paul Westefer of
12 Wishtoyo Foundation.

13 Okay. Going on.

14 BOARD MEMBER CLOKE: Does it say if they
15 indicated support on their card or not?

16 CHAIRPERSON NAHAI: Yes, the indication is for
17 support for the staff recommendation.

18 BOARD MEMBER CLOKE: Thank you.

19 CHAIRPERSON NAHAI: Next from Mr. Joe Geever of
20 Surfrider.

21 Okay. Again, this card indicates support.

22 Mr. Grant Noie of Malibu Surfing Association.

23 All right. Please, go ahead.

24 MR. NOIE: Yeah, good afternoon. I want to
25 apologize for the theatrics of the white jacket, but I am

1 a California State Registered Nurse and Certified Public
2 Health Nurse. Aside from that, I look like a long-haired
3 surfer, which I am also.

4 (Laughter.)

5 MR. NOIE: I surf consistently at Malibu
6 Surfrider Beach. And I like to tell people that I've been
7 surfing longer than they've even been alive out there in
8 the water, a lot of those young surfers.

9 But we've got a situation there that I think
10 would be highly embarrassing to the State of California,
11 much less the politicians, especially some of our county
12 politicians who are kind of in opposition to this.

13 We've got this thing -- actually there's two
14 things. There's carcharodon carcharias and there's
15 escherichia coli. They both will kill you.

16 Now, carcharodon carcharias is a great white
17 shark. We don't have a problem down here that much.
18 We've seen them off the Malibu Pier occasionally. But
19 there's not a big problem like in South Africa or
20 Australia or northern California.

21 Now, escherichia coli actually lives within our
22 own intestinal tract. We need it to stay alive. But when
23 it gets on your skin, it causes skin rash. If it gets in
24 your ears, it causes earache. If it gets in your eyes, it
25 causes pink eye. If you ingest it in the wrong end, it

1 causes gastrointestinal distress or diarrhea.

2 Now, you can't really trace that diarrhea back,
3 you know, epidemiologically to the surf zone necessarily,
4 because a person could have gotten that at their fast food
5 restaurant. And as a matter of fact, we have epidemiology
6 programs that spend millions of dollars and we still don't
7 know how many people in L.A. County have HIV virus. So,
8 you know, a little thing like escherichia coli, or E. coli
9 as we know it, how are we going to trace that back to
10 something?

11 However, the fact is, if it gets in your
12 bloodstream and colonizes, a person gets something called
13 sepsis, a lot of bacteria in the system. It can make a
14 person very sick. If it goes to the heart, it causes an
15 endocarditis, which is an infection of the heart valve.
16 There's another factor out there called -- yellow light --
17 B virus, which if it gets on to the outside of the heart
18 causes pericarditis.

19 We've had surfers die of this. I know of one
20 person who spent his entire inheritance getting a
21 pacemaker because of this. And he couldn't -- he doesn't
22 have the money to get a battery for it anymore.

23 With that said, the surfers are not just old guys
24 like me. There's young people out there that are getting
25 sick from that.

1 Thank you very much.

2 CHAIRPERSON NAHAI: Thank you. Thank you for
3 your comments.

4 I gather Ms. Weinstien is with us. Would you
5 like to -- yes.

6 Oh, there you are.

7 MS. WEINSTIEN: Hi. I'm Deborah Weinstien. I
8 work for Bill Rosendahl. And I would like to submit a
9 letter on behalf of both Bill Rosendahl and Jack Weiss.

10 "We strongly urge the Regional Water
11 Quality Control Board to approve the
12 staff recommendation to incorporate the
13 dry weather bacteria TMDL requirements
14 into the storm water permit.

15 "As you know, clean beaches are a
16 right for each and every one of the 50
17 million annual visitors to the Santa
18 Monica Bay. All too often a trip to the
19 beach ends up in a stomach flu, skin
20 rash or upper respiratory infections. A
21 trip to the beach should not make you
22 sick.

23 "The bacteria TMDL was adopted three
24 years ago to protect beachgoers by
25 reducing harmful bacteria in our local

1 beach water. The bacteria pollution
2 limits must be incorporated in the L.A.
3 County Storm Water Permit so that the
4 dischargers will be held accountable for
5 cleaning our beaches.

6 "If you can't keep our beaches safe
7 for swimmers and surfers during the dry
8 summer months, then what will we do to
9 reduce polluted runoffs during rain
10 storms.

11 "As you know, the City of Los
12 Angeles passed Measure L with a record
13 percentage of votes and we've allocated
14 tens of millions of dollars to clean up
15 our polluted beaches. Clean beaches are
16 a high priority for our districts and we
17 urge you to make it a high priority for
18 the Regional Water Board."

19 Thank you.

20 CHAIRPERSON NAHAI: Thank you very much. Thank
21 you for your comments.

22 I have next Ms. Dorothy Green.

23 Not here?

24 All right. She may be coming back.

25 Ms. Madelyn Glickfield?

1 This card indicates support for the staff
2 recommendation.

3 Next Mr. Tom Nefcy, Malibu Surfing Association.

4 Thank you.

5 After Mr. Nefcy it will be Mr. Patrick Rowen.

6 And after Mr. Rowen, Mr. David Williams.

7 MR. NEFCY: Thank you very much. My name is Tom
8 Nefcy. That's spelled N-e-f-c-y. I am the Secretary of
9 the Malibu Surfer Association. And I've been surfing at
10 Malibu Surfrider Beach for the past 25 years.

11 CHAIRPERSON NAHAI: Excuse me. Could somebody
12 activate the timer please.

13 MR. NEFCY: And I came here to speak on behalf of
14 what I feel is the single most -- the single largest group
15 of people that use Surfrider Beach, and that is the
16 surfers. The surfers are there day in and day out when
17 the waves are breaking. And we are the group that are
18 most affected by the pathogens in the water.

19 I mean Surfrider Beach is a real unique place. I
20 don't know if you're aware of it, but it's the only beach
21 on the coast where they don't allow people to go swimming
22 in the water. You have to be on a surfboard in order to
23 go out and get into the water. They chase people out if
24 they're not on a surfboard. So the surfers have a -- it's
25 a very special place for us, and we'd like to keep it that

1 way.

2 I just came here, like I said, to say that I'd
3 really demand that the Board take this action and make the
4 beaches safer for us. I really feel that listening to the
5 County's testimony earlier, that in the first half hour of
6 their testimony they really made the case for enforcing
7 these -- making this change to the permit, by saying that
8 the several municipalities are not cooperating with them.
9 And we'd like to see a little punch put into the permit so
10 that we can elicit the cooperation of the other
11 counties -- of the other county entities that -- or
12 municipalities in order to get the cleanup of Santa Monica
13 Bay.

14 Thank you very much.

15 CHAIRPERSON NAHAI: Thank you, Nefcy.

16 Mr. Patrick Rowen, followed by Mr. David
17 Williams.

18 MR. ROWEN: Yes. Good afternoon, Chairman Nahai
19 and other Board members. Leo VanderLans, whom I worked
20 with in the past.

21 Preliminarily, I'm an attorney. I incorporated
22 the Malibu Surfing Association. I've served on various
23 county boards and commissions. I'm a trial lawyer.

24 I have listened to the County of Los Angeles
25 presentation. I believe the Board has fairly and

1 completely given them all their procedural and substantive
2 due process. They've had the opportunity to submit all
3 the written material.

4 And on behalf of all the surfers in California,
5 and those worldwide who choose to visit Malibu as a
6 destination resort, we need to take some steps which will
7 provide the impetus to the county agencies and charter
8 cities to do the necessaries to clean up both Malibu
9 Surfrider Beach, Malibu Lagoon and the adjacent creek.

10 I have submitted a letter on behalf of our
11 organization and surfers in general, which I would ask the
12 Board to refer to and incorporate in the record here
13 today. I won't read the whole thing since it is
14 repetitive of prior testimony. But I would point out that
15 our organization since its inception has worked very hard
16 with the local cities, with the stream task force, with
17 various study groups, in an effort to get Malibu Creek
18 cleaned up.

19 It's been an arduous process with all the
20 stakeholders in this watershed eventually coming to the
21 realization that each of them and each of their small or
22 large ways are contributing to the waste and the damage to
23 the public both economically, as we've heard, and most
24 importantly physically, as you've heard from other
25 testimony.

1 I would just tell you that not only have there
2 been discomforts in the way of intestinal viruses and skin
3 rashes, but there have been deaths that have occurred
4 there. Ralph Gambina, one of our revered older surfers
5 that died several weeks after surfing at Malibu Surfrider
6 Beach a number of years ago. Two surfers to my knowledge
7 have contracted heart viruses, have had pacemakers put in.
8 My own son after surfing at Surfrider Beach in his first
9 two weeks at the University of San Diego was hospitalized
10 with a heart -- after surfing at Malibu. This is real
11 health risk which needs immediate remediation and needs to
12 be addressed in the form of enforceable regulations and
13 sanctions.

14 The County can always refer to and the Board can
15 refer to the good efforts that have gone on, and have been
16 recited here today, to alleviate the problem. But to get
17 everybody moving together and moving toward a resolution,
18 you need the provisions that will call for an appropriate
19 enforcement where that is required.

20 Thank you.

21 CHAIRPERSON NAHAI: Thank you very much. Mr.
22 David Williams.

23 Okay. Next, Mr. Jose -- I apologize, I cannot
24 read the last name. But it's Bac --

25 MS. JAMES: Excuse me, Chair. David Williams had

1 to leave, but he asked that I speak on his behalf, if
2 that's okay.

3 CHAIRPERSON NAHAI: Okay.

4 MS. JAMES: I'll just read into the record his
5 comments that were submitted --

6 CHAIRPERSON NAHAI: We need your name for the
7 record.

8 MS. JAMES: I'm Kirsten James.

9 I'll read into the record his comments that were
10 submitted on September 7th.

11 "The AVP Pro Beach Volleyball Tour
12 is the nationally recognized
13 professional beach volleyball tour in
14 the United States, featuring more than
15 200 of the top men and women competitors
16 in the sport, including the Gold Medal
17 winners from the last three Olympics.
18 The AVP will stage 16 events throughout
19 the United States in 2006, including
20 four on the beaches of California.

21 "Our organization and beach
22 volleyball itself has very close ties to
23 the Santa Monica Bay beaches. In fact,
24 the origins of beach volleyball trace
25 back to Santa Monica, California. In

1 the 1920s the first beach volleyball
2 courts were installed at a Santa Monica
3 beach, and in 1947 the first official
4 beach volleyball tournament was played
5 at Will Rogers State Beach.

6 "Today many of our top players train
7 and practice on Santa Monica beaches.
8 Moreover, two of our biggest tournaments
9 take place annually at Hermosa Beach and
10 Manhattan Beach. In every way AVP
11 celebrates the connection to all that is
12 wonderful about the beach.

13 "As an organization that relies on
14 beaches for its livelihood, we are
15 increasingly concerned about the state
16 of our beaches. Despite the adoption of
17 strict bacteria pollution limits for
18 Santa Monica Bay beaches in 2003, data
19 show that many Santa Monica Bay beaches
20 still have elevated bacteria levels that
21 can make people sick. Given the amount
22 of time that our athletes spend playing
23 and training on Santa Monica beaches, we
24 are anxious to see this environmental
25 hazard addressed and remediated.

1 "On September 14th, today, the
2 Regional Board will consider
3 incorporating the bacteria TMDL into the
4 L.A. County Municipal Storm Water
5 discharge permit. This action is
6 necessary to make the bacteria TMDL
7 enforceable, thereby ensuring that our
8 beaches are safe and public health is
9 not compromised.

10 "I urge you to vote to adopt
11 Regional Board staff's proposal to
12 incorporate the bacterial TMDL into the
13 storm water permit. This action in the
14 summer season during which thousands of
15 people play beach volleyball at Santa
16 Monica Bay beaches will demonstrate that
17 the Regional Board continues to live up
18 to its fundamental obligation to protect
19 water quality and its citizens."

20 Thank you.

21 CHAIRPERSON NAHAI: Thank you very much.

22 The next card is from Mr. Jose -- again I can't
23 read the last name. I'm sorry.

24 MS. BACAUSS: Hi, thanks. It's Jose Bacauss.

25 I just want to say from the City of Hermosa

1 Beach, I'm a citizen there, I'm a dad, and I'm a diver. I
2 grew up in the south bay. And I hope that the Board
3 approves this measure. We need to see enforceable
4 numbers. We need to hold agencies accountable. And we
5 need some -- this to happen. There's a lot of people that
6 enjoy our oceans from all over the world. And you can see
7 that today there's a lot of support for this. So I hope
8 that this gets approved.

9 Thanks.

10 CHAIRPERSON NAHAI: Thank you very much.

11 Ms. Madelyn Glickfield is back with us.

12 MS. GLICKFIELD: Thank you, Mr. Chairman, members
13 of the Board. I'm really happy that I got an opportunity
14 to speak to you today.

15 I have been involved in water quality issues in
16 Santa Monica Bay for a very long time. But I think the
17 more important thing that I can do for you today is just
18 tell you a personal story.

19 In 1987 we needed to get out of our house and
20 rent a house. And we rented one on the beach in between
21 Las Flores and Big Rock Canyon in an old house on a street
22 where there were lots of old houses and old septic
23 systems.

24 My daughter went into the water and came out with
25 rashes on a regular basis. And any time it was low tide,

1 the water was clearly daylighting out of the septic
2 systems. My daughter was seven at that time. She's now
3 graduating her PhD, and nothing has changed. Nothing's
4 changed. There are lots of things that have been
5 improved. But fundamentally the problems that are causing
6 bacteria and pollution, particularly in the Malibu Creek
7 watershed and north of there, are still the problems that
8 are causing those things.

9 So while I am a proponent and I have done a great
10 deal to forward the collaborative efforts that have been
11 talked about by the County here, it is time for the County
12 to start putting some of their regulatory clout and their
13 resources into finding ways to locate and get rid of the
14 septic systems that are not working and identify ways that
15 they can respond quickly. And I have come to believe that
16 the County Public Health Department, who's critical in
17 this matter, will not do so until they're regulated to do
18 so. I'm sorry to say that, but I think that that's the
19 case.

20 So I would hope that you would act today in favor
21 of your staff recommendation. And I really thank you for
22 your time.

23 CHAIRPERSON NAHAI: Thank you very much.

24 The next card is from Ms. Lili Boyle, followed by
25 Ms. Lisa Boyle.

1 And I see Ms. Dorothy Green is with us. So
2 perhaps at that point Ms. Dorothy Green can also give us
3 her remarks.

4 LILI BOYLE: Hello. My name is Lili Boyle. I'm
5 ten and three-quarters. I live in Pacific Palisades, a
6 small beach community. So when my friends and family and
7 I go to the beach near my house -- that's Will Rogers
8 Beach -- sometimes it's really dirty and it smells really
9 bad.

10 I, an avid beachgoer, supporter of Heal the Bay,
11 thinks that is disgusting and it reminds me of sewage.
12 I'm asking you to please help fix this bacterial problem
13 by changing the permit to make it enforceable.

14 Before I knew how dirty the water at Will Rogers
15 Beach is, I didn't know how the dirty bacteria can make
16 you and I sick. I don't want to be sick so I can go to
17 school and some day become a lawyer.

18 (Laughter.)

19 LILI BOYLE: If kids and adults go into the dirty
20 water, they will get sick and have to miss school or work,
21 and that's not good.

22 Thank you very much for this opportunity to share
23 my point of view. Please make the water safe so my
24 brother and I can swim and not get sick.

25 Thank you.

1 (Applause.)

2 MS. BOYLE: Hello. My name is Lisa Boyle and I'm
3 an attorney. And I'm also the very proud mother of Lili
4 Boyle. I think that's my main qualification here. And of
5 her younger brother Jake.

6 We live in Pacific Palisades and our local beach
7 is Will Rogers. And I can tell you that on many a day
8 when my children and I are waiting for a light to turn at
9 PCH on either Chautauqua or Temescal, that the smell is
10 overpowering. And we don't want to put down our windows
11 because you can just smell that sewage scent. And my kids
12 are always saying, "What is that?"

13 And, you know, you really don't need a microscope
14 to know that the water that's coming out of those storm
15 drains there is dirty. You can smell it and you can see
16 it. And unfortunately for us, we avoid our local beach.
17 And when my kids want to swim, I take them all the way up
18 the coast to Zuma, because I don't want them to get sick.

19 And my comments today are not just NBIMOBY, no
20 bacteria in my own backyard. Because if you want to see a
21 real true slice of Los Angeles, go to Will Rogers Beach on
22 a hot day in summer. It is every person in Los Angeles,
23 and it's a beautiful site. And I want to be there and
24 everybody wants to be there. But, you know, you can smell
25 that it's dirty, and that's just not right.

1 And so if there's going to be any change at all,
2 then there needs to be enforceable standards. And then
3 maybe we will all have access to clean and healthy
4 beaches.

5 Thank you.

6 CHAIRPERSON NAHAI: Thank you very much.

7 Next, Ms. Dorothy Green, followed by Mr. Connor
8 Everts and followed by Ms. Maraiiva Chicon.

9 MS. GREEN: Yes, good afternoon. My name is
10 Dorothy Green. I'm was the founding president of Heal the
11 Bay and, as such, has founded the Los Angeles and San
12 Gabriel Rivers Watershed Council.

13 And one of the main concerns of both of these
14 organizations is to have water resources clean, useful,
15 healthful and available for everybody.

16 I hadn't really planned on speaking today, but
17 cannot help but add my voice to those that you've already
18 heard about how important this is.

19 Heal the Bay was founded 22 years ago just for
20 this purpose, to clean up this water in the bay that we
21 swim in, that is so dependent -- our tourism industry is
22 so dependent on, as well as the people who live here for a
23 place to recreate and to enjoy life.

24 It is such an important part of all of our lives,
25 that it must be protected. And the only way to do it of

1 course is with enforceable standards and then seeing to it
2 that they are enforced.

3 Thank you.

4 CHAIRPERSON NAHAI: Thank you very much.

5 Mr. Everts?

6 Ms. Chicon?

7 I note that both these cards indicate support for
8 staff recommendation.

9 Ms. Kelly Chapman-Meyer, followed by Mr. Nicholas
10 Fash, followed by Ms. Lori Feldman.

11 MS. CHAPMAN-MEYER: Hi. I'm Kelly Chapman-Meyer,
12 and I'm a surfer and a sand paddler and a triathlete,
13 which includes swimming, from Malibu. I'm on the board of
14 Heal the Bay. I'm on the L.A. Action Forum for the NRDC
15 and I'm a friend of the Santa Monica Baykeeper.

16 But my real reason and my real credential for
17 being here today is I'm a mother. And I sent my daughter
18 to Junior Lifeguards this summer in order for her to learn
19 how to save lives and keep people safe. And I find it
20 ironic that I'm sending her into water that in fact could
21 endanger her life. So I come here with my conscience to
22 do all I can for my daughter and for all children in the
23 County of Los Angeles, and for the hundreds of thousands
24 of visitors that come and spend money on our beaches every
25 year.

1 I know firsthand from being in the water all the
2 time what poor water quality can do to open cuts and ears
3 and nose and throat. I've got a staph infection wound to
4 show you and I've got, you know, an earache right now -- I
5 mean a scar from staph from this summer.

6 And I glide across a beautiful cove named
7 Paradise Cove every morning, which is now rightly named
8 Parasite Cove. I live between two F quality beaches. And
9 as many of you have said, it doesn't -- you know, you
10 don't have to be a scientist or have expensive gene probe
11 technology to know that what you see, raw sewage going
12 into your waters, in your backyard, into what feeds your
13 soul is not okay and not acceptable for any of us, whether
14 residents or visitors or people that just observe and look
15 at the ocean.

16 As I said, I'm not a lawyer, I'm not a scientist,
17 I'm not a bureaucrat or a civil servant. But as a mother,
18 I do know what is right and I know that all of us have
19 water quality and cleaning up our water as a common goal.
20 And I know that all of us from the County and from -- as
21 citizens and all this together, that's what we want,
22 that's why we're here and that's why we're spending this
23 enormous amount of time and energy, you know, taking out
24 of our, you know, otherwise -- you know, time with our
25 family to be here, is to clean up the water.

1 So I just hope that we can all take a good look
2 at ourselves in the mirror and look what we're doing as
3 individuals, as a community, as a society, as we all come
4 together to solve this problem. I hope in response to
5 this particular TMDLs we can go for the gold and not go
6 for the bronze, because that's what I feel we're doing
7 here. Why lessen a standard that we all need to see
8 improved greatly. And I think that by not adopting these
9 and keeping them legally enforceable, we're not going for
10 the gold, we're going for the bronze.

11 CHAIRPERSON NAHAI: Thank you very much.

12 MS. CHAPMAN-MEYER: Thank you.

13 CHAIRPERSON NAHAI: Thank you.

14 Mr. Nicholas Fash. Then Ms. Laurie Feldman,
15 followed by Dr. Jeff Harris.

16 MR. FASH: Thank you.

17 I moved to Los Angeles about five years ago from
18 Fairbanks, Alaska. There's no beaches there. My
19 perception of what to expect was primarily based off
20 things like Bay Watch, so I assumed everybody surfed and
21 played volleyball and swam all day, much of which I pretty
22 much do during all my free time.

23 I'm a teacher now. And I'm here to speak for the
24 hundreds of thousands of children that frequent the
25 beaches. I teach marine biology and ecology, and I use

1 the beach as my classroom in some sense. When I have to
2 sit there with children and have to decide whether or not
3 it's safe to take them to the beach, which I find is Los
4 Angeles' best resource, I find that absolutely appalling.
5 And if we cannot do and take measures to clean up our
6 beaches, I think that we have to look to ourselves and
7 wonder exactly what our priorities are.

8 Going into the water is not something that we
9 should have to worry about. It should be something that
10 we enjoy.

11 And I thank you for listening to me rant on for a
12 moment. So have a good one.

13 CHAIRPERSON NAHAI: Thank you very much.

14 Ms. Feldman.

15 MS. FELDMAN: Hi. Actually I checked off that
16 box that said I'd rather not speak, but I was in support.
17 But I really do feel compelled to speak.

18 I was born and raised in Los --

19 CHAIRPERSON NAHAI: Then please state your name
20 for the record.

21 MS. FELDMAN: Laurie Feldman.

22 I was born and raised in Los Angeles. And in
23 1985 I remember going on to the Santa Monica Pier, fishing
24 with a girlfriend, and being told not to eat the fish,
25 having people come around tell you, "Do not eat the fish."

1 At that point I learned how polluted the waters were. I
2 had to ask myself, "Well, if I can't eat the fish that's
3 swimming in the water, should I be swimming in the water?"

4 That got me thinking. I started going further up
5 north. And I thought, "Okay, swim in Malibu. Malibu's
6 safe." So I swam most of my years there in high school,
7 and went to UCLA, went to college here. And in the last
8 couple years I have to say I became knowledgeable to the
9 fact that Malibu is not clean either. And I just am up
10 here to say, "Where can we swim?" Where can we swim on
11 our beaches? And the County should be ashamed of
12 themselves.

13 Thank you.

14 CHAIRPERSON NAHAI: Thank you.

15 Dr. Harris.

16 His card indicates support for the staff
17 recommendation.

18 Next, Ms. Heather Hoecherl. And whether this is
19 part of the Heal the Bay --

20 MS. HOECHERL: I actually just submitted a card
21 in support. I don't need to speak.

22 CHAIRPERSON NAHAI: Okay. Thank you.

23 Yes, the card does indicate support.

24 Next, a card from Ms. Sandra Huizar. This card
25 also indicates support. I don't know if she wants --

1 okay.

2 Next, Mr. Frankie Orrata.

3 MR. ORRATA: Good afternoon, members of the
4 Board. My name is Frankie Orrata, and I'm a student from
5 Santa Monica College.

6 Cities and other dischargers were given three
7 years to meet the bacteria TMDL pollution limits, making
8 the Santa Monica Bay beaches safe for beachgoers and --
9 did on the dry season. But it didn't happen. And the
10 reason that I'm hear, because I have a couple of friends,
11 that they are with me right now, Sandra and Milaya, and
12 they got sick a couple months ago from swimming in Santa
13 Monica Bay and specifically at Santa Monica Beach. But
14 they got the result from the doctor, and they said they
15 got some bacterial infection, they got a throat sore. And
16 the reason is because many of the beaches here in the
17 Santa Monica Bay so they still have elevated levels of
18 bacteria above from the TMDL -- from the bacterial
19 limits -- from the TMDL pollution limits. And we are
20 considering that the bacteria pollution limit must be
21 incorporated into the L.A. County Storm Water Permit to
22 protect water quality and its citizens.

23 So please do the right thing to help clean our
24 beaches. Thank you.

25 CHAIRPERSON NAHAI: Thank you very much.

1 Our next card is from Randi Parent, who expresses
2 support for the staff recommendation.

3 Next, Mr. Robert Pousman to speak.

4 DR. POUSMAN: Good afternoon. I'm Robert
5 Pousman. I come to you wearing many hats that you can't
6 see, but I'm going to describe them.

7 For one I'm a physician. I'm a UCLA physician.
8 I recently moved to Los Angeles. I've trained at
9 University of Texas. I'm from the East Coast. I've
10 always wanted to be in California, ever since I was five.
11 I also was at Vanderbilt.

12 So I've seen science. And I must commend
13 scientists behind the UCLA study with the health costs and
14 expenses incurred by our dirty beaches.

15 I'm also a voter. I'm also a taxpayer. I'm a
16 parent and I'm a surfer. I frequent the beaches. And,
17 again, I'm a physician.

18 So the reason I'm here, I'm taking a day off --
19 actually I have to go back in and see patients. I'm here
20 because I wanted to help people. I'm hoping you want to
21 help people. I want to help people in a fashion hopefully
22 just as you can. And I actually am envious of the power
23 that you have. You sit among us with the power to help
24 people just as I want to help them. Unfortunately I can
25 only help them in an individual fashion. I'm an

1 anesthesiologist and I also practice intensive care
2 medicine. So the number of people that I can help and
3 touch lives is minuscule in the numbers that you can.

4 So you sit before us with the power to affect
5 change upon millions of people, thousands of people.
6 That's why I'm here today. I'm passionate about this.
7 I'm passionate about the fact that the time I'm spending
8 here today will hopefully have some positive impact and I
9 will be able to do good in a way that my profession allows
10 me to do good, but in an exponential fashion.

11 So as I said, I'm envious of what power you have.
12 And hopefully you'll use conscience in a positive way and
13 allow us to do that good on a large basis.

14 Thank you.

15 CHAIRPERSON NAHAI: Thank you very much. Thank
16 you, Mr. Pousman.

17 Next is a card from Ms. Emily Pratt which
18 indicates support for the staff recommendation.

19 Next a card from Mr. Bob Purvey, who wishes to
20 speak.

21 CHIEF DEPUTY EXECUTIVE OFFICER SMITH: I think he
22 had to leave.

23 CHAIRPERSON NAHAI: Next, Ms. Anne Tobin,
24 followed by Mr. Paul Herzog, followed by Mr. Dusty Peak.

25 MS. TOBIN: Good afternoon. My name is Anne

1 Tobin. I live in Playa Del Rey, which is just south of
2 the marina, very near Los Angeles Airport. I bike and I
3 run on the bike path there down to Dockweiler, down to
4 Manhattan Beach. And I see community groups and I see
5 families coming to the beach all the time to enjoy this
6 relatively inexpensive attraction that we have here in
7 southern California.

8 But I, myself, I have not gone in the water in
9 two years. I'd love to learn how to surf, but I just know
10 how much bacteria's in the water and I'm afraid of that.
11 And so when I see all these families, you know, coming to
12 the beach, I just -- I think we can do better to try and
13 protect them and protect all of our rights to enjoy this
14 wonderful attraction that we have. So I just urge you to
15 support the amendment.

16 Thank you.

17 CHAIRPERSON NAHAI: Thank you very much.

18 Mr. Paul Herzog.

19 MR. HERZOG: Hi. My name is Paul Herzog, and I'm
20 representing the Ballona Wetlands Land Trust today. The
21 land trust supports incorporation of the TMDL into the
22 MS-4 permit.

23 And I just have to wonder what kind of county
24 we're seeing today. It seems like the County has
25 different faces. In December of 2004 we saw a county in

1 Sacramento pushing for a reduction of rec standards, the
2 UAA standards, in Ballona Creek.

3 When I called the County for information about
4 storm drain volumes and constituents, they don't have that
5 information readily available, and so I have to go to
6 Alhambra to find that information. That's important,
7 because we're going through the Prop O process right now
8 in the city and we want to figure out which BMP is best
9 for what area. And unless we know the volumes and the
10 constituents, how do we know what's the best BMP for our
11 site?

12 And so when I hear the County today saying --
13 particularly the counsel for County saying -- you know,
14 sort of the shoe's on the other foot -- they've been
15 wanting to move forward and they've been hindered, that's
16 not the county that I'm familiar with. And this is
17 important, because the land trust is interested in
18 improving water quality in Ballona Creek and welcomes
19 working with the county.

20 But I have to remember -- I'm almost 39 years
21 old -- the Clean Water Act has been around for almost as
22 long as I have been, and if voluntary compliance were to
23 have worked, we wouldn't be here today under this issue.
24 So if the County is for achieving water quality goals, as
25 counsel said, what do they have to fear by today's action?

1 And why if the County supports these goals do they seem to
2 come today with their own adversarial posture?

3 I think, along the lines of what they described
4 as a relationship that is cooperative, it seems to me that
5 we want one that's enforceable. We don't need to like
6 people. We need to clean up the water that we all use.
7 And whether or not the residents believe the myths that
8 the County attorney enumerated, the reality is that they
9 trust that the County would want enforcement mechanisms as
10 well.

11 CHAIRPERSON NAHAI: Thank you very much.

12 Dusty Peak -- Mr. Dusty Peak.

13 MR. PEAK: Dusty Peak. I've lived in Malibu for
14 awhile. And I've been a member of the North Santa Monica
15 Bay Watershed Task Force and have attended quite a few of
16 the meetings. And I've felt that that group of cities and
17 the County too, they have -- I have never been around a
18 group of people that seem to want to clean this thing up.
19 That's just my observation.

20 Anyhow, in 2002 I acquired a bacterial infection
21 while surfing. I can't say where I -- exactly where I got
22 sick, but I know it wasn't at Malibu or Topanga or
23 Paradise Cove, because I always surf up from there, up
24 in -- all over the place.

25 Anyhow, this infection was treated by fusing my

1 lumbar spine with cadaver bones and titanium screws and
2 rods, next to my right ankle was removed and my foot was
3 screwed to my leg, and finally my thoracic spine was
4 fused. The point of my sharing this with you is that
5 these bacteria can cause real problems to the human body.

6 So please include this in the permit.

7 Thank you.

8 CHAIRPERSON NAHAI: Thank you very much.

9 Ms. Valerie Burkholder, the final card that I
10 have.

11 VALERIE BURKHOLDER: My name is Valerie
12 Burkholder and I live in Calabasas. And my favorite thing
13 in the world is the ocean. I want to be a marine
14 biologist. But my mom won't let me get scuba certified
15 because the water is too dirty. I love to go to the
16 beach, but I'm only allowed to go once a week during the
17 summer because the water's too dirty.

18 My mom doesn't let us go into the rivers. And
19 she only occasionally lets us swim in the ocean due to the
20 contaminants in the water. When she was a kid she swam in
21 rivers and lakes because the water was clean enough that
22 she wouldn't get rashes or bacterial infections that
23 required her to remove her bones.

24 That is just sad that we can't go in the water.
25 We don't surf or snorkel because it's too dirty. I can't

1 scuba dive. I'm not allowed to go to the beach any more
2 than once a week.

3 Please do everything possible to change what has
4 come to be the norm. These TMDLs need to be enforceable.
5 This could be a great day for my generation, and yours for
6 what you did for mine.

7 CHAIRPERSON NAHAI: Thank you very much.

8 (Applause.)

9 CHAIRPERSON NAHAI: All right. Those are all of
10 the cards from interested persons that I have.

11 So with that, we'll go back to the County's
12 presentation for another 20 minutes. And then when that
13 is concluded, we will hear from the environmental
14 organizations. No, when that is concluded we'll hear from
15 other permittees and then from the environmental
16 organizations.

17 So, Mr. Gest, your additional 20 minutes.

18 MR. GEST: At this time the County would like to
19 call Ken Schiff.

20 Please state your name for the record.

21 MR. SCHIFF: My name is Ken Schiff. I'm the
22 Deputy Director of the Southern California Coastal Water
23 Research Project.

24 MR. GEST: And what is the Southern California
25 Coastal Water Research Project?

1 MR. SCHIFF: The agency I work for is a public
2 agency. And our mission is to provide the unbiased
3 scientific evidence to decision makers such as yourselves.

4 MR. GEST: And sometimes the agency's referred to
5 as SCCWRP, is that right?

6 MR. SCHIFF: Correct.

7 MR. GEST: So if we used that acronym -- I think
8 it's S-C-C-W-R-P -- you'll know what I'm referring to?

9 MR. SCHIFF: Correct.

10 MR. GEST: And who sits on the Board of Trustees
11 of SCCWRP -- or Board of Directors?

12 MR. SCHIFF: Our Board of Commissioners includes
13 a unique mix of regulated and regulatory agencies. Would
14 you like me to list all of them?

15 MR. GEST: No, but just give a flavor of who sits
16 on it?

17 Or let me ask you this question: Is it -- does a
18 representative of the Regional Board sit on the Board of
19 Trustees?

20 MR. SCHIFF: Yes, as well as the County.

21 MR. GEST: That's right, a representative of the
22 County also sits on the Board of Trustees, is that right?

23 MR. SCHIFF: Correct.

24 MR. GEST: Now, as an employee of SCCWRP, have
25 you participated in studies addressing sources and effects

1 of fecal indicator bacteria?

2 MR. SCHIFF: Yes.

3 MR. GEST: And those fecal indicator bacteria
4 would include total coliform, fecal coliform and
5 enterococcus?

6 MR. SCHIFF: Amongst others.

7 MR. GEST: I'd like to bring your attention to
8 what's been marked as the County Exhibit 12. It's in this
9 book that's before you.

10 MR. SCHIFF: Yes.

11 MR. GEST: This is an article entitled
12 "Multi-tiered Approach to the Quantitative PCR to attract
13 Sources of Fecal Pollution affecting Santa Monica Bay,
14 California."

15 Are you one of the authors of this article?

16 MR. SCHIFF: I am.

17 MR. GEST: And what was the purpose of this
18 article?

19 MR. SCHIFF: The purpose of the article was to
20 demonstrate that there are techniques to try and identify
21 and prioritize sources of fecal indicator bacteria.

22 MR. GEST: And where -- this article reports on a
23 study?

24 MR. SCHIFF: Yes.

25 MR. GEST: And where was the study performed?

1 MR. SCHIFF: In the Santa Monica Bay watershed.

2 MR. GEST: Was it Ballona Creek?

3 MR. SCHIFF: Ballona Creek.

4 MR. GEST: What did you conclude in this article?

5 MR. SCHIFF: There's a number of conclusions:

6 The first directly to the goal, is that there are
7 techniques that are available to help you identify and
8 prioritize sources of fecal contamination.

9 MR. GEST: Any other conclusions?

10 MR. SCHIFF: Any one in specific or --

11 MR. GEST: All right. Well, let me ask you this.

12 I want to bring your attention to the abstract on the
13 front of the article and, in particular, to the first
14 sentence, which says, "The ubiquity of fecal indicator
15 bacteria such as" -- and I'll probably mispronounce. How
16 do you pronounce it?

17 MR. SCHIFF: E. coli is fine.

18 MR. GEST: -- "E coli and enterococcus in urban
19 environments makes tracking of fecal contamination
20 extremely challenging."

21 What do you mean by the ubiquity of fecal
22 indicator bacteria?

23 MR. SCHIFF: Specifically to this study we found
24 large concentrations and masses of fecal indicator
25 bacteria such as E. coli widespread in the Ballona Creek

1 watershed.

2 MR. GEST: Now, also halfway down through the
3 abstract it says, "Sources of fecal indicator bacteria
4 were ubiquitous."

5 What does that mean? Same thing?

6 MR. SCHIFF: Same thing.

7 MR. GEST: And what's the effect that fecal
8 indicator bacteria is ubiquitous?

9 MR. SCHIFF: Could you rephrase your question? I
10 don't --

11 MR. GEST: What does the impact of the ubiquity
12 of the fecal indicator bacteria have on the ability to
13 identify sources of bacteria?

14 MR. SCHIFF: Basically for the fecal indicator
15 bacteria, we find them from all tributaries.

16 MR. GEST: And if it's ubiquitous, how about in
17 terms of the sources of bacteria: Is it easy or hard to
18 determine the source of the bacteria?

19 MR. SCHIFF: Difficult.

20 MR. GEST: Let me bring your attention to
21 paragraph 2 of the article. It starts with the sentence,
22 "Despite the impairment..."

23 Could you read the first sentence into the
24 record?

25 MR. SCHIFF: "Despite the impairment of water

1 quality and risks to human health, identification and
2 elimination of the sources of bacteria responsible for the
3 beach warnings remain elusive."

4 MR. GEST: Now, do you agree with that statement?

5 MR. SCHIFF: Yes.

6 MR. GEST: Now, could you read the next sentence?

7 MR. SCHIFF: "The difficulty in identifying and
8 eliminating the sources of bacteria results from three
9 potential or three important factors."

10 MR. GEST: And actually -- and read the next
11 sentence after that too.

12 MR. SCHIFF: "First, the traditional indicators
13 of fecal pollution on the basis of which the water quality
14 thresholds were developed are not specific to humans."

15 MR. GEST: And do you agree with that statement?

16 MR. SCHIFF: That is true.

17 MR. GEST: And read the next sentence please.

18 MR. SCHIFF: "These fecal indicator bacteria can
19 be shed from any warm blooded organism, including wild and
20 domesticated animals."

21 MR. GEST: And do you agree with that statement?

22 MR. SCHIFF: That statement is true.

23 MR. GEST: And what is the meaning of the fact
24 that fecal indicator bacteria can come from animals as
25 well as humans when an agency is trying to identify the

1 sources and then treat the sources? What impact does that
2 have on the ability to address that bacteria?

3 MR. SCHIFF: Well, I'm not an agency that has to
4 do that, so -- can you rephrase your question?

5 MR. GEST: It's correct that the fecal indicator
6 bacteria that you have observed does not necessarily come
7 from a human source?

8 MR. SCHIFF: Correct.

9 MR. GEST: If it comes from an animal source,
10 what is the likelihood that a human pathogen would be
11 associated with it?

12 MR. SCHIFF: Those studies haven't been done.
13 There is a likelihood that there may not be pathogens.
14 But there are also examples where pathogens from wild
15 animals can occur. There has not been a conclusive study
16 done on the health risk of swimming in water contaminated
17 by fecal bacteria of animals. Those are Very rare.

18 MR. GEST: And when you test for the fecal
19 bacteria and you find the presence of fecal bacteria, does
20 that test tell you whether the fecal bacteria came from a
21 human source or an animal source?

22 MR. SCHIFF: In the tests that were -- the basic
23 tests do not.

24 MR. GEST: So you could have a test that shows an
25 exceedance of fecal indicator bacteria and you may not

1 know whether it's from a human source or an animal source?

2 MR. SCHIFF: In the context of this study, the
3 basic measurements did not.

4 MR. GEST: And if you -- if it's from an animal
5 source, it may not present a health risk, is that right?

6 MR. SCHIFF: I don't know what the health risk is
7 in swimming in the water from Ballona Creek.

8 MR. GEST: Okay. But you did agree that there --
9 it's unknown as to whether human pathogens are also
10 associated with bacteria that comes from animal or other
11 sources -- sources other than humans?

12 MR. SCHIFF: Specifically in this study, we found
13 areas that were not -- where we did not find human
14 sources -- other measures of human and we found some that
15 did.

16 MR. GEST: Let me ask you to read the next
17 sentence starting with "Therefore..."

18 MR. SCHIFF: "Therefore, source tracking turns
19 into a challenging scenario when these diffuse and
20 frequently intermittent or episodic fecal releases occur."

21 MR. GEST: Do you agree with that statement?

22 MR. SCHIFF: Yes.

23 MR. GEST: And why is source tracking a
24 challenging scenario when there's intermittent or episodic
25 fecal releases?

1 MR. SCHIFF: In the context of this study,
2 there's a number of reasons. The first is that these --
3 if you don't sample frequently, you may not catch the
4 release. If you have multiple releases, you may find them
5 subsequently in a downstream site, and that will confuse
6 your signals.

7 MR. GEST: The next sentence in this article
8 says, "The second difficulty in identifying and
9 eliminating sources of fecal indicator bacteria is the
10 ubiquity in urban environments." And we've talked about
11 ubiquity before.

12 Do you agree with that statement?

13 MR. SCHIFF: Yes.

14 MR. GEST: And therefore the ubiquity of bacteria
15 in urban environments makes it difficult to identify or --
16 and, in fact, eliminate those sources, is that right?

17 MR. SCHIFF: Correct.

18 MR. GEST: And then the next sentence in this
19 article says, "Finally, unlike many human pathogens of
20 concern, fecal indicator bacteria may survive and even
21 grow in the environment."

22 Do you agree with that statement?

23 MR. SCHIFF: There have been some studies that
24 have indicated potential extended survival of growth in
25 the environment, correct.

1 MR. GEST: And by that, you mean that the fecal
2 indicator bacteria may be present even though the human
3 pathogens are no longer present?

4 MR. SCHIFF: That is correct.

5 MR. GEST: And if you measure for the fecal
6 indicator bacteria, you would find that bacteria present
7 even though the pathogen is not?

8 MR. SCHIFF: Correct.

9 MR. GEST: And for the record, what do you mean
10 when you refer to human pathogens?

11 MR. SCHIFF: Human pathogens in the context of
12 this study, I'm referring to human-specific viruses.

13 MR. GEST: And that is different than bacteria?

14 MR. SCHIFF: Correct.

15 MR. GEST: And the health risk is focused on the
16 human pathogen, is that right?

17 MR. SCHIFF: In this particular study we measured
18 human pathogens because we felt they were the best measure
19 of human-specific sources and the potential for health
20 risk.

21 MR. GEST: But the risk in general -- and the
22 risk that we're trying to address when we're measuring
23 fecal indicator bacteria is because we're using the fecal
24 indicator bacteria as a surrogate for the presence of
25 human pathogens, is that right?

1 MR. SCHIFF: I did not make the regulation, but
2 that's my understanding, correct.

3 MR. GEST: Let me ask you to turn to page 16-10
4 of this exhibit.

5 I'd like to bring your attention to the paragraph
6 on the right where it says, "The lack of correlation
7 between bacterial indicator levels and levels of human
8 pathogenic viruses has been observed in previous studies
9 and demonstrates the value of the multi-tiered approach
10 used here for source identification."

11 Have there been studies where there was a lack of
12 correlation between bacteria indicator levels and human
13 pathogens?

14 MR. SCHIFF: Yes, I cited two in this article.

15 MR. GEST: If I could turn to County Exhibit 13
16 in your book, which is the Mission Bay study.

17 Are you an author of this study?

18 MR. SCHIFF: I am.

19 MR. GEST: Now, is it correct that in this water
20 bay, Mission Bay, was -- did I say water bay? -- this
21 water body, Mission Bay, did not -- was not influenced by
22 human sewage? Is that right?

23 MR. SCHIFF: Recent source tracking studies by
24 others that we cite in this document indicate little-to-no
25 human contributions, correct.

1 MR. GEST: Now, in the study you still found the
2 presence of bacterial indicators, is that right?

3 MR. SCHIFF: Correct.

4 MR. GEST: And this included the traditional
5 fecal indicators, enterococcus, fecal coliform and total
6 coliforms?

7 MR. SCHIFF: Correct.

8 MR. GEST: Now, please turn to page 25 of this
9 study, under the caption "Relationship between Health
10 Outcomes and Water Quality".

11 I'm going to read you the first sentence.

12 "No correlation was observed between increased
13 risk of illness and increased levels of traditional water
14 quality indicators including enterococcus, fecal coliform
15 or total coliform."

16 Do you agree with that statement?

17 MR. SCHIFF: Yes.

18 MR. GEST: And so at Mission Bay there was no
19 correlation between increased risk of illness and the
20 fecal indicator bacteria?

21 MR. SCHIFF: In Mission Bay during the study,
22 yes.

23 MR. GEST: Now, you have said that additional
24 studies should be made in light of this study, is that
25 right?

1 MR. SCHIFF: Correct.

2 MR. GEST: And so you've cautioned against
3 extrapolating from this study until additional studies
4 have been made?

5 MR. SCHIFF: Yes.

6 MR. GEST: But at Mission Bay there was fecal
7 indicator bacteria but no risk -- associated risk of
8 illness?

9 MR. SCHIFF: During the study, correct.

10 MR. GEST: Are you familiar with an article by
11 Alexandria Boehm and Steve Weisberg entitled "Tidal
12 Forcing of Enterococci at Marine Recreational Beaches at
13 fortnightly and semi-diurnal frequencies"?

14 MR. SCHIFF: I am aware.

15 MR. GEST: Mr. Weisberg is also a member of
16 SCCWRP?

17 MR. SCHIFF: Yes.

18 MR. GEST: Or employee?

19 What's his --

20 MR. SCHIFF: Executive Director.

21 Just so that you know, I was not involved in that
22 one.

23 MR. GEST: Thank you.

24 But you are familiar with the study?

25 MR. SCHIFF: I do know of it, yes.

1 MR. GEST: And it's correct that this study found
2 that the levels of bacteria that might be measured could
3 be influenced by the tides?

4 MR. SCHIFF: Yes, I believe that was one of the
5 findings of the article.

6 MR. GEST: Now, is SCCWRP performing other
7 research studies relating to the identification of sources
8 of bacteria?

9 MR. SCHIFF: Yes.

10 MR. GEST: What other kinds of study is SCCWRP
11 presently performing?

12 MR. SCHIFF: Would you like me to list them all?

13 MR. GEST: No. But if you could give again sort
14 of a general idea to the Board members what types of
15 studies SCCWRP is engaged in to further our knowledge
16 about bacteria and the human health risks associated with
17 bacteria.

18 MR. SCHIFF: Okay. I'll keep it brief, because I
19 have briefed the Board on these studies before.

20 The first one is we are attempting to do some
21 more epidemiology studies so that hopefully we can make
22 extrapolations to other beaches besides Mission Bay.

23 The second type of study is looking at rapid
24 methods of bacterial detection so that we can provide
25 realtime warnings to swimmers.

1 A third one is continuation of our source
2 tracking methodologies to make those more accurate and
3 more timely.

4 And the last one would be contributions of
5 bacteria from natural or reference watersheds or beaches.

6 MR. GEST: I have no further questions.

7 CHAIRPERSON NAHAI: Thank you very much.

8 Does that conclude your case?

9 MR. GEST: No.

10 CHAIRPERSON NAHAI: Or how much more time do we
11 have for Mr. Gest?

12 MR. GEST: Well, I have a witness, Larissa
13 Aumand, who I'd like to call, should take about ten
14 minutes.

15 CHAIRPERSON NAHAI: Well, I want to know how much
16 time there is on the 20 minutes that was allotted to him.

17 MR. GEST: I'm sorry. I didn't hear your
18 question.

19 CHAIRPERSON NAHAI: You've got three minutes.

20 MR. GEST: All right. Well, I would request
21 additional time --

22 CHAIRPERSON NAHAI: No.

23 MR. GEST: -- because -- and I would like -- I
24 would request additional time because, in addition to Ms.
25 Aumand, we want to call representatives of the Regional

1 Board to establish certain facts that go to the findings
2 that are being made here.

3 CHAIRPERSON NAHAI: Then in that case I suggest
4 you're going to have at least another 50 minutes. You
5 have 30 minutes for cross-examination and you'll have 20
6 minutes for your closing statement. So that's another 50
7 minutes. And you can -- you could use some of that time
8 to present additional witnesses if you want. But I'm not
9 going to go over the 20 minutes.

10 MR. GEST: Well, okay. Thank you for your
11 ruling. We of course reserve our rights to object and
12 make our record and reserve our right to make a complete
13 record for the Board. But I will use my time as the
14 Chairman has allocated -- has indicated, with the
15 understanding that I can go into my cross-examination or
16 closing statement time if I want to use it for more
17 witnesses.

18 BOARD MEMBER MINDLIN: Can I ask you a question?

19 MR. GEST: Yes.

20 BOARD MEMBER MINDLIN: The last witness you had,
21 he wrote an article. And part of your questions were, "Do
22 you agree with this sentence?" I mean you kept going over
23 and over, "Do you agree with this sentence?" He wrote it.
24 And we were sitting here listening to you ask him if he
25 agreed with a sentence that he wrote. I mean it doesn't

1 get us anywhere.

2 MR. GEST: Well, I understand it was somewhat
3 pedantic, but it's important to make a record. And even
4 though you could read it, for anybody who's reviewing
5 these proceedings, it's necessary to have the witness
6 testify as to whether he in fact agrees with those
7 statements in order to make it. It's somewhat a
8 formalistic process even though it's a -- this is an
9 informal process.

10 BOARD MEMBER MINDLIN: Well, it's adjudicative,
11 but this is an administrative hearing too. And I mean we
12 know certain things. It's not a court of law; it's an
13 adjudicative administrative hearing. And there's certain
14 things that you're telling us that we just know. I mean
15 we know that the County is working hard and spending
16 money. You spend an hour doing that for us. I mean
17 you're going to come back and do due process. But you've
18 given every process in the world. We've tried to give you
19 every single moment. We've been trying to work with you.
20 And you spend hours, but you haven't given us any of
21 your -- you need to give us some more information. This
22 is all your due process. And we could give you a lot of
23 time.

24 MR. GEST: Well --

25 CHAIRPERSON NAHAI: And we've received a great

1 deal of information.

2 BOARD MEMBER MINDLIN: A great deal of
3 information, yes.

4 CHAIRPERSON NAHAI: But I think enough said. On
5 your opening statement, we doubled that time for you. We
6 gave you an additional half an hour on the case that you
7 needed to present. To call it pedantic is really an
8 understatement.

9 So I think you've been given every courtesy,
10 every indulgence. And you'll have in this hearing an
11 additional 50 minutes to call your other witnesses and do
12 your cross-examination and make your closing statement.
13 If you need a little bit more time at the end of it, you
14 can apply for it and we'll discuss it then. But as of now
15 I think we need to move on to hear from the other
16 permittees.

17 MR. GEST: So in other words, you do not --
18 you're suggesting that I should not use my time at this
19 point to call the other witnesses?

20 CHAIRPERSON NAHAI: Oh, no. You have another
21 three minutes. Would you like to use that right now?

22 MR. GEST: And the other time that I have for the
23 cross-examining and closing, I can't use that time now?

24 CHAIRPERSON NAHAI: Oh, is that what you would
25 like to do? You'd like to cut in to that now?

1 MR. GEST: I would like to finish presenting my
2 witnesses.

3 CHAIRPERSON NAHAI: Well, no, I don't think so.
4 I think we'll -- you know, this is -- we've been here
5 since nine o'clock. We've had six hours. The vast bulk
6 of that time has been taken with you, Mr. Gest. It is not
7 fair. It wasn't fair to the members of the public. It's
8 not fair to the other permittees. It's not fair to the
9 other party.

10 So when we come back to your 30 minutes and your
11 20 minutes, then you can put on the rest of your case, if
12 that's what you decide to do.

13 SENIOR STAFF COUNSEL LEVY: Mr. Chair, just a
14 clarification.

15 You aren't suggesting that during closing Mr.
16 Gest be allowed to introduce new evidence, but just
17 present his closing? In fairness to the other parties who
18 are going to present a closing based upon the evidence
19 that's already been presented, it might be deemed unfair
20 to them to receive new evidence from the County under the
21 guise of a closing.

22 CHAIRPERSON NAHAI: I understand. But I want to
23 give Mr. Gest every opportunity to present his case, even
24 though I think the fact that he may not have presented the
25 entirety of his case is completely his own doing. But

1 perhaps what we can do is if you could use some time
2 during his cross-examination to put on additional
3 witnesses --

4 SENIOR STAFF COUNSEL LEVY: Just so that the
5 other parties aren't blindsided by new evidence after
6 they've rested and completed their cross.

7 CHAIRPERSON NAHAI: I understand, I understand.

8 Okay. We'll do it then during the
9 cross-examination time.

10 I don't know. This is a position that
11 unfortunately he's put us in, and I think quite
12 unnecessarily.

13 So we'll come back to you.

14 MR. GEST: Okay. And I'll be able use my extra
15 three minutes at that time?

16 CHAIRPERSON NAHAI: Yeah, your extra three
17 minutes right now.

18 MR. GEST: Extra three minutes right now.

19 All right. At this time I would like to call
20 Larissa Aumand.

21 CHAIRPERSON NAHAI: Please activate the timer for
22 three minutes.

23 MR. GEST: Please state your name for the record.

24 MS. AUMAND: Larissa Aumand.

25 MR. GEST: And by whom are you employed?

1 MS. AUMAND: Weston Solutions.

2 MR. GEST: And what is your position at Weston
3 Solutions?

4 MS. AUMAND: Director of Microbial Sciences.

5 MR. GEST: And as Director of Microbial Sciences,
6 have you also been involved in studies addressing the
7 identification of sources of bacteria?

8 MS. AUMAND: Yes, as a project manager and as a
9 technical advisor.

10 MR. GEST: And for the record, I would lay a
11 further foundation. But given the limits of time, we'll
12 move right to the substance of the testimony.

13 In designing a program to address risk of human
14 illness at beaches, is it important to know the sources of
15 bacteria?

16 MS. AUMAND: We're not a company that actually
17 does that kind of epidemiology studies. We do source
18 tracking studies. So I wouldn't really be able to answer
19 that.

20 MR. GEST: What's the purpose of a source
21 tracking study?

22 MS. AUMAND: To identify sources of bacteria
23 through location and possibly hosts, such as storm drains
24 or watersheds and so forth, into a water body and then
25 host tracking -- potential host tracking, such as human,

1 bird and so forth.

2 MR. GEST: And are there different sources of
3 bacteria?

4 MS. AUMAND: Yes there are.

5 MR. GEST: What are the different sources of
6 bacteria?

7 MS. AUMAND: Again, there are two types of
8 sources: Location sources and host sources. Locations
9 can be storm drains; rivers; you know, direct human,
10 indirect human, such as irrigation or sewage runoff and so
11 forth. Then there's also host tracking, which is using
12 various types of methods I won't get into now to
13 discuss -- or to determine whether it's human, bird, other
14 wildlife, domestic animal and so forth.

15 MR. GEST: And are there elements that can
16 amplify or encourage the growth of bacteria?

17 MS. AUMAND: Absolutely. We've done studies in
18 our own laboratory where we have taken a certain number of
19 known bacteria per hundred milliliter, say a thousand,
20 using fecal coliform and enterococci, added it to organic
21 material such as kelp and eel grass, and found up to three
22 and four, sometimes five log growth. So starting with a
23 thousand on kelp in a recent study we did, we wound up
24 with almost a billion bacteria in about 48 hours.

25 MR. GEST: And are some of these elements present

1 at beach in southern California?

2 MS. AUMAND: Absolutely. Kelp, eel grass and so
3 forth, dead leaves, any kind of organic material.

4 MR. GEST: Is it possible to have high levels of
5 bacteria on southern California beaches that derive from
6 non-human sources?

7 MS. AUMAND: Yes, definitely.

8 MR. GEST: And are you aware of any studies that
9 have found that?

10 CHAIRPERSON NAHAI: Mr. Gest, thank you.

11 MR. GEST: All right. Thank you.

12 Should I -- can I make a record as to the offer
13 of proof I would make if I had more time? Or since we
14 don't have more time, address it at a later -- since you
15 indicated I would have more time later, should I just
16 address it at that time?

17 CHAIRPERSON NAHAI: Well, we did. You will have
18 more time later.

19 MR. GEST: All right. Thank you very much. Then
20 I will hold this witness back at that time.

21 CHAIRPERSON NAHAI: Thank you.

22 The court reporter would like a break. So
23 we'll -- how much time would you --

24 THE REPORTER: Five minutes.

25 CHAIRPERSON NAHAI: Okay. Five minutes.

1 (Thereupon a recess was taken.)

2 CHAIRPERSON NAHAI: Let's come back to order
3 please.

4 Come on. We're going the start.

5 All right. Next we're going to hear from the
6 other permittees. And we've allocated five minutes each
7 for this group of speakers.

8 Again, to the extent that your presentation is
9 going to be repetitive of others, please just indicate
10 that, and indicate to us what your inclinations are.

11 All right. First, Mr. Craig Perkins of the City
12 of Santa Monica.

13 Mr. Perkins?

14 Mr. Perkins' card indicates support for the staff
15 recommendation.

16 Next, Mr. Neal Shapiro of the City of Santa
17 Monica?

18 Mr. Shapiro?

19 Okay. His card too indicates support for the
20 staff recommendation.

21 Next, Mr. Gary Laforge, the City of Industry.

22 Mr. Laforge's card indicates opposition to the
23 staff recommendation.

24 Next, Mr. Ray Tahir, representing the City of
25 Inglewood.

1 Is Mr. Tahir here?

2 Do you wish to speak?

3 MR. TAHIR: Yes, I do.

4 Well, come on up please.

5 MR. TAHIR: Can I defer to these other folks.

6 I'll still make some final touches on my comments.

7 CHAIRPERSON NAHAI: What other folks?

8 Okay. I've got two other cards and then we'll

9 call on you.

10 Mr. Jim Thorsen, the City of Malibu.

11 MR. THORSEN: Thank you. And good afternoon,

12 Chair, members of the Board. My name is Jim Thorsen. I'm

13 the City Manager for the City of Malibu.

14 First of all, I would like to say thank you to

15 the Board and to the state for your continued support of

16 many of our projects in our city.

17 Within the next 12 months, our city will begin --

18 or complete construction on water quality projects that

19 total over \$12 million. This equates to over 70 percent

20 of our annual budget. We could not undertake all of these

21 projects without collaborative support from you and our

22 partners.

23 As can be seen by the monetary commitment, our

24 council has placed the environment and the improvement of

25 water quality in our region as their top priority. The

1 City is putting forth tremendous efforts to educate,
2 enforce, engineer, and eliminate sources of pollution in
3 our water bodies.

4 However, the City of Malibu opposes the reopener
5 at this time. We believe the regular permit renewal
6 process would be better suited in a more effective way to
7 ensure existing and future TMDL compliance.

8 Whether the numeric limits are included now or in
9 three months when the permit is reopened, the City of
10 Malibu is aggressively pursuing real solutions that will
11 reduce or prohibit bacteria inputs to the creek and ocean.
12 The City anticipates that we will continue to partner with
13 the Board, the County and the environmental organizations
14 and our citizens to achieve the common goal of clean
15 water.

16 I would like to make a couple of notes regarding
17 today's hearing. First of all, I'd like to make a note
18 that the City has been in complete uniformity with the
19 County regarding their BMP projects within our city
20 boundaries. We support the County in their efforts.
21 We've assisted them with grant applications, processing
22 permits, waiving fees, and paying shared costs when
23 applicable.

24 Second of all, I'd like to say that with regards
25 to the bacteria in the Malibu Creek, even though we're not

1 talking about Malibu Creek today, the City is spending
2 over \$6 million to improve the bacteria along that section
3 of the stream.

4 With that, I'd like to conclude and say thank you
5 for having me here today.

6 CHAIRPERSON NAHAI: Thank you very much, Mr.
7 Thorsen.

8 Mr. Matthew Cohen.

9 Mr. Cohen?

10 All right. Mr. Tahir.

11 You're up, sir.

12 MR. TAHIR: I was hoping you'd give me a little
13 bit more time.

14 (Laughter.)

15 MR. TAHIR: I had some last minute changes,
16 tactical changes.

17 CHAIRPERSON NAHAI: Thank you for your sense of
18 humor.

19 MR. TAHIR: Well, we need it today, don't we.

20 Good afternoon. My name's Ray Tahir and I'm with
21 TECS Environmental. And my firm represents the City of
22 Inglewood with respect to this TMDL.

23 I should point out, first of all, that the City
24 of Inglewood firmly supports this -- not only this TMDL,
25 but the Ballona Creek TMDL for bacteria. It does so

1 because its city council and its city administration do
2 not want any of its residents or any other individuals who
3 visit Los Angeles County beaches to get sick from the
4 bacterial infection. That's real clear.

5 What the city objects to is the need for numeric
6 limits to compel compliance with this TMDL. It is not
7 necessary.

8 You have in the current MS-4 permit for Los
9 Angeles County a couple of mechanisms that could be used
10 to compel compliance with this TMDL. And I should point
11 out, as most of you know, the best available control
12 technology for bacteria is dry weather diversion for the
13 dry weather bacteria TMDL for Santa Monica beaches, and
14 Ballona Creek for that matter. You could simply write
15 that requirement into the Storm Water Quality Management
16 Plan, which is a mechanism contained in the permit. You
17 could say in two years -- or two or three years, or
18 whatever time period, cities that are subject to this TMDL
19 have to divert dry weather to mitigate the problem of
20 bacteria in the storm water runoff. The question is: Why
21 haven't you done so?

22 It's clearly stated in the permit. We mentioned
23 this before during the workshop on this particular
24 subject. Why is there a need for a numeric limit?

25 The question might be asked: Well, if you guys

1 can do that, why are you avoiding a numeric limit? You
2 know why? Because the source of bacteria -- the County's
3 going to point this out in a few minutes. The reason for
4 that is -- what if dry weather diversion does not succeed
5 in addressing the bacteria problem? What if the source of
6 bacteria is an aquifer to the ocean? As was the case for
7 Huntington Beach, which spends zillions of dollars in
8 trying to identify the source of the bacteria and mitigate
9 it. Then what?

10 This is what the iterative process was intended
11 to do and, that is, to give effective permittees a safe
12 harbor in the event that any of the BMPs that are
13 implements including structure controls doesn't work at
14 getting to that pollutant of concern.

15 I'm also here today to --

16 CHAIRPERSON NAHAI: How much more time?

17 MR. TAHIR: Oh, a couple minutes.

18 CHAIRPERSON NAHAI: Okay. Go ahead.

19 MR. TAHIR: Here's the deal. City of Inglewood
20 isn't certain if it is subject to the Santa Monica Beach's
21 primary TMDL for bacteria. And that's because in the
22 TMDL -- that TMDL Inglewood isn't listed. But it was
23 listed as being subject in the reopener fact sheet notice.
24 So the city would like to know if it is subject. And if
25 it is subject, why? Because it is also subject to the

1 Ballona Creek bacteria TMDL.

2 And I guess that's about it.

3 CHAIRPERSON NAHAI: Okay. Thank you very much.

4 MR. TAHIR: Thank you.

5 CHAIRPERSON NAHAI: Thank you very much.

6 With that, we're going to move to hear from the
7 environmental organizations for their presentation, which
8 will take an hour.

9 Go ahead.

10 MS. EGOSCUE: Good afternoon.

11 CHAIRPERSON NAHAI: Activate the timer.

12 MS. EGOSCUE: Good afternoon. For the record I'd
13 like to -- again, once again, my name is Tracy Egoscue.
14 I'm representing the Environmental Groups as formal
15 parties.

16 We've had approximately five minutes up to this
17 point in this hearing. And I'm making an objection for
18 the record at this point that, knowing that this was a
19 one-day hearing, it was noticed as a one-day hearing, that
20 time has been unduly taken up and will prejudice our side,
21 we believe, in our presentation of our case. In the
22 interests of time, the interests of this body, we are
23 cutting significantly parts of our case. I would like to
24 make a motion that objections that I have to testimony are
25 made -- that the Chair under his power under the

1 regulations allows this proceeding to be held open for the
2 purposes of written objections, so I don't have to stand
3 here and object to things that I saw under direct
4 testimony on the County. I'd like to ask that I be given
5 that.

6 CHAIRPERSON NAHAI: Well, let me see what our
7 powers are as far as that's concerned.

8 SENIOR STAFF COUNSEL LEVY: If you do that, Mr.
9 Chair, you'll have to delay consideration and voting on
10 the item because you've got to have a full record before
11 you, including the objections, before you can consider the
12 item.

13 You can do that -- perhaps the party might choose
14 to proceed with their testimony, their presentation, see
15 how much time they have left at the end and see if they
16 want to lodge them. I don't know. It's certainly in the
17 Chair's discretion. A lot of time has been taken up
18 already.

19 But, again, unless you have a complete record,
20 you can't act on it.

21 CHAIRPERSON NAHAI: Well, a lot of time has been
22 taken up, but there's still a lot of time left in -- you
23 know, left in the day.

24 MS. EGOSCUE: All right. We'll move forward.

25 CHAIRPERSON NAHAI: I'd rather not keep this item

1 open past today's hearing if that's at all possible.

2 SENIOR STAFF COUNSEL LEVY: Perhaps after they're
3 done, depending on the time, if they want to renew their
4 objections at that time, you might give them leave to just
5 read them quickly into the record later.

6 MS. EGOSCUE: Thank you. I will withdraw it at
7 this point. And I will probably take my closing up with
8 the objections at that time.

9 CHAIRPERSON NAHAI: Yes, you'll have 30 minutes
10 for cross-examination and you have 20 minutes for your
11 closing. And you can incorporate your objections at that
12 time.

13 MS. EGOSCUE: All right. My precious cross will
14 not be used by objecting.

15 I'm going to call our witness, Dr. Mark Gold, to
16 the stand -- he's standing here right next to me -- for
17 purposes of direct examination.

18 Dr. Gold, will you please state your name for the
19 record.

20 DR. GOLD: My name's Mark Gold.

21 MS. EGOSCUE: Will you please spell your name for
22 the record.

23 DR. GOLD: M-a-r-k G-o-l-d.

24 MS. EGOSCUE: By leave of the Chair sitting as
25 the Hearing Officer pursuant to Government Code Section

1 11513, and in the interest of time, Santa Monica
2 Baykeeper, Heal the Bay and NRDC respectfully request the
3 process for laying foundation for Dr. Gold as expert
4 witness in this matter be waived in lieu of entering his
5 resume into the record.

6 CHAIRPERSON NAHAI: I'll agree to that.

7 MR. GEST: May I address the motion?

8 CHAIRPERSON NAHAI: Mr. Gest, are you going to
9 question Dr. Gold's expertise in water quality matters?

10 MR. GEST: I'm not --

11 MS. EGOSCUE: And with all due respect, I kept
12 silent the entire day and did not object once to anything
13 that I heard. And I take objection -- I will not listen
14 to this, absolutely not. After I am finished when he has
15 his time, he may object.

16 CHAIRPERSON NAHAI: And that's the way we'll do
17 it.

18 MR. GEST: Okay.

19 CHAIRPERSON NAHAI: You can reserve your
20 objections and express them later.

21 MS. EGOSCUE: You can use your closing to object,
22 Mr. Gest.

23 Okay. But I assume this is --

24 CHAIRPERSON NAHAI: Please sit down.

25 MR. GEST: I will sit down.

1 CHAIRPERSON NAHAI: Thank you.

2 And please add to Ms. Egoscue's time.

3 MS. EGOSCUE: So Mark Gold's resume is entered
4 into the record.

5 Dr. Gold, what, if any, expert opinion do you
6 have regarding the water quality of the Santa Monica Bay
7 beaches?

8 DR. GOLD: This is an issue that I've worked on a
9 great deal in my career at Heal the Bay as well as in my
10 academic career. My dissertation was at UCLA, my
11 Doctorate in Environmental Science and Engineering from
12 UCLA was actually on this exact topic of beach water
13 quality, specifically fecal bacteria densities and human
14 interent viruses in urban runoff discharging to Santa
15 Monica Bay beaches, as well as an assessment of the health
16 risks on -- related to exposure to polluted runoff. I
17 also was one of the coauthors of the Santa Monica Bay
18 epidemiology study on people exposed to urban runoff
19 contaminated waters.

20 In addition to that, I was the creator of the
21 Heal the Bay California Beach Report Card, which grades
22 more than 450 beaches based on fecal bacteria densities.
23 And we do that weekly throughout the entire State of
24 California.

25 I've also helped author Assembly Bill 411, which

1 is the California Beach Water Quality Act, which set the
2 standards for beach water quality within the State of
3 California.

4 I also sit on numerous task forces, including the
5 Clean Beach Initiative Task Force, which has allocated
6 over \$100 million to clean up California's most polluted
7 beaches.

8 So those are just some of the areas in which I
9 feel I have expertise in this.

10 MS. EGOSCUE: What opinion do you have regarding
11 the water quality of the beaches?

12 DR. GOLD: Opinion is very broad. Focusing on
13 Santa Monica Bay beaches during dry weather, there's been
14 poor water -- wet weather is much worse in water quality
15 than dry weather. But there are a number of beaches
16 throughout Santa Monica Bay that have had chronically poor
17 water quality. Most of them are associated with a couple
18 of different sources of pollution:

19 Runoff coming from storm drains even during the
20 dry season is a major source of fecal bacteria to beaches.

21 Also creeks and streams is another major source.

22 And then a little bit more on the
23 non-point-source arena, large piers, like Santa Monica
24 Pier and Redondo Pier.

25 So those are some of the larger sources of fecal

1 bacteria to the surf zone where people are swimming at
2 beaches.

3 MS. EGOSCUE: Dr. Gold, what is an example of the
4 evidence that you rely on in formulating this opinion?

5 DR. GOLD: Probably one of the best examples, of
6 which there are many, would be Heal the Bay's Beach Report
7 Card. We've developed longstanding working relationships
8 with all the monitoring agencies that monitor fecal
9 bacteria throughout the State of California along the
10 coast, well more than 20 agencies. And we receive that
11 data from most of these agencies on at least a weekly
12 basis. That includes the City of Los Angeles and the
13 County Health Department and the Los Angeles County
14 Sanitation Districts and the City of Long Beach, which are
15 the four monitoring agencies that monitor beach water
16 quality along L.A. County's shores.

17 Anyway, so that's as good a source as any.

18 MS. EGOSCUE: Dr. Gold, will you please tell me
19 what it is that I just handed you.

20 DR. GOLD: You just handed me a copy of the
21 2005-2006 Heal the Bay Annual Beach Report Card, which
22 comes out the Wednesday before Memorial Day every year.
23 We've been doing that for 16 years now. And it grades
24 water quality on an A to F basis to make it user friendly
25 for the public. People understand that an F is poor water

1 quality, an A is good water quality.

2 MS. EGOSCUE: Dr. Gold, what is the source of
3 data for the report card?

4 DR. GOLD: The monitoring agencies, as I've
5 stated before, would be -- for Santa Monica Bay would be
6 City of Los Angeles, County Health Department and the Los
7 Angeles County Sanitation Districts.

8 MS. EGOSCUE: What conclusions have you in your
9 professional opinion drawn from the report card?

10 DR. GOLD: The conclusions are that, although
11 water quality during the dry weather months, the AB 411
12 months from April through October, is much better than one
13 sees during wet weather, there still are some chronically
14 polluted beaches along Santa Monica Bay. And there's been
15 some improvement in the last year or two based largely on
16 very significant funding from the State of California on a
17 wide variety of dry weather runoff diversions and runoff
18 treatment facility projects working closely with the
19 cities and the County. But, by and large, there's still a
20 good number of beaches that still have chronic beach water
21 quality problems.

22 MS. EGOSCUE: Dr. Gold, in response to the data
23 that you have looked at through the report card, is there
24 a distinction of open-ocean beaches versus runoff-impacted
25 beaches? Can you briefly explain that?

1 DR. GOLD: Yes. Very briefly, in our annual
2 beach report card we take a look at open-ocean beaches
3 versus beaches that are exposed to polluted runoff,
4 whether it's from a storm drain or from a river or creek.
5 And what we find is that the open-ocean beaches where
6 there are no visible sources of fecal bacteria pollution,
7 that the letter grades are extremely good.

8 So, for example, in 2003, 96 percent of beaches
9 looked at received an A grade on the beach report card
10 that were open-ocean beaches and only 4 percent got B's.
11 So no C's, D's or F's on open ocean.

12 Yet to give you for a comparison, runoff-impacted
13 beaches, only 75 percent of the beaches got A's, 13
14 percent B's, 7 percent C's, 3 percent D's, and 2 percent
15 F's.

16 So it demonstrates quite clearly that polluted
17 runoff coming from storm drains and coming from creeks is
18 a significant source of fecal bacteria that's causing
19 lower letter grades on the beach report card.

20 MS. EGOSCUE: Dr. Gold, were you in the hearing
21 room when you heard testimony from Mr. Lafferty of the
22 County regarding the evidence that bacteria exceedances
23 have gone down?

24 DR. GOLD: Yes, I was.

25 MS. EGOSCUE: And can you briefly explain to this

1 hearing and this body of your experience in that regard?

2 DR. GOLD: Yes. Last summer, for example, was a
3 very poor beach water quality year for Santa Monica Bay.
4 And obviously that was the first summer prior to the July
5 15th deadline.

6 And this year -- and, again, I think I referred
7 to this earlier -- largely due to a big program, the Clean
8 Beach Initiative, as well as the Santa Monica Bay
9 Restoration Commission's funding, those two major funding
10 sources, we've seen some major significant improvements at
11 a wide number of beaches along Santa Monica Bay. And so
12 there has been great progress in this area in the last
13 year.

14 MS. EGOSCUE: Dr. Gold, are there still
15 exceedances at beaches?

16 DR. GOLD: Yes. To date, since July 15th -- and
17 this is just looking at a subset of the more than 65
18 beaches that are monitored on a regular basis, so looking
19 at about 50 of those beaches, there's been around 23
20 beaches that have exceeded the water quality standard
21 since July 15th. Of those, there's 5 that have exceeded
22 more than ten times and 2 that have exceeded more than
23 five times, and then the remainder of the 23 have exceeded
24 only one or two times.

25 MS. EGOSCUE: Dr. Gold, I just handed you

1 something that I do not believe that this Board has seen.

2 Is that correct?

3 DR. GOLD: Yes, that's the case.

4 MS. EGOSCUE: It does not appear in the record to
5 date. What is this, Dr. Gold, that I just handed you?

6 DR. GOLD: This is a summary of beach water
7 quality data put together by Heal the Bay data management
8 staff on -- that puts together our beach report card on a
9 regular basis. And what it is is the number of
10 exceedances of the beach water quality standards that have
11 occurred on a monthly basis since late 2004 all the way
12 through August 2006. And it breaks it down by the city
13 and the county health department, and geometric mean as
14 well as single sample exceedances.

15 MS. EGOSCUE: Dr. Gold, did you personally review
16 the data that you see in front of you?

17 DR. GOLD: I reviewed this data, but I do not
18 review Heal the Bay's data for the beach report card on a
19 regular basis. That's the responsibility of other staff
20 members at Heal the Bay.

21 MS. EGOSCUE: So to reiterate, because you were a
22 little bit nonresponsive. Did you review this data that
23 you see in front of you?

24 DR. GOLD: Yes, I did.

25 MS. EGOSCUE: And this data in front of you

1 supports the testimony that we just heard regarding
2 exceedances; is that correct?

3 DR. GOLD: Yes, it does. And it also tells quite
4 a different story than I think was up there earlier on
5 where -- I think there were two or three graphs that were
6 put up by the County that gave a much bleaker compliance
7 picture on water quality. And from my best professional
8 judgment, the reason why that is the case is that it
9 appeared that Mr. Lafferty was looking at the data from
10 April through September rather than the actual compliance
11 date of July through today.

12 And what we've definitely seen is there's been a
13 significant improvement in water quality subsequent to the
14 July 15th deadline.

15 MS. EGOSCUE: By the Chair's leave, I would like
16 to offer this data into evidence. It's not part of the
17 record. And under the regulations, that part of this
18 hearing is to bring forth evidence for the Board that does
19 not appear in the record. I apologize. I have not
20 brought copies for the entire Board. I have copies for
21 the Chair and for the County.

22 CHAIRPERSON NAHAI: Well, I want to seek our
23 counsel's viewpoint on that.

24 SENIOR STAFF COUNSEL LEVY: You know what, we
25 don't really object to anything we've seen so far. The

1 County's exhibits 3, 4, 12 and 13 were not before us, and
2 we have no objections. We haven't reviewed that data, nor
3 have we reviewed the County's exhibits 12 and 13. And
4 we -- let it come in as far as we're concerned and give it
5 the weight it's entitled.

6 CHAIRPERSON NAHAI: All right. So in the
7 interests of consistency, since we let the County's
8 materials in, we'll let this in.

9 Okay. Let's proceed.

10 MS. EGOSCUE: Dr. Gold, what do you base your
11 opinion regarding storm drains and creeks as sources of
12 fecal indicator bacteria on Santa Monica Bay beaches, very
13 briefly?

14 DR. GOLD: There's a number of different things
15 on -- one of which I alluded to earlier, which was the
16 open ocean versus runoff comparison in the beach report
17 card. Again, some examples of open-ocean beaches locally,
18 being Venice and TopSail, Dockweiler, Hyperion and Santa
19 Monica Beach, a strand where you don't have a pollution
20 source. And so I already went through that data. I Won't
21 do that again.

22 Another thing is my doctoral dissertation at
23 UCLA, one of the things that I focused on working with the
24 City of Los Angeles and the L.A. County Sanitation
25 Districts under the auspices of the Santa Monica Bay

1 Restoration Project was the fate and transport of the
2 runoff plume in Santa Monica Bay waters. And during that
3 study we demonstrated quite clearly how fecal bacteria
4 densities dropped off from what you see in the storm
5 drain, what you see in the wave wash at point zero
6 directly in front of the storm drain, and how that drops
7 off both at distance from the storm drain as well as at
8 depth, meaning the difference between ankle depth and
9 chest depth.

10 In addition to that, one of our staff scientists,
11 who I think most of the Board knows, Dr. Mitzi Taggart,
12 also completed her dissertation working with SCCWRP on the
13 fate and transport of fecal bacteria from two different
14 storm drains to Santa Monica Bay, looking at a wide
15 variety of different factors that impacted fate and
16 transport.

17 But, again, both of those dissertations clearly
18 demonstrate that polluted runoff coming from storm drains,
19 coming from creeks and streams is a very significant and
20 major source of fecal bacteria at the beach.

21 MS. EGOSCUE: Dr. Gold, does this fecal bacteria
22 cause human illness, to the best of your professional
23 opinion?

24 DR. GOLD: Fecal bacteria can cause human
25 illness. But it's better known for being an indicator of

1 health risk. I think that's one thing that needs to be
2 explained a little bit to the Board.

3 If you look at epidemiological work including the
4 Santa Monica Bay epidemiology study, of which I was a
5 coauthor, and numerous other epidemiology studies, what
6 that does is it looks at what are the associations of a
7 wide variety of different factors with the incidence of
8 illness and is there a strong correlation or association
9 between any of those factors and illness?

10 And so in the case of fecal indicators, meaning
11 total coliform, fecal coliform and enterococcus bacteria,
12 yes, they can be the actual pathogens that cause illness.
13 For example, there are different strains of E. coli. And
14 I'm sure you've read about in the news, there was a
15 front-page article in the California section just last
16 week about a strain of E. coli posing a wide variety of
17 gastroenteritis and worse sorts of health risks in lettuce
18 from the Salinas Valley. I mean we've all heard about E.
19 coli outbreaks in a number of water amusement parks and
20 those sorts of things. But those are not necessarily the
21 pathogens of concern that are most likely to cause
22 gastroenteritis.

23 I know that was a long-winded explanation. But
24 the thing about indicators themselves is: Do they have an
25 association with health risk? Which in the case of

1 enterococcus has been proven time and time again in --
2 obviously it's supported by EPA and the World Health
3 Organization quite strongly, that association.

4 And then also: Are they easy to measure? Are
5 they found in high densities in sources that we'd be
6 concerned about, like human sewage, for example? Are they
7 quick to measure, easy to measure? Those sorts of issues
8 are important in deciding on what the most appropriate
9 indicator would be.

10 MS. EGOSCUE: Thank you.

11 Dr. Gold, when you were talking about the
12 epidemiological study, were you talking about the health
13 effects of swimming in ocean water contaminated by storm
14 drain runoff, of which you are a coauthor?

15 DR. GOLD: Yes, I was.

16 MS. EGOSCUE: Will you please let the record
17 reflect that I have handed Dr. Gold's dissertation, Mitzi
18 Taggart's dissertation and a copy of the article to
19 counsel for the County. And I would like to offer it
20 again for the record just to forestall any objections to
21 Dr. Gold's testimony.

22 You heard testimony earlier, Dr. Gold, from Mr.
23 Ken Schiff regarding Mission Bay. And very briefly, will
24 you please for the purposes of the Santa Monica Bay
25 beaches TMDL differentiate, if at all possible, from

1 Mission Bay?

2 DR. GOLD: Sure. I think for context purposes it
3 might be good though to talk about how the results from
4 the Santa Monica epidemiology study were pretty consistent
5 with epidemiology studies that had been performed
6 globally, and how Mission Bay was really different in
7 comparison to those.

8 And so there have been a number of different
9 papers that have been written, literature reviews. I'm
10 sure you're aware of that sort of journal article. One
11 done by Dr. Pruce for the World Health Organization;
12 another one done by Tim Wade, who's now at EPA, who is
13 actually one of the coauthors of the Mission Bay Study;
14 that really surveyed what are the health -- what are the
15 health risk issues associated with swimming in fecal
16 bacteria polluted waters. And they looked at -- I'm sort
17 of combining the results of both of these, but they looked
18 at over 30 studies, of which 22 had a lot of similarities
19 between them. And in those cases they found in the vast
20 majority of those studies that there was a strong
21 association between enterococcus densities and the
22 incidence of adverse health effects, and most notably
23 gastroenteritis or stomach flu. And that's really the
24 basis, I'm sure you know, for the EPA in 1986 criteria for
25 enterococcus as well as a very strong basis for the ocean

1 plan numbers as well as the AB 411 numbers.

2 Now, what was interesting about the Mission Bay
3 Study -- and I can say this because I had the fortune of
4 sitting on the technical advisory committee for the
5 Mission Bay Study. So I met with Ken and his colleagues
6 and Jack Colwell and Steve Weisberg and others for the
7 year plus leading up to the study, during the study, and
8 after the study as it was getting written.

9 What was very interesting about this study in
10 comparison to, say, what we're talking about here at Santa
11 Monica Bay is that Mission Bay is an enclosed bay. So
12 it's an enclosed beach. None of the beaches that we're
13 talking about here today for the Santa Monica Bay beach
14 bacteria TMDL are enclosed beaches. So that makes it an
15 unusual circumstance on its own. Why does that matter?
16 Because enclosed beaches have their own specific problems
17 with extremely poor water circulation. So if you -- you
18 can have a fecal bacteria pollution problem that can stay
19 in an enclosed bay for quite some time, weeks on end.
20 Whereas alongside -- a beach along something like Santa
21 Monica Bay, the wave action, the currents, all those other
22 different factors, would cause major changes in bacterial
23 densities over time.

24 The other thing that's interesting about Mission
25 Bay is that this study occurred very shortly after really

1 an incredible effort by the City of San Diego. And
2 Weston, who I think you heard from earlier, actually did a
3 lot of the work leading up to this and helped and really
4 was consulting for the City of San Diego in doing this --
5 was they spent millions and millions of dollars doing a
6 series of studies, source identification efforts, making
7 sure that the dry weather runoff diversions were working
8 properly, doing source investigation, literally walking
9 every potential storm drain along Mission Bay to try to
10 make sure that there were no nuisance flow discharges
11 during dry weather.

12 And so because of that, the Mission Bay was
13 really sort of one of a kind where you had fecal bac --
14 high fecal bacteria counts on occasion at those beaches,
15 but you didn't have a constant source of runoff pollution
16 going to those beaches. And so very, very interesting in
17 that regard. That's why you heard from Ken earlier how
18 you couldn't really extrapolate the results to other
19 beaches, because it's so unique in comparison to say what
20 we're talking about here today in Santa Monica Bay.

21 MS. EGOSCUE: Thank you.

22 I'm going to divert a bit and speak to funding
23 issues.

24 What, if any, source of funding for water quality
25 improvements are available for Santa Monica Bay?

1 DR. GOLD: The biggest source of funding, I'd
2 say, has been the Clean Beach Initiative, which has come
3 from a number of the different bond measures, 1340 and 50
4 in particular. Over a hundred million dollars, can you
5 believe it, have now been allocated to clean up
6 California's most polluted beaches and also to be used for
7 some of the studies that Ken Schiff was talking about that
8 SCCWRP's undertaking. So it's really been an incredible
9 program that's been in place for about the last five
10 years.

11 Another major source --

12 MS. EGOSCUE: Dr. Gold, what role, if any, do you
13 have regarding the Clean Beaches Initiative?

14 DR. GOLD: A couple of different roles. Heal the
15 Bay worked very, very closely with the original author of
16 the budget legislation, Assembly Member Fran Pavley, in
17 actually putting together the Clean Beach Initiative and
18 determining what the most polluted beaches were within the
19 State of California that were eligible for funding in the
20 first round.

21 And subsequent to that time, I've been a member
22 of the Clean Beach Task Force. And I've worked very, very
23 closely not only with the State Water Resources Control
24 Board on everything from what projects are eligible, to
25 review of projects, how to enhance projects, but I've

1 actually worked with numerous project applicants in how to
2 make those projects more effective in reducing fecal
3 bacteria densities on the beach. So a wide variety of
4 ways.

5 MS. EGOSCUE: Dr. Gold, I'm handing you a copy of
6 an e-mail sent from a Laura Peters, and it's sent to Kelly
7 O'Brien.

8 Can you please look at this e-mail for me please.

9 DR. GOLD: Sure.

10 MS. EGOSCUE: Who is Kelly O'Brien?

11 DR. GOLD: Kelly is the executive assistant at
12 Heal the Bay.

13 MS. EGOSCUE: Can you please tell me what this
14 e-mail says.

15 DR. GOLD: This is a summary table of the
16 projects within Los Angeles County that have been funded,
17 are in the process of getting funded by the State Water
18 Resources Control Board's Clean Beach Initiative.

19 MS. EGOSCUE: Is this a true and correct copy of
20 the e-mail?

21 DR. GOLD: Yes, it is.

22 MS. EGOSCUE: Please let the record reflect I'm
23 handing a copy of the e-mail to the County's attorney,
24 Dr. -- Mr. Gest. I keep calling him Doctor.

25 Dr. Gold, will you please tell me how much money

1 has been awarded in Los Angeles County from the Clean
2 Beaches Initiative according to this e-mail?

3 DR. GOLD: Over \$26.7 million from the state.

4 MS. EGOSCUE: Thank you.

5 Dr. Gold, what, if any, is another significant
6 source of funding to the Santa Monica Bay beaches for
7 water quality improvement?

8 DR. GOLD: Prior to the Clean Beach Initiative
9 another -- and ongoing still to this day -- another major
10 source of funding has been the Santa Monica Bay
11 Restoration Commission. And so they funded numerous
12 projects within the Santa Monica Bay -- along the Santa
13 Monica Bay watershed to clean up beach pollution. It's
14 very, very clear if you know that -- and I've been a
15 member of the Santa Monica Bay Commission, which used to
16 be the Santa Monica Bay Restoration Project, and I've been
17 a vice chair for quite some time. I was a founding member
18 way back in 1989 and attended ever since. So I've been
19 involved a long time.

20 MS. EGOSCUE: Thank you, Dr. Gold.

21 I'm handing you a document. Can you please
22 explain for this hearing what this document is?

23 DR. GOLD: It is a chart on the beach pollution
24 projects -- beach pollution abatement projects funded by
25 the Santa Monica Bay Restoration Commission.

1 MS. EGOSCUE: Dr. Gold, where did you procure
2 this chart?

3 DR. GOLD: Upon request from the acting executive
4 director of the Bay Commission, Guang-yu Wang.

5 MS. EGOSCUE: And can you please for this hearing
6 tell us how much money has been granted to Los Angeles
7 County projects for clean water improvements?

8 DR. GOLD: Yes, I can. This is -- just for a
9 further clarification, it's a combination of Bay
10 Commission and Prop A and Prop 50 funds awarded through
11 the Bay Commission. And in total is \$9.37 million.

12 MS. EGOSCUE: Let the record reflect that I have
13 given the counsel for the County a copy of this e-mail.

14 Dr. Gold, what is an example of a water quality
15 improvement funded by the approximately \$32 million in
16 agency grants from the Santa Monica Bay Restoration
17 Commission and the State Water Resources Control Board
18 Clean Beaches Initiative?

19 DR. GOLD: It's actually a total of \$35 million.
20 And the more -- the example is -- many of the diversions
21 that were talked about earlier along Santa Monica Bay,
22 that's probably the most classic example of a successful
23 structural best management practice to reduce beach
24 pollution.

25 MS. EGOSCUE: Dr. Gold, are you an engineer?

1 DR. GOLD: No, I'm not.

2 MS. EGOSCUE: What, if any, experience then in
3 your current professional role do you have regarding the
4 storm water diversions that have been funded?

5 DR. GOLD: In my role with the Bay Commission as
6 well as with the Clean Beach Task Force for the State
7 Water Resources Control Board, I reviewed numerous
8 different projects, applications over the years. And so,
9 although I'm not an engineer, I do have a background in
10 looking at those specific issues and have some engineering
11 background.

12 But I've also gone out there with numerous
13 cities and the County looking at diversions over the years
14 and looking at beach pollution problems over the years in
15 a collaborative effort to try to come up with solutions to
16 beach pollution problems.

17 MS. EGOSCUE: Dr. Gold, have the diversions to
18 the best of your knowledge been successful in cleaning
19 polluted runoff to Santa Monica Bay?

20 DR. GOLD: They are the most successful
21 structural best management practice that is out there.
22 There are some exceptions to the rule. And I think we've
23 heard a lot about that today from the County, which is
24 where you do see problems with dry weather runoff
25 diversions is that they've been mis-cited. You heard an

1 example I think today about the Herondo drain -- also
2 Ashland Avenue drain was another case -- where the
3 diversion itself was put within the inter-tidal zone,
4 which isn't going to make your runoff diversion work very
5 well.

6 And then there's been other examples where
7 the -- the pumps have been undersized or have been poorly
8 maintained. Because a lot of times you can imagine the
9 amount of trash, the various different debris that comes
10 down within a storm drain prior to the actual pumping into
11 the sewer system. And that can wreak havoc, as you can
12 imagine, on a pump. And so there's been a lot of pumping
13 problems as well.

14 And then the weir itself which keeps the dry
15 weather runoff contained and stored so that the pump can
16 act effectively. There's been a number of problems with
17 the weirs being undersized over the years. The most
18 notable recent example for that, I would say, would be the
19 Santa Monica Canyon storm drain, which again was funded by
20 the state. Unfortunately the weir was severely
21 undersized, the pump was poorly maintained and also
22 undersized. And it wasn't until just this last summer,
23 where really I think the county largely took over for the
24 city in sort of rebuilding that entire project and beach
25 water quality in front of Santa Monica Canyon, in July and

1 August has improved dramatically. There's still a small
2 issue, but it's certainly not one of the five most
3 polluted beaches in the State of California like it often
4 is.

5 MS. EGOSCUE: Were you in the room earlier when
6 we heard testimony regarding the Herondo drain?

7 DR. GOLD: Yes, I was.

8 MS. EGOSCUE: Are you aware of when the Herondo
9 diversion was first designed?

10 DR. GOLD: I don't recall the exact date. But I
11 do believe it was back in the mid-nineties.

12 MS. EGOSCUE: Do you have any experience with
13 this diversion?

14 DR. GOLD: We've had some experience. I think
15 there's probably been a great deal more experience from
16 the Santa Monica Baykeeper of note -- of late. But that
17 drain has had numerous situations over the years where
18 both the siting issue, source of pollution issue that was
19 overwhelming the diversion, a number of different things
20 that have caused extensive basically reworking of that
21 diversion to make it effective.

22 MS. EGOSCUE: Were you in the room early when we
23 heard testimony regarding the Santa Monica Pier?

24 DR. GOLD: Yes, I was.

25 MS. EGOSCUE: Do you have any experience in your

1 professional capacity with the Santa Monica Pier, in
2 particular the polluted runoff at the pier?

3 DR. GOLD: Extensive experience.

4 MS. EGOSCUE: Can you please discuss briefly for
5 this hearing what that experience has led you to in
6 conclusion?

7 DR. GOLD: Yes. Recently as part of a
8 cooperative effort working with the City of Santa Monica,
9 Heal the Bay worked with the city. And hopefully it will
10 be out very, very soon. It's in Craig Perkins' office.
11 It's too bad he had to leave early and unable to give his
12 testimony. But we did a study on what was the source of
13 the fecal bacteria problems at Santa Monica Pier, which is
14 one of the most polluted beaches -- it was actually number
15 5 last year statewide on our beach report card. And what
16 we found was very eye-opening experience for Santa Monica
17 Pier, in that we found that the source of fecal bacteria
18 pollution was definitely coming from onshore more than
19 offshore. And we found that -- we were lucky enough to
20 work with Professor Jenny Jay at UCLA, who did some sand
21 fecal bacteria work. You heard a lot about her on the
22 Manhattan Beach spill.

23 And based on that work and the work that we did
24 doing total coliform, E. coli and enterococcus samples
25 analysis, we were able to determine that the predominant

1 source of the fecal bacteria pollution problem in Santa
2 Monica Pier was actually the storm drain, contrary to
3 popular belief and also what you heard earlier from the
4 County. And there's this huge pond underneath the pier
5 that forms at the end of that storm drain.

6 The storm drain is supposed to be diverted into
7 the Santa Monica Urban Runoff Reuse Facility, the SMURRF.
8 And unfortunately there's problems with the storm drain
9 pipe as well as the diversion itself. And so you end up
10 having a leak which forms this pond. And every time you
11 have a high tide situation -- this also happens at Santa
12 Monica Canyon at Pico Canyon during certain times of the
13 year -- you get this large pond that forms. And that --
14 especially because it's in the dark, you don't have a
15 direct UV exposure, the sand can act as a sink for fecal
16 bacteria in that circumstance. You end up having really a
17 regrowth situation, big source of pollution right then and
18 there.

19 Bottom line is that that diversion, contrary to
20 what we all believed, is not effective because they have
21 decaying infrastructure problems within the storm drain
22 itself, which are really quite visible. I mean you can
23 just walk down there and see big holes in the drain
24 itself. So it was quite alarming to come to that
25 conclusion at the end of the study.

1 MS. EGOSCUE: The conclusion being that there was
2 an infrastructure breakdown?

3 DR. GOLD: Yes, that there was an infrastructure
4 breakdown, and the dry weather runoff diversion was not
5 functioning as designed because of the fact that the
6 infrastructure wasn't being properly operated and
7 maintained.

8 The key part of these diversions is, if they're
9 not properly sited, if they're not properly operated, if
10 they're not properly maintained, they're not going to do
11 the job of protecting public health and keeping fecal
12 bacteria densities below the water quality standards. And
13 that's absolutely critical.

14 So just putting in a diversion and walking away
15 from it isn't going to do the job. You have to make sure
16 it was sized properly and operated and maintained
17 properly.

18 MS. EGOSCUE: Dr. Gold, one final question.

19 Would you say that you have been a willing and
20 active participant in trying to solve the water quality
21 problems through your experience on the Clean Beaches
22 Initiative Task Force, the Santa Monica Bay Restoration
23 Commission Governing Board and as a scientist at Heal the
24 Bay?

25 DR. GOLD: Very much so. I think -- Heal the Bay

1 is very much of a problem-solving organization. And this
2 in particular is my biggest field of expertise and
3 something that I'm extremely passionate about. And so
4 really I've worked very, very closely with the city, with
5 the county, with numerous cities up and down the State of
6 California, in trying to solve beach pollution problems.
7 So, yes, it's definitely something that I do.

8 MS. EGOSCUE: Thank you, Dr. Gold.

9 I'm finished with this witness. I believe I have
10 about 20 minutes left. I'm going to make my objections
11 now to the direct testimony put on my the County. And
12 then any remaining time I would like to reserve, if there
13 is some, for our cross-examinations, if possible.

14 CHAIRPERSON NAHAI: Well, you're being allotted
15 30 minutes for cross-examination later on. So you don't
16 need to take up time with cross-examination at this point.

17 Is Dr. Gold your only witness?

18 MS. EGOSCUE: That's correct.

19 CHAIRPERSON NAHAI: Okay. Go ahead then and
20 state your objections for the record.

21 MS. EGOSCUE: Okay. The Environmental Groups as
22 formal parties object to the direct testimony of Dan
23 Lafferty of the County based on several grounds. Hearsay
24 was our primary -- is our primary objection. And I
25 apologize to the Chair and the hearing board, because it's

1 very difficult for me to recollect at this point.
2 Relevance was definitely an objection, in particular as it
3 applied to the indirect challenges of the bacteria TMDL
4 that we saw. It actually drove us to have to put our Dr.
5 Gold on the stand for other questions and other testimony
6 and evidence that we were not ready for, but felt that we
7 had to to supplement the record.

8 Dan Lafferty. Mr. Lafferty testified to
9 statements that were made by Don Wolfe and his
10 predecessor. We object to those statements on the grounds
11 of hearsay. Those are absolute statements offered for the
12 proof of those statements. Those we object to.

13 The implementation plans that were testified to
14 were, we feel, objectionable. They were irrelevant to
15 these proceedings. They were only applicable to dry
16 weather -- wet weather. Thank you for that catcall.

17 We also object to the testimony regarding other
18 municipalities' willingness to fund. How is this witness
19 qualified to testify about the state of mind of other
20 municipalities? There was no evidence offered to support
21 that contention.

22 We object to Exhibit No. 4.

23 There were numerous questions asked and answer.
24 That is an objection I'd like to have for the record.
25 Asked and answered.

1 CHAIRPERSON NAHAI: What was your objection to
2 Exhibit No. 4?

3 MS. EGOSCUE: Exhibit No. 4 in particular had
4 some estimates of costs for the County -- in-house costs.
5 And I did not feel there was sufficient evidence to back
6 up those estimates and place an exhibit for this Board to
7 review for this hearing.

8 I'm almost finished. I apologize.

9 We object to the testimony regarding the State of
10 California Coastal Commission. Not only are they not here
11 and able to present their version of the facts. It is
12 again hearsay without any kind of evidence to back it up.
13 I do not see any correspondence from the Coastal
14 Commission or anything to support that testimony.

15 We have a blanket objection to counsel testifying
16 during the direct examination.

17 We have a blanket objection to the witness, Mr.
18 Lafferty, testifying to parts of the County's that perhaps
19 he's not an expert in or has no direct knowledge in. We
20 feel that there was not enough foundation laid for that
21 testifying to economics, policy, other issues that we felt
22 that were objectionable in front of this hearing board.

23 Thank you. That's enough. I will not take any
24 more of your time.

25 CHAIRPERSON NAHAI: All right. Thank you very

1 much.

2 That then concludes the testimony and
3 presentation of the environmental organizations.

4 With that, we can move on to cross-examination.

5 I understand that the County wishes to conduct
6 cross-examination and that the environmental organizations
7 wish to conduct some cross-examination and that staff
8 wishes to cross-examine.

9 Michael, who goes first? Staff, I presume.

10 SENIOR STAFF COUNSEL LEVY: You're the Chair.

11 CHAIRPERSON NAHAI: Well, I think I will commence
12 with staff. Staff was the first to provide its
13 presentation. Then the county. Then the environmental
14 organizations.

15 SENIOR STAFF COUNSEL LEVY: Staff calls Dr. Mark
16 Gold.

17 CHAIRPERSON NAHAI: It will be 30 minutes each.

18 SENIOR STAFF COUNSEL LEVY: Dr. Gold, just a few
19 brief questions.

20 DR. GOLD: Sure.

21 SENIOR STAFF COUNSEL LEVY: When you arrived this
22 morning you swore an oath to tell the truth?

23 DR. GOLD: Yes, I did.

24 SENIOR STAFF COUNSEL LEVY: Did you review the
25 resume that Ms. Egoscue offered into evidence that was

1 received?

2 DR. GOLD: Yes, I did.

3 CHAIRPERSON NAHAI: Did you prepare it?

4 DR. GOLD: Yes, I did.

5 SENIOR STAFF COUNSEL LEVY: Is it true and
6 correct, to the best of your knowledge?

7 DR. GOLD: Yes.

8 That means he's going to find a typo.

9 (Laughter.)

10 SENIOR STAFF COUNSEL LEVY: Dr. Gold, the MS-4
11 Permit Order No. 01-182, page 2, paragraph 5, refers to a
12 study as a reference entitled "The Health Effects of
13 swimming in Ocean Water Contaminated by Storm Drain
14 Runoff," Haile, R.W., et al., 1999.

15 Who are the et al's on that study?

16 DR. GOLD: I don't recall off the top of my head,
17 but I was one of them. I was the third author on that.
18 John Witte was the secondary author. James Alamillo, Ron
19 Cressey, Charlie McGee. There's probably like four other
20 people.

21 SENIOR STAFF COUNSEL LEVY: Was that one of the
22 studies you were referring to in your direct testimony?

23 DR. GOLD: Yes, it was.

24 SENIOR STAFF COUNSEL LEVY: Dr. Gold, how many
25 times have you testified before this Board?

1 DR. GOLD: I ran out of fingers many years ago.

2 SENIOR STAFF COUNSEL LEVY: How many years have
3 you been testifying before this Board?

4 DR. GOLD: A full 20.

5 SENIOR STAFF COUNSEL LEVY: Thank you very much,
6 Dr. Gold.

7 Nothing further.

8 The staff calls Mr. Lafferty.

9 Mr. Lafferty, how many of the 27 major drains
10 identified in the TMDL still need to be diverted?

11 MR. LAFFERTY: May I refer to my Exhibit 4?

12 SENIOR STAFF COUNSEL LEVY: I'm referring to your
13 testimony.

14 MR. LAFFERTY: Yes. And that was based -- I
15 refreshed my memory with Exhibit 4 as I was testifying.

16 Would I be able to look at that exhibit again?

17 SENIOR STAFF COUNSEL LEVY: Do you know from your
18 own personal knowledge any of the contents of Exhibit 4?

19 MR. LAFFERTY: Yes, I do.

20 SENIOR STAFF COUNSEL LEVY: You know the
21 background of the substance of Exhibit 4?

22 MR. LAFFERTY: Yes.

23 SENIOR STAFF COUNSEL LEVY: Then let me ask you
24 this question, sir: How much of the total cost of
25 \$18,300,000 was provided -- that you contend the County

1 spend was provided by state grants?

2 MR. LAFFERTY: Thank you for bringing that to my
3 attention. I realized that on that table we didn't
4 differentiate -- that was total cost, and we didn't
5 differentiate the grant monies that we received.

6 In answer to your question, it was 6.8 million.
7 I had staff during lunch make the phone call to verify
8 that number.

9 SENIOR STAFF COUNSEL LEVY: Do you know that of
10 your personal knowledge or staff's personal knowledge?

11 MR. LAFFERTY: Staff's personal knowledge.

12 SENIOR STAFF COUNSEL LEVY: So that would be
13 hearsay, sir, would it not?

14 MR. LAFFERTY: I guess -- if you say so. I don't
15 know.

16 SENIOR STAFF COUNSEL LEVY: But you don't know
17 from your own personal knowledge how much of that was
18 funded by the County and how much of that was funded from
19 other sources?

20 MR. LAFFERTY: No, I didn't review those
21 documents personally.

22 SENIOR STAFF COUNSEL LEVY: Thank you.

23 Mr. Lafferty, does the County submit an annual
24 report to the Regional Board in a year -- every year?

25 MR. LAFFERTY: Yes, it does.

1 SENIOR STAFF COUNSEL LEVY: That's enough with
2 that. I'll get back to that in a moment.

3 You testified that no construction could happen
4 between May and October each year. Would you like to
5 explain why that's the case?

6 MR. LAFFERTY: If I said no construction takes
7 place, that was an over statement. What I said is that
8 we -- that we often times in dealing with the agencies who
9 are requesting -- who we are requesting approval, they put
10 restrictions on us that do not allow us to construct
11 during those months.

12 SENIOR STAFF COUNSEL LEVY: The counties put
13 restrictions on you?

14 MR. LAFFERTY: No, no. The agencies and entities
15 that we seek approval from in order to construct these
16 projects place those restrictions on us. You're talking
17 from May to October?

18 SENIOR STAFF COUNSEL LEVY: Um-hmm.

19 MR. LAFFERTY: Right.

20 SENIOR STAFF COUNSEL LEVY: And what's the basis
21 of those restrictions?

22 MR. LAFFERTY: They vary. Sometimes there's a
23 special event that may be taking place and they don't want
24 us to interrupt that event. There are traffic
25 considerations in terms of beachgoers that they don't want

1 to have interrupted.

2 Also, just a general feeling that where we locate
3 these projects, they can have an adverse impact on
4 parking, for example. And they don't want to have that
5 impact occur during the high usage months for the beach.

6 SENIOR STAFF COUNSEL LEVY: Without waiving the
7 objections that have been raised to Exhibit 4, I would
8 like you to look at it, if you please.

9 MR. LAFFERTY: Okay. Just a minute.

10 Yes.

11 SENIOR STAFF COUNSEL LEVY: How many of the 27
12 major drains identified in the TMDL still need to be
13 diverted?

14 MR. LAFFERTY: There are five.

15 SENIOR STAFF COUNSEL LEVY: How many of these are
16 county-owned?

17 MR. LAFFERTY: The County owns all of those
18 drains.

19 SENIOR STAFF COUNSEL LEVY: At what stage in the
20 planning, design and construction are each of those?

21 MR. LAFFERTY: All of them have completed final
22 design. Some of them have begun construction. Others
23 have been advertised. Others have been awarded, but
24 construction has not yet commenced.

25 SENIOR STAFF COUNSEL LEVY: Isn't it true that

1 the County supported the TMDL's -- the TMDL's ban on dry
2 weather summer discharges to Santa Monica Bay?

3 MR. LAFFERTY: I'm sorry. I don't understand --
4 did we --

5 SENIOR STAFF COUNSEL LEVY: Did the County
6 participate in the TMDL proceedings?

7 MR. LAFFERTY: Yes, we did.

8 SENIOR STAFF COUNSEL LEVY: Did the County
9 support the summer ban during dry weather discharges to
10 the Santa Monica Bay?

11 MR. LAFFERTY: We felt that the discharge
12 prohibition of zero exceedance days was excessive and not
13 supported by the data. But we did recognize that it
14 needed to be more stringent than wet weather.

15 SENIOR STAFF COUNSEL LEVY: Mr. Lafferty, I'm
16 showing you a document on the County of Los Angeles
17 Department of Public Works letterhead dated August 30th,
18 2002. There's a paragraph highlighted on page 2 of that,
19 right under 1. The heading says, "Support for No
20 Exceedance Standard During Summer Dry Weather."

21 Would you kindly read that paragraph?

22 MR. LAFFERTY: Sure. "The LACDPW" -- Los Angeles
23 County Department of Public Works -- "supports the
24 supports the proposed standard of no exceedances of the
25 bacteria standard during summer dry weather, a period

1 extending for seven months of the year. Given the
2 intensive use of the Santa Monica Bay beaches during the
3 summer" --

4 SENIOR STAFF COUNSEL LEVY: Kindly slow down for
5 our court reporter, please.

6 MR. LAFFERTY: Oh, I'm sorry.

7 -- "the LACDPW believes that the no-exceedance
8 standard is an appropriate seasonal standard. Our
9 comments are primarily directed to" -- do you want me to
10 continue with the paragraph?

11 SENIOR STAFF COUNSEL LEVY: Sure.

12 MR. LAFFERTY: -- "the implementation of the TMDL
13 and especially the timing required to achieve compliance
14 with the summer, the dry weather standards."

15 SENIOR STAFF COUNSEL LEVY: Thank you very much.

16 Mr. Lafferty, are you familiar with the County's
17 storm water permits for the last -- oh, since 1990?

18 MR. LAFFERTY: I became involved with the storm
19 water permits beginning in 2000 and -- I believe it was
20 2001.

21 SENIOR STAFF COUNSEL LEVY: Okay. Thank you.
22 Nothing further of you, Mr. Lafferty.

23 Staff calls Renee DeShazo.

24 Ms. DeShazo, are you familiar with the bacteria
25 standards in the Basin Plan?

1 MS. DeSHAZO: Yes, I am.

2 SENIOR STAFF COUNSEL LEVY: How are those
3 standards expressed?

4 MS. DeSHAZO: Those standards are expressed as a
5 multiple set of fecal indicator bacteria. And they are
6 density-based standards both for single sample and
7 geometric mean limits.

8 SENIOR STAFF COUNSEL LEVY: Do they distinguish
9 between human and animal pathogenic viruses?

10 MS. DeSHAZO: No, they do not.

11 SENIOR STAFF COUNSEL LEVY: Nothing further of
12 Ms. DeShazo.

13 Staff calls Xavier Swamikannu.

14 Dr. Swamikannu, please explain the Board's IC/ID
15 program.

16 DR. SWAMIKANNU: The illicit connection/illicit
17 discharge elimination program is an essential element of
18 the storm water provision requirements from storm water
19 permit. They have been placed in the permit since 1990.

20 In the 1990 permit the County was -- County and
21 other permittees were required to develop a program to
22 eliminate unauthorized non-storm-water discharges to the
23 MS-4. The federal program calls for is cleaning up our
24 old pipes and then testing of any waters that close --
25 that protocol is a guidance documents from the U.S. EPA

1 for that.

2 And during the first five years progress was very
3 slow. We hadn't done our system entirely.

4 So in 1996 we basically required the county to
5 develop a model IC/ID program so all permittees could use.
6 That describes the screening methods that they were to
7 follow. And so each permittee is required to have a
8 program to eliminate unauthorized discharges to the
9 system.

10 The issue in those days was we have a very
11 extensive system, we cannot screen all of them. And the
12 program at that point basically depended on the reactive
13 program. That is, if somebody complains that there is a
14 discharge, we would go out. So we never really completed
15 screening the system.

16 In 2001, as part of a settlement agreement
17 between the County and one of the Environmental Groups,
18 that program was augmented to screen the system in
19 different stages. I haven't looked at the annual reports
20 to determine if that was complete. But until 2001, the
21 program was not aggressive. After that, it has been
22 measured.

23 Our review of the MS-4 annual reports in the last
24 two years basically says where they've identified
25 problems, we have been able to solve them. But I'm not

1 certain we have screened the entire Santa Monica Bay
2 watershed as required under federal storm water
3 regulations and guidelines.

4 SENIOR STAFF COUNSEL LEVY: And is that the basis
5 for finding 31C, which says despite the fact that more
6 than a decade and a half has passed since the MS-4
7 permittees were required to eliminate illicit connections/
8 discharges into the MS-4, few permittees have adopted an
9 aggressive approach to eliminating IC/ID's, and their
10 measured approach has not eliminated standards violations
11 at the beaches?

12 DR. SWAMIKANNU: That is in fact the text behind
13 that finding.

14 SENIOR STAFF COUNSEL LEVY: Dr. Swamikannu, when
15 did the dry weather prohibition first go into the storm
16 water permit?

17 DR. SWAMIKANNU: The dry weather prohibition went
18 into the permit when we first drafted it in 1990. As I
19 mentioned during my presentation today, that two parts to
20 the regulations from municipal storm water's -- municipal
21 separate storm sewer systems first is to prohibit the
22 discharge of unauthorized non-storm water to the system
23 effectively prohibiting, is their language, and then to
24 reduce pollutants in storm water to the maximum extent
25 practicable. So those two elements have been there since

1 1990.

2 What we have not -- and progressively we have
3 expanded and prescribed a more directed approach to
4 addressing that problem. What we are doing today is
5 giving it much more objectivity than that that existing in
6 1990, 1996 and 2001. Because we have identified a
7 definite problem with human health at Santa Monica Bay
8 beaches.

9 SENIOR STAFF COUNSEL LEVY: I'm sorry, I missed
10 your comment there for a moment. But if this is
11 duplicate, please bear with me.

12 When was the first time that we mandated a study
13 that examined diversions? Did you cover that?

14 DR. SWAMIKANNU: I did not. We mandated a study
15 to look at diversions in 2001. The 1996 permit had
16 language requiring permittees to consider diversions.
17 City of L.A. did conduct a diversion study around late '98
18 perhaps. In 2001 we basically directed the County to look
19 at it throughout the county system. And that study was
20 completed I think around 2002, 2003.

21 SENIOR STAFF COUNSEL LEVY: Is that study located
22 anywhere in the public domain?

23 DR. SWAMIKANNU: The county study is located on
24 the County's website. We also have a hard copy in the
25 office.

1 SENIOR STAFF COUNSEL LEVY: Dr. Swamikannu,
2 you've referred to the 1996 permit. I'd like to show you
3 page 41, paragraph Roman 4A. And there's an underlying
4 sentence in that provision. I'd like you to read that
5 please.

6 DR. SWAMIKANNU: This is the 1996 permit. And I
7 read from the public agency model program.

8 "The model program shall include a discussion of
9 the ongoing investigation of the feasibility of dry
10 weather flow diversion from the MS-4 to municipal waste
11 water treatment plants where appropriate. The model shall
12 be submitted to the Regional Board for approval."

13 SENIOR STAFF COUNSEL LEVY: Dr. Swamikannu, what
14 is your title at the Regional Board?

15 DR. SWAMIKANNU: I'm Chief of the Storm Water
16 Permitting Program.

17 SENIOR STAFF COUNSEL LEVY: And what are your
18 responsibilities?

19 DR. SWAMIKANNU: My responsibilities are
20 basically to craft or lead a team of staff who craft storm
21 water permits in response to the 1987 amendments to the
22 Clean Water Act which directed storm water to be addressed
23 through the NPDES permitting program.

24 SENIOR STAFF COUNSEL LEVY: Mr. Lafferty referred
25 to an annual report. Can you tell us what that is please?

1 DR. SWAMIKANNU: The municipal storm water
2 permits under federal regulations require an annual report
3 to be submitted to the agency during a certain month each
4 year. I think it's October 15th. And so each year we get
5 a report on progress that the cities and the permittees
6 identified that they made towards compliance of each of
7 the provisions within the municipal storm water permit.

8 SENIOR STAFF COUNSEL LEVY: The County made an
9 allegation that the Board has not been communicating with
10 the County about compliance with the dry weather
11 provisions.

12 Does the annual reports of the County -- do any
13 of them refer to their difficulty in complying with the
14 dry weather TMDL provisions?

15 DR. SWAMIKANNU: The question is: Do any of the
16 reports identify difficulties that the County had with
17 complying with the TMDL?

18 Since I haven't reviewed the annual report in
19 recent months, I cannot address that issue. But I did
20 have a staff member review the annual reports for the last
21 two years. The staff member was Ivar Ridgeway. he's not
22 here today. But he reviewed those annual reports and
23 basically said that it still was a measured program, not
24 aggressive. But no way did he identify that a
25 municipality had indicated that they had difficulty

1 complying with the TMDL wasteload allocation for bacteria.

2 SENIOR STAFF COUNSEL LEVY: Are those annual
3 reports in the record?

4 DR. SWAMIKANNU: The annual reports are in the
5 record.

6 SENIOR STAFF COUNSEL LEVY: Dr. Swamikannu, just
7 a couple more questions. One is, are there any direct
8 discharges from the MS-4 to Topanga Beach?

9 DR. SWAMIKANNU: I'll defer that comment to
10 Renee, who's more familiar with the TMDL indirect
11 discharges.

12 SENIOR STAFF COUNSEL LEVY: Okay. One more
13 question. Mr. Tahir from Inglewood -- the City of
14 Inglewood stated that dry weather diversions are BACT or
15 BAT, the best available technology.

16 What does that mean in storm water parlance?

17 DR. SWAMIKANNU: The BAT, or best available
18 technology, standard comes from the traditional National
19 Pollutant Discharge Elimination System Program. It's a
20 technology standard that EPA says can be achieved. It is
21 different from a water-quality-based standard. In EPA's
22 analysis of the maximum extent practicable standard within
23 the storm water program, EPA in its policy papers has
24 indicated that MEP and BAT are equivalent. So what --
25 imagine Mr. Tahir was saying is that dry weather flow

1 diversion can be considered BAT. That is, technology
2 that's achievable, feasible and can be implemented.

3 SENIOR STAFF COUNSEL LEVY: So assuming the MEP
4 standard applied to dry weather diversions. Mr. Tahir
5 anyway has stated that dry weather diversions are
6 consistent with MEP?

7 DR. SWAMIKANNU: Yes, that is the inference.

8 SENIOR STAFF COUNSEL LEVY: Staff would like to
9 recall Renee DeShazo.

10 Ms. DeShazo, are there any direct discharges from
11 the MS-4 to Topanga Beach?

12 MS. DeSHAZO: I would respond to that by saying
13 that we issued a 13267 letter to the County in the last
14 several weeks. And their response to us was that there
15 were no direct discharges. I believe that to be correct.
16 But you may want to ask that directly of Mr. Lafferty.

17 SENIOR STAFF COUNSEL LEVY: We'll do that.

18 Staff would like to recall Mr. Lafferty.

19 Mr. Lafferty, are there any direct discharges
20 from the MS-4 system to Topanga Beach?

21 MR. LAFFERTY: There are none that I'm aware of,
22 either county owned or city owned.

23 SENIOR STAFF COUNSEL LEVY: Thank you very much,
24 sir.

25 Staff would call Jonathan Bishop.

1 Mr. Bishop, please tell for the record your
2 title.

3 EXECUTIVE OFFICER BISHOP: My name is Jon.
4 Bishop. I'm the Executive Officer for the Los Angeles
5 Regional Water Quality Control Board.

6 SENIOR STAFF COUNSEL LEVY: Mr. Bishop, the
7 County alleged that the Regional Board never came to them
8 to discuss implementation and their difficulties in
9 complying with the July 15th, 2006, TMDL deadline.

10 Do you have meetings with the county?

11 EXECUTIVE OFFICER BISHOP: Yes, we meet.

12 SENIOR STAFF COUNSEL LEVY: How often?

13 It's not -- there isn't a regular scheduled
14 meeting, but we meet fairly often, at least five or six
15 times a year.

16 SENIOR STAFF COUNSEL LEVY: Prior to May of
17 '06 -- of 2006, May of this year -- and I'll remind you
18 that this item was first noticed in May of this year --
19 prior to May of this year, how often to the best of your
20 recollection did the subject of the County's ability to
21 meet the July 15th, 2006, deadline come up?

22 EXECUTIVE OFFICER BISHOP: I can't recall it ever
23 coming up.

24 SENIOR STAFF COUNSEL LEVY: Staff rests.

25 CHAIRPERSON NAHAI: Thank you.

1 All right. We'll go on to hear from the County,
2 cross-examination for 30 minutes.

3 Now, to the extent that you wish to take part of
4 your 30 minutes to continue your case in chief, I'll allow
5 that. But I will also then allow brief cross by the other
6 parties if they deem it necessary, out of fairness,
7 because they have not heard the testimony that you're
8 about to present in chief.

9 MR. GEST: That's fine. And as I understand, I
10 can also use some of my closing argument time to examine
11 witnesses at this point?

12 CHAIRPERSON NAHAI: No, because there will then
13 be -- we've discussed this earlier.

14 MR. GEST: Well, if I use it at this time, then
15 they would have the opportunity to hear it.

16 CHAIRPERSON NAHAI: No, go ahead and use your 30
17 minutes to finish your case in chief and to cross-examine.

18 MR. GEST: Thank you.

19 I'd like to call Diego Cadena.

20 Please state your name for the record.

21 MR. CADENA: Diego Cadena.

22 MR. GEST: And who are you employed by?

23 MR. CADENA: I'm a deputy director at Los Angeles
24 County Department of Public Works.

25 MR. GEST: And are you familiar with the County's

1 Illicit Connection and Illicit Discharge Program?

2 MR. CADENA: Yes, I am.

3 MR. GEST: And how are you familiar?

4 MR. CADENA: I used to be the -- prior to the
5 current assignment and my promotion to deputy, I was the
6 Assistant Deputy Director over Flood Maintenance Division.
7 And our division conducts the -- inspections.

8 MR. GEST: And could you describe for the record
9 what the County's Illicit Connection and Illicit Discharge
10 Program involves?

11 MR. CADENA: It involves inspection of our entire
12 land -- system. I believe Dan Lafferty talked about it
13 before. We inspect all our open channels on an annual
14 basis. And the rest of the system, depending on its size,
15 we inspect it every three years or every six and we
16 continue the cycle.

17 MR. GEST: And how many people are -- how many
18 employees are devoted to the Illicit discharge and Illicit
19 Connection Program?

20 MR. CADENA: We have one complete underground
21 crew at each one of our three areas. And each underground
22 crew consists of about seven people. And in order to meet
23 the deadline we sometimes supplement, bring extra
24 personnel to make sure we stayed within the schedule.

25 MR. GEST: And this program has been in place for

1 many years?

2 MR. CADENA: Yes, it has, since the original
3 permit.

4 MR. GEST: I have no further questions.

5 At this time I'd like to call Mr. Lafferty back.

6 Mr. Lafferty, please turn to Exhibit 4.

7 And are you responsible for the staff who keep
8 track of this data?

9 MR. LAFFERTY: I'm responsible for the budgetary
10 information, but not -- I do not directly oversee the
11 staff who prepared this particular report.

12 MR. LAFFERTY: Okay. But this -- the things
13 that's in this report falls within the responsibilities of
14 your division?

15 MR. LAFFERTY: Yes.

16 MR. GEST: And this was prepared under your
17 supervision?

18 MR. LAFFERTY: Correct.

19 MR. GEST: And you reviewed it after it was
20 prepared?

21 MR. LAFFERTY: Yes, I did.

22 MR. GEST: And you found that it was correct?

23 MR. LAFFERTY: At that time, yes.

24 MR. GEST: Let me ask you about Surfrider Beach.
25 During public comment there was comments about

1 Surfrider Beach and concerns. Is Surfrider Beach a
2 subject of the Santa Monica Bay bacteria TMDL that we're
3 here addressing today?

4 MR. LAFFERTY: Surfrider -- there are three
5 compliance points that are off of Surfrider Beach that are
6 contained within the coordinated trial and monitoring
7 program.

8 MR. GEST: And are they part of the Santa Monica
9 Bay beaches TMDL or are they part of the Malibu Creek?

10 MR. LAFFERTY: Right know those three points are
11 included in the Santa Monica Bay beaches bacteria TMDL.

12 MR. GEST: Are they impacted by the Malibu Creek?

13 MR. LAFFERTY: Yes, those three are directly
14 impacted.

15 MR. GEST: Looking at County Exhibit 2, which are
16 the three that relate to Surfrider Beach?

17 MR. LAFFERTY: Those are labeled SMB-MC-1, 2, and
18 3.

19 MR. GEST: And when it's labeled MC, does that
20 stand for Malibu Creek?

21 MR. LAFFERTY: Yes, it does.

22 MR. GEST: And so that would be -- they would
23 actually be the subject of the Malibu Creek TMDL; is that
24 right?

25 MR. LAFFERTY: At this point that has not been

1 taken into account. Right now they are part of the Santa
2 Monica Bay beaches bacteria only.

3 MR. GEST: Right. But they are receiving the
4 discharge from Malibu Creek?

5 MR. LAFFERTY: That's correct.

6 MR. GEST: And this is part of the issue that the
7 County has raised concerning the interrelationship between
8 the Malibu Creek TMDL and the Santa Monica Bay beaches
9 TMDL?

10 MR. LAFFERTY: That's correct.

11 MR. GEST: I have no further questions of Mr.
12 Lafferty.

13 At this time, I would like to call Larissa Aumand
14 back to the stand please.

15 Ms. Aumand, there's been reference to a study,
16 Regional Public Health Cost Estimates of Contaminated
17 Coastal Waters, a case study of gastroenteritis at
18 southern California beaches by Suzanne Gibbon and Linwood
19 Pendleton.

20 Are you familiar with that?

21 MS. AUMAND: Yes, I am.

22 MR. GEST: Were there assumptions made by the
23 authors of that article that bear on its ability to
24 predict health risks and cost from those health risks at
25 Santa Monica Bay beaches today?

1 MS. AUMAND: I know both you and Dr. Pendleton
2 have already discussed that the -- some of the data was
3 from the Year 2000. There is beach visitor data that was
4 from the Year 2000. There is water quality monitoring
5 data that was -- most of the 28 beaches were sampled.
6 There were a great number of samples that were taken at
7 those beaches. But there was -- for the remainder of
8 days -- see if I can explain this. The remainder of days
9 that were not actually sampled for, a model was used and
10 predictions were made for what those water quality
11 parameters would be for the days that had no sampling
12 data. So that was a model. It was an estimate. He does
13 claim that in his paper.

14 Also, for the number of gastrointestinal
15 illnesses predicted, there are two papers that are
16 referenced -- cited in the paper. And the data used for
17 that particular aspect was based on two models with data
18 that was taken from beaches on the East Coast, I believe
19 it was New York and other areas, and in the United
20 Kingdom. And the data that they used was between 15 and
21 33 years old. The data from England was actually used
22 before they even instituted the equivalent of our Clean
23 Water Act here. So it's -- that's it.

24 MR. GEST: The fact that they were using two old
25 epidemiological models, how does that bear on the ability

1 to draw conclusions about current conditions?

2 MS. AUMAND: Not being an epidemiologist or a --
3 well, an epidemiologist, my -- I would just like to say
4 that the data is 33 years old -- between 15 and 33 years
5 old and it's not from southern California beaches. So
6 without making reference as to my opinion on that, I just
7 wanted to draw that out.

8 MR. GEST: And the fact that the water quality
9 was from the Year 2000, if the water quality in the Year
10 2006 is different than 2000, how does that affect the
11 conclusions --

12 MS. AUMAND: Of course it would be different.
13 But I'm not familiar with how it's different from 2000 to
14 present. I would assume it would be somewhat different,
15 but I don't know.

16 MR. GEST: But if it different, then that bears
17 on the ability to draw a conclusion?

18 MS. AUMAND: That's correct.

19 MR. GEST: I have no further questions of this
20 witness.

21 I'd like to call Renee DeShazo at this time.

22 CHAIRPERSON NAHAI: This is for cross now, or is
23 this still -- are you still calling her as a witness in
24 chief?

25 MS. DeSHAZO: I'm calling her as a witness in my

1 case -- the County's case. I understand that she has been
2 designated the person most knowledgeable about the Santa
3 Monica Bay beaches bacteria TMDL. If that's not correct,
4 I'd like to be advised -- so advised.

5 CHAIRPERSON NAHAI: Go ahead and pose your
6 questions.

7 MR. GEST: Are you the Board member who's most
8 knowledgeable about the Santa Monica Bay beaches bacteria
9 TMDL record and proceedings?

10 MS. DeSHAZO: I am the staff member at the
11 Regional Board that's most familiar with that TMDL, yes.

12 MR. GEST: And when that TMDL was adopted, was
13 any consideration given as to whether compliance could be
14 achieved while being consistent with the maximum extent
15 practical standard?

16 MS. DeSHAZO: I don't know if I can answer that
17 in terms of the reference to the MEP standard. But we
18 certainly did take into consideration the three-year
19 compliance schedule and whether that was achievable.

20 When we set that schedule, we took into
21 consideration several things. One of course, we were
22 cognizant of the fact that there already was, as Mr.
23 Lafferty pointed out, a very aggressive low flow diversion
24 program that had already been started prior to the TMDL's
25 development the three years prior to that. And that is

1 also true for the City of Los Angeles.

2 So we took into account the fact that there was
3 already a program underway, as well as the fact that we
4 were talking about the summer dry weather TMDL. And
5 knowing that the public health risks were the greatest
6 during summer dry weather, of course we wanted to be
7 aggressive in setting the compliance date for that.

8 MR. GEST: Now let me ask you this question. Are
9 you familiar with the term "maximum extent practicable"?

10 MS. DeSHAZO: Yes, I am. But I am not in the
11 Storm Water Permitting Unit. So it's better asked of Dr.
12 Swamikannu.

13 MR. GEST: What is your understanding of what
14 maximum extent practicable means? What's it mean --

15 MS. DeSHAZO: I think that that is better left to
16 be answered by Dr. Swamikannu.

17 MR. GEST: And it's true that when the Regional
18 Board adopted a TMDL, the TMDL is adopted without
19 reference to the MEP standard; is that correct?

20 MS. DeSHAZO: That's correct.

21 MR. GEST: And that was true about this TMDL?

22 MS. DeSHAZO: Yes.

23 MR. GEST: You testified that you took into
24 consideration what could be done when you were setting the
25 three-year time period. Did you speak with anyone or

1 anyone from your staff speak with anyone from the County
2 with regard to whether the three-year period could be met?

3 MS. DeSHAZO: Well, we -- I would like to answer
4 that by saying that we had numerous meetings with the
5 responsible agencies prior to setting the TMDL and
6 bringing it before the Board for its consideration. We
7 started back in 1999 discussions on the development of
8 this TMDL. We formed a technical advisory committee as
9 well as meeting with different groups from a policy level
10 standpoint, including the Executive Advisory Committee as
11 well as the Bay Watershed Council.

12 MR. GEST: Excuse me. And I don't want to cut
13 you off. But my question was: Did you meet with anyone
14 from the County as opposed to a long --

15 MS. DeSHAZO: Yes, we did, because in all of
16 those groups there are members from the County Department
17 of Public Works that are representative on those groups.

18 MR. GEST: And you understood that the County was
19 advising you that the three-year period was not a
20 realistic period?

21 MS. DeSHAZO: We did receive that comment from
22 them in the consideration of the TMDL.

23 MR. GEST: I have no further questions.

24 At this time, I'd like to call Dr. Swamikannu.

25 Dr. Swamikannu, is it correct that the main

1 focus -- that the focus of this permit amendment is
2 non-storm water?

3 DR. SWAMIKANNU: The focus of this amendment is
4 to incorporate the summer dry weather wasteload allocation
5 that was adopted by the Board into the municipal storm
6 water permit.

7 MR. GEST: But you had -- when you were
8 testifying you said that the -- what is being addressed is
9 non-storm-water flows, and you distinguished storm water
10 from non-storm water, is that correct?

11 DR. SWAMIKANNU: Summer dry weather flow is
12 non-storm water.

13 MR. GEST: All right. So you are focused on
14 non-storm water?

15 DR. SWAMIKANNU: Yes.

16 MR. GEST: Can I ask the Board members to look at
17 the proposed language, and can we put that before you?
18 And, Dr. Swamikannu, I'll put that before you also.

19 And in particular I would like to bring your
20 attention to proposed language for Part 1B.

21 BOARD MEMBER MINDLIN: Reference to a page now.

22 EXECUTIVE OFFICER BISHOP: Yeah, I'll find it for
23 you and let you know.

24 SENIOR STAFF COUNSEL LEVY: It's 15-507.

25 EXECUTIVE OFFICER BISHOP: On the yellow.

1 SENIOR STAFF COUNSEL LEVY: In the yellow change
2 sheets, 15-507.

3 MR. GEST: Is there a copy that we can have the
4 witness use?

5 EXECUTIVE OFFICER BISHOP: Yes, of course.

6 MR. GEST: Now, proposed -- do you have that
7 before you, sir?

8 DR. SWAMIKANNU: Yes.

9 MR. GEST: Okay. Proposed Part 1.B says,
10 "Discharges of summer dry weather."

11 DR. SWAMIKANNU: Yes.

12 MR. GEST: Since this is directed solely to
13 non-storm water, do you have any objection to this part
14 saying discharges of non-storm water dry weather?

15 DR. SWAMIKANNU: Repeat that question.

16 MR. GEST: Because the focus of this amendment is
17 directed solely to non-storm water, do you have any
18 objection to Part 1.B reading "discharges of non-storm
19 water dry weather"?

20 SENIOR STAFF COUNSEL LEVY: Pardon me, Mr. Chair.
21 I'm sorry. I have to interpose an objection. My client
22 is being asked for a legal conclusion. And I don't
23 believe it's an appropriate question to ask Dr. Swamikannu
24 to answer. I apologize for objecting.

25 CHAIRPERSON NAHAI: Yes. But we've decided we're

1 not going to do that. And --

2 SENIOR STAFF COUNSEL LEVY: Then may I at least
3 caution Dr. Swamikannu not to express a legal opinion in
4 his response.

5 CHAIRPERSON NAHAI: I'll allow Dr. Swamikannu to
6 respond as he sees. And then you may cross later on if
7 you wish and you may interpose your objections later on.
8 But I want to make sure that we're very fair to all
9 parties and we treat everybody evenly here.

10 DR. SWAMIKANNU: I will respond from a technical
11 perspective and not a legal one. The purpose of the
12 proposal or proposition before you is to incorporate the
13 wasteload allocation for bacteria. The term that lies in
14 the wasteload allocation is summer dry weather flow. And
15 so that's the exact language that's been transferred here.
16 And that term is also in definitions.

17 MR. GEST: But, Mr. Swamikannu, you made a
18 specific point that this was addressed to non-storm water.
19 When you said that, were you using that in the term that
20 the word "storm water" is used as defined under the
21 permit?

22 DR. SWAMIKANNU: There are two different
23 objectives here.

24 MR. GEST: No. May I ask the witness to answer
25 my question, because I only have a limited amount of time.

1 DR. SWAMIKANNU: So go ahead. Repeat please.

2 MR. GEST: When you testified that the purpose of
3 this amendment was to address non-storm water, and you
4 made a very specific point of that, were you using the
5 term "storm water" as it's defined in the permit?

6 DR. SWAMIKANNU: Storm water is federally defined
7 in federal regulations, and that's the definition I was
8 using.

9 MR. GEST: Okay. So since we're dealing with
10 non-storm water, and that's the focus of it, do you have
11 any objection to Part 1.B as to what you're attempting to
12 accomplish to say "discharges of non-storm water dry
13 weather"?

14 DR. SWAMIKANNU: Discharges of non-storm water
15 summer dry weather?

16 MR. GEST: That's right.

17 DR. SWAMIKANNU: To me that's redundant.

18 MR. GEST: Okay. So then you have no objection
19 to saying that?

20 CHAIRPERSON NAHAI: No, I think what he's saying,
21 to help you out, is that the term "summer dry weather" is
22 a defined term.

23 MR. GEST: But the summer dry weather is not
24 defined to be non-storm water.

25 DR. SWAMIKANNU: Summer dry weather is defined in

1 the TMDL, which is what we're expressing here. Summer dry
2 weather is equal to non-storm water, but is a narrow
3 subset because you can also have winter dry weather.

4 MR. GEST: But the issue is are we talking only
5 about non-storm water discharges or are we talking about
6 something other than non-storm water discharges? And
7 please, if you could just answer that question, and then
8 we can move on.

9 DR. SWAMIKANNU: Okay. I'll go ahead.
10 Discharges of non-storm water summer dry weather is
11 redundant. So if you want to create redundancy, unless
12 legal counsel has a different opinion, I would simply go
13 with the statement that it's redundant and leave it to the
14 discretion of the Board which they want in.

15 MR. GEST: All right. And then also looking at
16 the proposed paragraph 2.5, I have the same question for
17 you. Where it says, "During summer dry weather there
18 shall be no discharges of bacteria from the MS-4s," do you
19 have any objection to that saying, "During summer dry
20 weather there shall be no non-storm water discharges of
21 bacteria"?

22 DR. SWAMIKANNU: Again, I would have no
23 objection, but I would leave it to counsel whether there
24 is a legal distinction.

25 CHAIRPERSON NAHAI: Mr. Gest, let's take it as

1 understood that you want the words "non-storm water"
2 inserted. When it comes to Board deliberations and
3 questions, I'm going to want to see the definition of
4 summer dry weather from the TMDL, and we'll consider, you
5 know, where you're driving to at that point.

6 MR. GEST: And the purpose of this --

7 CHAIRPERSON NAHAI: But there's no point in
8 trying to put the witness in a position of saying that he
9 doesn't object to this or he doesn't object to that. We
10 understand that it's a change that you would like to make.
11 But to keep going on at the witness in that way is not
12 helpful.

13 MR. GEST: No, I'm finished with this area. But
14 I wanted to understand his testimony, and have the Board
15 members understand his testimony, because he said his
16 testimony was directed to non-storm water. And I wanted
17 to understand that as it related to the proposed language
18 that's before the Board.

19 I would like you to turn to Proposed Finding No.
20 35.

21 CHAIRPERSON NAHAI: This is I think 15-503.

22 SENIOR STAFF COUNSEL LEVY: Okay. And I have it.

23 CHAIRPERSON NAHAI: Does it start Water Code
24 Section?

25 MR. GEST: Yes.

1 CHAIRPERSON NAHAI: It's 15-503.

2 MR. GEST: And I want to bring your attention to
3 the last sentence that says, "Nevertheless the Regional
4 Board has considered the policies and requirements set
5 forth in Chapters 1 through 2.6 of CEQA."

6 Do you have that before you, sir?

7 DR. SWAMIKANNU: Yes.

8 MR. GEST: All right. Are you the person from
9 the Regional Board that's most knowledgeable about the
10 steps that the Regional Board took with respect to CEQA?

11 SENIOR STAFF COUNSEL LEVY: I'm sorry, Mr.
12 Chairman. I must voice an objection to counsel's attempt
13 to invade into the deliberative process of the Board. The
14 staff recommendations are generated through a series of
15 mechanisms and machinations that go on behind closed doors
16 that are not subject to Mr. Gest's cross-examination and
17 inquiry about who has submitted what to which Board member
18 and how proposals were generated. And I must interpose an
19 objection to protect the integrity of the Board process
20 and to protect the Board's deliberative dealings behind
21 closed doors.

22 I would ask you not to compel a response to that
23 question, Mr. Chair.

24 MR. GEST: I think my question was: Is he the
25 person who's most knowledgeable about the steps they took

1 with regard to CEQA. That was my question.

2 DR. SWAMIKANNU: My answer would be no.

3 MR. GEST: And who is that? Who's the --

4 DR. SWAMIKANNU: I'll let counsel -- understand,
5 because this addresses the Board in its entirety, not just
6 an individual staff member.

7 MR. GEST: Look, to just be clear, I just want to
8 ask questions about what staff did. That's all I'm trying
9 to do. I want to make sure this is a correct witness.
10 Maybe I should just ask the questions.

11 CHAIRPERSON NAHAI: You posed the questions again
12 and he said no.

13 MR. GEST: Okay. To your knowledge has the
14 Regional Board staff prepared an environmental check list
15 under CEQA in connection with the proposed amendment
16 that's here before the Board today?

17 SENIOR STAFF COUNSEL LEVY: Once again, I'm
18 sorry, Mr. Chair. The record is the record. Mr. Gest has
19 at his fingertips or his availability the record in this
20 matter. The fact that there is no checklist in the record
21 is well established. And the question of whether a
22 checklist would be required is not a matter that Mr.
23 Swamikannu -- Dr. Swamikannu can testify to.

24 CHAIRPERSON NAHAI: And I don't think Dr.
25 Swamikannu is going to testify to that.

1 Can we take this line of questioning as
2 terminated?

3 MR. GEST: Can I have a stipulation that there's
4 been no environmental checklist or other CEQA documents
5 that have been prepared for submittal to the Board?

6 CHAIRPERSON NAHAI: I think we have -- you've
7 seen the record that has been submitted to the Board.

8 MR. GEST: Well, I want to make sure I'm not
9 missing anything, because I did not see anything. That's
10 why I'm asking these questions.

11 CHAIRPERSON NAHAI: Let's get on. I mean you've
12 looked at the records that the Board has. To pose this
13 question seems really surreptitious.

14 MR. GEST: All right. Dr. Swamikannu, are you
15 familiar with the phrase "maximum extent practicable"?

16 DR. SWAMIKANNU: Yes.

17 MR. GEST: And what does that mean to you?

18 DR. SWAMIKANNU: The maximum extent practicable
19 standard is equivalent to technology. It is required to
20 consider feasibility, economics, cost, practicalities,
21 state of science. And so it's lesser than a water quality
22 standard, but it's equivalent to technology.

23 MR. GEST: Have you determined whether compliance
24 with the proposed permit would require permittees to
25 implement technologies that go beyond the maximum extent

1 practicable standard?

2 DR. SWAMIKANNU: Repeat that question.

3 MR. GEST: Have you determined whether compliance
4 with the permit would require the permittees to take steps
5 that would go beyond the maximum extent practicable
6 standard?

7 DR. SWAMIKANNU: The elements that are required
8 within the municipal storm water permit right now all meet
9 the maximum extent practicable standard.

10 MR. GEST: My question to you is with respect to
11 this amendment. Have you made any determination as to
12 whether compliance with the proposed terms of this
13 amendment would require the permittees to go beyond the
14 maximum extent practicable standard?

15 DR. SWAMIKANNU: The amendment is a water quality
16 standard. It's not a technology standard. So what I have
17 done is practically incorporated the wasteload allocation
18 or the water quality standard into the permit.

19 In terms of feasibility technology, is it beyond?
20 That should have been discussed when the TMDL was
21 developed as well as when the implementation plans for
22 this particular TMDL were put together. The
23 implementation plans are part of the record and can be
24 reviewed.

25 MR. GEST: Are you saying that the feasibility

1 and cost should have been a part of the consideration when
2 the TMDL was adopted?

3 CHAIRPERSON NAHAI: The validity of the TMDL is
4 not relevant here.

5 MR. GEST: No, but I want an answer --

6 CHAIRPERSON NAHAI: Nor are the water quality
7 standards.

8 MR. GEST: But I want to understand his answer.
9 I thought he said it should have been considered when the
10 TMDL was adopted. And I heard another witness testify
11 that it was not considered. So I just want to know
12 whether Regional Board staff has made may determination of
13 whether compliance with this permit amendment can be
14 achieved --

15 SENIOR STAFF COUNSEL LEVY: Mr. Chair, to
16 expedite --

17 MR. GEST: -- in accordance with the maximum
18 extent practicable standard that applies to the permit.

19 SENIOR STAFF COUNSEL LEVY: To expedite we will
20 represent that the TMDL record demonstrates that the Board
21 considered feasibility when the TMDL was adopted --

22 MR. GEST: That --

23 SENIOR STAFF COUNSEL LEVY: -- and cost.

24 MR. GEST: That's not responsive to the question.

25 And I want to know the following from this

1 witness:

2 DR. SWAMIKANNU: Can I answer?

3 CHAIRPERSON NAHAI: Well -- no, the question is
4 you just posed --

5 DR. SWAMIKANNU: The issue is he's asking me,
6 when we incorporated this particular wasteload allocation
7 into the MS-4 permit, did I do a de novo review of
8 technology feasibility?

9 That would be redundant. It's already been done
10 when the wasteload allocation and the implementation plans
11 to implement the TMDL were developed. I'm simply relying
12 on that analysis to incorporate the change so that this
13 particular change becomes enforceable.

14 And there's no requirement for me to do a de novo
15 review of technology feasibility economics.

16 CHAIRPERSON NAHAI: Okay.

17 MR. GEST: Did you identify all the sources of
18 bacteria that need to be addressed with respect to this
19 permit amendment?

20 DR. SWAMIKANNU: Again, that -- the sources,
21 whether they're significant or not, are developed during
22 the wasteload allocation and the TMDL process. I did not
23 for this particular incorporation of a wasteload
24 allocation re-analyze the sources of bacteria.

25 MR. GEST: So you're not certain -- you did not

1 look at the sources of bacteria that might be still
2 causing the exceedances?

3 CHAIRPERSON NAHAI: Well, what he said was, that
4 that determination was made at the time that the TMDL was
5 adopted.

6 MR. GEST: And so my question --

7 CHAIRPERSON NAHAI: And the validity of the TMDL
8 and the standards within the TMDL are irrelevant to this
9 proceeding.

10 MR. GEST: So my question is: Did you make any
11 determination with respect to that issue?

12 CHAIRPERSON NAHAI: And I think his response to
13 that would be that the record speaks for itself. You're
14 badgering the witness.

15 MR. GEST: I'm just --

16 CHAIRPERSON NAHAI: You really are. You're going
17 too far.

18 MR. GEST: Well, I will ask a different question.

19 Was there any analysis made as to whether this
20 permit term is reasonably achievable?

21 DR. SWAMIKANNU: Again, I'm incorporating
22 wasteload allocation that has been adopted through an
23 entirely open public process that all the parties have
24 been party to, and I'm incorporating the standard that
25 comes out of that process into this permit.

1 Well, did I do a new analysis of MEP for this?
2 That's not the analysis that's required. This is a water
3 quality standard that was developed through a different
4 process. I'm simply incorporating that standard into
5 this, just like I would any other water quality standard
6 that applies.

7 MR. GEST: I'd like to -- that's all. I'm
8 finished with this witness.

9 Thank you very much.

10 CHAIRPERSON NAHAI: I'm sorry?

11 MR. GEST: I'm finished with this witness.

12 Thank you very much.

13 I'd like to call to the stand Dr. Pendleton.

14 Professor Pendleton, I believe you testified that
15 when you looked at solely the cases in Los Angeles County,
16 you would still come up with about 804,000 potential cases
17 of illness, is that right?

18 DR. PENDLETON: Well, I don't estimate that.
19 That is what we estimated in the paper.

20 MR. GEST: That is what you estimated in the
21 paper?

22 DR. PENDLETON: That's right.

23 MR. GEST: Well, if you estimated --

24 CHAIRPERSON NAHAI: I think your half an hour
25 appears to be up.

1 CHAIRPERSON NAHAI: I realize some of my time was
2 taken by objections. I also recognize -- I see a red
3 light and my time is up.

4 I would like five minutes to ask a few more
5 questions of Dr. Pendleton. And I'll leave it to the
6 Board to rule on my request.

7 CHAIRPERSON NAHAI: I'm going to deny it.

8 MR. GEST: All right. Thank you.

9 My time is up.

10 CHAIRPERSON NAHAI: Time's up.

11 All right. We're going to go to closing
12 statements.

13 Oh, I'm sorry. Did we have cross by the
14 environmental organizations?

15 Excuse me. Go ahead please.

16 You'd like a break?

17 Let's go through the cross-examinations. And at
18 that point we can take a short break before closing
19 statements.

20 MR. FLEISCHLI: Good evening, Mr. Chairman,
21 members of the Board. My name is Steve Fleischli. I'm
22 the Executive Director of Waterkeeper Alliance in New
23 York. I am an attorney, and I'm here representing the
24 Environmental Groups, Santa Monica Baykeeper, Heal the
25 Bay, and Natural Resources Defense Council.

1 I would like to first for the record object on
2 numerous grounds with regard to the testimony regarding
3 non-storm water inquiries of Dr. Swamikannu, in that those
4 called for a legal conclusion, many of those questions
5 were asked and answered, and in some context they were
6 badgering the witness.

7 I would also like to file an objection with
8 regard to the MEP and CEQA questions with regard to Dr.
9 Swamikannu to the extent that they called for --

10 CHAIRPERSON NAHAI: I'm sorry. We need to have
11 the timer activated.

12 Thank you.

13 MR. FLEISCHLI: With regard to the MEP and CEQA
14 testimony of Dr. Swamikannu, to the extent that they were
15 questions that called for a legal conclusion, the law
16 speaks for itself; to the extent that they rely upon the
17 best evidence rule where the documents speak for
18 themselves, particularly with regard to the TMDL that has
19 been previously adopted as well as the prior permit that's
20 been previously adopted; as well as on grounds of
21 relevance to today's proceeding, I would like to make a
22 motion that those questions and answers be expunged from
23 the record.

24 CHAIRPERSON NAHAI: They've been posed, they've
25 been answered. This Board is perfectly well able to weigh

1 the relevance and weight.

2 MR. FLEISCHLI: I appreciate that. I maintain my
3 objection for the record.

4 CHAIRPERSON NAHAI: Thank you.

5 MR. FLEISCHLI: I would like to call Dr.
6 Swamikannu first.

7 Dr. Swamikannu, with regard to the permitting
8 process at the Regional Water Quality Control Board, does
9 the Regional Board regularly include numeric effluent
10 limits in NPDES permits in general?

11 DR. SWAMIKANNU: In NPDES permits in general,
12 yes. We translate receiving water limitations or water
13 quality objectives into numerical effluent limits, which
14 means end of pipe numbers.

15 MR. FLEISCHLI: And for non-storm water or NPDES
16 permits that do not involve storm water itself or
17 precipitation-related discharges, is that a common
18 practice?

19 DR. SWAMIKANNU: That is a common practice.

20 MR. FLEISCHLI: In fact, isn't it so common that
21 you have not referenced any of those other permits in this
22 record?

23 DR. SWAMIKANNU: That is correct.

24 MR. FLEISCHLI: Thank you.

25 Do you have any objection to including numeric

1 effluent limits in this permit?

2 DR. SWAMIKANNU: What we have presented before
3 the Board is a prohibition consistent with the storm water
4 regulations. I see this as a storm water permit at this
5 time, not as a permit to include -- provide numeric
6 effluent limits for non-storm water discharge.

7 MR. FLEISCHLI: In developing a record and
8 developing this permit, did you look at the Lake Tahoe
9 storm water permit promulgated by Region 6 of the State
10 Water Board?

11 DR. SWAMIKANNU: I did not.

12 MR. FLEISCHLI: I'd like to represent to the
13 members of the Board as well as the County that this is a
14 copy of the Lake Tahoe storm water permit that I
15 downloaded from the Internet from Region 6's website. I'd
16 like to present this Dr. Swamikannu. And if Dana Palmer
17 could present one to the County, I'd appreciate it.

18 Can you look at page 7 of that permit.

19 DR. SWAMIKANNU: I am on page 7.

20 MR. FLEISCHLI: And can you tell me what Header
21 No. 5A says.

22 DR. SWAMIKANNU: Five A says effluent
23 limitations.

24 MR. FLEISCHLI: Can you read the next paragraph
25 please.

1 MR. SWAMIKANNU: "All storm water urban runoff
2 flows generated within each permittee's jurisdiction that
3 discharge to publicly owned or maintained land treatment
4 or infiltration systems or to surface waters shall not
5 contain constituents in excess of the following limits:"

6 And then you have a table with constituents
7 units, measures of units, and then the limits, numerical
8 limits.

9 MR. FLEISCHLI: And does that appear to you to be
10 a numeric effluent limit for storm water discharges?

11 DR. SWAMIKANNU: It is a numerical effluent limit
12 for storm water discharges.

13 MR. FLEISCHLI: Thank you.

14 I would like to introduce this into evidence as a
15 public record.

16 CHAIRPERSON NAHAI: Okay.

17 MR. FLEISCHLI: Dr. Swamikannu, did you look at
18 the --

19 SENIOR STAFF COUNSEL LEVY: I'm sorry. May we
20 have just a ruling -- an oral ruling from the Chair for
21 the record.

22 CHAIRPERSON NAHAI: I'll allow it.

23 MR. FLEISCHLI: Thank you.

24 Dr. Swamikannu, did you look at the State of
25 Oklahoma's Phase 2 municipal storm water permit in

1 developing this permit or the record for this permit?

2 DR. SWAMIKANNU: We did.

3 MR. FLEISCHLI: You did or did not?

4 DR. SWAMIKANNU: For the particular amendment at
5 this point? No, I take my statement back. We looked at
6 the Oklahoma permit when we adopted -- when we proposed
7 the 2001 permit that's before you. But I did not look at
8 the Oklahoma permit for this particular amendment.

9 MR. FLEISCHLI: Let me represent to the Board
10 that this is a copy of the Oklahoma Phase 2 Municipal
11 Storm Water Permit that my staff obtained at my direction
12 from the State of Oklahoma. I'd like to ask Dr.
13 Swamikannu to take a look at it. And ask Dana Palmer to
14 give a copy to the County. Section 3B in this permit, if
15 I can find it.

16 Can you read that section, Part 3B.

17 DR. SWAMIKANNU: "Part 3B: Establish Total
18 Maximum Daily Load Allocations.

19 "1. If a TMDL is established for any water body
20 into which you discharge prior to the date that you submit
21 a notice of intent and if that TMDL includes a wasteload
22 allocation or load allocation for a parameter likely to be
23 discharged by the municipal separate storm sewer system,
24 your discharges must meet the requirements of the TMDL and
25 our associated implementation plan within any timeframes

1 established in the TMDL. Monitoring and reporting of the
2 discharges may also be required as appropriate to ensure
3 compliance with the TMDL."

4 MR. FLEISCHLI: Can you read the next section as
5 well.

6 DR. SWAMIKANNU: "2. If a TMDL is approved for
7 any water body into which you discharge after the date
8 that you submit a notice of intent, you must incorporate
9 any limitations, conditions and requirements applicable to
10 your discharge into your storm water management plan to
11 ensure that the wasteload allocation, load allocation and
12 all the TMDL's associated implementation plan will be met
13 with any timeframes established in the TMDL. Monitoring
14 and reporting of the discharges may also be required as
15 appropriate to ensure compliance with the TMDL."

16 MR. FLEISCHLI: Thank you.

17 I'd like to move this document into the record,
18 if that's appropriate.

19 MR. GEST: We object on the grounds of relevance.

20 CHAIRPERSON NAHAI: I'd like to hear our
21 counsel's advice on this.

22 SENIOR STAFF COUNSEL LEVY: The objection is
23 relevance. And so perhaps the proponent can speak to the
24 relevance of it.

25 MR. FLEISCHLI: I think the relevance on this is

1 clear, that this permit and others like it that I would
2 like to introduce into the record demonstrate that not
3 only has the Regional Board here been very measured, but
4 it could have done more in terms of making this directly
5 implement the TMDL, not only in 2001 but today.

6 MR. GEST: Does the Chair want me to address this
7 now or later?

8 CHAIRPERSON NAHAI: Later.

9 For now -- again, we've allowed the exhibits that
10 you wanted to be entered into the record. So I'm going to
11 allow this. But you can reserve your objections and voice
12 them at another time.

13 MR. FLEISCHLI: Dr. Swamikannu, in preparing this
14 amendment today have you considered the State Phase 2
15 Permit for the State of Louisiana or the State Phase 2
16 permit for the State of New York?

17 DR. SWAMIKANNU: I have not.

18 MR. FLEISCHLI: To save time on this I would like
19 to submit these documents for the record, and express that
20 they contain very similar language with regard to TMDL
21 implementation via an NPDES permit.

22 CHAIRPERSON NAHAI: All right. Done.

23 MR. FLEISCHLI: Dr. Swamikannu, with regard to
24 the question of non-storm water or dry weather runoff, is
25 it your belief that when we refer to dry weather runoff --

1 when the Regional Board or staff refers to the term "dry
2 weather runoff," that that is runoff that is not
3 immediately induced by precipitation?

4 DR. SWAMIKANNU: Dry weather runoff or non-storm
5 water is not precipitation related, by definition.

6 MR. FLEISCHLI: And if it were precipitation
7 related, would it be called storm water runoff?

8 DR. SWAMIKANNU: It is called storm water by
9 definition.

10 MR. FLEISCHLI: If it's precipitation related?

11 DR. SWAMIKANNU: If it's precipitation related.

12 MR. FLEISCHLI: Either snow or rain?

13 DR. SWAMIKANNU: Snow or rain.

14 MR. FLEISCHLI: Thank you.

15 No further questions for you.

16 DR. SWAMIKANNU: Thank you.

17 MR. FLEISCHLI: I'd like to call Mr. Lafferty.

18 Mr. Lafferty, can you state your name again for
19 the record.

20 MR. LAFFERTY: Sure. Daniel J. Lafferty.

21 MR. FLEISCHLI: And you're with the County of Los
22 Angeles?

23 MR. LAFFERTY: Yes, I am.

24 MR. FLEISCHLI: Does the County have a formal
25 implementation plan for compliance with the bacteria TMDL.

1 MR. LAFFERTY: For the wet weather component.

2 MR. FLEISCHLI: And do you have a formal
3 implementation plan for the dry weather TMDL?

4 MR. LAFFERTY: No, we do not.

5 MR. FLEISCHLI: Thank you.

6 When was the first Santa Monica Bay storm drain
7 diversion put in place by the County?

8 MR. LAFFERTY: I don't have the exact date at
9 hand. The closest that we have in the records that I've
10 looked at was -- in our maintenance regimes there was a
11 printout that I saw that referenced 2000 -- May 5th of
12 2000.

13 MR. FLEISCHLI: Was the County involved in the
14 Pico diversion many years ago or the Ashland diversions?

15 MR. LAFFERTY: I don't have any knowledge of
16 that.

17 MR. FLEISCHLI: All right. With regard to Marie
18 Canyon, when did you first learn that the beach adjacent
19 to Marie Canyon exceeded state health standards?

20 MR. LAFFERTY: I don't have when we first found
21 that particular piece of information.

22 MR. FLEISCHLI: Was it before the TMDL was
23 adopted by the Regional Board?

24 MR. LAFFERTY: I don't have any knowledge of
25 that. I don't know.

1 MR. FLEISCHLI: All right. When did you start
2 planning and designing the treatment system at Marie
3 Canyon?

4 MR. LAFFERTY: We began that design process
5 following the early monitoring program that we implemented
6 under the Coordinated Shoreline Monitoring Program. We
7 began that ahead of time -- ahead of what the TMDL had
8 requested. And as a result of that data we realized that
9 Marie Canyon was one of the worst canyons in the north
10 Santa Monica Bay area. And that's when we began doing
11 that --

12 MR. FLEISCHLI: Can you give us a year and maybe
13 a month on that?

14 MR. LAFFERTY: Let's see. That would have been
15 in -- I believe that was in '04 that we started that, in
16 the fall of '04. And the data was analyzed I believe in
17 the early summer of '05.

18 MR. FLEISCHLI: Okay. And your testimony
19 previously was that that has not yet been built; is that
20 correct?

21 MR. LAFFERTY: That's correct.

22 MR. FLEISCHLI: Thank you.

23 With regard to Escondido, now when did you first
24 learn of exceedances of state health standards at that
25 beach?

1 MR. LAFFERTY: When I did first learn of it?

2 MR. FLEISCHLI: Yes.

3 MR. LAFFERTY: I first learned of that actually
4 with the 13267 letter that we received from the Regional
5 Board, which was in July of this year.

6 MR. FLEISCHLI: And you testified, did you not,
7 that this Tuesday the board of supervisors approved a
8 source identification study --

9 MR. LAFFERTY: That's correct.

10 MR. FLEISCHLI: -- for Escondido?

11 MR. LAFFERTY: Yes.

12 MR. FLEISCHLI: Why did this happen after the
13 compliance deadline for the TMDL?

14 MR. LAFFERTY: It took us a while to get a handle
15 on --

16 MR. GEST: Excuse me. I'm not -- I do want to
17 object. I'm not sure this witness can testify as to the
18 understanding of the Board what the Board was doing. I
19 think that needs to be --

20 MR. FLEISCHLI: Well, I'll rephrase my question.

21 CHAIRPERSON NAHAI: Thank you, Mr. Gest.

22 You're going to rephrase your question?

23 MR. FLEISCHLI: Yes. And I will object to Mr.
24 Gest objecting to my questions.

25 Do you have any understanding of why that took

1 place after the TMDL compliance date?

2 MR. LAFFERTY: I can testify with respect to why
3 the Department of Public Works began developing the study
4 proposal when we did. I don't have any knowledge as to
5 why the Board decided to take the action and when the
6 Board took its action. If you'd like to hear why the
7 Department of Public Works began, I can testify to that.

8 MR. FLEISCHLI: That's fine. Thank you.

9 With regard to the pier, did you hear the
10 testimony earlier of Dr. Mark Gold?

11 MR. LAFFERTY: Yes, I did.

12 MR. FLEISCHLI: You had testified previously that
13 you believed that the diversion was functioning properly;
14 is that correct?

15 MR. LAFFERTY: That's correct.

16 MR. FLEISCHLI: All right. Is this then new
17 information to you with regard to the dilapidated
18 condition of some of those drains --

19 MR. LAFFERTY: Yes, it is.

20 MR. FLEISCHLI: -- in the area?

21 MR. LAFFERTY: Yes, it is.

22 MR. FLEISCHLI: Okay. Thank you.

23 In terms of illicit connection/illicit discharge
24 program, what is your level of confidence in that
25 program's ability to identify illicit connections and

1 illicit discharges to the storm drain system?

2 MR. LAFFERTY: I think those are two separate
3 issues. Illicit connections, I think it's an outstanding
4 program for identifying illicit connections.

5 Illicit discharges is a little different. And
6 that's because illicit discharges could be a tanker truck
7 that overturns and ends up in our storm drain system. You
8 know, that particular program really doesn't address --
9 our inspections don't really address the illicit discharge
10 for those. We have a sort of a separate sort of parallel
11 program that addresses illicit discharges.

12 MR. FLEISCHLI: Okay. With regard to the Herondo
13 diversion, when was that put in place?

14 MR. LAFFERTY: Which Herondo diversion are you
15 referring to?

16 MR. FLEISCHLI: The Main Herondo diversion. The
17 one that you testified earlier with regard to the problems
18 you were having with it as well as the desalinator water
19 discharge.

20 MR. LAFFERTY: The original Herondo discharge. I
21 don't have again the exact date. All I can refer back to
22 is when it appeared on our maintenance records, which was
23 in May of 2000.

24 MR. FLEISCHLI: May of 2000.

25 When did you first become aware that that

1 diversion was not working properly?

2 MR. LAFFERTY: Let's see. That would have been
3 in the Summer of '04.

4 MR. FLEISCHLI: Okay. So four years after that
5 was built?

6 MR. LAFFERTY: Yes.

7 MR. FLEISCHLI: Okay. Didn't your staff have a
8 field visit in 2003 -- May of 2003 to discuss the problems
9 with that drain with staff of Santa Monica Baykeeper?

10 MR. LAFFERTY: I don't recall. I don't recall
11 the year. Yes, we have met with the baykeeper on this.
12 But I'm not certain as to what year that was.

13 MR. FLEISCHLI: Okay. When did you first
14 discover this discharge from the permitted desalination
15 facility to that drain?

16 MR. LAFFERTY: Well, for -- there were two
17 permitted. And I'm not sure if a desalination was
18 permitted. I have no knowledge as to whether that one was
19 permitted. There were two particular discharges at that
20 location.

21 MR. FLEISCHLI: Okay. Can you describe those two
22 then?

23 MR. LAFFERTY: Yeah. One was a de-sal line from
24 the water replenishment district. And that -- I can't
25 recall when we first became aware of that, but it was -- I

1 think it was in Summer of '04 when we saw that.

2 And the second one was a -- again it was a
3 maintenance discharge from a water company in Redondo
4 Beach. We became aware of that this summer actually.

5 MR. FLEISCHLI: With regard to the '04 discharge,
6 did you know when that was permitted by the Regional
7 Board?

8 MR. LAFFERTY: I have no idea.

9 MR. FLEISCHLI: You have no idea.

10 You've already expressed today, like just moments
11 ago, that you have outstanding confidence in the illicit
12 connection program.

13 Does the County review permitted discharges in
14 the design and development phase of a diversion project?

15 MR. LAFFERTY: I'm sorry. Could you repeat the
16 question?

17 MR. FLEISCHLI: Does the County have a policy for
18 reviewing for permitted discharges prior to design and
19 development of a storm drain diversion project?

20 MR. LAFFERTY: Permits that our department would
21 issue.

22 MR. FLEISCHLI: So you don't look at Regional
23 Board files to determine whether or not there are
24 permitted discharges to a drain prior to constructing or
25 designing a diversion?

1 MR. LAFFERTY: No, we have not.

2 MR. FLEISCHLI: Thank you.

3 And so under your program, you would have no
4 policy or procedure to try to identify the two discharges
5 that are permitted by the Regional Board prior to
6 construction of the Herondo drain?

7 MR. LAFFERTY: No, we wouldn't.

8 MR. FLEISCHLI: Okay. Thank you.

9 You testified earlier that the iterative process
10 has worked; is that correct?

11 MR. LAFFERTY: Yes, I did.

12 MR. FLEISCHLI: At the time the County sued the
13 Regional Water Board in 2001, was that your personal
14 opinion, that the iterative process would work?

15 MR. LAFFERTY: Do you have a date of that?

16 MR. FLEISCHLI: I do not.

17 MR. LAFFERTY: The reason I say that is because I
18 came on board in the department's water quality program in
19 I believe it was August of '01.

20 MR. FLEISCHLI: Okay. Well, in '01 or '02 did
21 you have an opinion about whether or not the iterative
22 process would work?

23 MR. LAFFERTY: At some point in '02 I'm sure I
24 had developed an opinion that the iterative process would
25 indeed work.

1 MR. FLEISCHLI: Notwithstanding the County's
2 litigation over the issue?

3 MR. LAFFERTY: Notwithstanding the County's
4 litigation over the issue, yeah, I believe that it worked.

5 MR. FLEISCHLI: So in essence the Regional
6 Board's approach at that point in time was correct in your
7 mind?

8 MR. LAFFERTY: I'm not sure what the Regional
9 Board's approach was at that time. But --

10 MR. FLEISCHLI: An iterative approach.

11 MR. LAFFERTY: Iterative approach would work.

12 MR. FLEISCHLI: Okay. You have testified already
13 with regard to concern regarding the cooperative approach
14 of this Board in the future; is that correct?

15 MR. LAFFERTY: Would you repeat the question
16 please?

17 MR. FLEISCHLI: You have testified previously
18 with regard to your concern regarding the cooperative
19 approach with this Regional Water Board in the future if
20 this permit is to be adopted, is that correct?

21 MR. LAFFERTY: Yes. Yes, I am.

22 MR. FLEISCHLI: Is it your contention that prior
23 to today the Regional Board has not taken a cooperative
24 approach?

25 MR. LAFFERTY: There have been instances where

1 there's been great cooperation and there's been other
2 instances where there hasn't.

3 MR. FLEISCHLI: Has Jon Bishop been cooperative?

4 MR. LAFFERTY: Jon Bishop has been cooperative,
5 I'd say, in characterizing it, yes.

6 MR. FLEISCHLI: Has Dr. Swamikannu been
7 cooperative?

8 MR. LAFFERTY: In certain instances, yes; and in
9 other instances, no.

10 MR. FLEISCHLI: In your work in this field, and
11 to your knowledge, in the 20 years that you've been an
12 engineer and worked on storm water issues, had the
13 Regional Water Board ever fined the County for exceedances
14 of water quality standards regarding bacteria for urban
15 runoff into Santa Monica Bay?

16 MR. LAFFERTY: Not to my knowledge, no.

17 MR. FLEISCHLI: Thank you.

18 Isn't it true that the state has provided the
19 county and other permittees millions of dollars to address
20 urban runoff in Santa Monica Bay?

21 MR. LAFFERTY: Yes, it is.

22 MR. FLEISCHLI: Do you have a sense of how much
23 that is?

24 MR. LAFFERTY: In total, no. I know that with
25 respect to the low flow diversion program, we received in

1 excess of \$6 million.

2 MR. FLEISCHLI: Just for Santa Monica Bay?

3 MR. LAFFERTY: Correct.

4 MR. FLEISCHLI: Do you know how much the County
5 has spent on litigation over the 2001 permit?

6 MR. LAFFERTY: We prepared a report summarizing
7 our fees to attorneys.

8 MR. GEST: I need to object.

9 MR. FLEISCHLI: I'm going to object to his
10 objection, that he needs to wait.

11 MR. GEST: The question was: Does he know? He
12 can answer it yes or no.

13 However, because this is an issue of privilege, I
14 have to assert the objection now. And I would assert the
15 attorney-client privilege with respect to any
16 communications concerning --

17 MR. FLEISCHLI: Again, I'm going to object to his
18 objection at this point, as well as objection that this is
19 somehow attorney-client privilege when it's a matter of
20 public record.

21 CHAIRPERSON NAHAI: I find difficulty with the
22 attorney-client privilege issue. Can you --

23 MR. GEST: Well, I haven't finished.

24 Excuse me. I haven't finished making my
25 objection.

1 MR. FLEISCHLI: Which he should make later.

2 CHAIRPERSON NAHAI: I think you've already
3 alerted your witness to the issue.

4 MR. GEST: Okay. Well, I'm going to advise my
5 witness not to answer any questions that would disclose
6 attorney-client privilege or attorney work product
7 material, and ask him to assert that privilege with
8 respect to any of these questions, which they're really
9 not relevant --

10 CHAIRPERSON NAHAI: You've made your objection.
11 Everyone's supposed to keep their objections until the
12 end. But you've alerted your witness to the issues.

13 However, what -- the amount of money that the
14 County has spent on litigation, is that a matter of
15 attorney-client privilege?

16 SENIOR STAFF COUNSEL LEVY: I would presume it's
17 a matter of public record. I think the admonition from
18 Mr. Gest to his client is -- or to Mr. Lafferty is
19 adequate to protect any alleged attorney-client privilege
20 there is. If he has information that he would be
21 testifying from that derived from communications with his
22 counsel, then he should presumably adhere to the
23 admonition from his counsel. Otherwise, if he knows it in
24 his official capacity, it would seem to be a proper
25 question.

1 MR. GEST: This is an issue of privilege, so I
2 have to assert the objection so I can address it.

3 I would direct my client not to answer any
4 questions in this area to avoid any waiver.

5 MR. FLEISCHLI: And I will ask the question
6 again.

7 Do you know how much the county has spent on
8 litigation over the 2001 permit?

9 MR. LAFFERTY: Well, on the advice of my
10 attorney, I'm going to decline to respond.

11 MR. FLEISCHLI: And I would like to ask this
12 panel to consider whether or not this is in fact a public
13 document or a public record, and it consider contempt
14 motions against counsel if in fact it is a matter of
15 public record in this instance.

16 CHAIRPERSON NAHAI: I would want -- you've made
17 your objection and Mr. Lafferty has refused to answer the
18 question based on your advice. I would like to know at
19 some point whether this is a matter of attorney-client
20 privilege when the question is posed, you know, how much
21 has the County or how much has any other public entity
22 spent on litigation with respect to a certain matter. It
23 doesn't need to be answered at this point. But I would
24 like to get an opinion on that.

25 SENIOR STAFF COUNSEL LEVY: Very briefly, the

1 attorney-client privilege attaches to confidential
2 communications between an attorney and a client. And how
3 much money the county has paid out of the county coffers
4 would appear to be public record. If Mr. Lafferty has
5 information that is derived from confidential
6 communications with his attorney, whatever that
7 information is, that would appear to be attorney-client
8 privilege unless it is a matter of public record. And
9 sitting here now I have no way of knowing.

10 I understand, and I'm sure the Board does
11 understand Mr. Fleischli's question and the purpose of the
12 question. I think for the purposes right now you can
13 decide later on whether you're interested in pursuing
14 that.

15 I think we all know that the figure is
16 substantial after five years of litigation. And the
17 relevance to this proceeding, much as I would like to know
18 the exact dollar figure myself, is really marginal to the
19 issues about whether to adopt the provisions into the MS-4
20 permit.

21 MR. GEST: I would object to any characterization
22 when this witness has not established a foundation where
23 he's characterized the amounts of funds --

24 CHAIRPERSON NAHAI: Mr. Gest, you've directed
25 your witness not to answer, and he's refusing to answer

1 the question. All right?

2 I will want to know at some point what the answer
3 to that question is. So I'm going to ask staff to find
4 out and let us know. But for now --

5 MR. FLEISCHLI: Yes. And I'd like to make a
6 motion to compel on that. And I would like to in the
7 future be granted leave to seek contempt should we bring
8 forth evidence that this is in fact a matter of public
9 record and that was known by Mr. Gest.

10 CHAIRPERSON NAHAI: I'm going to deny --

11 SENIOR STAFF COUNSEL LEVY: -- the Board preserve
12 the motion and we can address it at a later date.

13 CHAIRPERSON NAHAI: No, he wants the motion to
14 compel now.

15 MR. FLEISCHLI: Yes.

16 CHAIRPERSON NAHAI: Since he's bringing the
17 motion to compel.

18 MR. FLEISCHLI: And if it's denied, then I
19 will -- the motion to leave I think can be granted in the
20 future. But the motion to compel I would like now.

21 CHAIRPERSON NAHAI: But the motion to compel the
22 witness to respond at this point I'm going to deny,
23 because it doesn't bear a direct relevance to what we're
24 considering today. However --

25 MR. FLEISCHLI: And I believe it does bear direct

1 relevance.

2 CHAIRPERSON NAHAI: I understand, I understand.

3 However, the motion for leave is something that
4 we can take up at a later time.

5 MR. FLEISCHLI: Thank you.

6 One final question with regard to the cooperative
7 approach.

8 Was the County engaged in a cooperative approach
9 when it sued the Regional Board in 2001?

10 MR. LAFFERTY: No, we were preserving what we
11 thought was the best interests of our constituency.

12 MR. FLEISCHLI: Thank you.

13 No further questions.

14 CHAIRPERSON NAHAI: Thank you.

15 All right. Does staff wish to conduct brief
16 cross?

17 SENIOR STAFF COUNSEL LEVY: No.

18 CHAIRPERSON NAHAI: Okay. So the
19 cross-examinations are done.

20 We're going to go to closing statements.

21 However, there was one presenter, Mr. Matthew Cohen, who I
22 called upon a number of times. But he was out in the
23 hall, I believe. So we'll allow you to make your
24 presentation at this point. Hopefully no one will want to
25 cross-examine you on what you're about to say.

1 MR. COHEN: I hope not.

2 CHAIRPERSON NAHAI: Will three minutes be enough?

3 MR. COHEN: That should be sufficient. Thank
4 you.

5 CHAIRPERSON NAHAI: Did you take the oath?

6 MR. COHEN: Yes, I did.

7 CHAIRPERSON NAHAI: Okay.

8 MR. COHEN: My name is Matthew Cohen. I'm here
9 on behalf of Richards, Watson & Gershon. And we represent
10 a number of cities.

11 CHAIRPERSON NAHAI: Activate the timer please.

12 MR. COHEN: And my arguments today -- or my
13 statements today are mainly going to focus on procedures
14 invoked by the Regional Board for adopting or modifying
15 this permit.

16 And this has been the subject of considerable
17 debate over the course of the Regional Board's
18 administration of the National Pollution Discharge
19 Elimination System program, and I think it's important to
20 raise these issues here before this Board. Especially
21 judging by what I've seen today, I have some serious
22 concerns about due process violations.

23 An integral part of any adjudicatory hearing is
24 that there exists a clear delineation between Regional
25 Board staff and the decision maker. In Night Life

1 Partners versus City of Beverly Hills the Court of Appeal
2 held that procedural due process requires a clear division
3 between prosecutorial and adjudicative functions. This
4 has not occurred here. The Regional Board's legal counsel
5 has represented both the Regional Board staff as well as
6 the Regional Board members. Government Code Section
7 11425.10 requires an unbiased presiding officer, neutral
8 presiding officer. And the Court of Appeal held
9 specifically in Night Life, under circumstances very
10 similar, that combining advocacy and adversarial duties
11 constitutes actual bias and results in a procedural due
12 process.

13 And I attempted to raise this earlier at the
14 beginning of the hearing, so I apologize for the time it
15 is now. But as it is, I would feel compelled to assert
16 it.

17 And next I would assert for the record that, as a
18 principal, we object to any proceeding resulting in the
19 adoption or modification of a permit that is not conducted
20 as a formal adjudicatory proceeding. Over the course of
21 this current permit the Regional Board has adopted a
22 variety of different and diametrically opposed positions
23 with respect to the proper procedures for adopting or
24 modifying a permit.

25 Originally in 2001 -- November of 2001, Regional

1 Board's legal counsel adopted a position that the
2 Administrative Procedure Act does not apply at all.
3 Subsequently in legal papers before the Court of appeal,
4 they have adopted the position that formal adjudicatory
5 proceedings apply. And now today we are adopting informal
6 proceedings.

7 And I would suggest that this issue is going to
8 come up frequently in every adjudicatory hearing we're
9 going to have. And I would like a ruling from the Board
10 at some point as to whether or not -- and we had submitted
11 comment letters as to this -- as to whether or not formal
12 or informal apply. We believe, and we have raised in
13 objections related to this reopener, that formal hearings
14 should apply.

15 Informal hearings are generally used in
16 situations involving procedures where there are -- or
17 proceedings where there are no disputed issues of material
18 fact or monetary amounts are not more than a thousand
19 dollars involved.

20 We have -- when a state employee is disciplined,
21 they are frequently permitted -- I didn't --

22 CHAIRPERSON NAHAI: Go ahead and wrap up.

23 MR. COHEN: Well, when a state employee is
24 disciplined, they are frequently given five days of
25 hearings. And here we are talking about billions of

1 dollars worth of obligations that the cities are going to
2 have to face. So we would request extended hearings in
3 general whenever we are dealing with any modifications or
4 adoptions of permits.

5 And I will stop there now that my time is up.

6 And I appreciate the Board's hearing my comments and I
7 thank them.

8 CHAIRPERSON NAHAI: Thank you.

9 I think we'll take a ten-minute break. And then
10 come back in for closing statements.

11 (Thereupon a recess was taken.)

12 CHAIRPERSON NAHAI: Let's continue please.

13 Let's come to order.

14 All right. We're now going to have our closing
15 statements. And they're not to exceed 20 minutes each.

16 And we can start with the County. Mr. Gest,
17 would you like to lead off?

18 MR. GEST: Thank you very much, Mr. Chairman,
19 members of the Board. I know it's been a long day. And
20 County does very much appreciate the time and effort that
21 everyone has put into this matter and the consideration
22 that has been given.

23 First -- and I intend to take approximately ten
24 minutes. And with the Chairman's leave, allow Mr.
25 Pestrella to close for the final ten minutes of the

1 County.

2 I do want to say, because we need to address it
3 for the record, that to respond to various objections that
4 have been made to various items, it's very difficult when
5 the environmental groups -- because they have made the
6 objections -- object to testimony in general. It's not
7 towards any specific testimony, so it's hard to respond.
8 In fact, we can't respond. So I would ask that those
9 objections be ignored or denied.

10 We do also for the record want to say that we
11 object to the testimony of the counsel for the
12 environmental organizations, Mr. Fleischli, at the end,
13 who was characterizing positions the County was taking
14 with regard to litigation incorrectly. But he was
15 testifying. He was also further representing to the Board
16 that the litigation costs are public record when NRDC --
17 and they know that NRDC made a Public Records Act request
18 and that was denied. And they were trying to use this
19 forum for an improper -- obtainment to improper purpose.

20 Certainly if there's a consideration of whether
21 there should be contempt brought against anybody, perhaps
22 it should be directed in that direction.

23 We do object to the introduction of the new
24 permits and the evidence. It is not relevant and it is --
25 there has been no foundation laid. These are permits for

1 other cities, including Lake Tahoe, with other
2 considerations. It's not the beaches. It really has no
3 meaning here, and we raise that.

4 We have expressed our concerns about this
5 process. We believe that -- we are concerned that on the
6 final cross-examination, the Environmental Groups
7 interjected new issues and raised new facts. And we have
8 not been able to give -- be given a time to respond
9 through that with witnesses. So we object to that. And
10 that's -- or further, with respect to our position that
11 the time has been unduly limited, we've been -- it has not
12 been conducted in accordance with the Code of Regulations
13 or the Government code and the Evidence Code. And there
14 has been a violation of due process because we have not
15 been given adequate time. I note that we were going to
16 cross-examine Dr. Pendleton and we were precluded from
17 doing so.

18 We were precluded from introducing evidence with
19 regard to the iterative process. If we were allowed, then
20 I would make an offer of proof. We would have submitted
21 more evidence about the difficulty to identify bacteria
22 sources and why that's important to this Board's decision;
23 because if you can't identify bacteria sources, you can't
24 design programs to implement them.

25 So we do object to that and preserve our other

1 objections and object to the procedures.

2 We note that many of the documents that are on
3 the list of documents that are being included are
4 voluminous administrative records on CDs which have not
5 been accessed in this proceeding. There are members of
6 this Board who were not on the Board when those
7 proceedings took place. And therefore we submit that
8 those -- anything in those records which is not
9 specifically brought to the Board's attention in this
10 hearing for consideration in terms of finding of fact
11 cannot and should not be considered. And they include the
12 administrative record form. The permit includes the
13 administrative record that underlies the TMDL in
14 particular.

15 And we've already previously indicated our
16 concerns about the studies. And we object to these
17 studies on the grounds that they are hearsay to the extent
18 that the authors were not here.

19 We also in our comments have indicated to the
20 Board that there are certain findings that this Board must
21 make. We submit that there hasn't been sufficient
22 evidence on which to base those findings. First of all,
23 one of the proposed findings seeks to incorporate by
24 reference the statement of facts. There hasn't been any
25 evidence -- or sufficient evidence to support the separate

1 statement of facts that was prepared.

2 We indicated that in our -- and we suggest that
3 to the extent that there is a need to comply with CEQA,
4 there has not been any CEQA documentation brought to this
5 Board's attention and therefore no findings with regard to
6 CEQA can be made at this time.

7 And in our comments we've also indicated that in
8 order to support the permit's modification, there should
9 be a finding that the source of bacteria can in fact be
10 identified, that it's technically feasible to comply, that
11 the amendment can be met through cross-effective programs,
12 that it's reasonably achievable, that you should consider
13 the Water Code factor in Section 13241, and there hasn't
14 been evidence on which the Board can make those findings.

15 And, in addition, and no less important, this is
16 an NPDES municipal storm water permit. The MEP standard
17 applies to the terms. Therefore, there needs to be
18 findings with regard to whether it can be complied with in
19 accordance with the MEP standard. We submit that the
20 staff did not do that investigation, and there's no
21 evidence before this Board upon which you can make those
22 findings.

23 If this Board is going to take the position that
24 it can order the amendment even though it goes beyond MEP,
25 first of all, we would request a finding that the Board is

1 finding that it's going beyond MEP and, second of all, we
2 submit that the Board doesn't have the legal authority to
3 go order a provision that goes beyond MEP. And if it
4 does, it has to consider the Water Code Section 13241
5 factors under the City of Burbank case.

6 With all that procedural issues having been said,
7 we really do come back to where we started this morning,
8 which is: What are we doing here?

9 The County agrees with the TMDL. Mr. Lafferty
10 was asked that question and he said, "We agree with it."
11 We agree with the objective.

12 The issue is how is it going to be achieved? Is
13 it going to be partnership, a tripartite partnership
14 between the public, the permittees and the Board, or are
15 we going to be forced into an adversarial posture? We
16 suggested that it is better not to go through the
17 adversarial posture.

18 If this Board is going to adopt the proposals, we
19 suggest that there's no need for Part 1.B, and we suggest
20 that Part 2.5 should be part of the iterative process.

21 We certainly request that if those provisions are
22 going to be adopted, regardless of where they're placed in
23 the permit, that the word "non-storm water" be placed in
24 that -- in those provisions. The witnesses for the
25 Regional Board staff stated that their intent is to

1 address non-storm water. Whether they were
2 using -- that's what they said they're trying to address.
3 So if that's what they're trying to address, so that the
4 permit clearly reflects it, it should be placed in both of
5 those locations. If there's objection to that from the
6 Regional Board staff, then there's certainly a disconnect.
7 Why are they saying, "That's really our purpose, but we
8 don't want that to be put in"?

9 We disagree -- the county disagrees that putting
10 it in would be redundant. If it is redundant, there's no
11 harm. But if that's really what the Regional Board staff
12 is directed, then that word "non-storm water" should be
13 placed in both of those paragraphs in those two locations.

14 May I ask the Chairman how much time I have left?

15 CHAIRPERSON NAHAI: I know we allocated 20
16 minutes. So how much time is left?

17 MR. GEST: Approximately 10 minutes?

18 Okay. With that I would like to turn it over to
19 Mr. Pestrella.

20 MR. PESTRELLA: Mr. Chairman and Board members.
21 It's a complicated day, and not a day that I'm
22 particularly happy about. Because I don't think it solves
23 what we're all trying to do and, that is, to get forward
24 with actually implementing infrastructure that will clean
25 storm water here in L.A. County and provide cleaner

1 beaches for all the residents that came up and spoke. And
2 those are, by the way, the community that I serve. For 20
3 years I've been a public official for the County of Los
4 Angeles working in our Flood Control District. I actually
5 had a job in the Malibu for many years -- nine years as
6 the building official in that area. I worked with many of
7 the residents who came up today. I surfed with many of
8 the people that actually walked up. I know some of their
9 stories. I actually, believe it or not, used to surf at
10 lunch at Malibu Beach. Some people run. I used to surf.

11 I appreciate the beauty of our beaches. I think
12 everyone here will agree that there isn't any doubt that
13 everyone in the room wants clean water. And yet what
14 happens to flood protection agencies across the United
15 States, and particularly this one, is that we get
16 characterized with a black hat, and I think sometimes to
17 the benefit of the people sitting behind me.

18 That's unfortunate because many of the people
19 sitting behind me, Mark Gold, Tracy, we've worked together
20 grandly on this issue. And what I asked for today was
21 basically to look at a very simple situation, very, very
22 simple. For all the Board members that have been through
23 all this, I apologize that we had to go through that. But
24 basically what we're looking for is language that allows
25 us to work with you rather than being worried and setting

1 up budgets annually to defend our storm drain, when, after
2 all, the storm drain does not produce the bacteria. Well,
3 some people say a regrowth happens in the storm drain.
4 But I don't think I could attribute or allocate the amount
5 of bacteria we've been talking about today to a storm
6 drain, a piece of concrete pipe with rebar, that that
7 would be the cause of all these issues. In fact, it is
8 the conveyance structure for those communities' members
9 that walked up here today that protect them from floods.
10 It is that system that is being fed by that community that
11 we're actually talking about.

12 It will be interesting, because we will proceed
13 with bacteria source ID and we will find that those
14 sources of bacteria are actually coming from those very
15 private property owners that came here today. And I'm
16 hoping that they're ready -- they're ready to make the
17 commitment to change what's happening on their own
18 properties at least for that anthropogenic source. And
19 for those of you that didn't know that word before, the
20 human portion of this. What are those folks going to do?
21 Are they going to make a commitment to this? And is that
22 your intent with this? Is your actual intent to get to
23 those folks beyond the storm drain?

24 I would submit that as an engineer, with a staff
25 of scientists and engineers -- and I believe Mark would

1 agree with me -- and Tracy -- and you can correct me if
2 I'm wrong -- the issue is complicated, and it does take an
3 interadaptive approach. It's been totally displayed to
4 you here today.

5 If there's one thing I've learned about our
6 staff, they've done an outstanding job in three years in
7 putting the infrastructure that everybody seems to love in
8 place. And yet we're getting attacked for the very
9 infrastructure we put in place. And we're being
10 questioned about the numbers that we spent. And we're
11 being asked about how much litigation money we spent. It
12 has nothing to do with what our ultimate goal is.

13 I'm ready to go forward as a public official
14 despite what happens here today. I promise you that.
15 And, in fact, Mr. Lafferty, a fine engineer, came up here,
16 not a witness, your staff, not typically in a court room,
17 got up here and expressed himself and told you something.
18 We were given directions. We were given orders from the
19 top of our department, from the County Board of
20 Supervisors, to go after clean water despite what happens
21 at this Board, that it is the citizens of this community
22 that actually want clean water and we're trying to bring
23 that forward.

24 We've changed our system for that purpose. We
25 continue to work on it. We continue -- forget the

1 dollars. We continue to put resources into this and
2 research it, along with the people sitting in the room.
3 Jon and I have worked on a lot of things together, and
4 it's been very positive.

5 What I'm telling you is -- and now you're going
6 to say, "Why are they so concerned? What's the big deal,
7 if they want a partner? If water quality objectives are
8 really the issue, why is the County of Los Angeles so
9 concerned if that's what you're saying you want to do?"

10 If Don Wolfe, the Director of Public Works,
11 absolutely believes in clean water and is stressed on it
12 everyday, why is he fighting this regulation? Why are we
13 standing here?

14 And I've got to tell you that it's the
15 variability that you heard about today. It's the
16 variability in flows. We're talking about dry weather.
17 We can't predict who's washing their car on any given day.
18 We can't predict how much ground water might emerge. We
19 can't predict those things. And so we size things and we
20 make mistakes, and we've taken an iterative approach to
21 re-size that to try to figure it out. And we've shown
22 that that iterative approach has worked in this case. And
23 I believe it will work in the future.

24 And we will continue to spend those dollars
25 because it is at the interest of our Board of Supervisors,

1 in the interest of the City of L.A. and others that are
2 joining with us and those jurisdictional groups to
3 actually get this right.

4 However, moving this into a prohibitive section
5 of our permit means that on this day when you adopt this
6 is that we will be -- I can tell you we will go out to
7 Santa Monica channel and we'll take a sample or we'll go
8 to one of the creeks, Topanga or others, and we will find
9 an exceedance in a dry weather state. And you will have
10 the discretion -- your Executive Officer will have the
11 discretion to fine the County Board of Supervisors, to
12 fine the L.A. County Flood Control District for that
13 exceedance. Is that the intent?

14 I submit to you that that will not change our
15 efforts, but it will put us in a position that I will have
16 to put resources in a place so that we can all start going
17 like this, "Not me." You gave me a 13267 order, lots of
18 them. And about half of them I turned back and you
19 said -- I said -- I had to say, "That's the City of L.A.,
20 that's the City of Malibu." Our brothers in government
21 having to tell you who it is that's in charge of what, so
22 who can do what with this? So that third parties can come
23 in and sue those individual cities? Is that really what's
24 going to get us further? I don't think so.

25 So what I'm appealing to you today is take the

1 alternative. Please, put the language in a place that we
2 can continue to work with you. And I -- as I stand here,
3 I tell you we will continue to work with you despite it.
4 But I'm telling you I will spend a huge amount of money.
5 And, by the way, the County of Los Angeles is the
6 principal permittee on the MS-4 permit. We coordinate
7 those cities. We talk to those cities for you, as you
8 know. We bring them to the table and we sometimes
9 arbitrary between the two parties. And we do not see that
10 responsibility as something we have to do. We do that in
11 the interests of the region.

12 And I would hate to see us having to give up on
13 that because we have to concentrate on language that,
14 really, what was the intent? To be able to fine the
15 community? Because when you fine me, you fine the
16 community. You fine the very community that will -- and
17 we don't solve a problem. What we do is create more
18 attorneys, more hearings like this, which -- you know,
19 Diego Cadeno, who's my deputy director's here, we're both
20 depressed. We're looking at it saying we want move
21 forward with watershed approach. We want to do it in a
22 watershed approach. How do we do that when we're in this
23 condition -- when we get this condition?

24 I wouldn't be here with this much emotion if my
25 director, if the County Board of Supervisors didn't think

1 this was a huge deal.

2 Someone asked if Supervisor Yaroslavsky moved
3 forward on source ID because -- and there was an --
4 someone implied that he acted because of your move in
5 July, you're going to put us in the permit. He actually
6 told go away when I went to see him. What really struck
7 him was Mark's beach report. He looked at that and said,
8 "Is that true?" And we came back to him and said, "Yes,
9 Supervisor, there's exceedances in this area, and Mark is
10 correct in these areas."

11 He got very motivated. And that's not hearsay.
12 I was in the room. I was given the order.

13 Thank you for hearing me today.

14 CHAIRPERSON NAHAI: Thank you very, very much.

15 Let's hear the closing statement from the
16 environmental organizations.

17 MR. FLEISCHLI: Good evening again, members of
18 the Board. My name is Steve Fleischli, Waterkeeper
19 Alliance, representing the Environmental Groups.

20 I'm going to start. And then Tracy, David and
21 Mark will also proceed with comments.

22 I understand that we have 20 some minutes?

23 CHAIRPERSON NAHAI: Twenty minutes.

24 MR. FLEISCHLI: You know, this morning -- or
25 yesterday when I got on the plane in New York to come back

1 here -- for those of you who are new to the Board in the
2 last few years, just to give you some context of why I'm
3 here. I used to be the Santa Monica Baykeeper and I used
4 be an attorney with Heal the Bay. And I left three years
5 ago to go work in New York with Waterkeeper Alliance,
6 which is the hub for 156 waterkeeper programs around the
7 globe on six continents.

8 And when I got on the plane, you know, I was
9 excited about coming back here and seeing all of you again
10 and talking about this issue, because it was near and dear
11 to my heart when I was the Santa Monica Bay Keeper and
12 when I worked at Heal the Bay.

13 But not only did I go back 3,000 miles to come to
14 Los Angeles, but I went back in time. And I went back
15 three years, I went back five years, and I went back ten
16 years throughout the course of today.

17 And one thing that I've learned in New York over
18 the last several years is it's given me an opportunity to
19 have perspective on things and to step back from a
20 situation that perhaps so many of you who work so hard on
21 this issue everyday haven't had the opportunity to do in a
22 while.

23 So I wanted to step back a little bit. I wanted
24 to give some context. Some of it has already been
25 presented in the record today. Actually all of it's in

1 the record, but none of it was sequential in this context.
2 And many of you know this. And I apologize if you're
3 hearing it again. But I do think it's important to have
4 context.

5 In 1972, as many of you -- as all of you should
6 know, the Clean Water Act was adopted, with the goal of
7 fishable, swimable waters by 1983.

8 Almost immediately after that, EPA made
9 exemptions from the Clean Water Act for storm water
10 discharges. That resulted in many years of litigation
11 over the issue.

12 In 1977 a court of appeal finally came down with
13 a ruling that told EPA it needed to address storm water
14 discharges as point sources. Throughout the 1980s the EPA
15 dragged its feet. And in 1987 Congress finally stepped in
16 and adopted the amendments that we are dealing with today
17 known as 402P of the Clean Water Act.

18 In 1990 the EPA promulgated Phase 1 rules and
19 this Regional Water Board adopted the first storm water
20 permit for Los Angeles. Most of those provisions, as was
21 pointed out earlier by Dr. Swamikannu's presentation, were
22 voluntary, many focused on BMP issues, none of which had a
23 meaningful consideration of water quality. And the sad
24 part was back then Heal the Bay had to fight vigorously
25 for even that permit.

1 But the cities didn't take it seriously and no
2 one was willing to make the connection with water quality.

3 TMDLs meanwhile were supposed to be developed by
4 1979. In 1997, the environmental community had no choice,
5 with no TMDLs developed in the Los Angeles region, that
6 Baykeeper, Heal the Bay and NRDC sued EPA to establish
7 those TMDLs in the Los Angeles region.

8 Trash and bacteria were the first TMDLs under
9 that consent decree. That was in 1997 that we brought
10 that lawsuit.

11 In 2001, the new permit was issued.

12 In 2002 the bacteria TMDL finally came down.

13 And then in July of this year, the compliance
14 deadline for the dry weather bacteria TMDL came to pass.

15 Someone else pointed out earlier that if people
16 wanted to engage in voluntary measures and to move forward
17 in a cooperative approach, we could have made a lot more
18 progress than we have in the last 34 years.

19 And perhaps some of this is to blame on the
20 environmental community and the Regional Board. Perhaps
21 through our own fault the environmental community and the
22 Water Board has left the city and the county too many
23 outs. Perhaps we have bent where maybe we shouldn't have,
24 giving the cities the benefit of the doubt. And why not?
25 Most of them are good people. Most of them are trying to

1 do the right thing. We don't dispute that here.

2 So, on TMDLs we give them an extra year or two
3 here or there on implementation. We separate dry weather
4 from wet weather, to make it easier for the cities and the
5 county to deal with the TMDL issues. We moved the
6 compliance point from the end of the pipe to the wave
7 wash, again to make it easier for the cities to comply.

8 We avoid incorporating TMDLs by reference in the
9 permit, as we did in 2001. We make concessions on
10 threshold application requirements in the storm water
11 permit. And we avoid numeric effluent limits for the last
12 16 years.

13 Sure, the environmentalists could have sued over
14 these permits, but we didn't. Some of the cities did and
15 the county did. Instead, the environmental community and
16 some people in this room went out to try to find funding.
17 I know Mark, Tracy and David went out and worked very hard
18 on these propositions to raise money, because that was
19 always the big issue, was get us money, we have no money.
20 And the environmental community rallied to help make that
21 happen.

22 And yet still these entities are unhappy about
23 being regulated. Many of them are saying they're not
24 challenging the TMDL, that they support the TMDL. But
25 really what we heard today was direct challenge to the

1 TMDL. How can you say that you're supporting the TMDL as
2 long as it's not meaningful, as long as it's not
3 enforceable, as long as you don't actually have to achieve
4 the limits in the TMDL.

5 Fortunately, unlike other places that I've seen
6 around this country and around this world, Los Angeles has
7 always been a little bit different. We have 50 million
8 beachgoers to the Los Angeles -- Santa Monica Bay beaches
9 and San Pedro beaches every year. The funding is there,
10 like I said. The economics, as we heard today, support
11 clean water and public health. All the reasons are there.

12 It's hard to believe that it comes down to what
13 you're going to do today. And I know you've heard that
14 many, many times. And I'm not naive enough to think that
15 this problem's going to be solved tomorrow. Some cities
16 have already threatened litigation in their comment
17 letters. I'm glad we didn't hear that today in public
18 comment. But they have threatened that. My best guess is
19 that it will take several more years before compliance is
20 achieved.

21 But enough is enough in terms of leaving cities
22 an out. It's time to move forward on this. So be firm.
23 Do not be afraid to demonstrate measurable results for our
24 tax dollars. And perhaps, more importantly, to
25 demonstrate measurable results for the last 34 years of so

1 many people's efforts to make Santa Monica Bay and our
2 nation's waters clean.

3 Thank you.

4 MR. BECKMAN: Hi. I'm David Beckman. You
5 haven't heard much from me today. I think this hearing's
6 gone on so long that I started with a flu and now I'm
7 feeling better.

8 (Laughter.)

9 MR. BECKMAN: I guess it's the endorphins. So
10 before they subside, it's great to have you back here,
11 Steve. Glad you could make it.

12 You know, I'm a little bit lost to what to say,
13 because I think what needs to be said isn't as soft and
14 nice as maybe the end of this hearing seems like would be
15 more appropriate. But the fact is, having spent the last
16 few years litigating cases funded by the County of Los
17 Angeles, with the express purpose of limiting the County's
18 obligations and creating a regime in which results don't
19 matter, it's difficult not to conclude that what you've
20 heard, while well meaning perhaps by some of the staff,
21 is, in essence, double talk.

22 They sidle up to you and put a gun in your ribs
23 and say they want to be friends. They sue you repeatedly,
24 challenging your very ability to issue permits and the
25 very authority that you have to do your job as public

1 health officials, and say they want a cooperative
2 approach. I mean it is really frankly ridiculous.

3 And I think that the County in taking these
4 positions is motivated by a fear of being responsible for
5 results. You hear all the time about taking cost into
6 consideration. You hear all the time about a
7 business-like approach and efficiency. But you have to
8 ask: Is the County living up to that rhetoric? Is the
9 county willing to accept a business-like results approach?

10 I don't think they are. And I think the evidence
11 clearly demonstrates that they have not taken the
12 obligation seriously.

13 Notice that you did not hear a word today from
14 the County about what it did during the 1990s. A whole
15 decade when their own monitoring data demonstrated that
16 they had problems at the beaches. And anybody who lived
17 in this city knew from reading the newspaper or just
18 personal observation that there were problems at the
19 beaches. But what did they do? Nothing for a decade.
20 Nothing. They put no evidence before you that they took
21 these obligations seriously, until when? Until they were
22 faced with the prospect of an enforceable requirement.
23 And then all of a sudden they started to act.

24 But even there, the county witness most
25 knowledgeable about this issue admitted that they don't

1 have a plan. And you can get a sense when you look at all
2 of the colorful charts that they don't have a plan.
3 They're doing a little bit here, a little bit there. But
4 there's nothing proactive. They can't -- they didn't come
5 to you today and say, "We need a little bit more time.
6 But we can tell you and guarantee we'll get this job done
7 if you give us this amount of time." Well, they can't say
8 that because they don't have a plan.

9 This whole issue that was brought up about the
10 north part of the bay, they're doing source ID now -- now.
11 They're doing it backwards. It's like from Alice in
12 Wonderland. That should have been done five years ago, or
13 at a minimum three years ago. And then they segue through
14 and do the work that needs to be done to figure out the
15 problem. But they're doing it in reverse.

16 And why are they doing it? It's astounding.
17 Because the Heal the Bay beach report card that's been
18 coming out for more than a decade happened to come to the
19 attention of a supervisor who happened to ask a question.
20 Well, it's good that that occurred. But is that the
21 evidence of a county government that you can trust to
22 protect public health without an enforceable obligation?

23 Well, to ask that question answers a question.

24 The County government needs an enforceable
25 obligation, not because they're bad people. We all know

1 that the law is not set up with the understanding that
2 anybody who's subject to the law is per se a bad person.
3 The law is the way we regulate society. And the fact of
4 the matter is there's not a shred of evidence before you
5 that absent an enforceable obligation the numbers that you
6 heard about gastroenteritis, the tip of the iceberg, will
7 begin to go down; there's not a shred of evidence that the
8 tens or hundreds of millions of dollars that the economy
9 loses every year will be diminished. That's why we need
10 an enforceable obligation. And we don't need that
11 obligation watered down with some of the changes that the
12 County has asked you to make, which are just mischievous
13 little invitations for their next lawsuit.

14 That whole non-storm water, you might be
15 wondering, "Why are we arguing about that?" Well, if
16 you've read the comment letter, it's because the County
17 has put forward an idiosyncratic definition of a non-storm
18 water that would exclude the rivers, like at Surfrider,
19 and might exclude, under their definition, the actual
20 flows themselves, leaving only the actual illicit
21 discharge as the regulated substance. Well, obviously
22 that would undermine the entire intent of the TMDL.
23 That's what they're after there. Don't take the bait.

24 You've heard, as Steve said, many times that this
25 is an important decision or that's an important decision.

1 But if you think about it, this is the first time that
2 this Board, to my knowledge, at least in the last 10 or
3 15, if not ever, has considered something that goes to the
4 very heart and soul of southern California. I mean
5 southern California is defined by many things. Maybe by
6 Hollywood, maybe by the good weather. But certainly we
7 can all agree by the beach, by the palm trees, by that
8 vision, the California dream. That is what is at stake,
9 is a piece of that. And the fact that people cannot go to
10 the beach, cannot take their kids to the beach in the 21st
11 Century with a reasonable assurance that they're not going
12 to get grotesque types of scabs and rashes and other
13 illnesses is not worthy of this Board or this society. We
14 can do better. And an enforceable obligation will make
15 sure that we will do better.

16 And so for that reason we ask you to accept the
17 recommendations of staff, recognizing, as they pointed
18 out, that they're not even as strict as they could be, and
19 move us forward toward that day where we're not going to
20 have millions of cases of illness associated just with a
21 day at the beach in the summertime here.

22 Thank you very much.

23 DR. GOLD: Mark Gold, Executive Director at Heal
24 the Bay.

25 A couple issues. One is on the diversion issue.

1 We strongly urge you to hold firm. Diversions are not
2 exemptions to the TMDL requirements on the storm water
3 permit. And that was a good modification that was made by
4 staff. Boy, did you hear a lot about that issue today on
5 how important it is to do proper operation and
6 maintenance, siting, design, construction, all those other
7 sorts of things. So it's very important that that
8 exemption provision was eliminated.

9 On the direct discharge issue which David just
10 alluded to, the Board's responsible to protect the health
11 of all beachgoers in the bay. And that means the millions
12 that swim and surf in front of creeks and streams, like
13 Paradise Cove on the Ramirez Canyon, Surfrider Beach at
14 Malibu Creek, and Escondido.

15 And Escondido Creek is an interesting story in
16 itself in that -- I'm sure, if you all remember, when I
17 brought this up to you before the beach -- right after the
18 beach report card. This was a beach that was monitored by
19 the county for 18 months by the Health Department, with
20 the city of L.A. did the monitoring, provided the data to
21 the County Health Department. The County Health
22 Department sat on it for 18 months while thousands of
23 people were needlessly exposed to adverse bacterial --
24 high bacteria densities and putting themselves at risk.
25 And so that's what we're talking about from the standpoint

1 of something that's got to change.

2 Responsible parties must be held accountable for
3 water quality standards regardless of whether or not the
4 polluted water's coming from a storm drain or from a
5 creek. And Escondido is the worst example of that. We
6 didn't even get a sign posted.

7 The environmental community and the state have
8 worked hand in hand and they've worked their tails off to
9 bring over \$35 million to clean up L.A. County's beaches.
10 We've worked closely with these funded agencies to come up
11 with project concepts and modify designs.

12 This isn't about cooperation. This is about
13 accountability. This isn't about the difficulty of
14 finding fecal bacteria sources. This is about protecting
15 the public health of millions of beachgoers, demonstrated
16 health risks associated with exposure to high fecal
17 bacteria densities from creeks and storm drains and poorly
18 regulated septic systems, regardless of what the source of
19 fecal bacteria is. Did anyone listen about what those epi
20 studies were all about? It wasn't about source. It was
21 about exposure to the pollution source, not where the
22 fecal bacteria was coming from. That's just a smoke
23 screen that you're hearing from the county today.

24 So your decision all boils down to this: If we
25 can't clean up our beaches and make them safe during the

1 summer months, where we've already seen such tremendous
2 progress just in the last year, where the vast majority of
3 beaches are actually in compliance with this, something
4 that got lost during this long day, then how in the heck
5 are we going to meet water quality standards during the
6 rest of the year? So this is the place to start and make
7 your decision and make your stand now. And we urge you to
8 do the right thing.

9 Thank you.

10 CHAIRPERSON NAHAI: All right. How much time is
11 left for closing statement?

12 Four minutes?

13 You have four minutes left if you want to address
14 something.

15 MS. EGOSCUE: I would just like the record to
16 reflect, as the Chair just did, that we have left time on
17 the clock.

18 CHAIRPERSON NAHAI: We appreciate that.

19 (Laughter.)

20 CHAIRPERSON NAHAI: All right. Let's have the
21 closing statement from staff.

22 DR. SWAMIKANNU: I'm Xavier Swamikannu, Chief of
23 the Storm Water Permitting Program, and have been involved
24 in storm water permits ever since the 1990 permit. So
25 through three generations I crafted many of the text. And

1 I can tell you that we had broad language in there
2 compelling progress to its compliance. But we had little
3 objectivity, little -- no standards at all, no objective
4 standards that we could enforce upon. That left us with
5 issuing letters requesting more information.

6 What we come here before you today is to ask for
7 a very narrow change, including incorporating in the
8 permit an enforceable provision addressing dry weather
9 flows, non-storm water, where it has clear impact on
10 public health.

11 I remember the first ten years of the program
12 Board staff had great difficulty articulating the
13 connection between the permit and what -- and the
14 environment. What was the environmental issue about storm
15 water? What are the impacts? As I mentioned before, only
16 in the 1996 permit did we start looking at impacts to
17 receiving water.

18 So now that we have evidence of impacts and
19 non-storm water, which is very controllable, we bring a
20 provision before you for dry weather discharges and
21 suggest -- or recommend that we prohibit it and then we
22 measure it in the receiving water. So it's not a
23 numerical effluent limit that you're being asked to put in
24 the permit. You're being asked -- you've given the
25 permittees an opportunity to eliminate what's causing the

1 exceedance in the receiving water which has direct help
2 to -- which has direct impact to human health.

3 The environmental community introduced several
4 documents that I had not seen before. But I can tell you
5 most of them were documents from other states or permits
6 from other states that had broad language about meeting
7 TMDL implementation plans for storm water. I'm here
8 before you for non-storm water. But even if it was storm
9 water, we had language like that before. What is needed
10 is numerical objective criteria in the receiving water or
11 at the end of pipe that the Board can begin to enforce on.

12 If it takes 15 years to get here and we're still
13 arguing about whether we can actually control something
14 that has direct help to human -- direct impact to human
15 health, and not, you know, a critical -- those impacts are
16 there, but we haven't made that connection yet.

17 And so my recommendation is to look at the
18 proposed language and adopt it with the changes that
19 counsel will propose.

20 Thank you.

21 CHAIRPERSON NAHAI: Thank you very much.

22 Go ahead.

23 SENIOR STAFF COUNSEL LEVY: If I may present the
24 rest of our closing from here. I've got several reference
25 materials I'd like to refer to.

1 The first point has to do with why the proceeding
2 today happened in the manner in which it happened.

3 And you've heard several references to the MS-4
4 permit litigation, which was, as was referenced, a
5 five-year litigation. It was not only I that was at the
6 Court of Appeal last week. It was Mr. Beckman as well on
7 behalf of the Environmental Groups who intervened on
8 behalf of the water boards to defend the legal authority
9 of the water boards to issue the permits that Mr. Lafferty
10 said they could actually meet.

11 And the representations that were made I won't go
12 into now. But, again, there's five years of litigation,
13 through a trial court and a court of appeal, challenging
14 the very foundations of the Board to regulate storm water.

15 Why do I want to bring this up? One of the
16 issues that was raised in those proceedings was challenges
17 to the due process rights of the County and the cities
18 during the proceedings where the MS-4 permit was
19 originally adopted.

20 Both -- excuse me -- The trial court ruled that
21 the County and the cities had waived those objections
22 because they did not raise them or voice them to the Board
23 at the time.

24 While the court of appeal hasn't ruled yet, there
25 were some statements made by one of the justices

1 suggesting that there may be a similar ruling from the
2 court of appeal.

3 So now they're making the objections to protect a
4 record for the future to challenge this activity on due
5 process grounds.

6 I'd like to read to you from Section 648.5 of
7 Title 23 of the California Code of Regulations.

8 "Adjudicative proceedings shall be conducted in a
9 manner as the Board deems most suitable to the particular
10 case, with a view towards securing relevant information
11 expeditiously, without unnecessary delay and expense to
12 the parties and to the Board."

13 I believe without any shadow of a doubt that the
14 Board has fully indulged the County in this proceeding,
15 even to the prejudice of interested parties who were
16 forced to leave because they couldn't set aside the entire
17 day for a proceeding that ordinarily would take several
18 hours. That is not fair to the public. I believe the due
19 process rights of the County have been adequately
20 vindicated in this proceeding.

21 Mr. Cohen just got up and made a comment about
22 this being an informal proceeding. Section 11445.10 of
23 the California Government Code describes an informal
24 hearing.

25 "The informal hearing procedure provides a forum

1 in the nature of a conference in which a party has an
2 opportunity to be heard by the presiding officer."

3 There is no question beyond any doubt that the
4 proceeding today was as formal a proceeding as it could
5 possibly be short of bringing in a witness stand -- which
6 I believe we actually did -- and allowing every type of
7 courtroom process that would be allowed in a court of law.

8 This is an administrative proceeding. This is an
9 administrative body. And your obligation is not to
10 provide a courtroom for adjudicative proceedings.

11 We received volumes of procedural objections,
12 last minute -- they were timely, but they were last
13 minute. And the County knew full well that this item was
14 going to be heard on this day since July 13th and before
15 when the Board continued it previously. And they could
16 have voiced a lot of these objections sooner relative to
17 the record. They could have submitted the documents that
18 the Environmental Groups are objecting to sooner so that
19 we could have evaluated them in due course.

20 There is no surprise to any of the parties to
21 this proceeding or any of the members of the public.

22 They have appeared before you for years. In
23 fact, Dr. Gold has appeared before you as an expert for
24 years. And the challenges to his expertise to raise
25 another objection based on foundation, I think without

1 trying to sound too strident, the characterization by the
2 Environmental Groups is accurate. There is a setup here.

3 Mr. Beckman described why injecting the word
4 "non-storm water" into the permit would be a mistake. Mr.
5 Gest said, "We believe that it's not redundant." That's
6 the problem, because the allegation is that it will be
7 nonredundant and that it will exclude things that must be
8 included in this permit.

9 We could have raised issues today. We could have
10 recalled Dr. Linwood Pendleton on cross-examination to
11 bring into question some of the testimony of Larissa
12 Aumont's regarding the age of the epidemiological models
13 employed by Dr. Pendleton. We didn't do so. The reason
14 we didn't do so is because, as we said at the beginning of
15 this, while the issues of storm water are complex, the
16 proceeding before you and the recommendation by staff is
17 relatively simple. It does not relate to how the
18 standards are or should be expressed. It does not relate
19 to whether or not human or animal pathogenic viruses cause
20 harm to human beings. It does not relate to the
21 appropriateness of the TMDL. It relates exclusively to
22 how the TMDL should be incorporated into the storm water
23 permit, when the TMDL itself said that the storm water
24 permit was going to be the vehicle which would be
25 implementation of the TMDL.

1 The Clean Water Act, Section 402P, subsection
2 3B2, says, "Permits for discharges from municipal storm
3 sewers shall include a requirement to effectively prohibit
4 non-storm water discharges into the storm sewers." That
5 has not been effectively accomplished. And arguments
6 about the aggressiveness or non-aggressiveness of the
7 County's efforts notwithstanding, there is still non-storm
8 water discharges and illicit discharges polluting the
9 Santa Monica Bay beaches. It is an ongoing problem. And
10 after closing statements staff will recommend a change to
11 the language that should accommodate the County's
12 contention that the language is somehow inflammatory while
13 keeping in the spirit of the finding precise.

14 I'd like to add a couple more comments here. One
15 was Mr. Gest's allegations about CEQA, the California
16 Environment Quality Act. As you know -- and this has been
17 referred to this Board on numerous occasions -- Section
18 13389 of the Water Code exempts the water boards from
19 complying with chapter 3 of CEQA, our obligation of
20 preparing environmental impact report, when adopting NPDES
21 permits. One of the issues that was raised in the MS-4
22 permit includes whether or not that exemption relates to
23 the entirety of CEQA or merely the obligation to adopt an
24 environmental impact report.

25 Unfortunately the finding when we adopted the

1 MS-4 permit was a broad finding which conveyed that the
2 water boards believed that they were exempted from the
3 policy considerations in CEQA as well.

4 And there are indications from oral argument from
5 the court of appeal that they may rule that that was
6 inappropriate and that we are bound by the policy
7 considerations in CEQA.

8 I don't know what court of appeal is going to
9 rule. I do know that your staff and you, as Board
10 members, consider the policies reflected in chapters 1,
11 2.6 and the entire title of CEQA every time you do an
12 action. The obligation is to protect the environment, to
13 minimize adverse environmental impacts, to mitigate them
14 where possible, to search for alternatives. And this
15 Board has adequately done that in this case and virtually
16 every other item before it, certainly since I've been on
17 this -- serving you.

18 The Board need not read every single document in
19 the voluminous administrative record for it to be valid or
20 for the Board to take a valid action. That's why you have
21 staff that are experienced and trained and have the
22 expertise and background in these things. We are your
23 eyes and ears. You have the relevant materials before
24 you, both through our representations of what they say and
25 both through the materials that you've seen and heard in

1 the evidence today. That is not an impediment.

2 However, the finding about CEQA is well founded
3 and very well supported through this Board's entire
4 process.

5 Once again, the matter before you is very
6 limited. It is solely the incorporation of a TMDL's
7 provisions in to MS-4 permit, which is what the TMDL
8 decided -- which is what you decided when you adopted the
9 TMDL. We believe the federal statute in the Clean Water
10 Act compels the banning of these non-storm water flows.
11 We believe the federal regulations which clearly say that
12 permits must be consistent with the assumptions and
13 requirements of available wasteload allocations compels
14 this result too.

15 We would ask you to adopt the staff's
16 recommendation.

17 Thank you very much and thank you for indulging
18 the process today.

19 CHAIRPERSON NAHAI: All right. That concludes
20 the closing statements.

21 We can now go to Board deliberations, have Board
22 questions and then move to action.

23 So let me ask which Board members have questions
24 for who?

25 Bonny, let's start with you.

1 None.

2 Maribel?

3 BOARD MEMBER MARIN: I think I have statements,
4 not questions.

5 BOARD MEMBER VANDERLANS: No.

6 VICE CHAIRPERSON DIAMOND: I don't have
7 questions.

8 BOARD MEMBER CLOKE: A statement, not questions.

9 BOARD MEMBER RICHARDSON: (Shakes head.)

10 CHAIRPERSON NAHAI: Okay. You're all going to
11 hate me if I have some questions.

12 (Laughter.)

13 BOARD MEMBER CLOKE: We'll all be glaring at you,
14 yes.

15 CHAIRPERSON NAHAI: Okay. Can I be very quick?

16 BOARD MEMBER MINDLIN: You're going to do it
17 anyway.

18 CHAIRPERSON NAHAI: All right. I'll just pose
19 these questions to staff.

20 So with respect to dry weather discharges, what
21 is required is an effective prohibition, is that correct?

22 DR. SWAMIKANNU: Within the storm water framework
23 what's required is an effective prohibition of non-storm
24 water discharges to the system.

25 CHAIRPERSON NAHAI: Okay. That answers my

1 question.

2 Next. In the TMDL that we adopted, we posed a
3 July 15th deadline. And the TMDL itself as adopted
4 provides for it to be implemented through the device of
5 the MS-4?

6 MS. DeSHAZO: That's correct.

7 CHAIRPERSON NAHAI: Which is what we're doing
8 here today, correct?

9 MS. DeSHAZO: Yes.

10 EXECUTIVE OFFICER BISHOP: Can I just clarify,
11 that it was a -- three years past the effective date of
12 the TMDL, which turns out to be July 15th.

13 CHAIRPERSON NAHAI: Okay. I understand that.

14 Now, in the materials that you've provided to
15 us -- Jon, this is a question for you -- have you not
16 included certain enforcement, I'll call them protocols,
17 steps that would be taken with respect to a possible
18 violation?

19 EXECUTIVE OFFICER BISHOP: I've Included the
20 procedures that I planned to go through as part of the
21 findings in your documentation.

22 CHAIRPERSON NAHAI: Okay. And should it be shown
23 that additional time for compliance is necessary, have you
24 not provided for the possibility of time schedule orders
25 or other such devices in order to provide time for

1 compliance should that be necessary?

2 EXECUTIVE OFFICER BISHOP: That is correct.

3 CHAIRPERSON NAHAI: I have a question about the
4 wave wash.

5 If the contamination -- if the exceedance is
6 going to be measured at the wave wash, what does that do
7 with respect to discharges that contaminate the beach but
8 don't reach the wave wash? And under what regime are you
9 going to deal with that situation?

10 EXECUTIVE OFFICER BISHOP: This issue was
11 discussed at the time that the TMDL was adopted. And to
12 try and recall and answer that question, the beneficial
13 use that we are protecting with the TMDL was actually in
14 the receiving water. And so we felt it was the most
15 appropriate to set the compliance point at the wave wash.
16 That does allow in some circumstances that there will be a
17 flowing storm drain that never reaches the ocean, but has
18 some contaminated water in it.

19 This TMDL -- or this amendment and the TMDL that
20 was brought up doesn't directly address that. But there
21 are other provisions that would address that.

22 CHAIRPERSON NAHAI: All right.

23 SENIOR STAFF COUNSEL LEVY: In like regard, Mr.
24 Chair, Mr. Tahir from the City of Inglewood asked a
25 question about whether or not this amendment would apply

1 to the City of Inglewood. And the answer is that
2 Inglewood does not discharge directly to Santa Monica Bay.
3 They discharge to Ballona Creek. While Ballona Creek is
4 covered by the TMDL, it's not covered by this amendment to
5 the MS-4 permit because the MS-4 permit only addresses
6 discharges directly to Santa Monica Bay.

7 CHAIRPERSON NAHAI: I was going to ask the
8 question about Inglewood. Thank you for responding to
9 that.

10 I had a question about MEP.

11 Irrespective of the issue of the Board's
12 authority to go beyond MEP. In the case -- in the narrow
13 issue that's before us right now, since we're dealing with
14 summer dry weather discharges, do we have an MEP aspect to
15 this?

16 SENIOR STAFF COUNSEL LEVY: For summer dry
17 weather discharges. Well, for all non-storm water there
18 is no MEP aspect. MEP only applies to municipal storm
19 water.

20 In fact, as I read in my closing, the subsection
21 directly above the section that -- at the Clean Water Act,
22 directory above the subsection setting forth the MEP
23 standard has an absolute prohibition for non-storm water
24 discharges into the MS-4 system. And that's 402P 3B2.
25 The language is again, "Permits for discharges from

1 municipal storm sewers shall include a requirement to
2 effectively prohibit non-storm water discharges into the
3 storm sewers."

4 No MEP applies there.

5 CHAIRPERSON NAHAI: Effectively prohibit.

6 DR. SWAMIKANNU: I would like to comment on that
7 matter as well, Chairman Nahai.

8 The Clean Water Act effective prohibition, this
9 is how EPA interprets term "effective prohibition".
10 Effective prohibition means you eliminate that discharge
11 to the system, or you get it permitted through the NPDES
12 system managed by the Water Board. Those are the only two
13 options.

14 CHAIRPERSON NAHAI: Okay. My final question is:

15 With respect to the 13241 factors, given the fact
16 that we adopted the TMDL and it has not been challenged,
17 that it is effective, that it went through the chain of
18 the various approvals that a TMDL has to go through, do we
19 have an obligation to consider 13241 factors at this
20 hearing?

21 SENIOR STAFF COUNSEL LEVY: The Los Angeles
22 -Burbank -- the L.A. - Burbank Supreme Court decision
23 ruled that if we go beyond federal law, we must consider
24 the 13241 factors, because Section 13263, which is the
25 permitting statute, says consider the 13241 factors.

1 The Supreme Court recognized however that federal
2 law is supreme to state law and that we are not allowed to
3 not implement water quality standards when we're issuing
4 federal permits.

5 Now, the issue in L.A. - Burbank was a publicly
6 owned treatment works, which is markedly different from an
7 MS-4 permit. And the argument that the county is trying
8 to raise is that by putting this requirement in the
9 permit, we are going beyond federal law.

10 Our position is, for several reasons, that's not
11 the case. The first reason is it's implementing the
12 prohibition in the statute, which is required by federal
13 law.

14 The second reason is it's implementing a TMDL,
15 which is required by federal law.

16 Now, the argument that has been raised is that
17 any time we go beyond MEP, that is going beyond federal
18 law. We disagree with that allegation. The courts have
19 not ruled on it yet.

20 But the only evidence before you today so far is
21 from Mr. Tahir, I believe, who said that diversions are
22 MEP. Which means that even if MEP applied, based upon
23 what you've heard before you, it would still be not
24 subject to L.A. - Burbank.

25 Now, I'm not trying to suggest that we've done an

1 analysis of 13241 adequate to address that or whether or
2 not it's MEP. But, again, we're implementing a wasteload
3 allocation, which is required by federal law, and we're
4 implementing a prohibition, which is required by federal
5 law.

6 CHAIRPERSON NAHAI: Well, definitionally then
7 we're not going beyond federal law, it would seem.

8 SENIOR STAFF COUNSEL LEVY: Correct.

9 CHAIRPERSON NAHAI: Okay. Those are my
10 questions.

11 Thank you.

12 Who's the first person who wants to make --

13 SENIOR STAFF COUNSEL LEVY: Before you make a
14 motion, could we just make our three recommended changes
15 for your consideration?

16 The first one is on page 15-501 in the yellow
17 change sheets.

18 The finding in paragraph 31C had language in
19 it -- has language in it proposed which was subject to a
20 significant degree of dispute whether the County's program
21 is aggressive or not aggressive. For our purposes and the
22 purposes of implementing this TMDL and these provisions,
23 it's not necessary to opine on whether or not their
24 program is aggressive or not.

25 So staff would recommend striking language

1 characterizing their program and leaving the language
2 which merely says that they have not eliminated the
3 standards violations at the beaches.

4 So the way it would read is: "Despite the fact
5 that more than a decade and a half has passed since MS-4
6 permittees were required to eliminate illicit
7 connections/discharges (IC/ID) into their MS-4s, their
8 programs have not eliminated standards violations at the
9 beaches."

10 That's what we would propose.

11 The second proposal and third proposals are to
12 clarify -- somewhat in response to the City of Inglewood's
13 comments, further clarify in Part 1B on page 15-507 and in
14 Section 5 on page 15-508 to add the word "directly".

15 So Part 1B would read, "Discharges of summer dry
16 weather flows from MS-4s directly into Santa Monica Bay."

17 And on page 15-508, paragraph 5, it would read,
18 "During summer dry weather there shall be no discharges of
19 bacteria from MS-4s directly into the Santa Monica Bay,"
20 to eliminate any possible ambiguity.

21 Those are staff's proposals.

22 CHAIRPERSON NAHAI: What does that -- does
23 that -- given the map of what the storm drain system looks
24 like, which is there's storm drains feeding into storm
25 drains feeding into other storm drains and then emptying

1 out in the bay, what does "directly" mean?

2 SENIOR STAFF COUNSEL LEVY: It's emphasizing that
3 the point of compliance -- we don't believe it's necessary
4 to do this, but it's a recommendation to satisfy those
5 concerns -- that the point of compliance is the wave wash,
6 not the tributaries and not upstream in the storm drain
7 system.

8 CHAIRPERSON NAHAI: All right. This
9 doesn't -- what you're saying doesn't make any difference
10 to the permittees that this amendment would regulate it?

11 SENIOR STAFF COUNSEL LEVY: We do not believe it
12 would have any substantive change in the permit
13 conditions. It might satisfy their concerns that
14 Inglewood, for instance, is not subject to these
15 provisions in the permit.

16 CHAIRPERSON NAHAI: Okay. I mean I'll take your
17 recommendation if you're comfortable with it.

18 SENIOR STAFF COUNSEL LEVY: And, again, it's not
19 necessary. We're just trying to be conciliatory.

20 EXECUTIVE OFFICER BISHOP: I think that I can
21 allay your concerns. Your concerns are if someone
22 upstream discharges into the storm drain system that
23 eventually directly discharges into Santa Monica Bay.
24 They are still subject to this amendment. If they
25 discharge to Malibu Creek or to Ballona Creek, and so they

1 indirectly get to Santa Monica Bay, they would not be
2 subject to this, because that storm drain system doesn't
3 enter into the beach.

4 CHAIRPERSON NAHAI: Into the bay?

5 EXECUTIVE OFFICER BISHOP: Into the bay.

6 CHAIRPERSON NAHAI: All right. So be it.

7 We can have a motion, a second, and then have
8 statements, if you'd like. Shall we proceed that way?

9 VICE CHAIRPERSON DIAMOND: Well, I'd like to
10 start out before I make the motion with a statement that
11 this is probably one of the most important, if not the
12 most important, actions to come before the Board since
13 I've been on it, because it's the first time that we've
14 actually incorporated a TMDL -- or will be voting to
15 incorporate a TMDL into the very important storm water
16 permit, which is the most important permit of our region.

17 I think the very essence of what we do is coming
18 into play today; and, that is, to protect the public, to
19 protect water quality, to protect public health and the
20 economy, all of this in one action.

21 We all listened a lot today. And I was moved by
22 much of what I heard, not less than the two little girls
23 that came before us today to talk about their experience,
24 particularly about not being able to go into the ocean.

25 Anybody who knows me knows that I take every

1 opportunity to talk about my grandchildren. So this will
2 be another one. But I frequently go to the beach with my
3 grandchildren. And the sad part for me is when I take
4 them to the pier and they look over as we're going along
5 the ferris wheel at the beautiful Santa Monica Bay and ask
6 whether they can go swimming there, and I have to say,
7 "No, we can't swim here." And I have to tell them why.
8 And they know that being a member of the Water Board, I
9 should be protecting them. And I really feel that today
10 we're doing that, we're protecting all of our children --
11 I'd like to protect all of our children by the action that
12 we take today.

13 And I want to also say that I was very pleased to
14 get for the first time that I've sat on the Water Board a
15 letter from a governor -- from this Governor requesting us
16 and supporting the action that we were -- that we were
17 being asked to take today. And I think that's really
18 terrific.

19 And I would like to then make the motion to amend
20 the Los Angeles County Municipal Separate Storm Water
21 System by incorporating the dry weather wasteload
22 allocations for bacteria to the Santa Monica Bay beaches
23 bacteria TMDL. And I'd like to add the changes that were
24 made prior to today, that we received today, and then
25 additionally the three changes that were made by counsel

1 just a few moments ago.

2 CHAIRPERSON NAHAI: So we have a motion.

3 BOARD MEMBER RICHARDSON: I Would second that.

4 BOARD MEMBER CLOKE: Okay.

5 CHAIRPERSON NAHAI: But let's have -- to the
6 extent that Board members have statements, let's hear them
7 now.

8 Susan.

9 BOARD MEMBER CLOKE: Okay. First, I myself would
10 like to recognize the hard work of the County on water
11 quality issues. And I can speak specifically to the work
12 of Susan Nissman, who's a deputy to Supervisor
13 Yaroslavsky, and to Mark Pestrella, because I'm personally
14 familiar with their work and have been to meetings and
15 worked with them on issues. I don't think that -- in
16 spite of testimony that we heard today, I don't think that
17 that's an issue that this Board -- I don't think that
18 that's the issue here today.

19 There was also testimony today about this
20 question of indicators for public health. That is a
21 question that has been answered affirmatively,
22 substantially and repeatedly. That's not to say that we
23 don't appreciate or understand the need for ongoing
24 research. But it is to say that we do understand that the
25 risk to public health has been fully demonstrated.

1 Various people have raised objections today as to
2 testimony submitted. I want to assure everybody in the
3 audience that this Board is able to sift through testimony
4 and to decide what is relevant to the matter before us
5 today.

6 And, finally, I want to say that the matter
7 before us today goes to the heart of the responsibilities
8 of this Board. The Board has a clearly defined role, a
9 legally defined role, and a publicly defined role. And we
10 are required to meet our responsibilities as Board members
11 to the public health of the 50 million plus people who go
12 annually to our beaches.

13 And like Fran, I am also a grandmother. And we
14 are required, and I want, to meet our responsibility to
15 future generations.

16 BOARD MEMBER RICHARDSON: And I would defer to
17 you as a second.

18 BOARD MEMBER CLOKE: Okay.

19 CHAIRPERSON NAHAI: You have statement to make?

20 BOARD MEMBER RICHARDSON: No. I'm deferring
21 to --

22 CHAIRPERSON NAHAI: Do you have a statement to
23 make, Bonny?

24 Maribel, do you have something to say?

25 BOARD MEMBER MARIN: I do.

1 I'm one of the newer Commissioners --

2 CHAIRPERSON NAHAI: Turn on your microphone.

3 BOARD MEMBER MARIN: I'm one of the newer
4 Commissioners. And one of the -- the price that I pay to
5 participate on this very important board is I must take
6 personal vacation time to participate. I spend a lot of
7 time preparing for my meetings by reviewing the records
8 that's provided to me, as I did in this case,
9 understanding that it was a very, very important decision
10 that was before us today.

11 I have to say that I was really disappointed by
12 the approach taken by the County. They spent the last ten
13 minutes providing a very compelling set of statements
14 about how committed they are to, you know, the health of
15 the beaches and the public health. But they spent the
16 majority of the time with strategies that really appeared
17 to me to be seeding the process for a legal challenge in
18 the future.

19 And that to me was disingenuous and quite
20 offensive, because I was prepared to make a decision based
21 on the record and yet it was very clear that the
22 proceeding that they were participating was one for the
23 future in the court of law. And I don't appreciate my
24 time being spent like that. I think it disregards the
25 time and effort that I put into preparing for these

1 hearings.

2 Having said that, I also don't want to spend any
3 more time deliberating on all these issues. I hope that
4 in the future you are true to your word, that regardless
5 of the decision that is made today, you will continue to
6 make an investment in the protection of the beaches and
7 that you will continue to work with our staff in a genuine
8 effort to emit progress over the next few years. I
9 understand that it's a complicated process. I've been
10 with the City of Los Angeles in the past. I know that the
11 different hoops that you have to jump through take time
12 and it's an unpredictable process and it costs a lot of
13 money.

14 But I think that coming to a hearing like this
15 and presenting your case in the way that it was presented
16 today really just reflects an attitude of not wanting to
17 be held accountable, not wanting to take full
18 responsibility. And that sends I think the wrong message.
19 So I really am optimistic that this is just something that
20 lawyers do sometimes; and that in the practical world the
21 engineers and the analysts will knock their heads together
22 and come up with some good solutions.

23 So that's all that I want to say today.

24 CHAIRPERSON NAHAI: All right.

25 SENIOR STAFF COUNSEL LEVY: Mr. Chair?

1 CHAIRPERSON NAHAI: Yes.

2 SENIOR STAFF COUNSEL LEVY: I'm sorry.

3 Staff is sitting around here debating one of the
4 last-minute changes that we proposed. And we'd like to
5 withdraw the recommendation solely because staff is having
6 confusion about whether or not adding the word "directly"
7 in those two places causes mischief or doesn't. And we
8 think the language is fine as it was. We'd just like to
9 withdraw those recommendation for the two words "directly"
10 just because we can't figure it out right now. And the
11 public on either side has not had an opportunity to
12 comment on that, if it's substantive or not. And we'd
13 just as soon not do it.

14 CHAIRPERSON NAHAI: Yeah, I'm very concerned
15 about what it would be. So --

16 VICE CHAIRPERSON DIAMOND: Can I change my motion
17 then with a friendly amendment?

18 CHAIRPERSON NAHAI: Well, I can -- I think we can
19 offer a friendly amendment to your motion, which would
20 restore --

21 VICE CHAIRPERSON DIAMOND: -- the original
22 language.

23 CHAIRPERSON NAHAI: Yeah.

24 BOARD MEMBER CLOKE: And I'll second it.

25 VICE CHAIRPERSON DIAMOND: Okay. I'll accept the

1 friendly amendment.

2 BOARD MEMBER CLOKE: And I'll second to accept
3 that.

4 CHAIRPERSON NAHAI: All right. We have a motion,
5 we have a second.

6 Brad, do you have a statement to make?

7 BOARD MEMBER MINDLIN: No.

8 CHAIRPERSON NAHAI: Leo?

9 BOARD MEMBER VANDERLANS: Very briefly.

10 Pollution prevention I believe is the reason --
11 at least one of the main reasons why we're here. So I'm
12 sure, like everyone else here, I'm very pleased to see
13 this action as a big step in that direction.

14 CHAIRPERSON NAHAI: All right.

15 BOARD MEMBER MINDLIN: Real quickly. You know,
16 Supervisor Yaroslavsky's name was brought up so much, so
17 I'll use a quote that I've heard him say so many times.
18 "Everything that needs to be said has been said, but not
19 by me yet."

20 (Laughter.)

21 BOARD MEMBER MINDLIN: No, seriously. I was just
22 really a little disappointed with how the County
23 approached it. I've been hearing that the County wants to
24 work with the Board, they want clean water. I agree with
25 that. And hopefully after this hearing we will see that

1 and we won't spend five years in litigation and we can
2 move forward to do what's best for the citizens of this
3 county, this great state, and keep the economy going by
4 providing, you know, nice, beautiful waves and beaches.

5 You know, I have to tell you, last Sunday was my
6 daughter's birthday. And she has a beach party every year
7 for her birthday. And we were at Life Guard Stand 20,
8 pretty close to the Santa Monica Pier, and that's all I
9 could think of. And I had to tell every parent
10 afterwards, "Make sure to wash out your kids' ears, their
11 eyes and their face" after, you know, they went in surfing
12 and everything. And it's just such a shame to have to
13 tell an 11-year-old kid that.

14 Thank you.

15 CHAIRPERSON NAHAI: All right. Thank you.

16 I'll just wrap up by thanking everyone for the
17 presentations that they made today, and thank staff,
18 everybody who presented today. It's been a long day. But
19 it's clear that everybody worked very, very hard.

20 I wanted to address Mr. Pestrella for a second.
21 We do work together. I was -- I thought your closing
22 remarks -- you don't need to stand up.

23 MR. PESTRELLA: I want to be able to see you when
24 you're talking.

25 CHAIRPERSON NAHAI: Okay. I thought your closing

1 remarks were heartfelt, and I take them that way. And I
2 know that this is how you feel and this is how you intend
3 to conduct your business.

4 I have to say though that your remarks -- your
5 closing remarks stood out in sharp contrast to the tactics
6 that your team employed today. I think Mike Levy
7 characterized it as a setup. It certainly felt that way.
8 And it was very disappointing to me.

9 I also would like to thank Supervisor Yaroslavsky
10 in particular for instigating the source identification
11 study. I think that's a great step forward. I'm truly
12 grateful for his having stepped into this with his
13 leadership and his wisdom on these issues.

14 I would support the motion. I think we -- we've
15 adopted a TMDL. It passed. It's effective. And if we
16 don't take those wasteload allocations and put them into
17 the permit, which is exactly what the TMDL calls for, then
18 what good are those limits? What have we accomplished?

19 And as far as enforcement is concerned, this fear
20 of lawsuits coming out, history doesn't bear that out.
21 And certainly the EO has stated here on the record and in
22 the materials that we've seen that he has no intention to
23 go out and willingly sue people.

24 So with that, we have a motion, we have a second.

25 I'll call for the vote.

1 All in favor?

2 (Ayes.)

3 CHAIRPERSON NAHAI: Any opposed?

4 Okay. Thank you.

5 (Applause.)

6 CHAIRPERSON NAHAI: With that, everybody who
7 valet parked, your car may be in Lot B, which is --

8 SENIOR STAFF COUNSEL LEVY: Mr. Chair.

9 CHAIRPERSON NAHAI: All right. With respect to
10 the trash TMDL matter -- excuse me, everyone. We're not
11 through yet.

12 With respect to the trash TMDL matter, does
13 anybody have any --

14 EXECUTIVE OFFICER BISHOP: That was continued.

15 CHAIRPERSON NAHAI: Okay. We stated we would
16 move public comment to the end of the proceedings.

17 Does anybody have any public comment to offer?

18 Great.

19 So in that case we're adjourned.

20 Thank you.

21 (Thereupon the Los Angeles Regional Water

22 Quality Control Board adjourned at 7:10 p.m.)

23

24

25

1 CERTIFICATE OF REPORTER

2 I, JAMES F. PETERS, a Certified Shorthand
3 Reporter of the State of California, and Registered
4 Professional Reporter, do hereby certify:

5 That I am a disinterested person herein; that the
6 foregoing Los Angeles Regional Water Quality Control Board
7 meeting was reported in shorthand by me, James F. Peters,
8 a Certified Shorthand Reporter of the State of California,
9 and thereafter transcribed into typewriting.

10 I further certify that I am not of counsel or
11 attorney for any of the parties to said meeting nor in any
12 way interested in the outcome of said meeting.

13 IN WITNESS WHEREOF, I have hereunto set my hand
14 this 3rd day of October, 2006.

15

16

17

18

19

20

21

22

JAMES F. PETERS, CSR, RPR

23

Certified Shorthand Reporter

24

License Number 10063

25

□

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

DATE 06/02/10

DEPT. 86

HONORABLE DAVID F. YAPPE

JUDGE

C. HUDSON

DEPUTY CLERK

HONORABLE

JUDGE PRO TEM

B. JAUREGUI, COURTROOM ASST.

ELECTRONIC RECORDING MONITOR

3-

NONE

Deputy Sheriff

C. CRUZ, CSR # 9095

Recorder

9:30 am

BS122724

Plaintiff DAVID W. BURHENN (X)

Counsel HOWARD D. GEST (X)

COUNTY OF LOS ANGELES ET AL

Defendant STEVE FLEISCHLI (X)

VS

Counsel HELEN G. ARENS (X)

STATE WATER RESOURCES CONTROL
BOARD ET AL**NATURE OF PROCEEDINGS:**

HEARING ON PETITION FOR WRIT OF MANDATE;

The matter comes on for trial and is argued.

The Administrative Record (consisting of six volumes)
is admitted in evidence as petitioner's exhibit 1.

The Petition for Writ of Mandate is granted.

Petitioners seek judicial review of an administrative decision pursuant to section 13330 of the Water Code. Petitioners contested a rule making decision before a Regional Water Resources Control Board and, when its appeal was denied, petitioners requested further administrative review by the State Water Resources Control Board. The State Board considered and decided two issues raised before the Regional Board but refused to review any other issues decided by the Regional Board. One of the issues raised before the Regional Board that the State Board refused to decide was the issue of whether petitioners received a fair hearing before the Regional Board in light of the fact that an attorney for the Regional Board acted as an advocate in the hearing before the Regional Board and in the same hearing acted as an advisor to the decision making body.

Water Code section 13330(b) states that a party

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

DATE: 06/02/10

DEPT. 86

HONORABLE DAVID P. YAFFE

JUDGE

C. HUDSON

DEPUTY CLERK

HONORABLE

JUDGE PRO TEM

E. JAUREGUI, COURTROOM ASST.

ELECTRONIC RECORDING MONITOR

3

NONE

Deputy Sheriff

C. CRUZ, CSR # 9095

Reporter

9:30 am

BS122724

Plaintiff DAVID W. BURHENN (X)

Counsel HOWARD D. GEST (X)

COUNTY OF LOS ANGELES ET AL

Defendant STEVE FLEISCHLI (X)

VS

Counsel HELEN G. ARENS (X)

STATE WATER RESOURCES CONTROL
BOARD ET AL**NATURE OF PROCEEDINGS:**

aggrieved by a final decision or order of the Regional Board, for which the State Board denies review, may obtain review of the decision of the Regional Board by filing a petition for writ of mandate in this court. Petitioners have done so.

The statute also says that the proceeding in this court is to be conducted pursuant to section 1094.5 of the Code of Civil Procedure, and that the scope of review to be used by this court is to exercise its independent judgment on the evidence involving judicial review of a decision of the State Board or of a Regional Board for which the State Board denies review.

When counsel performs as an advocate in a given case he or she is generally precluded from advising a decision making body in the same case. NIGHTLIFE PARTNERS v. CITY OF BEVERLY HILLS, 108 Cal.App.4th 81, 92(2003). To allow an advocate for one party to also act as counsel to the decision maker creates the substantial risk that the advice will be skewed. NIGHTLIFE PARTNERS, supra at Page 93.

An independent review of the administrative record shows that the weight of the evidence contained therein is clearly to the effect that Michael Levy acted as the Regional Board's advocate in the administrative proceeding before that Board. He directly examined witnesses from the Board's staff, he cross-examined witnesses called by petitioners,

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

DATE 06/02/10

DEPT. 86

HONORABLE DAVID E. YAPPE

JUDGE

C. HUDSON

DEPUTY CLERK

HONORABLE

JUDGE PRO TEM

B. JAUREGUI, COURTROOM ASST.

ELECTRONIC RECORDING MONITOR

3-

NONE

Deputy Sheriff

C. CRUZ, CSR # 9095

Report:

9:30 am

BS122724

Plaintiff DAVID W. BURHENN (X)

Counsel HOWARD D. GEST (X)

COUNTY OF LOS ANGELES ET AL

Defendant STEVE FLEISCHLI (X)

VS

Counsel HELEN G. ARENS (X)

STATE WATER RESOURCES CONTROL
BOARD ET AL**NATURE OF PROCEEDINGS:**

he made a closing argument on behalf of the staff, and he made objections to questions asked by petitioners' counsel. Levy also acted as an advisor to the decision making body, repeatedly answering their questions as to legal and procedural matters.

The administrative hearing before the Regional Water Resources Control Board was not fairly conducted because of Levy's conduct. Petitioners are entitled to a writ of mandate remanding the matter to the Regional Water Resources Control Board for a new hearing in which Levy does not participate and in which the same person does not act as both an advocate before the Board and an advisor to the Board.

Because the proceedings ordered herein will require new administrative proceedings, which will create a new and probably different administrative record, the other issues raised by the parties are not decided by this court.

The Administrative Record lodged in this action is ordered forthwith returned to the party who lodged it, to be preserved without alteration until the Judgment herein is final, and to be forwarded to the Court of Appeal in the event of an appeal.

Counsel for petitioners are to submit a proposed judgment and a proposed writ to this department within ten days with a proof of service showing that copies have been served upon opposing counsel by hand

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

DATE: 06/02/10

DEPT. 86

HONORABLE DAVID P. YAFFE

JUDGE

C. HUDSON

DEPUTY CLERK

HONORABLE

JUDGE PRO TEM

B. JAUREGUI, COURTROOM ASST.

ELECTRONIC RECORDING MONITOR

3.

NONE

Deputy Sheriff

C. CRUZ, CSR # 9095

Reporter

9:30 am

BS122724

Plaintiff

DAVID W. BURHENN (X)

Counsel

HOWARD D. GEST (X)

COUNTY OF LOS ANGELES ET AL

Defendant

STEVE FLEISCHLI (X)

VS

Counsel

HELEN G. ARENS (X)

STATE WATER RESOURCES CONTROL
BOARD ET AL**NATURE OF PROCEEDINGS:**

delivery or facsimile. The court will hold the documents for ten days before signing and filing the judgment and causing the clerk to issue the writ.

1 ANDREA SHERIDAN ORDIN, County Counsel
2 JUDITH A. FRIES, Principal Deputy (SBN 070897)
3 LAURIE E. DODS, Deputy (SBN 157756)
4 Kenneth Hahn Hall of Administration
5 500 W. Temple St., Rm. 653
6 Los Angeles, California 90012
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10 Los Angeles, California 90017
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12 Facsimile: (213) 688-7716

9 Attorneys for Petitioners COUNTY OF LOS
10 ANGELES and LOS ANGELES COUNTY
11 FLOOD CONTROL DISTRICT

12 SUPERIOR COURT OF THE STATE OF CALIFORNIA

13 COUNTY OF LOS ANGELES

14 COUNTY OF LOS ANGELES and LOS
15 ANGELES COUNTY FLOOD CONTROL
16 DISTRICT,

16 Petitioners,

17 v.

18 STATE WATER RESOURCES CONTROL
19 BOARD; CALIFORNIA REGIONAL WATER
20 QUALITY CONTROL BOARD, LOS
21 ANGELES REGION; and DOES 1 through 50,
22 inclusive,

22 Respondents.

ORIGINAL FILED

JUL 16 2010

**LOS ANGELES
SUPERIOR COURT**

CASE NO. BS122724

~~[PROPOSED]~~ JUDGMENT GRANTING
PEREMPTORY WRIT OF MANDATE

Date: June 2, 2010

Time: 9:30 a.m.

Place: Dept. 86

23
24 This matter came on for trial before the Honorable David P. Yaffe, Superior Court Judge, on
25 June 2, 2010. Petitioners were represented by Howard Gest and David W. Burhenn of Burhenn &
26 Gest LLP. Respondents were represented by Helen G. Arens, Deputy Attorney General. Intervenor
27 Heal the Bay was represented by Steve Fleischli.

1 The Court, having reviewed the record of Respondents' proceedings in this matter, the briefs
2 submitted by counsel, and having heard the arguments of counsel, and being fully advised,

3 IT IS HEREBY ORDERED, ADJUDGED, AND DECREED that:

4 1. The Petition for Writ of Mandate is granted. For the reasons set forth in the Court's
5 minute order dated June 2, 2010, Respondent California Regional Water Quality Control Board, Los
6 Angeles Region ("Regional Board"), committed a prejudicial abuse of discretion.

7 2. A Peremptory Writ of Mandate shall issue commanding Respondents:

8 (a) To void and set aside Los Angeles Regional Water Quality Control Board
9 Order No. R4-2006-0074 and all amendments to the Los Angeles County Municipal Storm Water
10 Permit (Order No. 01-182) effected thereby;

11 (b) To void and set aside State Water Resources Control Board Order WQ 2009-
12 0008, without prejudice to the State Water Resources Control Board's consideration of the matters
13 addressed in Order WQ 2009-0008 based on any new administrative record that may come before it;

14 (c) To cease and suspend any and all activities taken by Respondents pursuant to
15 Los Angeles Regional Water Quality Control Board Order No. R4-2006-0074 or State Water
16 Resources Control Board Order WQ 2009-0008; and

17 (d) To make and file a return to this writ ninety (90) days from the date a copy of
18 this writ is served on them showing what they have done to comply with this writ.

19 3. The Peremptory Writ shall further command that, should Respondent Regional Board
20 ~~choose to amend the Los Angeles County Municipal Storm Water Permit (Order No. 01-182) to~~
~~SUCH HEARING~~ CONDUCT ANY FURTHER HEARING UPON REMAND, AT
21 ~~reflect the terms of the Santa Monica Bay Beaches Dry Weather Bacteria TMDL, Regional Board~~
~~Resolution No. 02-004, such amendment shall occur at a hearing in which the same person does not~~ SHALL
22 act as both an advocate before the Los Angeles Regional Water Quality Control Board and an
23 advisor to the Los Angeles Regional Water Quality Control Board, and ~~in which~~ the Regional Board
24 counsel who participated in the last Regional Board hearing ~~does~~ SHALL not participate.

25 4. OBJECTIONS BY RESPONDENTS AND INTERVENOR TO
26 THIS PROPOSED JUDGMENT ARE OVERRULED.
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4. Petitioners are awarded their costs of suit in the amount of \$_____.

Dated: JUL 16 2010

David P. Yaffe

Superior Court Judge

RECEIVED

JUN 02 2010

1 ANDREA SHERIDAN ORDIN, County Counsel
2 JUDITH A. FRIES, Principal Deputy (SBN 070897)
3 LAURIE E. DODS, Deputy (SBN 157756)
4 Kenneth Hahn Hall of Administration
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DEPT. 86 EXEMPT FROM FILING FEES
GOVERNMENT CODE § 6103

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13 Attorneys for Petitioners COUNTY OF LOS
14 ANGELES and LOS ANGELES COUNTY
15 FLOOD CONTROL DISTRICT

16 SUPERIOR COURT OF THE STATE OF CALIFORNIA

17 COUNTY OF LOS ANGELES

18 COUNTY OF LOS ANGELES and LOS
19 ANGELES COUNTY FLOOD CONTROL
20 DISTRICT,

CASE NO. BS122724

21 Petitioners,

^A
~~PROPOSED~~ PEREMPTORY WRIT OF
MANDATE

22 v.

Date: June 2, 2010

Time: 9:30 a.m.

Place: Dept. 86

23 STATE WATER RESOURCES CONTROL
24 BOARD; CALIFORNIA REGIONAL WATER
25 QUALITY CONTROL BOARD, LOS
26 ANGELES REGION; and DOES 1 through 50,
27 inclusive,

28 Respondents.

TO RESPONDENTS STATE WATER RESOURCES CONTROL BOARD AND
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION:

WHEREAS judgment has been entered in this action ordering that a peremptory writ of
mandate be issued from this Court,

1 THEREFORE, IN ACCORDANCE WITH THE JUDGMENT, YOU ARE HEREBY
2 COMMANDED:

3 (a) To void and set aside Los Angeles Regional Water Quality Control Board
4 Order No. R4-2006-0074 and all amendments to the Los Angeles County Municipal Storm Water
5 Permit (Order No. 01-182) effected thereby;

6 (b) To void and set aside State Water Resources Control Board Order WQ 2009-
7 0008, without prejudice to the State Water Resources Control Board's consideration of the matters
8 addressed in Order WQ 2009-0008 based on any new administrative record that may come before it;

9 (c) To cease and suspend any and all activities taken by you pursuant to Los
10 Angeles Regional Water Quality Control Board Order No. R4-2006-0074 or State Water Resources
11 Control Board Order WQ 2009-0008;

12 (d) Should you choose to ~~amend the Los Angeles County Municipal Storm Water~~
13 ~~Permit (Order No. 01-182) to reflect the terms of the Santa Monica Bay Beaches Dry Weather~~
14 ~~Bacteria TMDL, Regional Board Resolution No. 02-004, such amendment shall occur at a hearing in~~
15 ~~which~~ ^{CONDUCT ANY FURTHER HEARING} ~~the same person does not act as both an advocate before the Los Angeles Regional Water~~
16 ~~Quality Control Board and an advisor to the Los Angeles Regional Water Quality Control Board,~~
17 ~~and in which~~ ^{UPON REMAND AT SUICT HEARING} ~~the individual who participated as Regional Board counsel in the last Regional Board~~
18 ~~hearing~~ ^{Shall} ~~does not participate; and~~

19 (e) To make and file a return to this writ ninety (90) days from the date a copy of
20 this writ is served on you showing what you have done to comply with this writ.

21 Dated: July 23^r, 2010

22 John A. Clarke



LOS ANGELES SUPERIOR COURT CLERK

By:  Kelly Encinas

24 LET THE FOREGOING WRIT ISSUE.

25 Dated: July __, 2010

26 _____
Superior Court Judge

EXEMPT FROM FILING FEES
GOVERNMENT CODE § 6103

1 KAMALA D. HARRIS
Attorney General of California
2 RICHARD J. MAGASIN
Supervising Deputy Attorney General
3 HELEN G. ARENS (SBN 150572)
JENNIFER F. NOVAK (SBN 183882)
4 ALLAN S. ONO (SBN 130763)
Deputy Attorneys General
5 300 South Spring Street, Suite 1702
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Fax: (213) 897-2802
7 E-mail: Helen.Arens@doj.ca.gov

ORIGINAL FILED
APR 27 2011
**LOS ANGELES
SUPERIOR COURT**

8 *Attorneys for Respondents State Water Resources*
Control Board and California Regional Water
9 *Quality Control Board, Los Angeles Region*

10 SUPERIOR COURT OF THE STATE OF CALIFORNIA
11 COUNTY OF LOS ANGELES
12 CENTRAL DISTRICT
13

14
15 **COUNTY OF LOS ANGELES and LOS**
16 **ANGELES COUNTY FLOOD CONTROL**
DISTRICT,

Case No. BS122724

Judge: Hon. Ann Jones
Dept.: 86

17 Petitioners,

**REGIONAL BOARD'S
SUPPLEMENTAL RETURN TO
PEREMPTORY WRIT OF MANDATE**

18 v.

19 **STATE WATER RESOURCES CONTROL**
20 **BOARD; CALIFORNIA REGIONAL**
21 **WATER QUALITY CONTROL BOARD,**
22 **LOS ANGELES REGION; and DOES 1**
through 50, inclusive,

Trial/Hearing Date: June 2, 2010
Time: 9:30 a.m.
Dept: 86
Date Action Filed: September 10, 2009

23 Respondents.

24 TO THE ABOVE ENTITLED COURT:

25 Respondent California Regional Water Quality Control Board, Los Angeles Region
26 ("Regional Board") makes the following supplemental return to the peremptory writ of mandate
27 issued in this action:
28

CONFORMED COPY

1 On July 16, 2010, this Court entered judgment in favor of Petitioners and on July 23, 2010,
2 issued a peremptory writ of mandate commanding Respondents Regional Board and State Water
3 Resources Control Board ("State Board") (collectively, Water Boards):

4 (a) To void and set aside Los Angeles Regional Water Quality Control Board Order
5 No. R4-2006-0074 and all amendments to the Los Angeles County Municipal Storm Water
6 Permit (Order No. 01-182) effected thereby;

7 (b) To void and set aside State Water Resources Control Board Order WQ 2009-0008,
8 without prejudice to the State Water Resources Control Board's consideration of the matters
9 addressed in Order WQ 2009-0008 based on any new administrative record that may come before
10 it;

11 (c) To cease and suspend any and all activities taken by the Water Boards pursuant to
12 Los Angeles Regional Water Quality Control Board Order No. R4-2006-0074 or State Water
13 Resources Control Board Order WQ 2009-0008;

14 (d) Should the Regional Board choose to conduct any further hearing upon remand, at
15 such hearing the same person shall not act as both an advocate before the Los Angeles Regional
16 Water Quality Control Board and an advisor to the Los Angeles Regional Water Quality Control
17 Board, and the individual who participated as the Regional Board counsel in the last Regional
18 Board hearing shall not participate; and

19 (e) To make and file a return to the writ ninety (90) days from the date a copy of this
20 writ is served on the Water Boards showing what they have done to comply with the writ.

21
22 The Water Boards filed a timely Return, to which Petitioners filed a Motion to Strike as to
23 the Regional Board. The Court's Ruling on Petitioners' Motion to Strike Respondents' Return of
24 Writ Heard on January 6, 2011, stated as follows:

25 1. The motion to strike return of Respondent Regional Board and directing
26 compliance with the writ is granted;

27 2. The Regional Board shall comply with this Court's peremptory writ of
28 mandate's command to void and set aside Los Angeles Regional Water Quality Control

1 Board Order No. R4-2006-0074 and all amendments to the Los Angeles County
2 Municipal Storm Water Permit (Order No. 01-182) effected thereby;

3 3. The peremptory writ is hereby discharged with respect to (a) the command
4 that Respondent State Board void and set aside State Water Resources Control Board
5 Order WQ-2009-0008, and (b) the command that Respondents cease and suspend any and
6 all activities taken pursuant to Los Angeles Regional Water Quality Control Board Order
7 No. R4-2006-0074 or State Water Resources Control Board Order WQ-2009-0008;

8 4. The peremptory writ is not discharged with respect to (a) the command to
9 void and set aside Los Angeles Regional Water Quality Control Board Order No. R4-
10 2006-0074 and all amendments to the Los Angeles County Municipal Storm Water Permit
11 (Order No. 01-182) effected thereby, and (b) the command regarding Respondent
12 Regional Board conducting any further hearing upon remand until a hearing is so held and
13 Respondent Regional Board has filed a return showing compliance;

14 5. The Regional Board shall make and file another return to the writ 120 days
15 from the date of this Court's order, demonstrating compliance therewith; and

16 6. The Court retains jurisdiction to enforce its judgment and writ in this case.
17

18 The Regional Board has complied with these requirements as follows:

19 (a) The Regional Board has ceased and suspended any and all activities taken by the
20 Regional Board pursuant to Los Angeles Regional Water Quality Control Board Order No. R4-
21 2006-0074 or State Water Resources Control Board Order WQ 2009-0008;

22 (b) On April 14, 2011, the Regional Board voided and set aside Order No. R4-2006-
23 0074 and all amendments to the Los Angeles County Municipal Storm Water Permit (Order No.
24 01-182) effected thereby, as demonstrated by Exhibit A;

25 (c) The Regional Board has chosen not to conduct any further hearing(s) upon remand
26 to amend the Permit (Order No. 01-182). At the April 14, 2011 hearing where the Regional
27 Board voided and set aside Order No. R4-2006-0074, the same person did not act as both an
28 advocate before the Regional Board and an advisor to the Regional Board; and the individual who

1 participated as the Regional Board counsel in the Regional Board hearing at which Order No. R4-
2 2006-0074 was adopted did not participate, and in fact he is no longer employed as counsel to any
3 of the Water Boards.

4
5 In light of the above, Respondent Regional Board respectfully submits that it has complied
6 with this Court's peremptory writ of mandate in this matter.

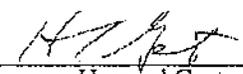
7
8 Dated: April 27, 2011

Respectfully Submitted,
KAMALA D. HARRIS
Attorney General of the State of California
RICHARD J. MAGASIN
Supervising Deputy Attorney General
HELEN G. ARENS
JENNIFER F. NOVAK
ALLAN S. ONO
Deputy Attorneys General

13
14 By 
15 /HELEN G. ARENS
16 Deputy Attorney General
17 *Attorneys for Respondents*
State Water Resources Control Board and
California Regional Water Quality Control
Board, Los Angeles Region

18 APPROVED AS TO FORM:

19 BURHENN & GEST LLP
20 HOWARD GEST
21 DAVID W. BURHENN

22 By: 
23 Howard Gest
24 Attorneys for Petitioners County of Los Angeles and
25 Los Angeles County Flood Control District

26 LOZEAU DRURY LLP
27 MICHAEL R. LOZEAU

28 By: 
Michael R. Lozeau
Attorneys for Intervenor Heal the Bay

CONFORMED COPY

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KAMALA D. HARRIS
Attorney General of California
RICHARD J. MAGASIN
Supervising Deputy Attorney General
HELEN G. ARENS (SBN 150572)
JENNIFER F. NOVAK (SBN 183882)
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*Attorneys for Respondents State Water Resources
Control Board and California Regional Water
Quality Control Board, Los Angeles Region*

SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF LOS ANGELES

COUNTY OF LOS ANGELES and LOS ANGELES COUNTY FLOOD CONTROL DISTRICT,

Petitioners,

v.

STATE WATER RESOURCES CONTROL BOARD; CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION; and DOES 1 through 50, inclusive,

Respondents.

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APR 29 2011
DEPT. 86
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GOVERNMENT CODE § 6103

ORIGINAL FILED
MAY 10 2011
LOS ANGELES
SUPERIOR COURT

CASE NO. BS122724
[PROPOSED] ORDER DISCHARGING WRIT AS TO RESPONDENT REGIONAL WATER QUALITY CONTROL BOARD, LOS ANGELES REGION

Trial Date: June 2, 2010
Time: 9:30 a.m.
Department: 86

Date Action Filed: September 10, 2009

Respondent California Regional Water Quality Control Board, Los Angeles Region ("Regional Board"), having filed a Supplemental Return complying with this Court's Peremptory Writ of Mandate and order granting Petitioners' Motion to Strike the Regional Board's Return of Writ heard on January 6, 2011,

IT IS HEREBY ORDERED, ADJUDGED AND DECREED:

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The peremptory writ is hereby discharged with respect to the Regional Board.
IT IS SO ORDERED.

MAY 10 2011

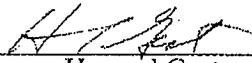
Dated: ~~April~~, 2011

ANN I. JONES

Superior Court Judge

APPROVED AS TO FORM:

BURHENN & GEST LLP
HOWARD GEST
DAVID W. BURHENN

By: 
Howard Gest

Attorneys for Petitioners County of Los Angeles and
Los Angeles County Flood Control District

LOZEAU DRURY LLP
MICHAEL R. LOZEAU

By: 
Michael R. Lozeau

Attorneys for Intervenor Heal the Bay

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

DATE: 09/06/11

DEPT. 86

HONORABLE ANN I. JONES

JUDGE

N DIGIAMBATTISTA

DEPUTY CLERK

HONORABLE
15

JUDGE PRO TEM

A AYALA/COURTROOM ASST

ELECTRONIC RECORDING MONITOR

NONE

Deputy Sheriff

NONE

Reporter

8:30 am

BS130730

Plaintiff

Counsel

STATE OF CA DEPT OF FINANCE ET

VS

Defendant

NO APPEARANCES

COMMISSION ON STATE MANDATES

Counsel

NATURE OF PROCEEDINGS:

CLERK'S CERTIFICATE OF MAILING/NOTICE OF ENTRY OF JUDGMENT AND JUDGMENT

I, the below-named Executive Officer/Clerk of the above-entitled court, do hereby certify that I am not a party to the cause herein, and that this date I served Notice of Entry of the Judgment and Judgment entered on September 6, 2011, upon each party or counsel named below by depositing in the United States mail at the courthouse in Los Angeles, California, one copy of the original entered herein in a separate sealed envelope for each, addressed as shown below with the postage thereon fully prepaid.

DATED: SEPTEMBER 6, 2011

JOHN A. CLARKE, EXECUTIVE OFFICER/CLERK

BY: N. Digiambattista

N DIGIAMBATTISTA

LAWRENCE B. TRYSTAD, TRYGSTAD, SCHWAB, ET AL, 1880 CENTURY PARK EAST, SUITE 1104, LOS ANGELES, CA 90067

CAMILLE SHELTON, ESQ., COMMISSION ON STATE MANDATES, 980 9TH ST., SUITE 300, SACRAMENTO, CA 95814

KATHLEEN A. LYNCH, DEPUTY ATTY GENERAL, 1300 "I" ST., SUITE 125, P.O. BOX 944255, SACRAMENTO, CA 94244-2550

MINUTES ENTERED
09/06/11
COUNTY CLERK

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

RB-AR23680

DATE: 09/06/11

DEPT. 86

HONORABLE ANN I. JONES

JUDGE

N DIGIAMBATTISTA

DEPUTY CLERK

HONORABLE
15

JUDGE PRO TEM

A AYALA/COURTROOM ASST

ELECTRONIC RECORDING MONITOR

NONE

Deputy Sheriff

NONE

Reporter

8:30 am

BS130730

Plaintiff

Counsel

STATE OF CA DEPT OF FINANCE ET

VS

Defendant

NO APPEARANCES

COMMISSION ON STATE MANDATES

Counsel.

NATURE OF PROCEEDINGS:

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HOWARD GEST, BURHENN & GEST, 624 S. GRAND AVE., SUITE 2200, LOS ANGELES, CA 90017

MINUTES ENTERED 09/06/11 COUNTY CLERK

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Department of Finance, State Water Resources
Control Board, Los Angeles Regional Water Quality
Control Board

ORIGINAL FILED
SEP - 6 2011
**LOS ANGELES
SUPERIOR COURT**

SUPERIOR COURT OF THE STATE OF CALIFORNIA
COUNTY OF LOS ANGELES

**STATE OF CALIFORNIA DEPARTMENT
OF FINANCE, STATE WATER
RESOURCES CONTROL BOARD, LOS
ANGELES REGIONAL WATER
QUALITY CONTROL BOARD,**

Petitioners,

v.

COMMISSION ON STATE MANDATES,

Respondent,

**COUNTY OF LOS ANGELES AND THE
CITIES OF ARTESIA, BEVERLY HILLS,
CARSON, NORWALK, RANCHO PALO
VERDES, WESTLAKE VILLAGE,
AZUSA, COMMERCE, VERNON,
BELLFLOWER, COVINA, DOWNEY,
MONTEREY PARK, AND SIGNAL HILL,**

Real Parties in Interest.

Case No. BS130730
~~Proposed~~ JUDGMENT
Dept: 86
Judge: The Hon. Ann I. Jones
Action Filed: July 20, 2010

1 COUNTY OF LOS ANGELES AND
2 CITIES OF BELLFLOWER, CARSON,
3 COMMERCE, COVINA, DOWNEY AND
4 SIGNAL HILL,

5 Cross-Petitioners,

6 COMMISSION ON STATE MANDATES,

7 Cross-Respondent.

8 STATE OF CALIFORNIA DEPARTMENT
9 OF FINANCE, STATE WATER
10 RESOURCES CONTROL BOARD, AND
11 LOS ANGELES REGIONAL WATER
12 QUALITY CONTROL BOARD,

13 Cross-Real Parties in Interest

14 This matter came on regularly for hearing in Los Angeles Superior Court, Department 86,
15 the Honorable Ann I. Jones, judge presiding, on August 10, 2011. Kathleen A. Lynch and
16 Jennifer F. Novak, Deputy Attorneys General, California Department of Justice, Office of the
17 Attorney General, appeared on behalf of Petitioners State of California Department of Finance,
18 State Water Resources Control Board and California Regional Water Quality Control Board, Los
19 Angeles Region. Howard D. Gest and David W. Burhenn, Burhenn & Gest, appeared on behalf
20 of Real Parties in Interest County of Los Angeles and the Cities of Bellflower, Carson,
21 Commerce, Covina, Downey and Signal Hill. Ginetta L. Givinco, Richards, Watson & Gershon,
22 appeared on behalf of Real Parties in Interest the Cities of Artesia, Beverly Hills, Norwalk,
23 Rancho Palos Verdes and Westlake Village.

24 The Court, having considered the pleadings, argument and evidence offered by all parties,
25 and the matter having been submitted on August 10, 2011, issued its Statement of Decision on
26 August 15, 2011, thereby granting the Petition for Writ of Mandate requested by Petitioners State
27 of California Department of Finance, State Water Resources Control Board and California
28 Regional Water Quality Control Board, Los Angeles Region.

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1 NOW THEREFORE, IT IS HEREBY ORDERED, ADJUDGED AND DECREED:

2 1. That the Petition for Writ of Mandate is GRANTED.

3 2. That the challenged permit provisions in permit number CAS004001, consisting of
4 part 4F5c3 (placing and maintaining trash receptacles at transit stops), part4C2a (inspecting
5 commercial facilities), part 4C2b (inspecting Phase I industrial facilities); and part 4E (inspecting
6 construction sites), are within the maximum extent practicable standard under the mandatory
7 provisions of the Clean Water Act and are federal mandates not subject to reimbursement under
8 article XIII B, section 6, of the California Constitution.

9 3. That the matter is remanded to the Commission on State Mandates to set aside and
10 vacate its Statement of Decision on the test claims of Real Parties in Interest, case numbers 03-
11 TC-04, 03-TC-19, 03-TC-20, and 03-TC-21, entitled "Municipal Stormwater and Urban Runoff
12 Discharges," adopted by the Commission on July 31, 2009, and to adopt a new decision
13 consistent with the Court's order of August 15, 2011 and paragraph numbers 1 and 2, above.

14 4. That a writ of mandate under seal of this Court shall issue ordering the
15 Commission on State Mandates to set aside and vacate its Statement of Decision on the test
16 claims of Real Parties in Interest, case numbers 03-TC-04, 03-TC-19, 03-TC-20, and 03-TC-21,
17 entitled "Municipal Stormwater and Urban Runoff Discharges," adopted by the Commission on
18 July 31, 2009, and to adopt an new decision consistent with the Court's order of August 15, 2011
19 and paragraph numbers 1 and 2, above.

20 5. That Petitioners are entitled to costs under section 1032 of the California Code of
21 Civil Procedure and rule 3.1700 of the California Rules of Court.

22
23 Dated: SEP - 6 2011

ANN I. JONES

The Honorable Ann I. Jones
Judge of the Superior Court

SERVICE LIST

<p>Representing Real Party in Interest County of Los Angeles:</p> <p>Andrea Sheridan Ordin, County Counsel Judith A. Fries, Principal Deputy Laurie E. Dods, Deputy County Counsel County of Los Angeles Kenneth Hahn Hall of Administration 500 West Temple Street, Room 653 Los Angeles, CA 90012 Telephone: (213) 974-1923 Facsimile: (213) 687-7337</p>	<p>Representing Real Party in Interest City of Monterey Park:</p> <p>Christi Hogin Jenkins & Hogin LLP 1230 Rosecrans Avenue, Suite 110 Manhattan Beach, CA 90266 Telephone: (310) 643-8448 Facsimile: (310) 643-8441</p>
<p>Representing Real Parties in Interest County of Los Angeles, Cities of Bellflower, Carson, Commerce, Covina, Downey, and Signal Hill:</p> <p>Howard Gest David W. Burhenn Burhenn & Gest, LLP 624 South Grand Avenue, Suite 2200 Los Angeles, CA 90017 Telephone: (213) 688-7715 Facsimile: (213) 688-7716</p>	<p>Representing Respondent Commission on State Mandates:</p> <p>Camille Shelton Chief Counsel Commission on State Mandates 980 Ninth Street, Suite 300 Sacramento, CA 95814 Telephone: (916) 323-3562 Facsimile: (916) 445-0278</p>
<p>Representing Real Parties in Interest Cities of Artesia, Beverly Hills, Norwalk, Rancho Palo Verde, and Westlake Village:</p> <p>Norman A. Dupont Richards, Watson & Gershon 355 South Grand Avenue, 40th Floor Los Angeles, CA 90071-3101 Telephone: (213) 626-8484 Facsimile: (213) 626-0078</p>	<p>Representing Real Party in Interest City of Vernon:</p> <p>Willard G. Yamaguchi Interim City Attorney City of Vernon 4305 Santa Fe Avenue Vernon, CA 90058 Telephone: (323) 583-8811 Facsimile: (323) 826-1438</p>

DECLARATION OF SERVICE BY OVERNIGHT COURIER

Case Name: Department of Finance, et al. v. Commission on State Mandates

No.: BS130730

I declare:

I am employed in the Office of the Attorney General, which is the office of a member of the California State Bar, at which member's direction this service is made. I am 18 years of age or older and not a party to this matter; my business address is: 1300 I Street, Suite 125, P.O. Box 944255, Sacramento, CA 94244-2550.

On August 25, 2011, I served the attached **[Proposed] Judgment** by placing a true copy thereof enclosed in a sealed envelope with the **Golden State Overnight courier service**, addressed as follows:

SEE ATTACHED SERVICE LIST

I declare under penalty of perjury under the laws of the State of California the foregoing is true and correct and that this declaration was executed on August 25, 2011, at Sacramento, California.

Scott De Medeiros

Declarant



Signature

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

DATE: 08/15/11

DEPT. 86

HONORABLE ANN I. JONES

JUDGE

N DIGIAMBATTISTA

DEPUTY CLERK

HONORABLE
2

JUDGE PRO TEM

A AYALA/COURTROOM ASST

ELECTRONIC RECORDING MONITOR

NONE

Deputy Sheriff

NONE

Reporter

11:30 am BS130730

Plaintiff

Counsel

STATE OF CA DEPT OF FINANCE ET

VS

Defendant NO APPEARANCES

COMMISSION ON STATE MANDATES

Counsel

NATURE OF PROCEEDINGS:

HEARING ON PETITION FOR WRIT OF MANDATE
RULING ON SUBMITTED MATTER

The court having taken the above matter under sub-
mission on August 10, 2011, now grants the petition
for writ of mandate for the reasons set forth in the
document entitled COURT'S RULING ON PETITION FOR WRIT
OF MANDATE HEARD ON AUGUST 10, 2011, signed and filed
this date.

Petitioner's exhibit 1 is ordered returned forthwith
to the party who lodged it, to be preserved without
alteration until a final judgment in this case and is
to be forwarded to the court of appeal in the event of
an appeal.

Counsel for petitioners is to prepare, serve and lodge
the proposed judgment within ten days. The judgment
will be held ten days for objections.

A copy of this minute order as well as the court's
Ruling are mailed via U.S. Mail to counsel of record
addressed as follows:

MICHAEL A.M. LAUFFER, ESQ., CALIF. ENVIRON. PROTECTION
AGENCY, 1001 I ST., 22ND FL., SACRAMENTO, CA 95814

JENNIFER F. NOVAK, DEPUTY ATTY GENERAL, 300 S. SPRING
ST., SUITE 1702, LOS ANGELES, CA 90013

MINUTES ENTERED
08/15/11
COUNTY CLERK

SUPERIOR COURT OF CALIFORNIA, COUNTY OF LOS ANGELES

DATE: 08/15/11

DEPT. 86

HONORABLE ANN I. JONES

JUDGE

N DIGIAMBATTISTA

DEPUTY CLERK

HONORABLE
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JUDGE PRO TEM

A AYALA/COURTROOM ASST

ELECTRONIC RECORDING MONITOR

NONE

Deputy Sheriff

NONE

Reporter

11:30 am BS130730

Plaintiff

Counsel

STATE OF CA DEPT OF FINANCE ET
VS

Defendant NO APPEARANCES

COMMISSION ON STATE MANDATES

Counsel

NATURE OF PROCEEDINGS:

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GINETTA L. GIOVINCO, RICHARDS, WATSON, GERSHON, 355
S. GRAND AVE., 40TH FL., LOS ANGELES, CA 90071-3101

MINUTES ENTERED
08/15/11
COUNTY CLERK

SUPERIOR COURT OF THE STATE OF CALIFORNIA
FOR THE COUNTY OF LOS ANGELES

ORIGINAL FILED

AUG 15 2011

LOS ANGELES
SUPERIOR COURT

STATE OF CALIFORNIA DEPARTMENT)
OF FINANCE, ET AL)
Petitioners)

vs)

COUNTY OF LOS ANGELES, ET AL)
Respondents)

CASE NO. BS130730

COURT'S RULING ON PETITION FOR WRIT OF MANDATE HEARD ON
AUGUST 10, 2011

Petitioners State of California Department of Finance, the State Water Resource Control Board ("State Board") and the Los Angeles California Regional Water Quality Control Board ("Regional Board") seek to set aside a decision of the Respondent Commission of State Mandates ("Commission").

After considering the parties' briefs and relevant evidence¹, having heard argument and having taken the matter under submission, the Court rules as follows:

Statement of the Case

This case involves the efforts of the Real Parties in Interest to obtain a subvention of funds for costs resulting from an executive order mandated by a state agency and contained in a storm water permit issued in 2001 to these cities and other cities in Los Angeles County and the Los Angeles Flood Control District.

An understanding of the interplay of the varied regulatory schemes underlying these orders and permits is necessary to an evaluation of the matters before the Court.

1. Environmental Regulations Under the Clean Water Act.

In 1972, Congress passed the Clean Water Act. The Clean Water Act sought to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33

¹ In addition to the administrative record, the court takes judicial notice of the matters sought to be noticed by Petitioners and Real Parties.

U.S.C. § 1251(a). The Clean Water Act prohibits the discharge of pollutants from “point sources” to waters of the United States unless provided for under the national Pollutant Discharge Elimination System (“NPDES”). 33 U.S.C. § 1311, 1342; Communities for a Better Environment v. State Water Resources Control Board, 109 Cal. App. 4th 1089, 1092-93 (2003).

Either the United States Environmental Protection Agency (“EPA”) or a U.S. EPA-approved state may issue NPDES permits.² 33 U.S.C. § 1342(a)(1) & (b). Congress concluded that the U.S. EPA could not only issue permits, but also allowed states to elect to take on that federal responsibility. Environmental Protection Agency v. California ex rel. State Water Resources Board, 426 U.S. 200, 219 (1976). California has the approval of the U.S. EPA to issue NPDES permits. Building Industry Association of San Diego County v. State Water Resources Control Board, 124 Cal. App. 4th 866, 875 (2004).

If a state elects to issue NPDES permits, it must ensure that the permits comply with many different federal requirements, including effluent limitations and national standards, and states must also provide for the continued inspection and monitoring of pollutants into the waters. 33 U.S.C. §§ 1342(b)(1), 1311, 1312, 1316, 1317, 1319(a)(1), (3) and 1365(a)(1). And, to ensure that the state programs comply with these federal mandates, the EPA maintains oversight and supervision of these programs. For example, the state must provide the U.S. EPA with proposed permits and notice of any action related to a discharger’s permit application. 33 U.S.C. § 1342(d)(1). The EPA may object to the permit and should the federal agency find that a state program does not comply with NPDES program guidelines, it may withdrawal approval of the state program. 33 U.S.C. § 1342(c)(3).

While many types of discharge require NPDES permits under the Clean Water Act, this case deals only with one type – discharge of pollutants through municipal storm sewer systems. This type of discharge is referred to as either MS4 or storm sewer systems. Controlling municipal storm water runoff is important because it constitutes one of the most significant sources of water pollution. Environmental Defense Center, Inc. v. EPA, 344 F.3d 832, 840 (9th Cir. 2003).

The Clean Water Act requires municipal storm water discharges, such those from the County of Los Angeles, “to reduce the discharge of pollutants to the maximum extent practicable,” including management practices, control techniques and system, design and

² In 1973, pursuant to an amendment to the Porter Cologne Water Quality Control Act, California became the first state to be approved by the U.S. EPA to administer the NPDES permit program. County Sanitation Dist. No. 2 of Los Angeles County v. County of Kern, 127 Cal. App. 4th 1544, 1565-66 (2005). As amended, the Porter-Cologne Act mandates that “waste discharge requirements for discharge from point sources to navigable waters shall be issued and administered in accordance with the currently applicable federal regulations for the . . . (NPDES) program.” 23 Cal. Code of Regulations § 2235.2. Nine regional boards, including the Los Angeles California Regional Water Quality Control Board, administer the program, with oversight by the State Board. See Water Code §§ 13140, 13200 et seq.. While the Porter-Cologne Act requires that Chapter 5.5 be “construed to ensure consistency with the requirements for state programs,” state regulators may impose restrictions in NPDES permits that go beyond the requirements of the Clean Water Act. Water Code section 13377.

engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” 33 U.S.C. § 1342(p)(3)(B). The “maximum extent practicable” standard is a technology-forcing requirement designed to foster innovation. See, e.g., Chemical Mfrs. Ass’n v. Natural Resources Defense Council, 470 U.S. 116, 155-56 (1985).

But, unlike many other technology-based requirements, the U.S. EPA directed that permit writers would identify the municipal storm water requirements on a permit-by-permit basis.³ Natural Resources Defense Council v. U.S. EPA, 966 F.2d 1292, 1308 n. 17 (9th Cir. 1992); 55 Fed. Reg. 47990, 48043 (Nov. 16, 1990). “

“Unlike NPDES industrial wastewater permits which typically contain specific end-of-pipe effluent limits based on . . . available treatment technology, MS4 permits usually include programmatic requirements involving the implementation of best management practices (BMP) in order to reduce pollutants discharged to the maximum extent practicable (MEP).

(AR 3393). See also Natural Resources Defense Council, *supra*, 568 F. 2d at 1380. Federal regulations define these practices to mean, *inter alia*, “schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of ‘waters of the United States’.”⁴ 40 C.F.R. § 122.2. Permittees are often allowed flexibility in the types of BMP and activities implemented to meet permit requirements. (AR 3393).

Before discharging pollutants from point sources under an MS4 permit, a public entity must file an application that addresses, among other things, the management programs in place to reduce the discharge of pollution using the maximum extent practicable standard. 40 C.F.R. § 122.26 et seq. These management programs must address discharges into the storm system from both the general population and from industrial and construction activities within the jurisdiction. *Id.*

Starting in 1990, the Regional Board issued municipal storm water permits to the County of Los Angeles.⁵ At issue in this case is Regional Order No. 01-182, NPDES permit

³ Regulating storm water discharges is generally considered to be more difficult than regulating traditional point resources, e.g. effluent levels discharged at factories or from sanitary treatment systems. (AR 5151). These traditional point sources have engineered treatment systems and the NPDES permits for these facilities generally contain numeric effluent limitations that must be met at the end of the discharge pipe. (*Id.*) By contrast, municipal storm water systems require controls to reduce the discharge of pollutants to the maximum extent practicable. (*Id.*)

⁴ The U.S. EPA issues guidance documents that discuss the types of “best management practices.” At the time that the claims at issue in this case were considered by Commission, the U.S. EPA had an MS4 Program Evaluation Guide. (AR 3391-94). In that Guide, the EPA addressed inspections of businesses and refuse-related issues. (AR 3468-69, 3440).

⁵ Before 1990, storm water discharges were not regulated under either state or federal law. On June 18, 1990, the first permit (90-079) was issued. This NPDES permit for the discharge of municipal storm water

number CAS004001, adopted on December 31, 2001. (AR 3495-3576). As part of that permit, the Regional Board made 66 findings concerning the permit's factual and legal basis. (AR 3505-19). For example, the Regional Board found that the proposed permit "[was] intended to develop, achieve and implement a timely, comprehensive, cost-effective storm water pollution control program to reduce the discharge of pollutants in storm water to the Maximum Extent Practicable" (AR 3507).

2. Subvention and the Commission on State Mandates.

In November 1979, the voters adopted Proposition 4, which added article XIII B to the State Constitution. Hayes v. Commission on State Mandates, 11 Cal. App. 4th 1564, 1580 (1992). Article XIII B, called the "Gann limit," restricts the amounts that state and local governments may appropriate and spend each year from the proceeds of taxes. City of Sacramento v. State of California, 50 Cal. 3d 51, 58-59 (1990). Section 6 of article XIII B calls for state subvention by requiring the state to pay for any new governmental programs, or for higher levels of service under existing programs, that it imposes upon local governmental agencies. County of Los Angeles v. State of California, 43 Cal. 3d 46, 56 (1987).

But, constitutional subvention is not required when the costs implement federal law. Article XIII B, section 9, subdivision (b) excludes from the state or local spending limit any "appropriations required to comply with mandates of the . . . federal government." See also Sand Diego Unified School Dist. v. Commission on State Mandates, 33 Cal. 4th 859, 879-80 (2004) (the Gann limit provides for reimbursement of state-mandated costs, not federal ones). This prohibition against reimbursement for activities imposed by federal law is specifically stated in Government Code section 17556, subdivision (c). Redevelopment Agency of the City of San Marcos v. Commission on State Mandates, 55 Cal. App. 4th 976, 984 (1996). The Commission shall not find "costs mandated by the state" if "the statute or executive order "imposes a requirement that is mandated by federal law or regulation and results in costs mandated by the federal government, *unless the statute or executive order mandates costs that exceed the mandate in the federal law or regulation.*"⁶ Gov't Code section 17556, subdivision (c) (emphasis added).

The Commission on State Mandates is a quasi-judicial agency vested with the sole and exclusive authority to adjudicate all disputes over the existence and reimbursement of state-mandated programs within the meaning of article XIII B of the California Constitution. Kinlaw v. State of California, 54 Cal. 3d 326, 342-43 (1991). Local agencies file claims with the Commission for reimbursement of state-mandated costs under article XIII B, section 6. Gov't Code §§ 17551, 17560. The first claim filed by a local agency alleging that a statute or executive order imposes a reimbursable cost is a

was replaced on July 15, 1995 (96-054). (AR 3501). In addition, the State Board has issued two general NPDES permits for storm water discharges from industrial and construction sites. (AR 3511).

⁶ "Costs mandated by the federal government" is defined as "any increased costs incurred by a local agency or school district after January 1, 1975, in order to comply with the requirements of a federal statute or regulation." Gov't Code section 17514.

“test claim.” Gov’t Code § 17521. A public hearing is held on the test claim at which time evidence may be presented by the claimant, the Department of Finance, or any other state agency affected by the claim, and any interested organization or individual. Gov’t Code § 17555.

The Commission determines in the first instance if a state-mandated program exists. Gov’t Code § 17551. If so, the Commission adopts parameters and guidelines for the reimbursement of claims submitted by eligible claimants. Gov’t Code § 17557, subdivision (a). Thereafter, the Controller issues claiming instructions for each mandate that requires reimbursement. Gov’t Code § 17558, subdivisions (a) and (c). Judicial review of the final Commission decision is available through a petition for writ of mandate filed pursuant to Cal. Code of Civ. P. section 1094.5. Gov’t Code § 17559.

3. The Test Claims at Issue Here

The County of Los Angeles and several cities, who are the Real Parties in Interest, presented “test claims” to the Respondent Commission in September 2003. The Real Parties sought subvention of state funds for four requirements contained in the NPDES permit number CAS004001, adopted on December 31, 2001: (1) to place and maintain trace receptacles at transit stops; (2) to inspect certain commercial facilities; (3) to inspect certain industrial facilities; and (4) to inspect construction sites.⁷ (AR 13-14). These parties asserted that these requirements exceeded the federal mandate under the law and regulations of the Clean Water Act.

The Commission initially rejected the claims, citing Government Code section 17516(c), exempting from the term “executive order” any orders issued by regional quality control boards or the State Board. The Commission’s ruling was ultimately reversed by the Superior Court, and that decision was affirmed by the Court of Appeal. See also County of Los Angeles v. Commission on State Mandates, 150 Cal. App. 4th 898, 904 (2007).

The test claims were re-filed with the Commission. (AR 5557). On July 31, 2009, Respondent issued a Statement of Decision. (AR 5555- 5625). In relevant part, the Commission determined that the challenged permit provisions were not federal mandates. (AR 5574-5603). And, the Commission determined that the permit activities challenged here imposed new programs or higher level of services on the County of Los Angeles.⁸ (AR 5603-04).

With respect to the federal mandate findings, the Commission found that these four challenged provisions exceeded the requirements of the CWA and federal regulations and

⁷ None of these challenged requirements was proposed by the Real Parties when they applied for the NPDES permit at issue in this case. (AR 3663-3794). Rather, these requirements were added by the Regional Board, over the real parties’ objections. (AR 3553, 3533-338, 3546-49).

⁸ The Commission further found that the state was required to reimburse the real parties for the trash receptacle obligation, but not for the inspection obligations as the real parties had the ability to raise fees to pay for these inspections. This aspect of the Commission’s decision necessarily fails under the analysis described below, but will not be specifically considered as the subject of this petition involves whether these inspections are state mandates in the first instance, not whether they are properly reimbursable.

that the state “freely chose” to impose them on the Real Parties. (AR 5578, 5582-86). The Commission analyzed the federal regulations, including 40 CFR 122.26 *et seq.*, and concluded that these rules did not expressly require the installation and maintenance of receptacles, or conducting certain inspections. (AR 5578, 5584, 5590, 5591, 5595, 5601). As for the conclusion that these four permit requirements were “new programs,” the Commission noted that these activities were not contained in the previous permits issued to the County of Los Angeles, and were imposed only on local agencies and not on the general public. (AR 5603-04).

On July 20, 2010, Petitioners filed this Petition.

Standard of Review

Petitioner seeks review of the Board’s decision under CCP section 1094.5. CCP section 1094.5 is the administrative mandamus provision which structures the procedure for judicial review of adjudicatory decisions rendered by administrative agencies. Topanga Ann’s for a Scenic Community v. County of Los Angeles, 11 Cal. 3d 506, 514-15 (1974).

The pertinent issues under section 1094.5 are (1) whether the respondent has proceeded without jurisdiction, (2) whether there was a fair trial, and (3) whether there was a prejudicial abuse of discretion. CCP § 1094.5(b). An abuse of discretion is established if the respondent has not proceeded in the manner required by law, the decision is not supported by the findings, or the findings are not supported by the evidence. CCP § 1094.5(c).

A review of the Commission’s factual determinations proceeds under the substantial evidence test. City of Richmond v. Commission on State Mandates, 64 Cal. App. 4th 1190, 1194-95 (1998). Applying that test, the Court must ensure that findings are legally relevant as well as supported by the evidence. See City and County of San Francisco v. Board of Permit Appeals, 207 Cal. App. 3d 1099, 1110 (1989). Substantial evidence review also includes a duty to determine whether the agency committed errors of law in applying the facts before it. *Id.* at 1111. Whether a statute creates a reimbursable state mandate is a question of law. Connell v. Superior Court, 59 Cal. App. 4th 382, 395 (1997); Long Beach Unified School Dist. v. State of California, 225 Cal. App. 3d 155, 174 (1990). Questions of law are subject to *de novo* review. City of Richmond, *supra*, 64 Cal. App. 4th at 1105.

An agency is presumed to have regularly performed its official duties. (Ev. Code § 664). The Petitioner, therefore, has the burden of proof to demonstrate wherein the proceedings were unfair, in excess of jurisdiction, or showed prejudicial abuse of discretion. Alford v. Pierno, 27 Cal. App. 3d 682, 691 (1972).

Analysis

Petitioners assert two arguments in support of their contention that the Commission erred and must be reversed. They shall be evaluated separately.

1. The Challenged Receptacle Requirement Is a Federal Mandate.

There is a two-step test to determine whether a particular program is mandated by federal law and not, therefore, subject to state subvention.

First, did the state have “no real choice” in deciding whether to comply with the federal act? Hayes, supra, 11 Cal. App. 4th at 1594. A federal mandate exists even if “the state has adopted an implementing statute or regulation pursuant to the federal mandate, so long as the state had no true choice in the manner of implementation of the federal mandate. Id. at 1593. But, “[t]his reasoning would not hold true where the manner of implementation of the federal program was left to the true discretion of the state.” Id. For example, in City of Sacramento, supra, 50 Cal. 3d at 73-74, the Supreme Court explained that certain regulatory standards imposed by the federal government are “coercive . . . in every practical sense.” But, there is no requirement of such compulsion under article XIII B. Id. at 76 (there is “no final test for ‘mandatory’ versus ‘optional’ compliance with federal law.”) Rather, the standard depends on a number of factors, such as the nature and purpose of the federal program; whether its design suggests an intention to coerce; when state participation began, and the practical consequences of non-participation, non-compliance or withdrawal. Id.

Second, did the program exceed the requirements of a compulsory federal law? San Diego Unified School Dist. v. Commission on State Mandates, 33 Cal. 4th 859, 880 (2004).

Petitioners assert that the Commission’s entire analysis is analytically defective as a matter of law. For the reasons set forth below, the Court agrees.

First, the Commission’s conclusion that the state has “freely chosen” to implement the storm water permit program is legally incorrect. The reasons given, *i.e.*, (1) that California “voluntarily adopts the [NPDES] permitting program” and (2) because federal law “does not expressly require states to have this program,” do not equate with a conclusion that the NPDES permitting program at issue here is optional.

A review of the Clean Water Act clearly dictates that NPDES permits issued – by either the U.S. EPA or a qualified state agency – are not voluntary. Federal law requires the County of Los Angeles to have an NPDES permit for municipal storm water discharges. That same federal law compels those permits to educe the discharge of pollutants to the maximum extent practicable.⁹ This federal statutory scheme mandates NPDES permitting, even if California took no action at all. And, if California did not administer its own water quality program through the Porter-Cologne Act, California’s dischargers,

⁹ Congress established the maximum extent practicable standard because municipal storm water runoff, unlike other pollutant discharges, could not be adequately addressed by blanket effluent limitations. Building Industry Ass’n of San Diego County v. State Water Resources Control Board, 124 Cal. App. 4th 866, 884 (2004).

both private and governmental, would still have to comply with federal law – and be directly regulated by the federal government.¹⁰

Second, there is no substantial evidence in the administrative record to support the Commission's conclusion that the state's mandate in this instance was inconsistent with or more stringent than the Clean Water Act's "maximum extent practicable" requirement.¹¹ Rather, the Commission simply concluded that the claimed permit requirements were in excess of federal mandates because they could not be located in certain identified federal regulations.¹² (AR 5584, 5591, 5595). Unless expressly dictated by an identifiable federal regulation, the Commission concluded that such requirements are state mandates.

The search for a comparable federal regulation as the pre-condition for finding a federal mandate utterly ignores and misapplies the flexible regulatory standard inherent in the Clean Water Act. The "maximum extent practicable standard" is designed to provide administrative bodies the "tools to meet the fundamental goals of the Clean Water Act in the context of storm water pollution." Building Industry Ass'n of San Diego County v. State Water Resources Control Board, 124 Cal. App. 4th 866, 884 (2004). That flexible standard was designed to allow permit writers to use a combination of pollution controls that may be different in different permits. In re City of Irving, Texas, Municipal Storm Sewer System, (July 16, 2001), 10 E.A.D. 111 (E.P.A.), *6. And, the flexible standard provides an agency to tailor permits to the "site-specific nature of MS4," and the ability

¹⁰ And, such an outcome would be clearly contrary to the Legislative intention behind Porter-Cologne. "It is in the interest of the people of the state, in order to avoid direct regulation by the federal government of persons already subject to regulation under state law pursuant to this division, to enact this chapter in order to authorize the state to implement the provisions of the Federal Water Pollution Control Act. Water Code § 13370, subdivision (c).

¹¹ The Real Parties assert that the State Board has held that the "maximum extent practicable" standard does not apply to permit requirements that address the entry of pollutants into the storm sewer system. See In the Matter of the Petitions of Building Industry Association of San Diego County and Western States Petroleum Association, State Water Board Order WQ 2001-15. A review of that case, however, fails to support that contention. The administrative decision presented different circumstances and involved different permit requirements. That order concerned an attempted prohibition on all discharges into the municipal storm sewer system until the pollutants had been reduced to the maximum extent practicable. The State Board found the order to broad because it restricted all discharges and, therefore, necessarily interfered with a flexible approach to the mix of pollutant reductions before reaching the storm sewer system, and after – so long as the overall reductions are to the maximum extent practicable. Water Quality Order WQ 2001-15 does not undermine the EPA's recognition that municipal storm water programs will include requirements that reduce pollutants before reaching the storm sewer, including *inter alia*, the capacity to direct permit requirements at the sources of pollution, rather than solely at the end of the pipe. City of Irving, supra, 10 EAD 111 at * 6. The Water Board Order simply did not consider the issue of whether the maximum extent practicable standard contained in the Clean Water Act prohibits control of discharges into a municipal storm sewer system.

¹² The Commission's reliance on Long Beach School Dist. v. State of California, 225 Cal. App. 3d 155, 173 (1990) is misplaced. In that case, the court concluded that a state executive order mandating desegregation was a state mandate because it required schools to provide a higher level of service than was required by the federal constitution. Id. at 187. In this case, the federal applicable law, *i.e.*, the maximum extent practicable standard, directly mandates the type of requirements included in the instant permit.

to direct permit requirements “at the sources of pollution in the MS4 rather than solely at the end of the pipe.” *Id.*

To ignore this flexible standard imposed and mandated under the Clean Water Act, and instead to require a comparable federal regulatory dictates, is legally erroneous.¹³ Under the Commission’s approach, a permit requirement that is merely practicable or easy (not even practicable to the maximum extent) would be a state mandate if the U.S. EPA failed to express the requirement as a regulation.¹⁴ Such an approach is clearly erroneous.

Third, the Commission erred in isolating a specific requirement to conclude that the issued NPDES permit was a state mandate. One permit provision cannot exceed the “maximum extent practicable” standard imposed by the Clean Water where the permit as a whole does not. (AR 3517). For example, the placement and maintenance of trash receptacles is fairly included within those management practices for maintaining public streets in such a way to reduce the impact on receiving waters of discharges from municipal sewer systems. *See, e.g.*, 40 C.F.R. § 122.26(d)(2)(iv)(A)(3).

That the receptacle and inspection requirements were not included in previous permits issued by the County does not take this regulation out of the purview of the Clean Water Act. The U.S. EPA “anticipates that storm water management programs will evolve and mature over time.” 55 Fed. Reg. 48052. Thus, the permits for discharges from municipal separate storm sewer systems will be written to reflect changing conditions that result from program development and implementation and corresponding improvements in water quality. *Id.* Given that the federal regulatory scheme anticipates changing permit requirements, that these requirements have not yet been articulated does not mean that the requirement exceeds the “maximum extent practicable” standard.

As Petitioners argue, if litter and debris cannot be properly disposed of by persons waiting at transit stops, the inevitable downstream result will be the introduction of pollutants into the streets and, thereafter, into the storm drains – leading inevitably to the discharge of pollutants into the nearby waterways. It cannot be seriously doubted that the placement and maintenance of trash receptacles at transit stops will help prevent the introduction of these known contaminants into the water. As the trash receptacle requirement is an obvious remedy, it is clearly within the maximum extent practicable

¹³ “The permitting agency has discretion to decide what practices, techniques, methods, and other provisions are appropriate and necessary to control the discharge of pollutants.” *City of Rancho Cucamonga v. Regional Water Quality Control Board-Santa Ana Region*, 135 Cal. App. 4th 1377, 1389 (2006). The only requirement is that the Regional Board comply with federal law requiring detailed conditions for NPDES permits. *Id.*

¹⁴ While there may be other cases in which the state agencies may impose standards that clearly exceed those imposed under a “maximum extent practicable” approach to storm water pollutants in the Clean Water Act, this case does not present that situation. *See, e.g.*, Water Code § 13377 (allowing for more stringent state effluent standards); 33 U.S.C. § 1370 (allowing for more stringent state pretreatment standards). *See also City of Burbank v. State Water Resources Control Board*, 35 Cal. 4th 613, 628 (2005). There is nothing in the administrative record here to support a conclusion that placing receptacles at transit stops is not practicable, much less not practicable to the maximum extent.

standard. In fact, the County's own proposal recommended minimizing trash from entering waterways by removing trash from open channels, and controlling litter and debris in the street. (AR 3677-78).

As the trash receptacle requirement of the NPDES permit is within the maximum extent practicable standard under the mandatory provisions of the Clean Water Act, it is imposed by federal law and is not subject to reimbursement under article XIII B, section 6 of the California Constitution.

2. The Inspection Provisions in the Permit Are Not State Mandates.

The remaining challenged permit activities related to the inspection of certain commercial and industrial facilities and construction sites. A portion of the permit pertains to inspections of commercial facilities, such as restaurants, automotive service facilities and retail gasoline stations. While each commercial property has unique inspection requirements, the permit requires that all facilities be inspected on a regular basis, twice during the five year permit period, to confirm that best management practices are being effectively implemented with the law. (AR 3533-36). Another portion of the permit requires the inspection of certain industrial facilities referred to in the permit as Phase I Facilities. (AR 3535-36). And, a third part of the permit provides that a program be implemented to control runoff from construction activity to storm drains at all construction sites within its jurisdiction. (AR 3546-47).

As with the receptacle requirement, these inspection mandates are clearly pursuant to the maximum extent practicable standard under the Clean Water Act.¹⁵ And, in addition, federal regulations also specifically contemplate inspections of industrial facilities (40 C.F.R. § 122.26 (d)(2)(iv)(B) & (C)), and construction sites (40 C.F.R. § 122.26 (d)(2)(iv)(D)). As discussed above, the Commission's rationale that these are not federal mandates because they are not expressly dictated by federal regulation is erroneous.¹⁶ (AR 5591, 5600). A federal mandate does not require explicit mention of every mandated activity. Rather, the relevant inquiry is whether these inspection activities fall within the Clean Water Act's maximum extent practicable standard. As there is nothing in the record to suggest that they exceed this standard, the Commission's conclusion to the contrary must fail.

¹⁵ The County of Los Angeles acknowledged that site inspections are within the maximum extent practicable standard because they recommended inspections in their permit applications as well. (AR 3671).

¹⁶ Nor does the Commission's reliance upon the existence of a statewide general industrial permit (GIASP) to negate the existence of a federal mandate make sense. (AR 5594). The issue properly framed is whether the inspection requirements are mandated under the federal Clean Water Act, not whether they may also be required under the GIASP permit. At most, "the GIASP permit may add additional inspections at the time and expense of the state." Opening Brief at 28. Although extensively argued to the Court, the existence of mutual inspection schemes does not constitute a derogation of state responsibilities to the real parties, in violation of Hayes. There is only a single question (asking for a certain permit number) that is obtained by the real parties under the existing permits that would otherwise be obtained by the state under its separate inspection obligations.

Nor are these inspections create requirements in excess of the federal mandate because they were not previously imposed.¹⁷ While they had not been previously required, this fact does not dictate the conclusion that they are not federal mandates. A requirement that the discharge of pollutants requires a NPDES permit is neither new nor different. And, the inclusion of new and advanced measures is clearly anticipated under the Clean Water Act. 55 Fed. Reg. 48052. As conditions and technologies change, the maximum extent practicable standard will similarly change. *Id.* Given that the federal regulatory scheme anticipates changing permit requirements, that these requirements have not yet been articulated does not mean that the requirement exceeds the “maximum extent practicable” standard.

Accordingly, these inspection requirements are federal, not state, mandates and are not subject to reimbursement under article XIII B, section 6 of the California Constitution.

Conclusion

For these reasons, the writ is GRANTED and the matter is remanded for further proceedings consistent with this decision and judgment.

Counsel for Petitioners is to submit to this Department a proposed judgment and a proposed writ within 10 days with a proof of service showing that copies were served on Respondent by hand delivery or fax. The Court will hold these documents for ten days before signing and filing the judgment and causing the clerk to issue the writ.

The administrative record is ordered returned to the party who lodged it to be preserved without alteration until a final judgment is rendered and to forward it to the Court of Appeal in the event of appeal.

The Court’s ruling, signed and filed this date, shall be deemed to be the Court’s Statement of Decision.

DATED: AUGUST 15, 2011

ANN I. JONES, JUDGE OF THE SUPERIOR COURT

¹⁷Although not previously required, the County of Los Angeles specifically included the inspection of commercial and industrial facilities in its application. (AR 3680-71). Essentially, the County admitted that its “site visit program” was clearly mandated under the maximum extent practicable standard. The County also included extensive and detailed measures relating to the control and containment of construction site wastes and erosion, including inspection of these sites. (AR 3672-74).

**SUPERIOR COURT OF CALIFORNIA
COUNTY OF SACRAMENTO**

DATE/TIME	November 4, 2011 1:30 p.m.	DEPT. NO	42
JUDGE	HON. ALLEN SUMNER	CLERK	J. ZGRAGGEN
STATE OF CALIFORNIA, DEPARTMENT OF FINANCE, et al., Petitioners v. COMMISSION ON STATE MANDATES, Respondent		Case No.: 34-2010-80000604	
<hr/> COUNTY OF SAN DIEGO, et al., Real Parties in Interest			
Nature of Proceedings:		WRIT OF MANDATE	

The petition for writ of mandate by the State Department of Finance, et al., challenging the decision by the Commission on State Mandates is GRANTED.

INTRODUCTION

At issue is whether the conditions that the San Diego Regional Quality Control Board imposed on a permit allowing the County of San Diego and eighteen cities within San Diego County to discharge storm water runoff constitutes a "state mandate" within the meaning of article XIII B of the California Constitution requiring the State to reimburse the County and cities for their cost in complying. Specifically, did the State require the County and cities to meet conditions beyond what is required by the federal Clean Water Act?

The court's tentative ruling was heard November 4, 2011. Petitioners, the Department of Finance, State Water Resources Control Board and San Diego Regional Water Quality Control Board (collectively "State") were represented by Deputy Attorney General Kathleen Lynch. Respondent Commission on State Mandates ("Commission") was represented by Eric Feller. The real parties in interest, the County of San Diego and eighteen cities within San Diego County (collectively "Permittees") were represented by James O'Day, Helen Peak and Shawn Hagerty.

BACKGROUND

In 2007 the San Diego Regional Water Quality Control Board issued a permit to Permittees allowing the discharge of storm water runoff.

The Permittees filed a test claim with the Commission seeking reimbursement from the State for costs incurred in complying with the permit. The Commission concluded several conditions of the permit imposed new programs, or higher levels of service, for which reimbursement is required under article XIII B, section 6.

The State filed a petition for writ of administrative mandamus to overturn the Commission's decision.¹

The court finds the Commission erred in concluding the challenged provisions of the permit are state-mandated programs merely because the permit conditions are not expressly required by federal statute or regulation. The relevant inquiry is whether the conditions are required by federal law, not whether they are explicitly described in federal statute or regulation. Because the Commission failed to apply the proper standard, the petition for writ is granted and the matter remanded to the Commission for proceedings consistent with this decision and judgment.

¹ The Permittees filed a cross-petition challenging the Commission's finding that Permittees are not entitled to reimbursement for some of the alleged mandates because they have authority to levy fees sufficient to recoup their costs. Given the court's conclusion the Commission erred in determining these were state-mandated costs, the court need not address Permittees' ability to recover the costs through local fees.

STATEMENT OF THE CASE

A. Federal Regulation of Storm Water Pollution

Background

The federal Water Pollution Control Act, enacted in 1948, initially relied primarily on state and local enforcement efforts to remedy water pollution problems. (*Building Industry Association v. State Water Resources Control Board* (2004) 124 Cal.App.4th 866, 872.) However, by the early 1970's it was apparent local enforcement was ineffective, resulting in "accelerating environmental degradation of rivers, lakes, and streams . . ." (*Ibid.* [citing *Natural Resources Defense Council, Inc. v. Costle* (D.C. Cir. 1977) 568 F.2d 1369, 1371].) In response, Congress adopted the Water Pollution Control Amendments of 1972, commonly known as the Clean Water Act.

The Clean Water Act is a comprehensive water quality statute intended to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." (*City of Burbank v. State Water Resources Control Board* (2005) 35 Cal.4th 613, 620.) The Act seeks to eliminate discharge of pollutants into navigable waters of the United States. (*Ibid.*) To accomplish this, the Act requires compliance with "effluent limitations" which restrict the quantities, rates or concentrations of chemical, physical, biological and other constituents discharged into navigable waters. (*Ibid.*)

The Act provides two sets of effluent limitations: First, "technology-based" effluent limitations, based on the best available or practical technology for reduction of water pollution. (*Communities for a Better Environment v. State Water Resources Control Board* (2003) 109 Cal.App.4th 1089, 1093.) Second, "water quality" effluent limitations, assuring that pollution will not fall below acceptable water quality standards. (*Ibid.*)

The primary means of enforcing the Clean Water Act's effluent limitations and water quality standards is the National Pollutant Discharge Elimination System ("NPDES") permit. Generally, it is unlawful for any person to discharge a pollutant from a "point source" without first obtaining a NPDES permit. (*Building Industry Association,*

supra, 124 Cal.App.4th at p.872.) The NPDES permit sets specific terms and conditions for each source discharging pollutants. The NPDES permit also sets any technology-based or water quality effluent limitations necessary to meet water quality standards. (*Communities for a Better Environment, supra*, 109 Cal.App.4th at p.1093.)

State Authorization

Under the Clean Water Act, the EPA may authorize a state with an EPA-approved water quality control program to issue NPDES permits. (*Communities for a Better Environment, supra*, at p.1092; 33 U.S.C. § 1342(a) & (b).) A state requesting authorization to administer its own permit program must demonstrate its state program meets federal requirements. (33 U.S.C. § 1342(b); 40 C.F.R. § 123.25; see also *Shell Oil Co. v. Train* (9th Cir. 1978) 585 F.2d 408, 410.) Once approved by the EPA, the state program is operated in lieu of the federal permit program. (33 U.S.C. § 1342(c); 40 C.F.R. §§ 123.22, 123.61.) Suspension of the federal program creates a separate and independent state authority to administer the NPDES pollution controls. (*Shell Oil, supra*, 585 F.2d at p.410.) A state authorized to administer the federal Clean Water Act may also adopt state water quality restrictions more stringent than those required by federal law. (*City of Burbank, supra*, at pp.627-628; 33 U.S.C. § 1370; 40 C.F.R. § 123.1.)

If an authorized state fails meet federal requirements, the EPA may withdraw approval and administer the federal permit program in that state. (33 U.S.C. § 1342(c).)

Discharge of Storm Waters

Shortly after the Clean Water Act was enacted, the EPA adopted regulations exempting most municipal storm sewer systems from NPDES permit requirements. This exemption was overturned in *Natural Resources Defense Council v. Costle* (1977) 568 F.2d 1369, and the EPA was ordered to require NPDES permits for storm water runoff. When the EPA failed to adopt regulations implementing a permitting system for

storm water runoff, Congress adopted the Water Quality Act of 1987, amending the Clean Water Act to impose NPDES permit requirements for storm water discharges.

Congress distinguished between industrial and municipal storm water discharges, establishing a lower bar for discharges from municipal storm sewer systems: Industrial NPDES permits are required to meet applicable effluent limitations, while municipal NPDES permits are generally required to control pollutants to the "**maximum extent practicable**." (See *Building Industry Association, supra*, 124 Cal.App.4th at pp.874, 884.) The Act provides:

Permits for discharges from municipal storm sewers . . . shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. (33 U.S.C. § 1342(p)(3)(B)(iii).)

B. California's Regulation of Storm Water Pollution

In 1969, three years before Congress enacted the Clean Water Act, California enacted its own water quality protection legislation, the Porter-Cologne Water Quality Control Act ("Porter-Cologne Act"). The Porter-Cologne Act seeks to attain the highest reasonable quality water, considering all demands made on those waters and the total value involved: beneficial and detrimental, economic and social, tangible and intangible. (Water Code § 13000.) The Porter-Cologne Act requires water quality plans to ensure the reasonable protection of beneficial uses and prevent nuisance. (Water Code §§ 13050(f), 13241.)

The Porter-Cologne Act makes the State Water Resources Control Board and the nine Regional Water Quality Control Boards responsible for establishing water quality standards. Together the State and regional boards are the state agencies with primary responsibility for coordination and control of California's water quality. (Water Code § 13001.)

The Porter-Cologne Act requires regional boards to establish water quality objectives (standards) and a program to achieve these objectives through regional water quality control plans. The regional board's program must describe the actions necessary to achieve its objectives, including recommendations for appropriate action by regulated entities; a schedule for actions to be taken; and a description of the surveillance to be undertaken to determine compliance. (Water Code § 13242.)

Under the Porter-Cologne Act, any person or entity discharging "waste" that could affect the quality of the state's waters is required to file a Report of Waste Discharge. (Water Code §§ 13260, 13263.) The regional water board may then issue a permit, known as a Waste Discharge Requirement, allowing the discharge. In issuing a Waste Discharge Requirement, the regional board sets conditions for the discharge. (Water Code § 13263.)

Shortly after Congress enacted the Clean Water Act in 1972, California took steps to implement the new federal requirements. California sought EPA approval to issue NPDES permits "in order to avoid direct regulation by the federal government of persons already subject to regulation under state law pursuant to [the Porter-Cologne Act]." (Water Code § 13370(c).) To ensure California meets federal requirements to issue NPDES permits, the Legislature added chapter 5.5 to the Porter-Cologne Act requiring the state and regional water boards to satisfy federal Clean Water Act requirements when issuing Waste Discharge Requirements. (Water Code § 13377.) As a result, Waste Discharge Requirements are the equivalent of NPDES permits required by the Clean Water Act. (Water Code § 13374.)

The EPA thereafter granted California approval to issue NPDES permits. Thus, Waste Discharge Requirements issued by California's regional water boards ordinarily serve as NPDES permits under federal law. (*Building Industry Association, supra*, 124 Cal.App.4th at p.875; *City of Burbank, supra*, 35 Cal.4th at p.631.)

C. Reimbursement for State Mandated Programs

In June 1978, the voters adopted Proposition 13, adding article XIII A to the California Constitution limiting the authority of local governments to impose *ad valorem*

property taxes or new special taxes. (*County of Fresno v. State of California* (1991) 53 Cal.3d 482, 486.) In November of 1979 the voters adopted Proposition 4, adding article XIII B to the California Constitution imposing the "Gann Limit" on local expenditures. The voters intended articles XIII A and XIII B to work in tandem, restricting the power of local government to both levy and spend taxes. (*County of Fresno, supra*, 53 Cal.3d at p.486.)

Recognizing that article XIII A severely restricted the taxing powers of local government, article XIII B prevents the State from transferring the cost of governmental programs from the State to local governments. (*County of Fresno, supra*, 53 Cal.3d at p.487.) Article XXII B generally requires the State to reimburse local governments for the cost of governmental services which the State mandates local governments provide. (*County of Los Angeles v. Commission on State Mandates* (2007) 150 Cal.App.4th 898, 906.) Although the State may require local entities to provide new programs or services, it may not require local entities to use their own tax revenues to pay for the programs or services. (*California School Boards Assn. v. State of California* (2011) 192 Cal.App.4th 770, 787.) Specifically, article XIII B, section 6, provides in relevant part:

Whenever the Legislature or any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse such local government for the costs of such program or increased level of service (Cal. Const, art. XIII B, § 6.)

Article XIII B, section 6, requires the State to reimburse local agencies for the cost of any new governmental program, or higher level of service, that the State imposes. (*County of Los Angeles, supra*, 150 Cal.App.4th at pp.906-907.) However, section 6 applies only to costs mandated by the State; the State is not required to reimburse costs mandated by federal law. (See *County of Los Angeles, supra*, 150 Cal.App.4th at p.907; see also Gov. Code §§ 17513, 17514, 17556(c).)

To implement article XIII B, the Legislature created the Commission on State Mandates. (Gov't. Code § 17500 et seq.) The Commission is a quasi-judicial body

charged with resolving state mandate claims. (*Kinlaw v. State of California* (1991) 54 Cal.3d 326, 331; see Gov. Code § 17500 *et seq.*) The Commission determines whether the State has imposed a reimbursable mandate. (*County of Los Angeles, supra*, 150 Cal.App.4th at pp.907-908.) The Commission has exclusive authority to make this determination. (*Redevelopment Agency v. Commission on State Mandates* (1996) 43 Cal.App.4th 1180, 1193; *County of Los Angeles, supra*, 150 Cal.App.4th at p.908; Gov. Code § 17552.)

A local government initiates the process for reimbursement under article XIII B, section 6, by filing a "test claim" with the Commission. The Commission must then determine whether a state mandate exists and, if so, the amount of reimbursement due the local entity. (Gov. Code §§ 17551, 17557, 17558.) Judicial review of the Commission's decision is available through a petition for writ of mandate under Code of Civil Procedure section 1094.5. (*Kinlaw, supra*, 54 Cal.3d at p.332; Gov. Code § 17559.)

D. Permittees' Test Claim

The Permittees filed a test claim with the Commission seeking reimbursement for various requirements imposed by NPDES Permit No. CAS0108758.² After hearing, the Commission issued a 133-page decision partially approving the claim. The Commission concluded the following requirements in the permit imposed reimbursable state-mandated new programs or higher levels of service within the meaning of article XIII B, section 6:

- Street sweeping and reporting (parts D.3.a(5), J.3.a(3)(c) x-xv);
- Conveyance system cleaning and reporting (parts D.3.a(3), J.3.a(3)(c)(iv)-(viii));
- Educational components of the Jurisdictional Urban Runoff Management Program (parts D.5.a(1)-(2), D.5.b(1)(c)-(d), D.5(b)(3));

² That NPDES permit was first issued in 1990 (Order No. 90-42), and renewed in 2001. (Order No. 2001-01.) In 2005, the County of San Diego submitted the required Report of Waste Discharge to renew the permit.

- Provisions of the Watershed Urban Runoff Management Program (parts E.2.f, E.2.g);
- Provisions of the Regional Urban Runoff Management Program (parts F.1, F.2, F.3);
- The program and long term effectiveness assessments (parts I.1, I.2, I.5); and
- The "all permittee collaboration" requirements (parts L.1.a(3)-(6)).³

F. Petition and Cross-Petition

On July 20, 2010, the State filed a petition for writ of administrative mandate challenging the Commission's finding that the above permit requirements are reimbursable state mandates. The State argues the Commission's decision is erroneous because (1) the NPDES permit and its conditions are required by federal law; (2) California's administration of the NPDES permit program does not transform the federal requirements into a state mandate; (3) the permit does not impose a new program or higher level of service under an existing program; and (4) even if the challenged activities are state mandates, they are not reimbursable because the Permittees have authority to levy fees to recover their costs.

DISCUSSION

The State challenges three aspects of the Commission's decision: the permit requirements are not federal mandates; the permit requirements impose new programs or higher levels of service; and the Permittees lack sufficient fee authority to recover the costs of the program.

³ The Commission also found the hydromodification management plan and low-impact development requirements of the Jurisdictional Urban Runoff Management Program (parts D.1.d(7)-(8), D.1.g) are state-mandated new programs or higher levels of service. However, the Commission concluded the Permittees are not entitled to reimbursement for these costs because they have sufficient authority to levy fees to pay these expenses.

The Permittees' cross-petition challenges this portion of the Commission's decision. Because the matter is remanded to the Commission for further procedures on the threshold question of whether these are state-mandated costs, the Permittees' cross-petition is not addressed.

The court concludes the Commission applied the wrong legal standard in addressing the first question, whether the permit conditions exceed federal requirements. Accordingly, the court concludes that a writ should issue remanding this matter to the Commission for further proceedings consistent with this court's decision and judgment.

Given this determination, it is unnecessary to address the other issues raised by the petition and cross-petition

Standard of Review

The court must determine whether the Commission proceeded without, or in excess of, jurisdiction; whether the parties received a fair hearing; and whether there was prejudicial abuse of discretion. (Code Civ. Proc. § 1094.5) Abuse of discretion is established if the Commission did not proceed in the manner required by law, its order or decision is not supported by the findings, or the findings are not supported by the evidence. (*Ibid.*)

Whether the State imposed conditions exceeding the requirements of the federal Clean Water Act is an issue of fact. (*City of Burbank, supra*, 35 Cal.4th at p.628.)

The Commission's factual findings are reviewed under the substantial evidence test. (*City of Richmond v. Commission on State Mandates* (1998) 64 Cal.App.4th 1190, 1194-1195; Cal. Gov. Code § 17559.) Under the substantial evidence test, the court does not reweigh the evidence, views the evidence in the light most favorable to the Commission's findings, and indulges all reasonable inferences in support thereof. (*Camarena v. State Personnel Bd.* (1997) 54 Cal.App.4th 698, 701; *Hosford v. State Personnel Bd.* (1977) 74 Cal.App.3d 302, 306-07.) The court may not overturn the Commission's finding of fact simply because a contrary finding would have been more reasonable. (*Boreta Enterprises, Inc. v. Department of Alcoholic Beverage Control* (1970) 2 Cal.3d 85, 94; *Wilson v. State Personnel Bd.* (1976) 58 Cal.App.3d 865, 870.)

However, in addition to examining whether the Commission's findings are supported by substantial evidence, the court must determine whether the Commission committed any errors of law. The Commission's legal conclusions are reviewed de

novo. (*Jenron Corp. v. Dept. of Social Services* (1997) 54 Cal.App.4th 1429, 1434.)

This includes the Commission's interpretation of a regulation or statute. (*Samples v. Brown* (2007)) 146 Cal.App.4th 787, 799.)

While an agency's interpretation of a statute or regulation it is charged with enforcing is entitled to deference, the court makes the ultimate interpretation of the law. (See, *Family Planning Associates Med. Group, Inc. v. Belshe* (1998) 62 Cal.App.4th 999, 1004.) The California Supreme Court explained:

[T]he standard of judicial review of an agency interpretation of law is the independent judgment of the court, giving deference to the determination of the agency appropriate to the circumstances of the agency action. (*Yamaha Corp. of America v. State Board of Equalization* (1998) 19 Cal.4th 1, 8.)

The weight to be given an agency's interpretation will depend upon the thoroughness of its consideration, the validity of its reasoning, and its consistency with earlier and later pronouncements. (*Yamaha, supra*, at p.14.) However, final responsibility for interpreting the law rests with the court. (*Id.* at p.7.)

Here, we have conflicting interpretations of what the federal Clean Water Act requires for the Permittees' permit. The San Diego Regional Water Quality Control Board concluded the permit conditions are required by the Clean Water Act. The Regional Board is charged with administering the Clean Water Act and approving the NPDES permit program in San Diego County. The court must accord appropriate deference to the Regional Board's construction of the Clean Water Act. (See *Building Industry Association, supra*, 124 Cal.App.4th at pp.873, 879 fn.9; *County of Los Angeles v. California State Water Resources Control Board* (2006) 143 Cal.App.4th 985, 997.)

The Commission disagreed with the Regional Board's construction, concluding the permit conditions go beyond what is required by the Clean Water Act. The Commission thus concluded the permit conditions imposed state-mandated costs within the meaning of article XIII B. The Commission has exclusive authority for enforcing article XIII B, including determining if the State has imposed a mandate requiring reimbursement. (See *Redevelopment Agency v. Commission on State Mandates*,

supra, 43 Cal.App.4th at p.1193.) The court must accord appropriate deference to the Commission's construction of whether there is a state mandate within the meaning of article XIII B.

1. State administration of the federal Clean Water Act does not make the permits a state-mandated program

The fact that the State chose to administer the federal NPDES permit program does not make the permit requirements a state-mandated program. In the seminal case of *Hayes v. Commission on State Mandates* (1992) 11 Cal.App.4th 1564, school districts sought reimbursement for costs incurred in providing special education programs implementing the federal Education of the Handicapped Act. The State argued these programs were required by federal law, and thus article XIII B did not require reimbursement.

The court agreed the federal Act required the State to provide the programs. However, under federal law, the State itself could have provided the programs. The court in *Hayes* concluded that if the State decided to shift the costs to local agencies, the State cannot claim the costs are a federal mandate because, "as far as the local agency is concerned, the burden is imposed by a state rather than a federal mandate." (*Id.* at p.1594.)

Here, in contrast, the federal government has imposed the NPDES requirements directly on local agencies that discharge pollutants. Federal law requires the Permittees to obtain a NPDES permit in order to discharge pollutants. Federal law also requires the permit to include controls reducing the discharge of pollutants "to the maximum extent practicable." (33 U.S.C. § 1342(p)(3)(B); See *Building Industry Association, supra*, 124 Cal.App.4th at pp.874, 884.)

Unlike *Hayes*, the State is not shifting federally-mandated costs to local agencies. Even if the State had not been approved to issue the NPDES permit, the Permittees would still have to comply with federal requirements to reduce their discharge of pollutants to the "maximum extent practicable." Californians choice to

administer the NPDES permit program did not transform the federal NPDES requirements into a state-mandated program.

2. **The Commission failed to apply the federal standard requiring that discharge of pollutants must be reduced to the "maximum extent practicable."**

The parties agree the issue is whether the State required Permittees to comply with conditions beyond those required by federal law. (See, e.g., *Long Beach Unified School District v. State of California* (1990) 225 Cal.App.3d 155, 173 [State Executive Order requiring school districts to adopt plans to alleviate segregation went beyond constitutional requirements and thus imposed a state-mandated program].) The Permittees argue the court must take a "comparative approach" – comparing the permit conditions to what is required by the federal Clean Water Act. But this begs the question – what is required by the federal Clean Water Act?

The Commission provided a lengthy discussion of whether the various permit conditions are required by federal law. However, the Commission looked only to whether federal law expressly requires the particular conditions specified in the permit. The Commission concluded that since nothing in federal statute or regulation expressly requires the conditions specified in the NPDES permit, the permit must therefore exceed the requirements of federal law. This was error.

As discussed above, the Clean Water Act requires every NPDES permit to include controls reducing discharge of pollutants to the "maximum extent practicable." The Clean Water Act uses a *flexible standard*, requiring each permitting agency to develop conditions based on the unique circumstances of the water affected. (*Building Industry Association, supra*, 124 Cal.App.4th at pp.873, 889.) The "maximum extent practicable" standard balances numerous factors, including technical feasibility, cost, public acceptance, regulatory compliance and effectiveness. (*Ibid.*)

In evaluating whether the challenged NPDES permit exceeds the requirements of federal law, the Commission must determine whether any of the permit conditions exceed the "maximum extent practicable" standard. The Commission never undertook

this inquiry. Instead, it simply asked whether the permit conditions are expressly specified in federal regulations or guidelines. This is not the test. The fact that a permit condition is not specified in a federal regulation or guideline does not determine whether the condition is "practicable," and thus required by federal law. The mere fact that a permit condition is not promulgated as a federal regulation does not mean it exceeds the federal standard.⁴

By failing to consider whether the permit requirements exceed the "maximum extent practicable" standard, the Commission failed to proceed in the manner required by law. As a result, there is nothing in the record to support the Commission's finding that the permit requirements exceed the "maximum extent practicable" standard. The Commission's conclusion that the permit goes beyond federal law must be set aside and the matter remanded to the Commission to reconsider its Decision. (*Voices of the*

⁴ The court appreciates the Commission's difficulty given the flexible test under the federal Clean Water Act. The Commission faced a similar challenge in *San Diego Unified School Dist. v. Commission on State Mandates* (2004) 33 Cal.4th 859, where the Commission was required to determine if state procedures requiring hearing when a student was being expelled exceeded federal due process requirements. Our Supreme Court sympathized with the challenge posed to the Commission attempting to resolve the exact extent of nebulous federal law in the context of a state mandate proceeding:

The record reveals that in the extended proceedings before the Commission, the parties spent numerous hours producing voluminous pages of analysis directed toward determining whether various provisions of Education Code section 48918 exceed federal due process requirements. The task below was complicated by the circumstance that this area of federal due process law is not well developed. The Commission, which is not a judicial body, did as best it could and concluded that in certain respects the various provisions . . . 'exceeded' the requirements of federal due process.

Even for an appellate court, it would be difficult and problematic in this setting to categorize the various . . . requirements here at issue as falling within or without the general federal due process mandate. The difficulty results not only from the circumstance that . . . the case law in the area of due process procedures concerning expulsion matters is relatively undeveloped, but also from the circumstance that when such an issue is raised in an action for reimbursement, as opposed to its being raised in litigation challenging an actual expulsion on the grounds of allegedly inadequate hearing procedures, the issue inevitably is presented in the abstract, without any factual context that might help frame the legal issue. (*Id.* at 889-890.)

Wetlands v. State Water Resources Control Bd. (2011) 52 Cal.4th 499, 534-535; *Fascination, Inc. v. Hoover* (1952) 39 Cal.2d 260, 268.)⁵

Remand

The State argues remand is unnecessary. The State argues the Regional Board's determination that the permit requirements are necessary to comply with the federal Clean Water Act must be given preclusive effect, and that the Permittees may not "collaterally attack" the Regional Board's findings before the Commission. In short, the State insists the federal requirements are whatever the Water Board says they are. With this the court does not agree.

In addition to administering the federal Clean Water Act, the Regional Board has authority under state law to impose requirements beyond the federal "maximum extent practicable" standard of federal law. (See *Building Industry Association, supra*, 124 Cal.App.4th at p.889 ["practicable" does not simply equate to "possible"].) If the Regional Board requires the Permittees to meet standards beyond those mandated by federal law, the additional costs would be a state mandate requiring reimbursement under article XIII B. (See *Hayes v. Commission on State Mandates, supra*, 11 Cal.App.4th at p.1564) The Commission has exclusive authority to determine whether the Regional Board has imposed a state mandate. (*Redevelopment Agency v. Commission on State Mandates, supra*, 43 Cal.App.4th at p.1188.)

⁵ The State asks this court to take judicial notice that the Los Angeles County Superior Court reached the same conclusion in a case reviewing the Commission's finding that similar conditions imposed in the NPDES permit for the County of Los Angeles constituted a state mandate requiring reimbursement. (*State of California v. County of Los Angeles* (Super. Ct. Los Angeles County, 2011, No. B5130730.) The State also asks this court to take judicial notice of a decision by the United States Environmental Protection Agency entitled *In re City of Irving, Texas, Municipal Separate Storm Sewer System* (July 16, 2001) 10 E.A.D. 111 (E.P.A.), allegedly showing the Clean Water Act allows permit writers to use a combination of pollution controls that may be different in different permits.

Permittees oppose the State's request for judicial notice of the Los Angeles Superior Court and EPA decisions, contending that neither decision is relevant and that the court is prohibited from citing to or relying on the Los Angeles Superior Court decision under California Rule of Court, Rule 8.1115.

The objection to the Los Angeles Superior Court decision is granted. (*Schmier v. Supreme Court* (2002) 96 Cal.App.4th 873, 881-882.) In contrast, the objection to the EPA decision is denied. (*County of Stanislaus v. Pacific Gas & Elec. Co.* (E.D. Cal. 1995) 1995 U.S. Dist. LEXIS 21411, 22; *Smiley v. Citibank (S.D.), N.A.* (1995) 11 Cal.4th 138, 145.) Although the EPA decision is not binding, it qualifies for judicial notice. Accordingly, the court grants the request for judicial notice of the EPA decision, but denies the request for judicial notice of the Los Angeles Superior Court decision.

Because the Commission failed to properly address this question, the court grants the writ and remands this matter for further proceedings consistent with this decision. This, however, does not mean the Commission is precluded from determining if the Regional Board has imposed a state-mandated program.

The Commission's Other Findings

Having concluded the writ should be granted because the Commission applied the wrong legal standard in determining whether the permit exceeded federal requirements, it is unnecessary to review the Commission's other findings at this time, including those raised in the cross-petition. (See *Gruschka v. Unemployment Ins. Appeals Bd.* (1985) 169 Cal.App.3d 789, 793 [use of wrong standard constituted error of law necessitating remand]; *County of Stanislaus v. Assessment Appeals Bd.* (1989) 213 Cal.App.3d 1445, 1450, 1452 [same].)

DISPOSITION

For the foregoing reasons, the State's petition for writ of mandate is GRANTED. A writ shall issue directing the Commission to set aside its decision and remanding this matter to the Commission for further proceedings consistent with this court's decision and judgment.

Counsel for the State is directed to prepare a formal judgment incorporating this ruling as an exhibit; submit it to opposing counsel for approval as to form; and thereafter submit it to the court for signature and entry of judgment in accordance with California Rule of Court, rule 3.1312.

The State is entitled to recover its costs upon appropriate application. The State shall recover any fees waived pursuant to Government Code section 6103, and reimbursed the clerk of the court pursuant to Government Code section 6103.5.

CERTIFICATE OF SERVICE BY MAILING**(C.C.P. Sec. 1013a(3))****Case Name: State of California, Department of Finance vs Commission on State Mandates
Case Number: Case No.: 34-2010-8000604**

I, the Clerk of the Superior Court of California, County of Sacramento, certify that I am not a party to this cause, and on the date shown below I served the foregoing *Writ of Mandate Ruling on Submitted Matter* (Taken Under Submission on November 4, 2011) by depositing true copies thereof, enclosed in separate, sealed envelopes causing postage to be fully prepaid, in the United States Mail at Sacramento, California, each of which envelopes was addressed respectively to the persons and addresses shown below:

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I, the undersigned deputy clerk, declare under penalty of perjury that the foregoing is true and correct.

Dated: December 2, 2011

Superior Court of California, County of
Sacramento

By: J. Zraggen
Deputy Clerk

federal register

**Friday
November 16, 1990**

Part II

Environmental Protection Agency

**40 CFR Parts 122, 123, and 124
National Pollutant Discharge Elimination
System Permit Application Regulations
for Storm Water Discharges; Final Rule**

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 122, 123, and 124

(FRL-3834-7)

RIN 2040-AA79

National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges**AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Final rule.

SUMMARY: Today's final rule begins to implement section 402(p) of the Clean Water Act (CWA) (added by section 405 of the Water Quality Act of 1987 (WQA)), which requires the Environmental Protection Agency (EPA) to establish regulations setting forth National Pollutant Discharge Elimination System (NPDES) permit application requirements for: storm water discharges associated with industrial activity; discharges from a municipal separate storm sewer system serving a population of 250,000 or more; and discharges from municipal separate storm sewer systems serving a population of 100,000 or more, but less than 250,000.

Today's rule also clarifies the requirements of section 401 of the WQA, which amended CWA section 402(1)(2) to provide that NPDES permits shall not be required for discharges of storm water runoff from mining operations or oil and gas exploration, production, processing, or treatment operations or transmission facilities, composed entirely of flows which are from conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with, or do not come into contact with, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of such operations. This rule sets forth NPDES permit application requirements addressing storm water discharges associated with industrial activity and storm water discharges from large and medium municipal separate storm sewer systems.

DATES: This final rule becomes effective December 17, 1990. In accordance with 40 CFR 23.2, this rule shall be considered final for purposes of judicial review on November 30, 1990, at 1 p.m. eastern daylight time. The public record is located at EPA Headquarters, EPA Public Information Reference Unit, room

2402, 401 M Street SW., Washington DC 20460. A reasonable fee may be charged for copying.

FOR FURTHER INFORMATION CONTACT:

For further information on the rule contact: Thomas J. Seaton, Kevin Weiss, or Michael Mitchell Office of Water Enforcement and Permits (EN-336), United States Environmental Protection Agency, 401 M Street SW., Washington, DC 20460, (202) 475-9518.

SUPPLEMENTARY INFORMATION:

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- III. Remand of 1984 Regulations
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SUPPLEMENTARY INFORMATION:**I. Background and Water Quality Concerns**

The 1972 amendments to the Federal Water Pollution Control Act (referred to as the Clean Water Act or CWA), prohibit the discharge of any pollutant to navigable waters from a point source unless the discharge is authorized by an NPDES permit. Efforts to improve water quality under the NPDES program traditionally and primarily focused on reducing pollutants in discharges of industrial process wastewater and municipal sewage. This program emphasis developed for a number of reasons. At the onset of the program in 1972, many sources of industrial process wastewater and municipal sewage were not adequately controlled and represented pressing environmental problems. In addition, sewage outfalls and industrial process discharges were easily identified as responsible for poor, often drastically degraded, water quality conditions. However, as pollution control measures were initially

developed for these discharges, it became evident that more diffuse sources (occurring over a wide area) of water pollution, such as agricultural and urban runoff were also major causes of water quality problems. Some diffuse sources of water pollution, such as agricultural storm water discharges and irrigation return flows, are statutorily exempted from the NPDES program.

Since enactment of the 1972 amendments to the CWA, considering the rise of economic activity and population, significant progress in controlling water pollution has been made, particularly with regard to industrial process wastewater and municipal sewage. Expenditures by EPA, the States, and local governments to construct and upgrade sewage treatment facilities have substantially increased the population served by higher levels of treatment. Backlogs of expired permits for industrial process wastewater discharges have been reduced. Continued improvements are expected for these discharges as the NPDES program continues to place increasing emphasis on water quality-based pollution controls, especially for toxic pollutants.

Although assessments of water quality are difficult to perform and verify, several national assessments of water quality are available. For the purpose of these assessments, urban runoff was considered to be a diffuse source or nonpoint source pollution. From a legal standpoint, however, most urban runoff is discharged through conveyances such as separate storm sewers or other conveyances which are point sources under the CWA. These discharges are subject to the NPDES program. The "National Water Quality Inventory, 1988 Report to Congress" provides a general assessment of water quality based on biennial reports submitted by the States under section 305(b) of the CWA. In preparing the section 305(b) Reports, the States were asked to indicate the fraction of the States' waters that were assessed, as well as the fraction of the States' waters that were fully supporting, partly supporting, or not supporting designated uses. The Report indicates that of the rivers, lakes, and estuaries that were assessed by States (approximately one-fifth of stream miles, one-third of lake acres and one-half of estuarine waters), roughly 70% to 75% are supporting the uses for which they are designated. For waters with use impairments, States were asked to determine impacts due to diffuse sources (agricultural and urban runoff and other sources), municipal sewage, industrial process wastewaters,

combined sewer overflows, and natural and other sources, then combine impacts to arrive at estimates of the relative percentage of State waters affected by each source. In this manner, the relative importance of the various sources of pollution that are causing use impairments was assessed and weighted national averages were calculated. Based on 37 States that provided information on sources of pollution, industrial process wastewaters were cited as the cause of nonsupport for 7.5% of rivers and streams, 10% of lakes, and 6% of estuaries. Municipal sewage was the cause of nonsupport for 13% of rivers and streams, 5% lakes, 48% estuaries, 41% of the Great Lake shoreline, and 11% of coastal waters. The Assessment concluded that pollution from diffuse sources, such as runoff from agricultural, urban areas, construction sites, land disposal and resource extraction, is cited by the States as the leading cause of water quality impairment. These sources appear to be increasingly important contributors of use impairment as discharges of industrial process wastewaters and municipal sewage plants come under increased control and as intensified data collection efforts provide additional information. Some examples of diffuse sources cited as causing use impairment are: for rivers and streams, 9% from separate storm sewers, 6% from construction and 13% from resource extraction; for lakes, 28% from separate storm sewers and 26% from land disposal; for the Great Lakes shoreline, 10% from separate storm sewers, 34% from resource extraction, and 82% from land disposal; for estuaries, 28% from separate storm sewers and 27% from land disposal; and for coastal areas, 20% from separate storm sewers and 29% from land disposal.

The States conducted a more comprehensive study of diffuse pollution sources under the sponsorship of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) and EPA. The study resulted in the report "America's Clean Water—The States' Nonpoint Source Assessment, 1985" which indicated that 38 States reported urban runoff as a major cause of beneficial use impairment. In addition, 21 States reported construction site runoff as a major cause of use impairment.

To provide a better understanding of the nature of urban runoff from commercial and residential areas, from 1978 through 1983, EPA provided funding and guidance to the Nationwide Urban Runoff Program (NURP). The NURP included 28 projects across the Nation,

conducted separately at the local level but centrally reviewed, coordinated, and guided.

One focus of the NURP was to characterize the water quality of discharges from separate storm sewers which drain residential, commercial, and light industrial (industrial parks) sites. The majority of samples collected in the study were analyzed for eight conventional pollutants and three metals. Data collected under the NURP indicated that on an annual loading basis, suspended solids in discharges from separate storm sewers draining runoff from residential, commercial and light industrial areas are around an order of magnitude greater than solids in discharges from municipal secondary sewage treatment plants. In addition, the study indicated that annual loadings of chemical oxygen demand (COD) are comparable in magnitude to effluent from secondary sewage treatment plants. When analyzing annual loadings associated with urban runoff, it is important to recognize that discharges of urban runoff are highly intermittent, and that the short-term loadings associated with individual events will be high and may have shockloading effects on receiving water, such as low dissolved oxygen levels. NURP data also showed that fecal coliform counts in urban runoff are typically in the tens to hundreds of thousands per 100 ml of runoff during warm weather conditions, although the study suggested that fecal coliform may not be the most appropriate indicator organism for identifying potential health risks in storm water runoff. Although NURP did not evaluate oil and grease, other studies have demonstrated that urban runoff is an extremely important source of oil pollution to receiving waters, with hydrocarbon levels in urban runoff typically being reported at a range of 2 to 15 mg/l. These hydrocarbons tend to accumulate in bottom sediments where they may persist for long periods of time and exert adverse impacts on benthic organisms.

A portion of the NURP study involved monitoring 120 priority pollutants in storm water discharges from lands used for residential, commercial and light industrial activities. Seventy-seven priority pollutants were detected in samples of storm water discharges from residential, commercial and light industrial lands taken during the NURP study, including 14 inorganic and 63 organic pollutants. Table A-1 shows the priority pollutants which were detected in at least ten percent of the discharge samples which were sampled for priority pollutants.

TABLE A-1.— PRIORITY POLLUTANTS DETECTED IN AT LEAST 10% OF NURP SAMPLES

[In percent]	
	Frequency of detection
Metals and inorganics:	
Antimony.....	13
Arsenic.....	52
Beryllium.....	12
Cadmium.....	48
Chromium.....	58
Copper.....	91
Cyanides.....	23
Lead.....	94
Nickel.....	43
Selenium.....	11
Zinc.....	94
Pesticides:	
Alpha-hexachlorocyclohexane.....	20
Alpha-endosulfan.....	19
Chlordane.....	17
Lindane.....	15
Halogenated aliphatics:	
Methane, dichloro.....	11
Phenols and cresols:	
Phenol.....	14
Phenol, pentachloro.....	19
Phenol, 4-nitro.....	10
Phthalate esters:	
Phthalate, bis(2-ethylhexyl).....	22
Polycyclic aromatic hydrocarbons:	
Chrysene.....	10
Fluoranthene.....	16
Phenanthrene.....	12
Pyrene.....	15

The NURP data also showed a significant number of these samples exceeded various EPA freshwater water quality criteria.

The NURP study provides insight on what can be considered background levels of pollutants for urban runoff, as the study focused primarily on monitoring runoff from residential, commercial and light industrial areas. However, NURP concluded that the quality of urban runoff can be adversely impacted by several sources of pollutants that were not directly evaluated in the study and are generally not reflected in the NURP data, including illicit connections, construction site runoff, industrial site runoff and illegal dumping.

Other studies have shown that many storm sewers contain illicit discharges of non-storm water and that large amounts of wastes, particularly used oils, are improperly disposed in storm sewers. Removal of these discharges present opportunities for dramatic improvements in the quality of storm water discharges. Storm water discharges from industrial facilities may contain toxics and conventional pollutants when material management practices allow exposure to storm water, in addition to wastes from illicit connections and improperly disposed wastes.

In some municipalities, illicit connections of sanitary, commercial and industrial discharges to storm sewer systems have had a significant impact on the water quality of receiving waters. Although the NURP study did not emphasize the identification of illicit connections to storm sewers (other than to assure that monitoring sites used in the study were free from sanitary sewage contamination), the study concluded that illicit connections can result in high bacterial counts and dangers to public health. The study also noted that removing such discharges presented opportunities for dramatic improvements in the quality of urban storm water discharges.

Studies have shown that illicit connections to storm sewers can create severe, wide-spread contamination problems. For example, the Huron River Pollution Abatement Program inspected 660 businesses, homes and other buildings located in Washtenaw County, Michigan and identified 14% of the buildings as having improper storm drain connections. Illicit discharges were detected at a higher rate of 60% for automobile related businesses, including service stations, automobile dealerships, car washes, body shops and light industrial facilities. While some of the problems discovered in this study were the result of improper plumbing or illegal connections, a majority were approved connections at the time they were built.

Intensive construction activities may result in severe localized impacts on water quality because of high unit loads of pollutants, primarily sediments. Construction sites can also generate other pollutants such as phosphorus and nitrogen from fertilizer, pesticides, petroleum products, construction chemicals and solid wastes. These materials can be toxic to aquatic organisms and degrade water for drinking and water-contact recreation. Sediment loadings rates from construction sites are typically 10 to 20 times that of agricultural lands, with runoff rates as high as 100 times that of agricultural lands, and typically 1,000 to 2,000 times that of forest lands. Even a small amount of construction may have a significant negative impact on water quality in localized areas. Over a short period of time, construction sites can contribute more sediment to streams than was previously deposited over several decades.

II. Water Quality Act of 1987

The WQA contains three provisions which specifically address storm water discharges. The central WQA provision governing storm water discharges is section 405, which adds section 402(p) to

the CWA. Section 402(p)(1) provides that EPA or NPDES States cannot require a permit for certain storm water discharges until October 1, 1992, except: for storm water discharges listed under section 402(p)(2). Section 402(p)(2) lists five types of storm water discharges which are required to obtain a permit prior to October 1, 1992:

(A) A discharge with respect to which a permit has been issued prior to February 4, 1987;

(B) A discharge associated with industrial activity;

(C) A discharge from a municipal separate storm sewer system serving a population of 250,000 or more;

(D) A discharge from a municipal separate storm sewer system serving a population of 100,000 or more, but less than 250,000; or

(E) A discharge for which the Administrator or the State, as the case may be, determines that the storm water discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to the waters of the United States.

Section 402(p)(4)(A) requires EPA to promulgate final regulations governing storm water permit application requirements for storm water discharges associated with industrial activity and discharges from large municipal separate storm sewer systems (systems serving a population of 250,000 or more), "no later than two years" after the date of enactment (*i.e.*, no later than February 4, 1989). Section 402(p)(4)(B) also requires EPA to promulgate final regulations governing storm water permit application requirements for discharges from medium municipal separate storm sewer systems (systems serving a population of 100,000 or more but less than 250,000) "no later than four years" after enactment (*i.e.*, no later than February 4, 1991).

In addition, section 402(p)(4) provides that permit applications for storm water discharges associated with industrial activity and discharges from large municipal separate storm sewer systems "shall be filed no later than three years" after the date of enactment of the WQA (*i.e.*, no later than February 4, 1990). Permit applications for discharges from medium municipal systems must be filed "no later than five years" after enactment (*i.e.*, no later than February 4, 1992).

The WQA clarified and amended the requirements for permits for storm water discharges in the new CWA section 402(p)(3). The Act clarified that permits for discharges associated with industrial activity must meet all of the applicable provisions of section 402 and section 301

including technology and water quality based standards. However, the new Act makes significant changes to the permit standards for discharges from municipal storm sewers. Section 402(p)(3)(B) provides that permits for such discharges:

- (i) May be issued on a system- or jurisdiction-wide basis;
- (ii) Shall include a requirement to effectively prohibit non-storm water discharges into the storm sewers; and
- (iii) Shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.

These changes are discussed in more detail later in today's rule.

The EPA, in consultation with the States, is required to conduct two studies on storm water discharges that are in the class of discharges for which EPA and NPDES States cannot require permits prior to October 1, 1992. The first study will identify those storm water discharges or classes of storm water discharges for which permits are not required prior to October 1, 1992, and determine, to the maximum extent practicable, the nature and extent of pollutants in such discharges. The second study is for the purpose of establishing procedures and methods to control storm water discharges to the extent necessary to mitigate impacts on water quality. Based on the two studies the EPA, in consultation with State and local officials, is required to issue regulations no later than October 1, 1992, which designate additional storm water discharges to be regulated to protect water quality and establish a comprehensive program to regulate such designated sources. This program must, at a minimum, (A) Establish priorities, (B) establish requirements for State storm water management programs, and (C) establish expeditious deadlines. The program may include performance standards, guidelines, guidance, and management practices and treatment requirements, as appropriate.

Section 401 of the WQA amends section 402(1)(2) of the CWA to provide that the EPA shall not require a permit for discharges of storm water runoff from mining operations or oil and gas exploration, production, processing, or treatment operations or transmission facilities if the storm water discharge is not contaminated by contact with, or does not come into contact with, any overburden, raw material, intermediate product, finished product, byproduct, or

waste product located on the site of such operations.

Section 503 of the WQA amends section 502(14) of the CWA to exclude agricultural storm water discharges from the definition of point source.

III. Remand of 1984 Regulations

On December 4, 1987, the United States Court of Appeals for the District of Columbia Circuit vacated 40 CFR 122.26, (as promulgated on September 26, 1984, 49 FR 37998, September 26, 1984), and remanded the regulations to EPA for further rulemaking (*NRDC v. EPA*, No. 80-1607). EPA had requested the remand because of significant changes made by the storm water provisions of the WQA. The effect of the decision was to invalidate the storm water discharge regulations then found at § 122.26.

Storm water discharges which had been issued an NPDES permit prior to February 4, 1987, were not affected by the Court remand or the February 12, 1988, rule implementing the court order (53 FR 4157). (See section 402(p)(2)(A) of the CWA.) Similarly, the remand did not affect the authority of EPA or an NPDES State to require a permit for any storm water discharge (except an agricultural storm water discharge) designated under section 402(p)(2)(E) of the CWA. The notice of the remand clarified that such designated discharges meet the regulatory definition of point source found at 40 CFR 122.2 and that EPA or an NPDES State can rely on the statutory authority and require the filing of an application (Form 1 and Form 2C) for an NPDES permit with respect to such discharges on a case-by-case basis.

IV. Codification Rule and Case-by-Case Designations

Codification Rule

On January 4, 1989, (54 FR 255), EPA published a final rule which codified numerous provisions of the WQA into EPA regulations. The codification rule included several provisions dealing with storm water discharges. The codification rule promulgated the language found at section 402(p)(1) and (2) of the amended Clean Water Act at 40 CFR 122.26(a)(1). In addition, the codification rule promulgated the language of Section 503 of the WQA which exempted agricultural storm water discharges from the definition of point source at 40 CFR 122.2, and section 401 of the WQA addressing uncontaminated storm water discharges from mining or oil and gas operations at 40 CFR 122.26(a)(2).

EPA also codified the statutory authority of section 402(p)(2)(E) of the CWA for the Administrator or the State

Director, as the case may be, to designate storm water discharges for a permit on a case-by-case basis at 40 CFR 122.26(a)(1)(v).

Case by Case Designations

Section 402(p)(2)(E) of the CWA authorizes case-by-case designations of storm water discharges for immediate permitting if the Administrator or the State Director determines that the storm water discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States.

In determining that a storm water discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States for the purpose of a designation under section 402(p)(2)(E), the legislative history for the provision provides that "EPA or the State should use any available water quality or sampling data to determine whether the latter two criteria (contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States) are met, and should require additional sampling as necessary to determine whether or not these criteria are met." Conference Report, *Cong. Rec.* S16443 (daily ed. October 16, 1986). In accordance with this legislative history, today's rule promulgates permit application requirements for certain storm water discharges, including discharges designated on a case-by-case basis. EPA will consider a number of factors when determining whether a storm water discharge is a significant contributor of pollution to the waters of the United States. These factors include: the location of the discharge with respect to waters of the United States; the size of the discharge; the quantity and nature of the pollutants reaching waters of the United States; and any other relevant factors. Today's rule incorporates these factors at 40 CFR 122.26(a)(1)(v).

Under today's rule, case-by-case designations are made under regulatory procedures found at 40 CFR 124.52. The procedures at 40 CFR 124.52 require that whenever the Director decides that an individual permit is required, the Director shall notify the discharger in writing that the discharge requires a permit and the reasons for the decision. In addition, an application form is sent with the notice. Section 124.52 provides a 60 day period from the date of notice for submitting a permit application. Although this 60 day period may be appropriate for many designated storm water discharges, site specific factors may dictate that the Director provide

additional time for submitting a permit application. For example, due to the complexities associated with designation of a municipal separate storm sewer system for a system- or jurisdiction-wide permit, the Director may provide the applicant with additional time to submit relevant information or may require that information be submitted in several phases.

V. Consent Decree of October 20, 1989

On April 20, 1989, EPA was served notice of intent to sue by Kathy Williams *et al.* because of the Agency's failure to promulgate final storm regulations on February 4, 1989, pursuant to Section 402(p)(4) of the CWA. A suit was filed by the same party on July 20, 1989, alleging the same cause of action, to wit: the Agency's failure to promulgate regulations under section 402(p)(4) of the CWA. On October 20, 1989, EPA entered into a consent decree with Kathy Williams *et al.*, wherein the Federal District Court, District of Oregon, Southern Division, decreed that the Agency promulgate final regulations for storm water discharges identified in sections 402(p)(2) (B) and (C) of the CWA no later than July 20, 1990. *Kathy Williams et al., v. William K. Reilly, Administrator, et al.*, No. 89-6265-E (D-Ore.) In July 1990, the consent decree was amended to provide for a promulgation date of October 31. Today's rule is promulgated in compliance with the terms of the consent decree as amended.

VI. Today's Final Rule and Response to Comments

A. Overview

Section 405 of the WQA alters the regulatory approach to control pollutants in storm water discharges by adopting a phased and tiered approach. The new provision phases in permit application requirements, permit issuance deadlines and compliance with permit conditions for different categories of storm water discharges. The approach is tiered in that storm water discharges associated with industrial activity must comply with sections 301 and 402 of the CWA (requiring control of the discharge of pollutants that utilize the Best Available Technology (BAT) and the Best Conventional Pollutant Control Technology (BCT) and where necessary, water quality-based controls), but permits for discharges from municipal separate storm sewer systems must require controls to reduce the discharge of pollutants to the maximum extent

practicable, and where necessary water quality-based controls, and must include a requirement to effectively prohibit non-storm water discharges into the storm sewers. Furthermore, EPA in consultation with State and local officials must develop a comprehensive program to designate and regulate other storm water discharges to protect water quality.

This final regulation establishes requirements for the storm water permit application process. It also sets forth the required components of municipal storm water quality management plans, as well as a preliminary permitting strategy for industrial activities. In implementing these regulations, EPA and the States will strive to achieve environmental results in a cost effective manner by placing high priority on pollution prevention activities, and by targeting activities based on reducing risk from particularly harmful pollutants and/or from discharges to high value waters. EPA and the States will also work with applicants to avoid cross media transfers of storm water contaminants, especially through injection to shallow wells in the Class V Underground Injection Control Program.

In addition, EPA recognizes that problems associated with storm water, combined sewer overflows (CSOs) and infiltration and inflow (I&I) are all inter-related even though they are treated somewhat differently under the law. EPA believes that it is important to begin linking these programs and activities and, because of the potential cost to local governments, to investigate the use of innovative, non-traditional approaches to reducing or preventing contamination of storm water.

The application process for developing municipal storm water management plans provides an ideal opportunity between steps 1 and 2 for considering the full range of nontraditional, preventive approaches, including municipalities, public awareness/education programs, use of vegetation and/or land conservancy practices, alternative paving materials, creative ways to eliminate I&I and illegal hook-ups, and potentials for water reuse. EPA has already announced its plans to present an award for the best creative, cost effective approaches to storm water and CSOs beginning in 1991.

This rulemaking establishes permit application requirements for classes of storm water discharges that were specifically identified in section 402(p)(2). These priority storm water discharges include storm water discharges associated with industrial

activity and discharges from a municipal separate storm sewer serving a population of 100,000 or more.

This rulemaking was developed after careful consideration of 450 sets of comments, comprising over 3200 pages, that were received from a variety of industries, trade associations, municipalities, State and Federal Agencies, environmental groups, and private citizens. These comments were received during a 90-day comment period which extended from December 7, 1988, to March 7, 1989. EPA received several requests for an extension of the comment period from 30-days up to 90-days. Many arguments were advanced for an extension including: the extent and complexity of the proposal, the existence of other concurrent EPA proposals, and the need for technical evaluations of the proposal. EPA considered these comments as they were received, but declined to extend the comment period beyond 90 days. The standard comment period on proposals normally range from 30 to 60 days. In light of the statutory deadline of February 4, 1989, additional time for the comment period beyond what was already a substantially lengthened comment period would have been inappropriate. The number and extent of the comments received on this proposal indicated that interested parties had substantially adequate time to review and comment on the regulation. Furthermore, the public was invited to attend six public meetings in Washington DC, Chicago, Dallas, Oakland, Jacksonville, and Boston to present questions and comments. EPA is convinced that substantial and adequate public participation was sought and received by the Agency.

Numerous commenters have also requested that the rule be repropounded due to the extent of the proposal and the number of options and issues upon which the Agency requested comments. EPA has decided against a reproposal. The December 7, 1988, notice of proposed rulemaking was extremely detailed and thoroughly identified major issues in such a manner as to allow the public clear opportunities to comment. The comments that were received were extensive, and many provided valuable information and ideas that have been incorporated into the regulation. Accordingly, the Agency is confident it has produced a workable and rational approach to the initial regulation of storm water discharges and a regulation that reflects the experience and knowledge of the public as provided in the comments, and which was developed in accordance with the

procedural requirements of the Administrative Procedures Act (APA). EPA believes that while the number of issues raised by the proposal was extensive, the number of detailed comments indicates that the public was able to understand the issues in order to comment adequately. Thus, a reproposal is unnecessary.

B. Definition of Storm Water

The December 7, 1988, notice requested comment on defining storm water as storm water runoff, surface runoff, street wash waters related to street cleaning or maintenance, infiltration (other than infiltration contaminated by seepage from sanitary sewers or by other discharges) and drainage related to storm events or snow melt. This definition is consistent with the regulatory definition of "storm sewer" at 40 CFR 35.2005(b)(47) which is used in the context of grants for construction of treatment works. This definition aids in distinguishing separate storm water sewers from sanitary sewers, combined sewers, process discharge outfalls and non-storm water, non-process discharge outfalls.

The definition of "storm water" has an important bearing on the NPDES permitting scheme under the CWA. The following discusses the interrelationship of NPDES permitting requirements for storm water discharges addressed by this rule and NPDES permitting requirements for other non-storm water discharges which may be discharged via the storm sewer as a storm water discharge. Today's rule addresses permit application requirements for storm water discharges associated with industrial activity and for discharges from municipal separate storm sewer systems serving a population of 100,000 or more. Storm water discharges associated with industrial activity are to be covered by permits which contain technology-based controls based on BAT/BCT considerations or water quality-based controls, if necessary. A permit for storm water discharges from an industrial facility may also cover other non-storm water discharges from the facility. Today's rule establishes individual (Form 1 and Form 2F) and group application requirements for storm water discharges associated with industrial activity. In addition, EPA or authorized NPDES States with authorized general permit programs may issue general permits which establish alternative application or notification requirements for storm water discharges covered by the general permit(s). Where a storm water discharge associated with industrial activity is mixed with a non-storm water discharge, both discharges

must be covered by an NPDES permit (this can be in the same permit or with multiple permits). Permit application requirements for these "combination" discharges are discussed later in today's notice.

Today's rule also addresses permit application requirements for discharges from municipal separate storm sewer systems serving a population of 100,000 or more. Under today's rule, appropriate municipal owners or operators of these systems must obtain NPDES permits for discharges from these systems. These permits are to establish controls to the maximum extent practicable (MEP), effectively prohibit non-storm water discharges to the municipal separate storm sewer system and, where necessary, contain applicable water quality-based controls. Where non-storm water discharges or storm water discharges associated with industrial activity discharge through a municipal separate storm sewer system (including systems serving a population of 100,000 or more as well as other systems), which ultimately discharges to a waters of the United States, such discharges through a municipal storm sewer need to be covered by an NPDES permit that is independent of the permit issued for discharges from the municipal separate storm sewer system. Today's rule defines the term "illicit discharge" to describe any discharge through a municipal separate storm sewer that is not composed entirely of storm water and that is not covered by an NPDES permit. Such illicit discharges are not authorized under the CWA. Section 402(p)(3)(B) of the CWA requires that permits for discharges from municipal separate storm sewers require the municipality to "effectively prohibit" non-storm water discharges from the municipal separate storm sewer. As discussed in more detail below, today's rule begins to implement the "effective prohibition" by requiring municipal operators of municipal separate storm sewer systems serving a population of 100,000 or more to submit a description of a program to detect and control certain non-storm water discharges to their municipal system. Ultimately, such non-storm water discharges through a municipal separate storm sewer must either be removed from the system or become subject to an NPDES permit (other than the permit for the discharge from the municipal separate storm sewer). For reasons discussed in more detail below, in general, municipalities will not be held responsible for prohibiting some specific components of discharges or flows listed below through their municipal separate storm sewer

system, even though such components may be considered non-storm water discharges, unless such discharges are specifically identified on a case-by-case basis as needing to be addressed. However, operators of such non-storm water discharges need to obtain NPDES permits for these discharges under the present framework of the CWA (rather than the municipal operator of the municipal separate storm sewer system). (Note that section 516 of the Water Quality Act of 1987 requires EPA to conduct a study of de minimis discharges of pollutants to waters of the United States and to determine the most effective and appropriate methods of regulating any such discharges.)

EPA received numerous comments on the proposed regulatory definition of storm water, many of which proposed exclusions or additions to the definition. Several commenters suggested that the definition should include or not include detention and retention reservoir releases, water line flushing, fire hydrant flushing, runoff from fire fighting, swimming pool drainage and discharge, landscape irrigation, diverted stream flows, uncontaminated pumped ground water, rising ground waters, discharges from potable water sources, uncontaminated waters from cooling towers, foundation drains, non-contact cooling water (such as HVAC or heating, ventilation and air conditioning condensation water that POTWs require to be discharged to separate storm sewers rather than sanitary sewers), irrigation water, springs, roof drains, water from crawl space pumps, footing drains, lawn watering, individual car washing, flows from riparian habitats and wetlands. Most of these comments were made with regard to the concern that these were commonly occurring discharges which did not pose significant environmental problems. It was also noted that, unless these flows are classified as storm water, permits would be required for these discharges.

In response to the comments which requested EPA to define the term "storm water" broadly to include a number of classes of discharges which are not in any way related to precipitation events, EPA believes that this rulemaking is not an appropriate forum for addressing the appropriate regulation under the NPDES program of such non-storm water discharges, even though some classes of non-storm water discharges may typically contain only minimal amounts of pollutants. Congress did not intend that the term storm water be used to describe any discharge that has a de minimis amount of pollutants, nor did it intend for section 402(p) to be used to

provide a moratorium from permitting other non-storm water discharges. Consequently, the final definition of storm water has not been expanded from what was proposed. However, as discussed in more detail later in today's notice, municipal operators of municipal separate storm sewer systems will generally not be held responsible for "effectively prohibiting" limited classes of these discharges through their municipal separate storm sewer systems.

The proposed rule included infiltration in the definition of storm water. In this context one commenter suggested that the term infiltration be defined. Infiltration is defined at 40 CFR 35.2005(b)(20) as water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections or manholes. Infiltration does not include, and is distinguished from, inflow. Another commenter urged that ground water infiltration not be classified as storm water because the chemical characteristics and contaminants of ground water will differ from surface storm water because of a longer contact period with materials in the soil and because ground water quality will not reflect current practices at the site. In today's rule, the definition of storm water excludes infiltration since pollutants in these flows will depend on a large number of factors, including interactions with soil and past land use practices at a given site. Further infiltration flows can be contaminated by sources that are not related to precipitation events, such as seepage from sanitary sewers. Accordingly the final regulatory language does not include infiltration in the definition of storm water. Such flows may be subject to appropriate permit conditions in industrial permits. As discussed in more detail below, municipal management programs must address infiltration where identified as a source of pollutants to waters of the United States.

One commenter questioned the status of discharges from detention and retention basins used to collect storm water. This regulation covers discharges of storm water associated with industrial activity and discharges from municipal separate storm sewer systems serving a population of 100,000 or more into waters of the United States. Therefore, discharges from basins that are part of a conveyance system for a storm water discharge associated with industrial activity or part of a municipal

separate storm sewer system serving a population of 100,000 or more are covered by this regulation. Flows which are channeled into basins and which do not discharge into waters of the United States are not addressed by today's rule.

Several commenters requested that the term illicit connection be replaced with a term that does not connote illegal discharges or activity, because many discharges of non-storm water to municipal separate storm sewer systems occurred prior to the establishment of the NPDES program and in accordance with local or State requirements at the time of the connection. EPA disagrees that there should be a change in this terminology. The fact that these connections were at one time legal does not confer such status now. The CWA prohibits the point source discharge of non-storm water not subject to an NPDES permit through municipal separate storm sewers to waters of the United States. Thus, classifying such discharges as illicit properly identifies such discharges as being illegal.

A commenter wanted clarification of the terms "other discharges" and "drainage" that are used in the definition of "storm water." As noted above, today's rule clarifies that infiltration is not considered storm water. Thus the portion of the definition of storm water that refers to "other discharges" has also been removed. However, the term drainage has been retained. "Drainage" does not take on any meaning other than the flow of runoff into a conveyance, as the word is commonly understood.

One commenter stated that irrigation flows combined with storm water discharges should be excluded from consideration in the storm water program. The Agency would note that irrigation return flows are excluded from regulation under the NPDES program. Section 402(l)(1) states that the Administrator or the State shall not require permits for discharges composed entirely of return flows from irrigated agriculture. The legislative history of the 1977 Clean Water Act, which enacted this language, states that the word "entirely" was intended to limit the exception to only those flows which do not contain additional discharges from activities unrelated to crop production. Congressional Record Vol. 123 (1977), pg. 4360, Senate Report No. 95-370. Accordingly, a storm water discharge component, from an industrial facility for example, included in such "joint" discharges may be regulated pursuant to an NPDES permit either at the point at which the storm water flow enters or joins the irrigation flow, or where the

combined flow enters waters of the United States or a municipal separate storm sewer.

Some commenters expressed concern about including street wash waters as storm water. One commenter argued including street wash waters in the definition of storm water should not be construed to eliminate the need for management practices relating to construction activities where sediment may simply wash into storm drains. EPA agrees with these points and the concerns that storm sewers may receive material that pose environmental problems if street wash waters are included in the definition. Accordingly, such discharges are no longer in the definition as proposed, and must be addressed by municipal management programs as part of the prohibition on non-storm water discharges through municipal separate storm sewer systems.

Several commenters requested that the terms discharge and point source, in the context of permits for storm water discharge, be clarified. Several commenters stated that the EPA should clarify that storm water discharge does not include "sheet flow" off of an industrial facility. EPA interprets this as request for clarification on the status of the terms "point source" and "discharge" under these regulations. In response, this rulemaking only covers storm water discharges from point sources. A point source is defined at 40 CFR 122.2 as "any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff." EPA agrees with one commenter that this definition is adequate for defining what discharges of storm water are covered by this rulemaking. EPA notes that this definition would encompass municipal separate storm sewers. In view of this comprehensive definition of point source, EPA need clarify in this rulemaking only that a storm water discharge subject to NPDES regulation does not include storm water that enters the waters of the United States via means other than a "point source." As further discussed below, storm water from an industrial facility which enters and is subsequently discharged through a municipal separate storm sewer is a "discharge associated with industrial

activity" which must be covered by an individual or general permit pursuant to today's rule.

EPA would also note that individual facilities have the burden of determining whether a permit application should be submitted to address a point source discharge. Those unsure of the classification of storm water flow from a facility, should file permit applications addressing the flow, or prior to submitting the application consult permitting authorities for clarification.

One commenter stated that "point source" for this rulemaking should be defined, for the purposes of achieving better water quality, as those areas where "discharges leave the municipal [separate storm sewer] system." EPA notes in response that "point source" as currently defined will address such discharges, while keeping the definition of discharge and point source within the framework of the NPDES program, and without adding potentially confusing and ambiguous additional definitions to the regulation. If this comment is asserting that the term point source should not include discharges from sources through the municipal system, EPA disagrees. As discussed in detail below, discharges through municipal separate storm sewer systems which are not connected to an operable treatment works are discharges subject to NPDES permit requirements at (40 CFR 122.3(c)), and may properly be deemed point sources.

One industry argued that the definition of "point source" should be modified for storm water discharges so as to exclude discharges from land that is not artificially graded and which has a propensity to form channels where precipitation runs off. EPA intends to embrace the broadest possible definition of point source consistent with the legislative intent of the CWA and court interpretations to include any identifiable conveyance from which pollutants might enter the waters of the United States. In most court cases interpreting the term "point source", the term has been interpreted broadly. For example, the holding in *Sierra Club v. Abston Construction Co., Inc.*, 620 F.2d 41 (5th Cir. 1980) indicates that changing the surface of land or establishing grading patterns on land will result in a point source where the runoff from the site is ultimately discharged to waters of the United States:

Simple erosion over the material surface, resulting in the discharge of water and other materials into navigable waters, does not constitute a point source discharge, absent some effort to change the surface, to direct the water flow or otherwise impede its progress * * * Gravity flow, resulting in a

discharge into a navigable body of water, may be part of a point source discharge if the (discharger) at least initially collected or channeled the water and other materials. A point source of pollution may also be present where (dischargers) design spoil piles from discarded overburden such that, during periods of precipitation, erosion of spoil pile walls results in discharges into a navigable body of water by means of ditches, gullies and similar conveyances, even if the (dischargers) have done nothing beyond the mere collection of rock and other materials * * * Nothing in the Act relieves (dischargers) from liability simply because the operators did not actually construct those conveyances, so long as they are reasonably likely to be the means by which pollutants are ultimately deposited into a navigable body of water. Conveyances of pollution formed either as a result of natural erosion or by material means, and which constitute a component of a * * * drainage system, may fit the statutory definition and thereby subject the operators to liability under the Act." 620 F.2d at 45 (emphasis added).

Under this approach, point source discharges of storm water result from structures which increase the imperviousness of the ground which acts to collect runoff, with runoff being conveyed along the resulting drainage or grading patterns.

The entire thrust of today's regulation is to control pollutants that enter receiving water from storm water conveyances. It is these conveyances that will carry the largest volume of water and higher levels of pollutants. The storm water permit application process and permit conditions will address circumstances and discharges peculiar to individual facilities.

One industry commented that the definition of waters of the State under some State NPDES programs included municipal storm sewer systems. The commenter was concerned that certain industrial facilities discharging through municipal storm sewers in these states would be required to obtain an NPDES permit, despite EPA's proposal not to require permits from such facilities generally. In response, EPA notes that section 510 of the CWA, approved States are able to have stricter requirements in their NPDES program. In approved NPDES States, the definition of waters of the State controls with regard to what constitutes a discharge to a water body. However, EPA believes that this will have little impact, since, as discussed below, all industrial dischargers, including those discharging through municipal separate storm sewer systems, will be subject to general or individual NPDES permits, regardless of any additional State requirements.

One municipality commented that neither the term "point source" nor "discharge" should be used in

conjunction with industrial releases into urban storm water systems because that gives the impression that such systems are navigable waters. EPA disagrees that any confusion should result from the use of these terms in this context. In this rulemaking, EPA always addresses such discharges as "discharges through municipal separate storm sewer systems" as opposed to "discharges to waters of the United States." Nonetheless, such industrial discharges through municipal storm sewer systems are subject to the requirements of today's rule, as discussed elsewhere.

One commenter desired clarification with regard to what constituted an outfall, and if an outfall could be a pipe that connected two storm water conveyances. This rulemaking defines outfall as a point of discharge into the waters of the United States, and not a conveyance which connects to Sections of municipal separate storm sewer. In response to another comment, this rulemaking only addresses discharges to waters of United States, consequently discharges to ground waters are not covered by this rulemaking (unless there is a hydrological connection between the ground water and a nearby surface water body. See, e.g., *Exxon Corp. v. Train*, 554 F.2d 1310, 1312 n.1 (5th Cir. 1977); *McClellan Ecological Seepage Situation v. Weinberger*, 707 F.Supp. 1182, 1195-96 (E.D. Cal. 1988)).

In the WQA and other places, the term "storm water" is presented as a single word. Numerous comments were received by EPA as to the appropriate spelling. Many of these comments recommended that two words for storm water is appropriate. EPA has decided to use an approach consistent with the Government Printing Office's approved form where storm water appears as two words.

C. Responsibility for Storm Water Discharges Associated With Industrial Activity Through Municipal Separate Storm Sewers

The December 7, 1988, notice of proposed rulemaking requested comments on the appropriate permitting scheme for storm water discharges associated with industrial activity through municipal separate storm sewers. EPA proposed a permitting scheme that would define the requirement to obtain coverage under an NPDES permit for a storm water discharge associated with industrial activity through a municipal separate storm sewer in terms of the classification of the municipal separate storm sewer. EPA proposed holding municipal operators of large or medium

municipal separate storm sewer systems primarily responsible for applying for and obtaining an NPDES permit covering system discharges as well as storm water discharges (including storm water discharges associated with industrial activity) through the system. Under the proposed approach, operators of storm water discharges associated with industrial activity which discharge through a large or medium municipal separate storm sewer system would generally not be required to obtain permit coverage for their discharge (unless designated as a significant contributor of pollution pursuant to section 402(p)(2)(E)) provided the municipality was notified of: The name, location and type of facility and a certification that the discharge has been tested (if feasible) for non-storm water (including the results of any testing). The notification procedure also required the operator of the storm water discharge associated with industrial activity to determine that: The discharge is composed entirely of storm water; the discharge does not contain hazardous substances in excess of reporting quantities; and the facility is in compliance with applicable provisions of the NPDES permit issued to the municipality for storm water.

In the proposal, EPA also requested comments on whether a decision on regulatory requirements for storm water discharges associated with industrial activity through other municipal separate storm sewer systems (generally those serving a population of less than 100,000) should be postponed until completion of two studies of storm water discharges required under section 402(p)(5) of the CWA.

EPA favored these approaches because they appeared to reduce the potential administrative burden associated with preparing and processing the thousands of permit applications associated with the rulemaking and provide EPA additional flexibility in developing permitting requirements for storm water discharges associated with industrial activity. EPA also expressed its belief, based upon an analysis of ordinances controlling construction site runoff in place in certain cities, that municipalities generally possessed legal authority sufficient to control contributions of industrial storm water pollutants to their separate storm sewers to the degree necessary to implement the proposed rule. EPA commented that municipal controls on industrial sources implemented to comply with an NPDES permit issued to the municipality would likely result in a level of storm water

pollution control very similar to that put directly on the industrial source through its own NPDES permit. This was to be accomplished by requiring municipal permittees, to the maximum extent practicable, to require industrial facilities in the municipality to develop and implement storm water controls based on a consideration of the same or similar factors as those used to make BAT/BCT determinations. (See 40 CFR 125.3 (d)(2) and (d)(3)).

The great majority of commenters on the December 7, 1988, notice addressed this aspect of the proposal. Based on consideration of the comments received on the notice, EPA has decided that it is appropriate to revise the approach in its proposed rule to require direct permit coverage for all storm water discharges associated with industrial activity, including those that discharge through municipal separate storm sewers. In response to this decision, EPA has continued to analyze the appropriate manner to respond to the large number of storm water discharges subject to this rulemaking. The development of EPA's policy regarding permitting these discharges is discussed in more detail in the section VI.D of today's preamble.

EPA notes that the status of discharges associated with industrial activity which pass through a municipal separate storm sewer system under section 402(p) raises difficult legal and policy questions. EPA believes that treating these discharges under permits separate from those issued to the municipality will most fully address both the legal and policy concerns raised in public comment.

Certain commenters supported EPA's proposal. Some commenters claimed that EPA lacked any authority to permit industrial discharges which were not discharged immediately to waters of the U.S. Other commenters agreed with EPA's statements in the proposal that its approach would result in a more manageable administrative burden for EPA and the NPDES states. However, numerous comments also were received which provided various arguments in support of revising the proposed approach. These comments addressed several areas including the definition of discharge under the CWA, the requirements and associated statutory time frames of section 402(p), as well as the resource and enforcement constraints of municipalities. EPA is persuaded by these comments and has modified its approach accordingly. The key comments on this issue are discussed below.

EPA disagrees with commenters who suggested that EPA lacks authority to

permit separately industrial discharges through municipal sewers. The CWA prohibits the discharge of a pollutant except pursuant to an NPDES permit. Section 502(12)(A) of the CWA defines the "discharge of a pollutant" as "any addition of any pollutant to navigable waters from any point source."¹ There is no qualification in the statutory language regarding the source of the pollutants being discharged. Thus, pollutants from a remote location which are discharged through a point source conveyance controlled by a different entity (such as a municipal storm sewer) are nonetheless discharges for which a permit is required.

EPA's regulatory definition of the term "discharge" reflects this broad construction. EPA defines the term to include

additions of pollutants into waters of the United States from: surface runoff which is collected or channelled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which does not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

40 CFR § 122.2 (1989) (emphasis added). The only exception to this general rule is the one contemplated by section 307(b) of the CWA, i.e., the introduction of pollutants into publicly-owned treatment works. EPA treats these as "indirect discharges," subject not to NPDES requirements, but to pretreatment standards under section 307(b).

In light of its construction of the term discharge, EPA has consistently maintained that a person who sends pollutants from a remote location through a point source into a water of the U.S. may be held liable for the unpermitted discharge of that pollutant. Thus, EPA asserts the authority to require a permit either from the operator of the point source conveyance, (such as a municipal storm sewer or a privately-owned treatment works), or from any person causing pollutants to be present in that conveyance and discharged through the point source, or both. See *Decision of the General Counsel (of EPA) No. 43* ("In re Friendswood Development Co.") (June 11, 1976) (operator of privately owned treatment work and dischargers to it are both subject to NPDES permit requirements). See also, 40 CFR 122.3(g), 122.44(m)

¹ Indeed, the DC Circuit has held, in the storm water context, that EPA may not exempt any point source discharges of pollutants from the requirement to obtain an NPDES permit. *NRDC v. Costle*, 568 F.2d 1369, 1377 (DC Cir. 1977).

(NPDES permit writer has discretion to permit contributors to a privately owned treatment works as direct dischargers). In other words, where pollutants are added by one person to a conveyance owned/operated by another person, and that conveyance discharges those pollutants through a point source, EPA may permit either person or both to ensure that the discharge is properly controlled. Pollutants from industrial sites discharged through a storm sewer to a point source are appropriately treated in this fashion.

Furthermore, EPA believes that storm water from an industrial plant which is discharged through a municipal storm sewer is a "discharge associated with industrial activity." Today's rule, as in the proposal, defines discharges associated with industrial activity solely in terms of the origin of the storm water runoff. There is no distinction for how the storm water reaches the waters of the U.S. In other words, pollutants in storm water from an industrial plant which are discharged are "associated with industrial activity," regardless of whether the industrial facility operates the conveyance discharging the storm water (or whether the storm water is ultimately discharged through a municipal storm sewer). Indeed, there is no distinction in the "industrial" nature of these two types of discharges. The pollutants of concern in an industrial storm water discharge are present when the storm water leaves the facility, either through an industrial or municipal storm water conveyance. EPA has no data to suggest that the pollutants in industrial storm water entering a municipal storm sewer are any different than those in storm water discharged immediately to a water of the U.S. Thus, industrial storm water in a municipal sewer is properly classified as "associated with industrial activity." Although EPA proposed not to cover these discharges by separate permit, the Agency believes that it is clearly not precluded from doing so.

Many comments also supported the proposed approach, noting that holding municipalities primarily responsible for obtaining a permit which covers industrial storm water discharges through municipal systems would reduce the administrative burden associated with preparing and processing thousands of permit applications—permit applications that would be submitted if each industrial discharger through a large or medium municipal separate storm sewer system had to apply individually (or as part of a group application).

EPA appreciates these concerns. Yet EPA also recognizes that there are also significant problems with putting the burden of controlling these sources on the municipalities (except for designated discharges) which must be balanced with the concerns about the permit application burden on industries. The industrial permitting strategy discussed in section VLD below attempts to achieve this balance.

EPA also does not believe that the administrative burden will be nearly as significant as originally thought, for several reasons. First, as discussed in section VLF.2 below and in response to significant public comment, EPA has significantly narrowed the scope of the definition of "associated with industrial activity" to focus in on those facilities which are most commonly considered "industrial" and thought to have the potential for the highest levels of pollutants in their storm water discharges. EPA believes this is a more appropriate way to ensure a manageable scope for the industrial storm water program in light of the statutory language of section 402(p), since it does not attempt to arbitrarily distinguish industrial facilities on the basis of the ownership of the conveyance through which a facility discharges its storm water. Second, EPA's industrial permitting strategy discussed in section VLD is designed around aggressive use of general permits to cover the vast majority of industrial sources. These general permits will require industrial facilities to develop storm water control plans and practices similar to those that would have been required by the municipality. Yet, general permits will eliminate the need for thousands of individual or group permit applications, greatly reducing the burden on both industry/EPA/States. Finally, even under the proposal, EPA believes that a large number of industrial dischargers would have been appropriate for designation for individual permitting under section 402(p)(2)(E), with the attendant individual application requirements. Today's approach will actually decrease the overall burden on these facilities; rather than filing an individual permit application upon designation, these facilities will generally be covered by a general permit.

By contrast, several commenters asserted that not only does EPA have the authority to cover these discharges by separate permit, it is required to by the language of section 402(p). As discussed above, storm water from an industrial plant which passes through a municipal storm sewer to a point source

and is discharged to waters of the U.S. is a "discharge associated with industrial activity." Therefore, it is subject to the appropriate requirements of section 402(p). The operator of the discharge (or the industrial facility where the storm water originates) must apply for a permit within three years of the 1987 amendments (*i.e.*, Feb. 4, 1990);² EPA must issue a permit by one year later (Feb. 4, 1991); and the permit must require compliance within three years of permit issuance. That permit must ensure that the discharge is in compliance with all appropriate provisions of sections 301 and 402. Commenters asserted that EPA's proposal would violate these two requirements of the law. First, the statute requires all industrial storm water discharges to obtain a permit in the first round of permitting (*i.e.*, February 4, 1990). However, Congress established a different framework to address discharges from small municipal separate storm sewer systems. Section 402(p) requires EPA to complete two studies of storm water discharges, and based on those studies, promulgate additional regulations, including requirements for state storm water management programs by October 1, 1992. EPA is prohibited from issuing permits for storm water discharges from small municipal systems until October 1, 1992 unless the discharge is designated under section 402(p)(2)(E). Thus, industrial storm water discharges from these systems would not be covered by a permit until later than contemplated by statute. Second, permits for municipal storm sewer systems require controls on storm water discharges "to the maximum extent practicable," as opposed to the BAT/BCT requirements of section 301(b)(2). Yet, all industrial storm water discharges must comply with section 301(b)(2). Thus, covering industrial storm water under a municipal storm water permit will not ensure the legally-required level of control of industrial storm water discharges.

In addition to comments on the requirements of section 402(p), EPA received several comments questioning whether EPA's proposal to cover industrial pollutants in municipal separate storm sewers solely in the permit issued to the municipality would ensure adequate control of these pollutants due to both inadequate

² It should be noted that EPA did not promulgate the required storm water regulations by February, 1989, as contemplated by section 402(p)(1)(A). As discussed below, today's rule generally requires industrial storm water discharges to file a permit application in one year.

resources and enforcement. Some municipalities stated that the burdens of this responsibility would be too great with regard to source identification and general administration of the program. These commenters claimed they lacked the necessary technical and regulatory expertise to regulate such sources. Commenters also noted that additional resources to control these sources would be difficult to obtain given the restrictions on local taxation in many states and the fact that EPA will not be providing funding to local governments to implement their storm water programs.

Municipalities also expressed concerns regarding enforcement of EPA's proposed approach. Some municipalities remarked that they did not have appropriate legal authority to address these discharges. Several commenters also stated that requiring municipalities to be responsible for addressing storm water discharges associated with industrial activity through their municipal system would result in unequal treatment of industries nationwide because of different municipal requirements and enforcement procedures. Several municipal entities expressed concern with regard to their responsibility and liability for pollutants discharged to their municipal storm sewer system, and further asserted that it was unfair to require municipalities to bear the full cost of controlling such pollutants. Other municipalities suggested that overall municipal storm water control would be impaired, since municipalities would spend a disproportionate amount of resources trying to control industrial discharges through their sewers, rather than addressing other storm water problems. In a related vein, certain commenters suggested that, where industrial storm water was a significant problem in a municipal sewer, EPA's proposed approach would hamper enforcement at the federal/state level, since all enforcement measures could be directed only at the municipality, rather than at the most direct source of that problem.

In response to all of these concerns, EPA has decided to require storm water discharges associated with industrial activity which discharge through municipal separate storm sewers to obtain separate individual or general NPDES permits. EPA believes that this change will adequately address all of the key concerns raised by commenters.

The Agency was particularly influenced by concerns that many municipalities lacked the authority under state law to address industrial

storm water practices. EPA had assumed that since several cities regulate construction site activities, that they could regulate other industrial operations in a similar manner. Several commenters suggested otherwise. In light of these concerns, EPA agrees with certain commenters that municipal controls on industrial facilities, in lieu of federal control, might not comply with section 402(p)(3)(A) for those facilities.³ This calls into question whether EPA's proposed approach would have reasonably implemented Congressional intent to address industrial storm water early and stringently in the permitting process.

EPA also agrees with those commenters who argued that municipal controls on industrial storm water sources were not directly analogous to the pretreatment program under section 307(b), as EPA suggested in the preamble to the proposal. The authority of cities to control the type and volume of industrial pollutants into a POTW is generally unquestioned under the laws of most states, since sewage and industrial waste treatment is a service provided by the municipality. Thus, EPA has greater confidence that cities can and will adopt effective pretreatment programs. By contrast, many cities are limited in the types of controls they can impose on flows into storm sewers; cities are more often limited to regulations on quantity of industrial flows to prevent flooding the system. So too, the pretreatment program allows for federal enforcement of local pretreatment requirements. Enforcement against direct dischargers (including dischargers through municipal storm sewers) is possible only when the municipal requirements are contained in an NPDES permit.

Although today's rule will require industrial discharges through municipal storm sewers to be covered by separate permit, EPA still believes that municipal operators of large and medium municipal systems have an important role in source identification and the development of pollutant controls for industries that discharge storm water through municipal separate storm sewer systems is appropriate. Under the CWA,

³ EPA notes that the legal issue raised by commenters regarding whether industrial storm water would be controlled by BAT if covered by a municipal permit at the MEP level is primarily a theoretical issue. As explained above, the proposal assumed that cities would establish controls on industry very similar to those established in an NPDES permit using best professional judgment. EPA's key concern, rather, is whether cities can, in fact, establish such controls. Thus, today's final rule should not appreciably change the requirements to be imposed on industrial sources, only how those requirements are enforced.

large and medium municipalities are responsible for reducing pollutants in discharges from municipal separate storm sewers to the maximum extent practicable. Because storm water from industrial facilities may be a major contributor of pollutants to municipal separate storm sewer systems, municipalities are obligated to develop controls for storm water discharges associated with industrial activity through their system in their storm water management program. (See section VI.H.7. of today's preamble.) The CWA provides that permits for municipal separate storm sewers shall require municipalities to reduce pollutants to the maximum extent practicable. Permits issued to municipalities for discharges from municipal separate storm sewers will reflect terms, specified controls, and programs that achieve that goal. As with all NPDES permits, responsibility and liability is determined by the discharger's compliance with the terms of the permit. A municipality's responsibility for industrial storm water discharged through their system is governed by the terms of the permit issued. If an industrial source discharges storm water through a municipal separate storm sewer in violation of requirements incorporated into a permit for the industrial facility's discharge, that industrial operator of the discharge may be subject to an enforcement action instituted by the Director of the NPDES program.

Today's rule also requires operators of storm water discharges associated with industrial activity through large and medium municipal systems to provide municipal entities of the name, location, and type of facility that is discharging to the municipal system. This information will provide municipalities with a base of information from which management plans can be devised and implemented. This requirement is in addition to any requirements contained in the industrial facility's permit. As in the proposal, the notification process will assist cities in development of their industrial control programs.

EPA intends for the NPDES program, through requirements in permits for storm water discharges associated with industrial activity, to work in concert with municipalities in the industrial component of their storm water management program efforts. EPA believes that permitting of municipal storm sewer systems and the industrial discharges through them will act in a complementary manner to fully control the pollutants in those sewer systems. This will fully implement the intent of

Congress to control industrial as well as large and medium municipal storm water discharges as expeditiously and effectively as possible. This approach will also address the concerns of municipalities that they lack sufficient authority and resources to control all industrial contributions to their storm sewers and will be liable for discharges outside of their control.

The permit application requirements for large and medium municipal separate storm sewer systems, discussed in more detail later in today's preamble, address the responsibilities of the municipal operators of these systems to identify and control pollutants in storm water discharges associated with industrial activity. Permit applications for large and medium municipal separate storm sewer systems are to identify the location of facilities which discharge storm water associated with industrial activity to the municipal system (*see* section VI.H.7. of the preamble). In addition, municipal applicants will provide a description of a proposed management program to reduce, to the maximum extent practicable, pollutants from storm water discharges associated with industrial activity which discharge to the municipal system (*see* section VI.H.7.c of this preamble). EPA notes that each municipal program will be tailored to the conditions in that city. Differences in regional weather patterns, hydrology, water quality standards, and storm sewer systems themselves dictate that storm water management practices will vary to some degree in each municipality. Accordingly, similar industrial storm water discharges may be treated differently in terms of the requirements imposed by the municipality, depending on the municipal program. Nonetheless, any individual or general permit issued to the industrial facility must comply with section 402(p)(3)(A) of the CWA.

EPA intends to provide assistance and guidance to municipalities and permitting authorities for developing storm water management programs that achieve permit requirements. EPA intends to issue a guidance document addressing municipal permit applications in the near term.

Controls developed in management plans for municipal system permits may take a variety of forms. Where necessary, municipal permittees can pursue local remedies to develop measures to reduce pollutants or halt storm water discharges with high levels of pollutants through municipal storm sewer systems. Some local entities have already implemented ordinances or laws

that are designed to reduce the discharge of pollutants to municipal separate storm sewers, while other municipalities have developed a variety of techniques to control pollutants in storm water. Alternatively, where appropriate, municipal permittees may develop end-of-pipe controls to control pollutants in these discharges such as regional wet detention ponds or diverting flow to publicly owned treatment works. Finally, municipal applicants may bring individual storm water discharges, which cannot be adequately controlled by the municipal permittees or general permit coverage, to the attention of the permitting authority. Then, at the Director's discretion, appropriate additional controls can be required in the permit for the facility generating the targeted storm water discharge.

One commenter suggested that municipal operators of municipal separate storm sewers should have control over all storm water discharges from a facility that discharges both through the municipal system and to waters of the United States. In response, under this regulatory and statutory scheme, industries that discharge storm water directly into the waters of the United States, through municipal separate storm sewer systems, or both are required to obtain permit coverage for their discharges. However, municipalities are not precluded from exercising control over such facilities through their own municipal authorities.

It is important to note that EPA has established effluent guideline limitations for storm water discharges for nine subcategories of industrial dischargers (Cement Manufacturing (40 CFR part 411), Feedlots (40 CFR part 412), Fertilizer Manufacturing (40 CFR part 418), Petroleum Refining (40 CFR part 419), Phosphate Manufacturing (40 CFR part 422), Steam Electric (40 CFR part 423), Coal Mining (40 CFR part 434), Ore Mining and Dressing (40 CFR part 440) and Asphalt (40 CFR part 441)). Most of the existing facilities in these subcategories already have individual permits for their storm water discharges. Under today's rule, facilities with existing NPDES permits for storm water discharges through a municipal storm sewer will be required to maintain these permits and apply for an individual permit, under § 122.26(c), when existing permits expire. EPA received numerous comments supporting this decision because requiring facilities that have existing permits to comply with today's requirements immediately would be inefficient and not serve improved water quality.

Sections 402(p) (1) and (2) of the CWA provide that discharges from municipal separate storm sewer systems serving a population of less than 100,000 are not required to obtain a permit prior to October 1, 1992, unless designated on a case-by-case basis under section 402(p)(2)(E). However, as discussed above, storm water discharges associated with industrial activity through such municipal systems are not excluded. Thus, under today's rule, all storm water discharges associated with industrial activity that discharge through municipal separate storm sewer systems are required to obtain NPDES permit coverage, including those which discharge through systems serving populations less than 100,000. EPA believes requiring permits will address the legal concerns raised by commenters regarding these sources. In addition, it will allow for control of these significant sources of pollution while EPA continues to study under section 402(p)(6) whether to require the development of municipal storm water management plans in these municipalities. If these municipalities do ultimately obtain NPDES permits for their municipal separate storm sewer systems, early permitting of the industrial contributions may aid those cities in their storm water management efforts.

In the December 7, 1988, proposal, EPA recognized that storm water discharges associated with industrial activity from Federal facilities through municipal separate storm sewer systems may pose unique legal and administrative situations. EPA received numerous comments on this issue, with most of these comments coming from cities and counties. The comments reflected a general concern with respect to a municipality's ability to control Federal storm water discharges through municipal separate storm sewer systems. Most municipalities stated that they do not have the legal authority to adequately enforce against problem storm water discharges from Federal facilities and that these facilities should be required to obtain separate storm water permits. Some commenters stated that they have no Constitutional authority to regulate Federal facilities or establish regulation for such facilities. Some commenters indicated that Federal facilities could not be inspected, monitored, or subjected to enforcement for national security and other jurisdictional reasons. Some commenters argued that without clearly stated legal authority for the municipality, such dischargers should be required to obtain permits. One

municipality pointed out that Federal facilities within city limits are exempted from their Erosion and Sediment Control Act and that permits for these facilities should be required.

Under today's rule, Federal facilities which discharge storm water associated with industrial activity through municipal separate storm sewer systems will be required to obtain NPDES permit coverage under Federal or State law. EPA believes this will cure the legal authority problems at the local level raised by the commenters. EPA notes that this requirement is consistent with section 313(a) of the CWA.

D. Preliminary Permitting Strategy for Storm Water Discharges Associated With Industrial Activity

Many of the comments received on the December 7, 1988, proposal focused on the difficulties that EPA Regions and authorized NPDES States, with their finite resources, will have in implementing an effective permitting program for the large number of storm water discharges associated with industrial activity. Many commenters noted that problems with implementing permit programs are caused not only by the large number of industrial facilities subject to the program, but by the difficulties associated with identifying appropriate technologies for controlling storm water at various sites and the differences in the nature and extent of storm water discharges from different types of industrial facilities.

EPA recognizes these concerns; and based on a consideration of comments from authorized NPDES States, municipalities, industrial facilities and environmental groups on the permitting framework and permit application requirements for storm water discharges associated with industrial activity, EPA is in the process of developing a preliminary strategy for permitting storm water discharges associated with industrial activity. In developing this strategy, EPA recognizes that the CWA provides flexibility in the manner in which NPDES permits are issued.⁴ EPA

⁴ The courts in *NRDC v. Train*, 396 F.Supp. 1393 (D.D.C. 1975) *aff'd*, *NRDC v. Costle*, 568 F.2d 1369 (DC Cir. 1977), have acknowledged the administrative burden placed on the Agency by requiring individual permits for a large number of storm water discharges. These courts have recognized EPA's discretion to use certain administrative devices, such as area permits or general permits to help manage its workload. In addition, the courts have recognized flexibility in the type of permit conditions that are established, including requirements for best management practices.

intends to use this flexibility in designing a workable and reasonable permitting system. In accordance with these considerations, EPA intends to publish in the near future a discussion of its preliminary permitting strategy for implementing the NPDES storm water program.

The preliminary strategy is intended to establish a framework for developing permitting priorities, and includes a four tier set of priorities for issuing permits to be implemented over time:

- *Tier I—baseline permitting:* One or more general permits will be developed to initially cover the majority of storm water discharges associated with industrial activity;

- *Tier II—watershed permitting:* Facilities within watersheds shown to be adversely impacted by storm water discharges associated with industrial activity will be targeted for permitting.

- *Tier III—industry specific permitting:* Specific industry categories will be targeted for individual or industry-specific permits; and

- *Tier IV—facility specific permitting:* A variety of factors will be used to target specific facilities for individual permits.

Tier I—Baseline Permitting

EPA intends to issue general permits that initially cover the majority of storm water discharges associated with industrial activity in States without authorized NPDES programs. These permits will also serve as models for States with authorized NPDES programs.

The consolidation of many sources under one permit will greatly reduce the otherwise overwhelming administrative burden associated with permitting storm water discharges associated with industrial activity. This approach has a number of additional advantages, including:

- Requirements will be established for discharges covered by the permit;

- Facilities whose discharges are covered by the permit will have an opportunity for substantial compliance with the CWA;

- The public, including municipal operators of municipal separate storm sewers which may receive storm water discharges associated with industrial activity, will have access under section 308(b) of the CWA to monitoring data and certain other information developed by the permittee;

- EPA will have the opportunity to begin to collect and review data on storm water discharges from priority industries, thereby supporting the

development of subsequent permitting activities;

- Applicable requirements of municipal storm water management programs established in permits for discharges from municipal separate storm sewer systems will be enforceable directly against non-complying industrial facilities that generate the discharges;

- The public will be given an opportunity to comment on permitting activities;

- The baseline permits will provide a basis for bringing selected enforcement actions by eliminating many issues which might otherwise arise in an enforcement proceeding; and

- Finally, the baseline permits will provide a focus for public comment on the development of subsequent phases of the permitting strategy for storm water discharges, including the development of priorities for State storm water management programs developed under section 402(p)(6) of the CWA.

Initially, the coverage of the baseline permits will be broad, but the coverage is intended to shrink as other permits are issued for storm water discharges associated with industrial activities pursuant to Tier II through IV activities.

2. Tier II—Watershed Permitting

Facilities within watersheds shown to be adversely impacted by storm water discharges associated with industrial activity will be targeted for individual and general permitting. This process can be initiated by identifying receiving waters (or segments of receiving waters) where storm water discharges associated with industrial activity have been identified as a source of use impairment or are suspected to be contributing to use impairment.

3. Tier III—Industry Specific Permitting

Specific industry categories will be targeted for individual or industry-specific general permits. These permits will allow permitting authorities to focus attention and resources on industry categories of particular concern and/or industry categories where tailored requirements are appropriate. EPA will work with the States to coordinate the development of model permits for selected classes of industrial storm water discharges. EPA is also working to identify priority industrial categories in the two reports to Congress required under section 402(p)(5) of the CWA. In addition, group applications that are received can be used to develop model permits for the appropriate industries

4. Tier IV—Facility Specific Permitting

Individual permits will be appropriate for some storm water discharges in addition to those identified under Tier II and III activities. Individual permits should be issued where warranted by: the pollution potential of the discharge; the need for individual control mechanisms; and in cases where reduced administrative burdens exist. For example, individual NPDES permits for facilities with process discharges should be expanded during the normal process of permit reissuance to cover storm water discharges from the facility.

5. Relationship of Strategy to Permit Applications Requirements

The preliminary long-term permitting strategy described above identifies several permit schemes that EPA anticipates will be used in addressing storm water discharges associated with industrial activity. One issue that arises with this strategy is determining the appropriate information needed to develop and issue permits for these discharges. The NPDES regulatory scheme provides three major options for obtaining permit coverage for storm water discharges associated with industrial activity: (1) Individual permit applications; (2) group applications; and (3) case-by-case requirements developed for general permit coverage.

a. Individual permit application requirements. Today's notice establishes requirements for individual permit applications for storm water discharges associated with industrial activity. These application requirements are applicable for all storm water discharges associated with industrial activity, except where the operator of the discharge is participating in a group application or a general permit is issued to cover the discharge and the general permit provides alternative means to obtain permit coverage. Information in individual applications is intended to be used in developing the site-specific conditions generally associated with individual permits.

Individual permit applications are expected to play an important role in all tiers of the Strategy, even where general permits are used. Although general permits may provide for notification requirements that operate in lieu of the requirement to submit individual permit applications, the individual permit applications may be needed under several circumstances. Examples include: where a general permit requires the submission of a permit application as the notice of intent to be covered by the permit; where the owner or operator authorized by a general permit requests

to be excluded from the coverage of the general permit by applying for a permit (*see* 40 CFR 122.28(b)(2)(iii) for EPA issued general permits); and where the Director requires an owner or operator authorized by a general permit to apply for an individual permit (*see* 40 CFR 122.28(b)(2)(ii) for EPA issued general permits).

b. Group applications. Today's rule also promulgates requirements for group applications for storm water discharges associated with industrial activity. These applications provide participants of groups with sufficiently similar storm water discharges an alternative mechanism for applying for permit coverage.

The group application requirements are primarily intended to provide information for developing industry specific general permits. (Group applications can also be used to issue individual permits in authorized NPDES States without general permit authority or where otherwise appropriate). As such, group application requirements correlate well with the Tier III permitting activities identified in the long-term permitting Strategy.

c. Case-by-case requirements. 40 CFR 122.21(a) excludes persons covered by general permits from requirements to submit individual permit applications. Further, the general permit regulations at 40 CFR 122.28 do not address the issue of how a potential permittee is to apply to be covered under a general permit. Rather, conditions for notification of intent (NOI) to be covered by the general permit are established in the permits on a case-by-case basis, and operate in lieu of permit application requirements. Requirements for submitting NOIs to be covered by a general permit can range from full applications (this would be Form 1 and Form 2F for most discharges composed entirely of storm water discharges associated with industrial activity), to no notice. EPA recommends that the NOI requirements established in a general permit for storm water discharges associated with industrial activity be commensurate with the needs of the permit writer in establishing the permit and the permit program. The baseline general permit described in Tier I is intended to support the development of controls for storm water discharges associated with industrial activity that can be supported by the limited resources of the permitting Agency. In this regard, the burdens of receiving and reviewing NOI's from the large number of facilities covered by the permit should also be considered when developing NOI

requirements. In addition, NOI requirements should be developed in conjunction with permit conditions establishing reporting requirements during the term of the permit.

NOI requirements in general permits can establish a mechanism which can be used to establish a clear accounting of the number of permittees covered by the general permit, the nature of operations at the facility generating the discharge, their identity and location. The NOI can be used as an initial screening tool to determine discharges where individual permits are appropriate. Also, the NOI can be used to identify classes of discharges appropriate for more specific general permits, as well as provide information needed to notify such dischargers of the issuance of a more specific general permit. In addition, the NOI can provide for the identification of the permittee to provide a basis for enforcement and compliance monitoring strategies. EPA will further address this issue in the context of specific general permits it plans to issue in the near future.

Today's rule requires that individual permit applications for storm water discharges associated with industrial activity be submitted within one year from the date of publication of this notice. EPA is considering issuing general permits for the majority of storm water discharges associated with industrial activity in those States and territories that do not have authorized State NPDES programs (MA, ME, NH, FL, LA, TX, OK, NM, SD, AZ, AK, ID, District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands) before that date to enable industrial dischargers of storm water to ascertain whether they are eligible for coverage under a general permit (and subject to any alternative notification requirements established by the general permit in lieu of the individual permit application requirements of today's rule) or whether they must submit an individual permit application (or participate in a group application) before the regulatory deadlines for submitting these applications passes. Storm water application deadlines are discussed in further detail below.

E. Storm Water Discharge Sampling

Storm water discharges are intermittent by their nature, and pollutant concentrations in storm water discharges will be highly variable. Not only will variability arise between given events, but the flow and pollutant

concentrations of such discharges will vary with time during an event. This variability raises two technical problems: how best to characterize the discharge associated with a single storm event; and how best to characterize the variability between discharges of different events that may be caused by seasonal changes and changes in material management practices, for example.

Prior to today's rulemaking, 40 CFR 122.21(g)(7) required that applicants for NPDES permits submit quantitative data based on one grab sample taken every hour of the discharge for the first four hours of discharge. EPA has modified this requirement such that, instead of collecting and analyzing four grab samples individually, applicants for permits addressing storm water discharges associated with industrial activity will provide data as indicators of two sets of conditions: data collected during the first 30 minutes of discharge and flow-weighted average storm event concentrations. Large and medium municipalities will provide data on flow-weighted average storm event concentrations only.

Data describing pollutants in a grab sample taken during the first few minutes of the discharge can often be used as a screen for non-storm water discharges to separate storm sewers because such pollutants may be flushed out of the system during the initial portion of the discharge. In addition, data from the first few minutes of a discharge are useful because much of the traditional structural technology used to control storm water discharges, including detention and retention devices, may only provide controls for the first portion of the discharge, with relatively little or no control for the remainder of the discharge. Data from the first portion of the discharge will give an indication of the potential usefulness of these techniques to reduce pollutants in storm water discharges. Also, such discharges may be primarily responsible for pollutant shocks to the ecosystem in receiving waters.

Studies such as NURP have shown that flow-weighted average concentrations of storm water discharges are useful for estimating pollutant loads and for evaluating certain concentration-based water quality impacts. The use of flow-weighted composite samples are also consistent with comments raised by various industry representatives during previous Agency rulemakings that continuous monitoring of discharges from storm events is necessary to

adequately characterize such discharges.

EPA requested comment on the feasibility of the proposed modification of sampling procedures at § 122.21(g)(7) and the ability to characterize pollutants in storm water discharges with an average concentration from the first portion of the discharge compared to collecting and separately analyzing four grab samples. It was proposed that an event composite sample be collected, as well as a grab sample collected during the first 20 minutes of runoff. Comments were solicited as to whether or not this sampling method would provide better definition of the storm load for runoff characterization than would the requirement to collect and separately analyze four grab samples.

Many commenters questioned the ability to obtain a 20 minute sample in the absence of automatic samplers. Some believed that pollutants measured by such a sample can be accounted for in the event composite sample. Others argued that this is an unwarranted sampling effort if municipal storm water management plans are to be geared to achieving annual pollutant load reductions. Many commenters advised that problems accessing sampling stations and mobilizing sampling crews, particularly after working hours, made sampling during the first 20 minutes impractical. These comments were made particularly with respect to municipalities, where the geographical areas could encompass several hundred square miles. Several alternatives were suggested including: the collection of a sample in the first hour, and representative grab sampling in the next three hours, one per hour; or perform time proportioned sampling for up to four hours.

Because of the logistical problems associated with collecting samples during the first few minutes of discharge from municipal systems, EPA will only require such sampling from industrial facilities. Municipal systems will be spread out over many square miles with sampling locations potentially several miles from public works departments or other responsible government agencies. Reaching such locations in order to obtain samples during the first few minutes of a storm event may prove impossible. For essentially the same reasons, the requirement has been modified to encompass the first 30 minutes of the discharge, instead of 20 minutes, for industrial discharges. The rule also clarifies that the sample should be taken during the first 30 minutes or as soon thereafter as practicable. Where appropriate, characterization of this

portion of the discharge from selected outfalls or sampling points may be a condition to permits issued to municipalities. With regard to protocols for the collection of sample aliquots for flow-weighted composite samples, § 122.21(g)(7) provides that municipal applicants may collect flow-weighted composite samples using different protocols with respect to the time duration between the collection of sample aliquots, subject to the approval of the Director or Regional Administrator. In other words, the period may be extended from 15 minutes to 20 or 25 minutes between sample aliquots, or decreased from 15 to 10 or 5 minutes.

Other comments raised issues that apply both to the impact of runoff characterization and the first discharge representation. These primarily pertained to regions that have well defined wet and dry seasons. Comments questioned whether or not it is fair to assume that the initial storm or two of a wet season, which will have very high pollutant concentrations, are actually representative of the runoff concentrations for the area.

In response, EPA believes that it is important to represent the first part of the discharge either separately or as a part of the event composite samples. This loading is made up primarily of the mass of unattached fine particulates and readily soluble surface load that accumulates between storms. This load washes off of the basin's directly connected paved surfaces when the runoff velocities reach the level required for entrainment of the particulate load into the surface flow. It should be noted that for very fine particulates and solubles, this can occur very soon after the storm begins and much sooner than the peak flow. The first few minutes of discharge represents a shock load to the receiving water, in terms of concentration of pollutants, because for many constituents the highest concentrations of the event will occur during this initial period. Due to the need to properly quantify this load, it is not necessary to represent the first discharge from the upper reaches of the outfall's tributary area. In runoff characterization basins, the assumption is that the land use in the basin is homogeneous, or nearly so, and that the first discharge from the lower reaches for all intents and purposes is representative of the entire basin. If a sample is taken during the first 30 minutes of the runoff, it will be composed primarily of first discharge. If the sample is taken at the outfall an hour into the event, it may contain

discharge from the remote portions of the basin. It will not be representative of the discharge because it will also contain later washoff from the lower reaches of the basin, resulting in a low estimation of the first discharge load of most constituents. Conversely, larger suspended particulates that normally are not present in first discharge due to inadequate velocities will appear in this later sampling scenario because of the influence of higher runoff rates in the lower basin. Many commonly used management practices are designed based on their ability to treat a volume of water defined by the first discharge phenomenon. It is important to characterize the first discharge load because most management practices effectively treat only, or primarily, this load.

It should be noted that first discharge runoff is sometimes contaminated by non-storm water related pollutants. In many urban catchments, contaminants that result from illicit connections and illegal dumping may be stored in the system until "flushed" during the initial storm period. This does not negate the need for information on the characteristic first discharge load, but does indicate that the first phase field screen results for illicit connections should be used to help define those outfalls where this problem might exist.

Several methods can be used to develop an event average concentration. Either automatic or manual sampling techniques can be used that sample the entire hydrograph, or at least the first four hours of it, that will result in several discrete samples and associated flow rates that represent the various flow regimes of an event. These procedures have the potential for providing either an event average concentration, an event mean concentration, or discrete definition of the washoff process. Automatic sampling procedures are also available that collect a single composite sample, either on a time-proportioned or flow proportioned basis.

When discrete samples are collected, an event average composite sample can be produced by the manual composite of the discrete samples in equal volumes. Laboratory analysis of time proportioned composite samples will directly yield the event average concentration. Mathematical averaging of discrete sample analysis results will yield an event average concentration.

When discrete samples are collected, a flow-weighted composite sample can be produced based on the discharge record. This is done by manually flow proportioning the volumes of the individual samples. Laboratory analysis

of flow weighted composite samples will directly yield an event mean concentration. Mathematical integration of the change in concentrations and mass flux of the discharge for discrete sample data can produce an event mean concentration. This procedure was used during the NURP program.

EPA wishes to emphasize that the reason for sampling the type of storm event identified in § 122.21(g)(7) is to provide information that represents local conditions that will be used to create sound storm water management plans. Based on the method to be used to generate system-wide estimates of pollutant loads, either method, discrete or event average concentrations, may be preferable to the other. If simulation models will be used to generate loading estimates, analysis of discrete samples will be more valuable so that calibration of water quality and hydrology may be performed. On the other hand, simple estimation methods based on event average or event mean concentrations may not justify the additional cost of discrete sample analysis.

EPA believes that the first discharge loading should be represented in the permit application from industrial facilities and, if appropriate, permitting authorities may require the same in the discharge characterization component of permits issued to municipalities. The first discharge load should also be represented as part of an event composite sample. This requirement will assist industries in the development of effective storm water management plans.

EPA requested comments on the appropriateness of the proposed rules and of proposed amendments to the rules regarding discharge sampling. Comments were received which addressed the appropriateness of imposing uniform national guidelines. Several commenters are concerned that uniform national guidelines may not be appropriate due to the geographic variations in meteorology, topography, and pollutant sources. While some assert that a uniform guideline will provide consistency of the sample results, others prefer a program based on regional or State guidelines that more specifically address their situation.

Several commenters, addressing industrial permit application requirements, preferred that the owner/operator be allowed to set an individual sampling protocol with approval of the permit writer. Some commenters were concerned that one event may not be sufficient to characterize runoff from a basin as this may result in gross over-estimation or underestimation of the pollutant loads. Others indicated

confusion with regard to sampling procedures, lab analysis procedures, and the purpose of the program.

In response, today's regulations establish certain minimum requirements. Municipalities and industries may vary from these requirements to the extent that their implementation is at least as stringent as outlined in today's rule. EPA views today's rule as a means to provide assurance as to the quality of the data collected; and to this end, it is important that the minimum level of sampling required be well defined.

In response to EPA's proposal that the first discharge be included in "representative" storm sampling, several commenters made their concerns known about the possible equipment necessary to meet this requirement. Several commenters are concerned that in order to get a first discharge sample, automatic sampling equipment will be required. Concerns related to the need for this equipment surfaced in the comments frequently; most advised that the equipment is expensive and that the demand on sampling equipment will be too large for suppliers and manufacturers to meet. Although equipment can be leased, some commenters maintained that not enough rental equipment is available to make this a viable option in many instances.

EPA is not promoting or requiring the use of automated equipment to satisfy the sampling requirements. A community may find that in the long run it would be more convenient to have such equipment since sampling is required not only during preparation of the application, but also may be required during the term of the permit to assure that the program goals are being met. Discharge measurement is necessary in order for the sample data to have any meaning. If unattended automatic sampling is to be performed, then unattended flow measurement will be required too.

EPA realizes that equipment availability is a legitimate concern. However, there is no practical recommendation that can be made relative to the availability of equipment. If automatic sampling equipment is not available, manual sampling is an appropriate alternative.

F. Storm Water Discharges Associated With Industrial Activity

1. Permit Applicability

a. *Storm water discharges associated with industrial activity to waters of the United States. Under today's rule dischargers of storm water associated*

with industrial activity are required to apply for an NPDES permit. Permits are to be applied for in one of three ways depending on the type of facility: Through the individual permit application process; through the group application process; or through a notice of intent to be covered by general permit.

Storm water discharges associated with the industrial activities identified under § 122.26(b)(14) of today's rule may avail themselves of general permits that EPA intends to propose and promulgate in the near future. The general permit will be available to be promulgated in each non-NPDES State, following State certification, and as a model for use by NPDES States with general permit authority. It is envisioned that these general permits will provide baseline storm water management practices. For certain categories of industries, specific management practices will be prescribed in addition to the baseline management practices. As information on specific types of industrial activities is developed, other, more industry-specific general permits will be developed.

Today's rule requires facilities with existing NPDES permits for storm water discharges to apply for individual permits under the individual permit application requirements found at 122.26(c) 180 days before their current permit expires. Facilities not eligible for coverage under a general permit are required to file an individual or group permit application in accordance with today's rule. The general permits to be proposed and promulgated will indicate what facilities are eligible for coverage by the general permit.

b. Storm water discharges through municipal storm sewers. As discussed above, many operators of storm water discharges associated with industrial activity are not required to apply for an individual permit or participate in a group application under § 122.26(c) of today's rule if covered by a general permit. Under the December 7, 1988, proposal, dischargers through large and medium municipal separate storm sewer systems were not required, as a general rule, to apply for an individual permit or as a group applicant. Today's rule is a departure from that proposal. Today's rule requires all dischargers through municipal separate storm sewer systems to apply for an individual permit, apply as part of a group application, or seek coverage under a promulgated general permit for storm water discharges associated with industrial activity.

Municipal operators of large and medium municipal separate storm sewer systems are responsible for obtaining

system-wide or area permits for their system's discharges. These permits are expected to require that controls be placed on storm water discharges associated with industrial activity which discharge through the municipal system. It is anticipated that general or individual permits covering industrial storm water dischargers to these municipal separate storm sewer systems will require industries to comply with the terms of the permit issued to the municipality, as well other terms specific to the permittee.

c. Storm water discharges through non-municipal storm sewers. Under today's rulemaking all operators of storm water discharges associated with industrial activity that discharge into a privately or Federally owned storm water conveyance (a storm water conveyance that is not a municipal separate storm sewer) will be required to be covered by an NPDES permit (e.g. an individual permit, general permit, or as a co-permittee to a permit issued to the operator of the portion of the system that directly discharges to waters of the United States). This is a departure from the "either/or" approach that EPA requested comments on in the December 7, 1988, notice. The "either/or" approach would have allowed either the system discharges to be covered by a permit issued to the owner/operator of the system segment that discharged to waters of the United States, or by an individual permit issued to each contributor to the non-municipal conveyance.

EPA requested comments on the advantages and disadvantages of retaining the "either/or" approach for non-municipal storm sewers. An abundance of comment was received by EPA on this particular part of the program. A number of industrial commenters and a smaller number of municipalities favored retaining the "either/or" approach as proposed, while most municipal entities, one industry, and one trade association favored requiring permits for each discharger.

Two commenters stated that private owners of conveyances may not have the legal authority to implement controls on discharges through their system and would not want to be held responsible for such controls. EPA agrees that this is a potential problem. Therefore, today's rule will require permit coverage for each storm water discharge associated with industrial activity.

One commenter supported the concept of requiring all the facilities that discharge to a non-municipal conveyance to be co-permittees. EPA agrees that this type of permitting scheme, along with other permit

schemes such as area or general permits, is appropriate for discharges from non-municipal sewers, as long as each storm water discharge through the system is associated with industrial activity and thus currently subject to NPDES permit coverage.

One State agency commented that in the interest of uniformity, all industries that discharge to non-municipal conveyances should be required to conform to the application requirements. One industry stated that the rules must provide a way for the last discharger before the waters of the U.S. to require permits for facilities discharging into the upper portions of the system. EPA agrees with these comments. Today's rule provides that each discharger may be covered under individual permits, as co-permittees to a single permit, or by general permit rather than holding the last discharger to the waters of the United States solely responsible.

In response to one commenter, the term "non-municipal" has been clarified to explain that the term refers to non-publicly owned or Federally-owned storm sewer systems.

Some commenters supporting the approach as proposed, noted that industrial storm water dischargers into such systems can take advantage of the group application process. EPA agrees that in appropriate circumstances, such as when industrial facilities discharging storm water to the same system are sufficiently similar, group applications can be used for discharges to non-municipal conveyances. However, EPA believes that it would be inappropriate to approve group applications for those facilities whose only similarity is that they discharge storm water into the same private conveyance system. The efficacy of the group application procedures is predicated on the similarity of operations and other factors. The fact that several industries discharge storm water to the same non-municipal sewer system alone may not make these discharges sufficiently similar for group application approval.

One commenter suggested that EPA has not established any deadlines for submission of permit applications for storm water discharges associated with industrial activity through non-municipal separate storm sewer systems. EPA wants to clarify that industrial storm water dischargers into privately owned or Federally owned storm water conveyances are required to apply for permits in the same time frame as individual or group applicants (or as otherwise provided for in a general permit).

One commenter stated that the operator of the conveyance that accepts discharges into its system has control and police power over those that discharge into the system by virtue of the ability to restrict discharges into the system. This commenter stated that these facilities should be the entity required to obtain the permit in all cases. Assuming that this statement is true in all respects, the larger problem is that one's theoretical ability to restrict discharges is not necessarily tied to the reality of enforcing those restrictions or even detecting problem discharges when they exist. In a similar vein one commenter urged that a private operator will not be in any worse a position than a municipal entity to determine who is the source of pollution up-stream. EPA agrees that from a hydrological standpoint this may be true. However, from the standpoint of detection resources, police powers, enforcement remedies, and other facets of municipal power that may be brought to bear upon problem dischargers, private systems are in a far more precarious position with respect to controlling discharges from other private sources.

In light of the comments received, EPA has decided that the either/or approach as proposed is inappropriate. Operators of non-municipal systems will generally be in a poorer position to gain knowledge of pollutants in storm water discharges and to impose controls on storm water discharges from other facilities than will municipal system operators. In addition, best management practices and other site-specific controls are often most appropriate for reducing pollutants in storm water discharges associated with industrial activity and can often only be effectively addressed in a regulatory scheme that holds each industrial facility operator directly responsible. The either/or approach as proposed is not conducive to establishing these types of practices unless each discharger is discharging under a permit. Also, some non-municipal operators of storm water conveyances, which receive storm water runoff from industrial facilities, may not be generating storm water discharges associated with industrial activity themselves and, therefore, they would otherwise not need to obtain a permit prior to October 1, 1992, unless specifically designated under section 402(p)(2)(E). Accordingly, EPA disagrees with comments that dischargers to non-municipal conveyances should have the flexibility to be covered by their permit or covered by the permit issued to the operator of the outfall to waters to the United States.

2. Scope of "Associated with Industrial Activity"

The September 26, 1984, final regulation divided those discharges that met the regulatory definition of storm water point source into two groups. The term Group I storm water discharges was defined in an attempt to identify those storm water discharges which had a higher potential to contribute significantly to environmental impacts. Group I included those discharges that contained storm water drained from an industrial plant or plant associated areas. Other storm water discharges (such as those from parking lots and administrative buildings) located on lands used for industrial activity were classified as Group II discharges. The regulations defined the term "plant associated areas" by listing several examples of areas that would be associated with industrial activities. However, the resulting definition led to confusion among the regulated community regarding the distinctions between the Group I and Group II classifications.

In amending the CWA in 1987, Congress did not explicitly adopt EPA's regulatory classification of Group I and Group II discharges. Rather, Congress required EPA to address "storm water discharges associated with industrial activity" in the first round of storm water permitting. In light of the adoption of the term "associated with industrial activity" in the CWA, and the ongoing confusion surrounding the previous regulatory definition, EPA has eliminated the regulatory terms "Group I storm water discharge" and "Group II storm water discharge" pursuant to the December 7, 1987, Court remand and has not revived it. In addition, today's notice promulgates a definition of the term "storm water discharge associated with industrial activity" at § 122.26(b)(14) and clarified the scope of the term.

In describing the scope of the term "associated with industrial activity", several members of Congress explained in the legislative history that the term applied if a discharge was "directly related to manufacturing, processing or raw materials storage areas at an industrial plant." (Vol. 132 Cong. Rec. H10932, H10936 (daily ed. October 15, 1986); Vol. 133 Cong. Rec. H176 (daily ed. January 8, 1987)). Several commenters cited this language in arguing for a more expansive or less expansive definition of "associated with industrial activity." EPA believes that the legislative history supports the decision to exclude from the definition of industrial activity, at § 122.26(b)(14) of today's rule, those facilities that are

generally classified under the Office of Management and Budget Standard Industrial Classifications (SIC) as wholesale, retail, service, or commercial activities.

Two commenters recommended that all commercial enterprises should be required to obtain a permit under this regulation. Another commenter recommended that all the facilities listed in the December 7, 1988, proposal, including those listed in paragraphs (xi) through (xvi) on page 49432 of the December 7, 1988, proposal, should be included. EPA disagrees since the intent of Congress was to establish a phased and tiered approach to storm water permits, and that only those facilities having discharges associated with industrial activity should be included initially. The studies to be conducted pursuant to section 402(p)(5) will examine sources of pollutants associated with commercial, retail, and other light business activity. If appropriate, additional regulations addressing these sources can be developed under section 402(p)(6) of the CWA. As further discussed below, EPA believes that the facilities identified in paragraphs (xi) through (xvi) are more properly characterized as commercial or retail facilities, rather than industrial facilities.

Today's rule clarifies the regulatory definition of "associated with industrial activity" by adopting the language used in the legislative history and supplementing it with a description of various types of areas that are directly related to an industrial process (e.g., industrial plant yards, immediate access roads and rail lines, drainage ponds, material handling sites, sites used for the application or disposal of process waters, sites used for the storage and maintenance of material handling equipment, and known sites that are presently or have been used in the past for residual treatment, storage or disposal). The agency has also incorporated some of the suggestions offered by the public in comments.

Three commenters suggested that the permit application should focus only on storm water with the potential to come into contact with industrial-related pollutant sources, rather than focusing on how plant areas are utilized. These commenters suggested that facilities that are wholly enclosed or have their operations entirely protected from the elements should not be subject to permit requirements under today's rule. EPA agrees that these comments have merit with regard to certain types of facilities. Today's rule defines the term "storm water discharge associated with

industrial activity" to include storm water discharges from facilities identified in today's rule at 40 CFR 122.21(b)(14)(xi) (facilities classified as Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25) only if:

areas where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery at these facilities are exposed to storm water. Such areas include: material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment; storage or disposal; shipping and receiving areas; manufacturing buildings; material storage areas for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water.

The critical distinction between the facilities identified at 40 CFR 122.26(b)(14)(xi) and the facilities identified at 40 CFR 122.26(b)(14)(i)-(x) is that the former are not classified as having "storm water discharges associated with industrial activity" unless certain materials or activities are exposed to storm water. Storm water discharges from the latter set of facilities are considered to be "associated with industrial activity" regardless of the actual exposure of these same materials or activities to storm water.

EPA believes this distinction is appropriate because, when considered as a class, most of the activity at the facilities in § 122.26(b)(14)(xi) is undertaken in buildings; emissions from stacks will be minimal or non-existent; the use of unhooded manufacturing and heavy industrial equipment will be minimal; outside material storage, disposal or handling generally will not be a part of the manufacturing process; and generating significant dust or particulates would be atypical. As such, these industries are more akin or comparable to businesses, such as retail, commercial, or service industries, which Congress did not contemplate regulating before October 1, 1992, and storm water discharges from these facilities are not "associated with industrial activity." Thus, these industries will be required to obtain a permit under today's rule only when the manufacturing processes undertaken at such facilities would result in storm water contact with industrial materials associated with the facility.

Industrial categories in § 122.26(b)(14)(xi) all tend to engage in production activities in the manner described in the paragraph above. Facilities under SIC 20 process foods including meats, dairy food, fruit, and flour. Facilities classified under SIC 21 make cigarettes, cigars, chewing tobacco and related products. Under SIC 22, facilities produce yarn, etc., and/or dye and finish fabrics. Facilities under SIC 23 are in the business of producing clothing by cutting and sewing purchased woven or knitted textile products. Facilities under SIC 2434 and 25 are establishments engaged in furniture making. SIC 265 and 267 address facilities that manufacture paper board products. Facilities under SIC 27 perform services such as bookbinding, plate making, and printing. Facilities under SIC 283 manufacture pharmaceuticals and facilities under 285 manufacture paints, varnishes, lacquers, enamels, and allied products. Under SIC 30 establishments manufacture products from plastics and rubber. Those facilities under SIC 31 (except 311), 323, 34 (except 3441), 35, 36, and 37 (except 373) manufacture industrial and commercial metal products, machinery, equipment, computers, electrical equipment, and transportation equipment, and glass products made of purchased glass. Facilities under SIC 38 manufacture scientific and electrical instruments and optical equipment. Those under SIC 39 manufacture a variety of items such as jewelry, silverware, musical instruments, dolls, toys, and athletic goods. SIC 4221-25 are warehousing and storage activities.

In contrast, the facilities identified by SIC 24 (except and 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, 373 when taken as a group, are expected to have one or many of the following activities, processes occurring on-site: storing raw materials, intermediate products, final products, by-products, waste products, or chemicals outside; smelting; refining; producing significant emissions from stacks or air exhaust systems; loading or unloading chemical or hazardous substances; the use of unhooded manufacturing and heavy industrial equipment; and generating significant dust or particulates. Accordingly, these are classes of facilities which can be viewed as generating storm water discharges associated with industrial activity requiring a permit. Establishments identified under SIC 24 (except 2434) are engaged in operating sawmills, planing mills and other mills engaged in producing lumber and wood basic materials. SIC 26 facilities are paper mills. Under SIC 28, facilities

produce basic chemical products by predominantly chemical processes. SIC 29 describes facilities that are engaged in the petroleum industry. Under SIC 311, facilities are engaged in tanning, currying, and finishing hides and skins. Such processes use chemicals such as sulfuric acid and sodium dichromate, and detergents, and a variety of raw and intermediate materials. SIC 32 manufacture glass, clay, stone and concrete products from raw materials in the form quarried and mined stone, clay, and sand. SIC 33 identifies facilities that smelt, refine ferrous and nonferrous metals from ore, pig or scrap, and manufacturing related products. SIC 3441 identifies facilities manufacturing fabricated structural metal. Facilities under SIC 373 engage in ship building and repairing. The permit application requirements for storm water discharges from facilities in these categories are unchanged from the proposal.

Today's rule clarifies that the requirement to apply for a permit applies to storm water discharges from plant areas that are no longer used for industrial activities (if significant materials remain and are exposed to storm water) as well as areas that are currently being used for industrial activities. EPA would also clarify that all discharges from these areas including those that discharge through municipal separate storm sewers are addressed by this rulemaking.

One commenter questioned the use of the word "or" instead of the word "and" to describe storm water "which is located at an industrial plant 'or' directly related to manufacturing, processing, or raw material storage areas at an industrial plant." The comment expressed the concern that discharges from areas not located at an industrial plant would be subject to permitting by this language and questioned whether this was EPA's intent. EPA agrees that this is a potential source of confusion and has modified this language to reflect the conjunctive instead of the alternative. This change has been made to provide consistency in the rule whereby some areas at industrial plants, such as administrative parking lots which do not have storm water discharges commingled with discharges from manufacturing areas, are not included under this rulemaking.

Two commenters wanted clarification of the term "or process water," in the definition of discharge associated with industrial activity at § 122.26(b)(14). This rulemaking replaces this term with the term "process waste water" which is defined at 40 CFR part 401.

One commenter took issue with the decision to include drainage ponds, refuse sites, sites for residual treatment, storage, or disposal, as areas associated with industrial activity, because it was the commenter's view that such areas are unconnected with industrial activity. EPA disagrees with this comment. If refuse and other sites are used in conjunction with manufacturing or the by-products of manufacturing they are clearly associated with industrial activity. As noted above, Congress intended to include discharges directly related to manufacturing and processing at industrial plants. EPA is convinced that wastes, refuse, and residuals are the direct result or consequence of manufacturing and processing and, when located or stored at the plant that produces them, are directly related to manufacturing and processing at that plant. Storm water drainage from such areas, especially those areas exposed to the elements (e.g. rainfall) has a high potential for containing pollutants from materials that were used in the manufacturing process at that facility. One commenter supported the inclusion of these areas since many toxins degrade very slowly and the mere passage of time will not eliminate their effects. EPA agrees and finalizes this part of the definition as proposed. One commenter requested clarification of the term "residual" as used in this context. Residual can generally be defined to include material that is remaining subsequent to completion of an industrial process. One commenter noted that the current owner of a facility may not know what areas or sites at a facility were used in this manner in the past. EPA has clarified the definition of discharge associated with industrial activity to include areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. The Agency believes that the current owner will be in a position to establish these facts.

One commenter suggested including material shipping and receiving areas, waste storage and processing areas, manufacturing buildings, storage areas for raw materials, supplies, intermediates, and finished products, and material handling facilities as additional areas "associated with industrial activity." EPA agrees that this would add clarification to the definition, and has incorporated these areas into the definition at § 122.26(b)(14).

One commenter stated that the language "point source located at an industrial plant" would include outfalls located at the facility that are not owned

or operated by the facility, but which are municipal storm sewers on easements granted to a municipality for the conveyance of storm water. EPA agrees that if the industry does not operate the point source then that facility is not required to obtain a permit for that discharge. A point source is a conveyance that discharges pollutants into the waters of the United States. If a facility does not operate that point source, then it would be the responsibility of the municipality to cover it under a permit issued to them. However, if contaminated storm water associated with industrial activity were introduced into that conveyance by that facility, the facility would be subject to permit application requirements as is all industrial storm water discharged through municipal sewers.

EPA disagrees with several comments that road drainage or railroad drainage within a facility should not be covered by the definition. Access roads and rail lines (even those not used for loading and unloading) are areas that are likely to accumulate extraneous material from raw materials, intermediate products and finished products that are used or transported within, or to and from, the facility. These areas will also be repositories for pollutants such as oil and grease from machinery or vehicles using these areas. As such they are related to the industrial activity at facilities. However, the language describing these areas of industrial activity has been clarified to include those access roads and rail lines that are "used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility." For the same reasons haul roads (roads dedicated to transportation of industrial products at facilities) and similar extensions are required to be addressed in permit applications. Two industries stated that haul roads and similar extensions should be covered by permits by rule. EPA is not considering the use of a permit by rule mechanism under this regulation, however this issue will be addressed in the section 402(p)(5) reports to Congress and in general permits to be proposed and promulgated in the near future. EPA would note however that facilities with similar operations and storm water concerns that desire to limit administrative burdens associated with permit applications and obtaining permits may want to avail themselves of the group application and/or general permits.

In response to comments, EPA would also like to clarify that it intends the language "immediate access roads"

(including haul roads) to refer to roads which are exclusively or primarily dedicated for use by the industrial facility. EPA does not expect facilities to submit permit applications for discharges from public access roads such as state, county, or federal roads such as highways or BLM roads which happen to be used by the facility. Also, some access roads are used to transport bulk samples of raw materials or products (such as prospecting samples from potential mines) in small-scale prior to industrial production. EPA does not intend to require permit applications for access roads to operations which are not yet industrial activities.

EPA does agree with comments made by several industries that undeveloped areas, or areas that do not encompass those described above, should generally not be addressed in the permit application, or a storm water permit, as long as the storm water discharge from these areas is segregated from the storm water discharge associated with the industrial activity at the facility.

Numerous commenters stated that maintenance facilities, if covered, should not be included in the definition. EPA disagrees with this comment. Maintenance facilities will invariably have points of access and egress, and frequently will have outside areas where parts are stored or disposed of. Such areas are locations where oil, grease, solvents and other materials associated with maintenance activities will accumulate. In response to one commenter, such areas are only regulated in the context of those facilities enumerated in the definition at § 122.26(b)(14), and not similar areas of retail or commercial facilities.

Another commenter requested that "storage areas" be more clearly defined. EPA disagrees that this term needs further clarification in the context of this section of the rule. However, in response to one comment, tank farms at industrial facilities are included. Tank farms are in existence to store products and materials created or used by the facility. Accordingly they are directly related to manufacturing processes.

Regarding storage areas, one commenter stated that the regulations should emphasize that only facilities that are not totally enclosed are required to submit permit applications. EPA does not agree with this interpretation since use of the generic term storage area indicates no exceptions for certain physical characteristics. Thus discharges from enclosed storage areas are also covered by today's rule (except as discussed above). EPA also disagrees with one

comment asserting that small outside storage areas of finished products at industrial facilities should be excluded under the definition of associated with industrial activity. EPA believes that such areas are areas associated with industrial activity which Congress intended to be regulated under the CWA. As noted above, the legislative history refers to storage areas, without reference to whether they are covered or uncovered, or of a certain size.

The same language, in the legislative history cited above, was careful to state that the term "associated with industrial activity" does not include storm water "discharges associated with parking lots and administrative and employee buildings." To accommodate legislative intent, segregated storm water discharges from these areas will not be required to obtain a permit prior to October 1, 1992. Many commenters stated that this was an appropriate method in which to limit the scope of "associated with industrial activity." However, if a storm water discharge from a parking lot at an industrial facility is mixed with a storm water discharge "associated with industrial activity," the combined discharge is subject to permit application requirements for storm water discharges associated with industrial activity. EPA disagrees with some commenters who urged that office buildings and administrative parking lots should be covered if they are located at the plant site. EPA agrees with one commenter that inclusion of storm water discharge from these areas would be overstepping Congressional intent unless such are commingled with storm water discharges from the plant site. Several commenters requested that language be incorporated into the rule which establishes that storm water discharges from parking lots and administrative areas not be included in the definition of associated with industrial activity. EPA agrees and has retained language used in the proposal which addresses this distinction.

Storm water discharges from parking lots and administrative buildings along with other discharges from industrial lands that do not meet the regulatory definition of "associated with industrial activity" and that are segregated from such discharges may be required to obtain an NPDES permit prior to October 1, 1992, under certain conditions. For example, large parking facilities, due to their impervious nature may generate large amounts of runoff which may contain significant amounts of oil and grease and heavy metals which may have adverse impacts on

receiving waters. The Administrator or NPDES State has the authority under section 402(p)(2)(E) of the amended CWA to require a permit prior to October 1, 1992, by designating storm water discharges such as those from parking lots that are significant contributors of pollutants or contribute to a water quality standard violation. EPA will address storm water discharges from lands used for industrial activity which do not meet the regulatory definition of "associated with industrial activity" in the section 402(p)(5) study to determine the appropriate manner to regulate such discharges.

Several commenters requested clarification that the definition does not include sheet flow or discharged storm water from upstream adjacent facilities that enters the land or commingles with discharge from a facility submitting a permit application. EPA wishes to clarify that operators of facilities are generally responsible for its discharge in its entirety regardless of the initial source of discharge. However, where an upstream source can be identified and permitted, the liability of a downstream facility for other storm water entering that facility may be minimized. Facilities in such circumstances may be required to develop management practices or other run-on/run-off controls, which segregates or otherwise prevents outside runoff from comingling with its storm water discharge. Some commenters expressed concern about other pollutants which may arrive on a facility's premises from rainfall. This comment was made in reference to runoff with a high or low pH. If an applicant has reason to believe that pollutants in its storm water discharge are from such sources, then that needs to be addressed in the permit application and brought to the attention of the permitting authority, which can draft appropriate permit conditions to reflect these circumstances.

EPA requested comments on clarifying the types of facilities that involve industrial activities and generate storm water. EPA preferred basing the clarification, in part, on the use of Standard Industrial Classification (SIC) codes, which have been suggested in comments to prior storm water rulemakings because they are commonly used and accepted and would provide definitions of facilities involved in industrial activity. Several commenters supported the use by EPA of Standard Industrial Classifications for the same reasons identified by EPA as a generally used and understood form of classification. It was also noted that

using such a classification would allow targeting for special notification and educational mailings. Three municipalities and three State authorities commented that SICs were appropriate and endorsed their use as a sound basis for determining which industries are covered.

One municipality questioned how SIC classifications will be assigned to particular industries. SICs have descriptions of the type of industrial activity that is engaged in by facilities. Industries will need to assess for themselves whether they are covered by a listed SIC and submit an application accordingly. Another commenter questioned if Federal facilities that do not have an SIC code identification are required to file a permit application. Federal facilities will be required to submit a permit application if they are engaged in an industrial activity that is described under § 122.26(b)(14). The definition of industrial activity incorporates language that requires Federal facilities to submit permit applications in such circumstances. The language has been further clarified to include State and municipal facilities.

EPA requested comments on the scope of the definition (types of facilities addressed) as well as the clarity of regulation. EPA identified the following types of facilities in the proposed regulation as those facilities that would be required to obtain permits for storm water discharges associated with industrial activity:

(i) *Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N (except facilities with toxic pollutant effluent standards which are also identified under category (xi) of this paragraph).* One commenter (a municipality) agreed with EPA that these industries should be addressed in this rulemaking. No other comments were received on this category. EPA agrees with this comment since these facilities are those that Congress has required EPA to examine and regulate under the CWA with respect to process water discharges. The industries in these categories have generally been identified by EPA as the most significant dischargers of process wastewaters in the country. As such, these facilities are likely to have storm water discharges associated with industrial activity for which permit applications should be required.

One commenter stated that because oil and gas producers are subject to effluent guidelines, EPA is disregarding the intent of Congress to exclude

facilities pursuant to section 402(1). EPA disagrees with this comment. EPA is not prohibited from requiring permit applications from industries with storm water discharge associated with industrial activity. EPA is prohibited only from requiring a permit for oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water that is not contaminated by contact with or has not come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations such discharges. In keeping with this requirement, EPA is requiring permit applications from oil and gas exploration, production, processing, or treatment operations, or transmission facilities that fall into a class of dischargers as described in § 122.26(c)(iii).

(ii) *Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3411, 373 and (xi). Facilities classified as Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-25.* One large municipality and one industry agreed with EPA that facilities covered by these SICs should be covered by this rulemaking. Many commenters, however, took exception to including all or some of these industries. However as noted elsewhere these facilities are appropriate for permit applications.

One commenter stated that within certain SICs industries, such as textile manufacturers use few chemicals and that there is little chance of pollutants in their storm water discharge. EPA agrees that some industries in this category are less likely than others to have storm water discharges that pose significant risks to receiving water quality. However, there are many other activities that are undertaken at these facilities that may result in polluted storm water. Further, the CWA is clear in its mandate to require permit applications for discharges associated with industrial activity. Excluding any of the facilities under these categories, except where the facility manufacturing plant more closely resembles a commercial or retail outlet would be contrary to Congressional intent.

One State questioned the inclusion of facilities identified in SIC codes 20-39 because of their temporary and transient nature or ownership. Agency disagrees that simply because a facility may transfer ownership that storm water

quality concerns should be ignored. If constant ownership was a condition precedent to applying for and obtaining a permit, few if any facilities would be subject to this rulemaking.

One State estimated that the proposed definition would lead to permits for 18,000 facilities in its State. Consequently this commenter recommended that the facilities under SIC 20-39 should be limited to those facilities that have to report under section 313 of title III, Superfund Amendments and Reauthorization Act. However, as noted by another commenter, limiting permit requirements to these facilities would be contrary to Congressional intent. While use of chemicals at a facility may be a source of pollution in storm water discharges, other every day activities at an industrial site and associated pollutants such as oil and grease, also contribute to the discharge of pollutants that are to be addressed by the CWA and these regulations. While the number of permit applications may number in the thousands, EPA intends for group applications and general permits to be employed to reduce the administrative burdens as greatly as possible.

Two commenters felt the permit applications should be limited to all entities under SIC 20-39. EPA disagrees that all the industrial activities that need to be addressed fall within these SICs. Discharges from facilities under paragraphs (i) through (xi) such as POTWs, transportation facilities, and hazardous waste facilities, are of an industrial nature and clearly were intended to be addressed before October 1, 1992.

Two commenters stated that SIC 241 should be excluded in that logging is a transitory operation which may occur on a site for only 2-3 weeks once in a 20-30 year period. It was perceived that delays in obtaining permits for such operations could create problems in harvest schedule and mill demand. This commenter stated that runoff from such operations should be controlled by BMPs in effect for such industries and that such a permit would not be practical and would be cost prohibitive.

EPA agrees with the commenter that this provision needs clarification. The existing regulations at 40 CFR 122.27 currently define the scope of the NPDES program with regard to silvicultural activities. 40 CFR 122.27(b)(1) defines the term "silvicultural point source" to mean any discrete conveyance related to rock crushing, gravel washing, log sorting, or log storage facilities which are operated in connection with silvicultural activities and from which

pollutants are discharged into waters of the United States. Section 122.27(b)(1) also excludes certain sources. The definition of discharge associated with industrial activity does not include activities or facilities that are currently exempt from permitting under NPDES. EPA does not intend to change the scope of 40 CFR 122.27 in this rulemaking. Accordingly, the definition of "storm water discharge associated with industrial activity" does not include sources that may be included under SIC 24, but which are excluded under 40 CFR 122.27. Further, EPA intends to examine the scope of the NPDES silvicultural regulations at 40 CFR 122.27 as it relates to storm water discharges in the course of two studies of storm water discharges required under section 402(p)(5) of the CWA.

In response to one comment, EPA intends that the list of applicable SICs will define and identify what industrial facilities are required to apply. Facilities that warehouse finished products under the same code at a different facility from the site of manufacturing are not required to file a permit application, unless otherwise covered by this rulemaking.

(iii) *Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(l) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990 and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations.* Several commenters urged that Congress intended to require permits or permit applications only for the manufacturing sector of the oil and gas industry (or those activities that designated in SIC 20 through 39). EPA disagrees with this argument. The fact that Congress used the language cited above and not the appropriate the SIC definition explicitly does not indicate that a broader definition or less exclusive definition was contemplated. According to these comments, all storm water discharges from oil and gas

exploration and production facilities would be exempt from regulation. However, EPA is convinced that a facility that is engaged in finding and extracting crude oil and natural gas from subsurface formations, separating the oil and gas from formation water, and preparing that crude oil for transportation to a refinery for manufacturing and processing into refined products, will have discharges directly relating to the processing or raw material storage at an industrial plant and are therefore discharges associated with industrial activity.

For further clarification EPA is intending to focus only on those facilities that are in SIC 10-14. Furthermore, in response to several comments, this rulemaking will require permit applications for storm water discharges from currently inactive petroleum related facilities within SIC codes 10-14, if discharges from such facilities meet the requirements as described in section VI.F.7.a. and § 122.26(c)(1)(iii). Inactive facilities will have storm water associated with industrial activity irrespective of whether the activity is ongoing. Congress drew no distinction between active and inactive facilities in the statute or in the legislative history.

(iv) Hazardous waste treatment, storage, or disposal facilities that are operating under interim status or a permit under Subtitle C of the Resource, Conservation and Recovery Act. One commenter believed that all RCRA and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) facilities should be specifically identified using SIC codes for further clarification. EPA considers this to be unnecessarily redundant, since the RCRA/CERCLA identification is sufficient.

Several industries asserted that storm water discharge from landfills, dumps, and land application sites, properly closed or otherwise subject to corrective or remedial actions under RCRA, should not be included in the definition. One commenter noted that the runoff from these areas is like runoff from undeveloped areas. One commenter also concluded that landfills, dumps, and land application sites should also be excluded if they are properly maintained under RCRA.

One commenter also rejected the idea of requiring permits from all active and inactive landfills and open dumps that have received any industrial wastes, and subtitle C facilities. This commenter felt that these facilities were already adequately covered under RCRA.

Two industry commenters felt that it would be redundant to have hazardous

waste facilities regulated by RCRA and the NPDES storm water program. One felt this was especially so if there are current pretreatment standards.

The Agency disagrees that all activities that may contribute to storm water discharges at RCRA subtitle C facilities are being fully controlled and that requiring NPDES permits for storm water discharges at RCRA subtitle C facilities is redundant. First, the vast majority of permitted hazardous waste management facilities are industrial facilities involved in the manufacture or processing of products for distribution in commerce. Their hazardous waste management activities are incidental to the production-related activities. While RCRA subtitle C regulations impose controls in storm water runoff from hazardous waste management units and require cleanup of releases of hazardous wastes, they generally do not control non-systematic spills or process. These releases, from the process itself or the storage of raw materials or finished products are a potential source of storm water contamination. In addition, RCRA subtitle C (except via corrective action authority) does not address management of "non hazardous" industrial wastes, which nevertheless could also potentially contaminate storm water runoff.

Second, at commercial hazardous waste management facilities, the RCRA subtitle C permitting requirements and management standards do not control all releases of potentially toxic materials. For example, some permitted commercial treatment facilities may store and use chemicals in the treatment of RCRA hazardous wastes. Releases of these treatment chemicals from storage areas are a potential source of storm water contamination.

Finally, many RCRA subtitle C facilities have inactive Solid Waste Management Units (SWMU's) on the facility property. These SWMU's may contain areas on the land surface that are contaminated with hazardous constituents. RCRA requires that hazardous waste management facilities must investigate these areas of potential contamination, and then perform corrective action to remediate any SWMU's that are of concern. However, the corrective action process at these facilities will not be completed for a number of years due to the complexity of the cleanup decisions, and due to the fact that many hazardous waste management facilities do not yet have RCRA permits. Until corrective action has been completed at all such subtitle C facilities, SWMU's are a potential source of storm water contamination that should be addressed under the

NPDES program. Finally, under section 1004(27) of RCRA, all point source discharges, including those at RCRA regulated facilities, are to be regulated by the NPDES program. Thus, there is no concern of regulatory overlap, and to the extent that the storm water regulations are effectively implemented, it will help address these units in a way that alleviates the need for expensive corrective action in the future.

(v) Landfills, land application sites, and open dumps that receive or have received industrial wastes and that are subject to regulation under subtitle D of RCRA. EPA received numerous comments supporting the regulation of municipal landfills which receive industrial waste and are subject to regulation under subtitle D of RCRA. EPA agrees with these comments. These industries have significant potential for storm water discharges that can adversely affect receiving water.

Two States argued that landfills should be addressed under the non-point source program. EPA disagrees that the non-point source program is sufficient for addressing these facilities. Further, addressing a class of facilities under the non-point source program does not exempt storm water discharges from these facilities from regulation under NPDES. The CWA requires EPA to promulgate regulations for controlling point source discharges of storm water from industrial facilities. Point sources from landfills consisting of storm water are such discharges requiring an NPDES permit. Several commenters argued that these discharges are adequately addressed by RCRA and that regulating them under this storm water rule would be redundant. However, as discussed above, RCRA expressly does not regulate point source discharges subject to NPDES permits. Given the nature of these facilities and of the material stored or disposed, EPA believes storm water permits are necessary. Similarly EPA rejects the comment that storm water discharges from these facilities are already adequately regulated by State authority. Congress has mandated that storm water discharges associated with industrial activity have an NPDES permit.

One commenter wanted EPA to define by size what landfills are covered. In response, it is the intent of these regulations to require permit applications from all landfills that receive industrial waste. Storm water discharges from such facilities are addressed because of the nature of the material with which the storm water comes in contact. The size of facility

will not dictate what type of waste is exposed to the elements.

One commenter requested that the definition of industrial wastes be clarified. For the purpose of this rule, industrial waste consists of materials delivered to the landfill for disposal and whose origin is any of the facilities described under § 122.26(b)(14) of this regulation.

(vi) *Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093.* One commenter suggested that the recycling of materials such as paper, glass, plastics, etc., should not be classified as an industrial activity. EPA disagrees that such facilities should be excluded on that basis. These facilities may be considered industrial, as are facilities that manufacture such products absent recycling.

Other facilities exhibit traits that indicate industrial activity. In junkyards, the condition of materials and junked vehicles and the activities occurring on the yard frequently result in significant losses of fluids, which are sources of toxic metals, oil and grease and polychlorinated aromatic hydrocarbons. Weathering of plated and non-plated metal surfaces may result in contributions of toxic metals to storm water. Clearly such facilities cannot be classified as commercial or retail.

One municipality felt that "significant recycling" should be defined or clarified. EPA agrees that the proposed language is ambiguous. It has been clarified to require permit applications from facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093. These SIC codes describe facilities engaged in dismantling, breaking up, sorting, and wholesale distribution of motor vehicles and parts and a variety of other materials. The Agency believes these SIC codes clarify the term significant recycling.

One municipality stated that regulation of these facilities under NPDES would be duplicative if they are publicly owned facilities. One State expressed the view that automobile junkyards, salvage yards could not legitimately be considered industrial activity. As noted above, EPA disagrees with these comments. Facilities that are actively engaged in the storage and recycling of products including metals, oil, rubber, and synthetics are in the

business of storing and recycling materials associated with or once used in industrial activity. These activities are not commercial or retail because they are engaged in the dismantling of motors for distribution in wholesale or retail, and the assembling, breaking up, sorting, and wholesale distribution of scrap and waste materials, which EPA views as industrial activity. Further, being a publicly owned facility does not confer non-industrial status.

(vii) *Steam electric power generating facilities, including coal handling sites, and onsite and offsite ancillary transformer storage areas.* Most of the comments were against requiring permit applications for onsite and offsite ancillary transformer facilities. One commenter stated that these transformers did not leak in storage and if there were leakage problems in handling transformers, such leaks were subject to Federal and State spill clean-up procedures. The same commenter suggested that if EPA required applications from such facilities that it exclude those that have regular inspections, management practices in place, or those that store 50 transformers at any one time.

EPA agrees that such facilities should not be covered by today's rule. As one commenter noted, the Toxic Substances Control Act (TSCA) addresses pollutants associated with transformers that may enter receiving water through storm water discharges. EPA has examined regulations under TSCA and agrees that regulation of storm water discharges from these facilities should be the subject of the studies being performed under section 402(p)(5), rather than regulations established by today's rule. Under TSCA, transformers are required to be stored in a manner that prevents rain water from reaching the stored PCBs or PCB items. 40 CFR 761.65(b)(1)(i). EPA considers transformer storage to be more akin to retail or other light commercial activities, where items are inventoried in buildings for prolonged periods for use or sale at some point in the future, and where there is no ongoing manufacturing or other industrial activity within the structure.

One commenter stated that this category of industries should be loosened so that all steam electric facilities are addressed—oil fired and nuclear. EPA believes that the language as proposed broadly defines the type of industrial activity addressed without specifying each mode of steam electric production. One commenter noted that the EPA has no authority under the CWA (*Train v. CIPR, Inc.*, 426 U.S. 1 (1976)) to regulate the discharge of

source, special nuclear and by-product materials which are regulated under the Atomic Energy Act. EPA agrees permit applications may not address those aspects of such facilities, however the facility in its entirety may not necessarily be exempt. A permit application will be appropriate for discharges from non-exempt categories.

(viii) *Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, material handling facilities, equipment cleaning operations or airport deicing operations.* Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or which are identified in another subcategory of facilities under EPA's definition of storm water discharges associated with industrial activity. One commenter requested clarification of the terms "vehicle maintenance." Vehicle maintenance refers to the rehabilitation, mechanical repairing, painting, fueling, and lubricating of instrumentalities of transportation located at the described facilities. EPA is declining to write this definition into the regulation however since "vehicle maintenance" should not cause confusion as a descriptive term. One commenter wanted railroad tracks where rail cars are set aside for minor repairs excluded from regulation. In response, if the activity involves any of the above activities then a permit application is required. Train yards where repairs are undertaken are associated with industrial activity. Train yards generally have trains which, in and of themselves, can be classified as heavy industrial equipment. Trains, concentrated in train yards, are diesel fueled, lubricated, and repaired in volumes that connote industrial activity, rather than retail or commercial activity.

One commenter argued that if gasoline stations are not considered for permitting, then all transportation facilities should be exempt. EPA disagrees with the thrust of this comment. Transportation facilities such as bus depots, train yards, taxi stations, and airports are generally larger than individual repair shops, and generally engage in heavier more expansive forms of industrial activity. In keeping with Congressional intent to cover all industrial facilities, permit applications from such facilities are appropriate. In contrast, EPA views gas stations as retail commercial facilities not covered

by this regulation. It should be noted that SIC classifies gas stations as retail.

(ix) POTW lands used for land application treatment technology/sludge disposal, handling or processing areas, and chemical handling and storage areas. One commenter wanted more clarification of the term POTW lands. Another commenter requested clarification of the terms sludge disposal, sludge handling areas, and sludge processing areas. One State recommended that a broader term than POTW should be used. EPA notes that on May 2, 1989, it promulgated NPDES Sewage Sludge Permit Regulations; State Sludge Management Program Requirements at 40 CFR part 501. This regulation identified those facilities that are subject to section 405(f) of the CWA as "treatment works treating domestic sewage."

In response to the above comments, EPA has decided to use this language to define what facilities are required to apply for a storm water permit. Under this rulemaking "treatment works treating domestic sewage," or any other sewage sludge or wastewater treatment device or system used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge, with a design flow of 1.0 mgd or more, or facilities required to have an approved pretreatment program under 40 CFR part 403, will be required to apply for a storm water permit. However, permit applications will not be required to address land where sludge is beneficially reused such as farm lands and home gardens or lands used for sludge management that are not physically located within the confines (offsite facility) of the facility or where sludge is beneficially reused in compliance with section 405 of the Clean Water Act (proposed rules were published on February 6, 1989, at 54 FR 5746). EPA believes that such activity is not "industrial" since it is agricultural or domestic application (non-industrial) unconnected to the facility generating the material.

EPA received many comments on the necessity and appropriateness of requiring permit applications for storm water discharges from POTW lands. It was anticipated by numerous commenters that the above cited sludge regulations would adequately address storm water discharges from lands where sludge is applied. However, the sewage sludge regulations do not directly address NPDES permit requirements for storm water discharges from POTW lands and related areas to the extent required by today's

rulemaking; the regulations cover only permits for use or disposal of sludge. Also, the regulations proposed on February 4, 1989, cover primarily the technical standards for the composition of sewage sludge which is to be used or disposed. They do not include detailed permitting requirements for discharges of storm water from lands where sludge has been applied to the land. To that extent, EPA is not persuaded by these commenters that POTWs and POTW lands should be excluded from these storm water permit application requirements.

Two commenters noted that some States already regulate sludge use or disposal activities substantially and that EPA should refrain from further regulation. EPA disagrees that this is a basis for excluding facilities from Federal requirements. Notwithstanding regulations in existence under State law, EPA is required by the CWA to promulgate regulations for permit application for storm water associated with industrial activity. Under the NPDES program, States are able to promulgate more rigorous requirements. However a minimum level of control is required under Federal law. One commenter also indicated that a State's sludge land application sites must follow a well defined plan to ensure there is no sludge related runoff. Notwithstanding that a State may require storm water controls for sludge land applications, as noted above, EPA is required to promulgate regulations requiring permit applications from appropriate facilities. EPA views facilities such as waste treatment plants that engage in on-site sludge composting, storage of chemicals such as ferric chloride, alum, polymers, and chlorine, and which may experience spills and bubbleovers are suitable candidates for storm water permits. Facilities using such materials are not characteristic of commercial or retail activities. Use and storage of chemicals and the production of material such as sludge, with attendant heavy metals and organics, is activity that is industrial in nature. The size and scope of activities at the facility will determine the extent to which such activities are undertaken and such materials used and produced at the facility. Accordingly, EPA believes limiting the facilities covered under this category to those of 1.0 mgd and those covered under the industrial pretreatment program is appropriate.

To the extent that permit applicants are already required to employ certain management practices regarding storm water, these may be incorporated into permits and permit conditions issued by

Federal and State permitting authorities. EPA has selected facilities identified under 40 CFR part 501 (i.e. those with a design flow of 1.0 mgd or more or those required to have an approved pretreatment program) since these facilities will have largest contribution of industrial process discharges. Sludge from such facilities will contain higher concentrations of heavy metal and organic pollutants.

One commenter stated that sludge disposal is a public activity that should be addressed in a public facility's storm water management program under a municipal storm water management program. EPA disagrees. Industrial facilities, whether publicly owned or not, are required to apply for and obtain permits when they are designated as industrial activity.

Another comment stated that a permit should not be required for facilities that collect all runoff on site and treat it at the same POTW. EPA believes that a permit application should be required from such facilities. However, the above practice can be incorporated as a permit condition for such a facility. One commenter stated storm water from sludge and chemical handling areas can be routed through the headworks of the POTW. The agency agrees that this may be an appropriate management practice for POTWs as long as other NPDES regulatory requirements are fulfilled with regard to POTWs.

(x) Construction activities, including clearing, grading and excavation activities except operations that result in the disturbance of less than five acre total land area which are not part of a larger common plan of development or sale. EPA addresses whether these facilities should be covered by today's rule in section VI.F.8.

The December 7, 1988, proposal also requested comments on including the following other categories of discharges in the definition of industrial activities: (xii) Automotive repair shops classified as Standard Industrial Classification 751 or 753; (xiii) Gasoline service stations classified as Standard Industrial Code 5541; (xiv) Lands other than POTW lands (offsite facilities) used for sludge management; (xv) Lumber and building materials retail facilities classified as Standard Industrial Classification 5211; (xvi) Landfills, land application sites, and open dumps that do not receive industrial wastes and that are subject to regulation under subtitle D of RCRA; (xvii) Facilities classified as Standard Industrial Classification 46 (pipelines, except natural gas), and 492 (gas production and distribution); (xviii) Major electrical powerline corridors.

EPA received numerous comments on whether to require permit applications for these particular facilities. The December 7, 1986, proposal reflected EPA's intent not to require permits for these facilities, but rather to address these facilities in the two studies required by CWA sections 402(p)(5) and (6). After reviewing the comments on this issue, EPA believes that these facilities should be addressed under these sections of the CWA. Most of these facilities are classified as light commercial and retail business establishments, agricultural facilities where residential or domestic waste is received, or land use activities where there is no manufacturing. It should be noted that although EPA is not requiring the facilities identified as categories (xii) to (xviii), in the December 7, 1988, proposal to apply for a permit application under this rulemaking, such facilities may be designated under section 402(p)(2)(E) of the CWA.

Three commenters recommended that EPA clarify that non-exempt Department of Energy and Department of Defense facilities should be covered by the storm water regulation. The regulation clearly states that Federal Facilities that are engaged in industrial activity (*i.e.* those activities in § 122.26(b)(14)(i)-(xi)) are required to submit permit applications. Those applying for permits covering Federal facilities should consult the Standard Industrial Classifications for further clarification.

One commenter questioned how EPA intended to regulate municipal facilities engaged in industrial activities. Municipal facilities that are engaged in the type of industrial activity described above and which discharge into waters of the United States or municipal separate storm sewer systems are required to apply for permits. These facilities will be covered in the same manner as other industrial facilities. The fact that they are municipally owned does not in any way exclude them from needing permit applications under this rulemaking.

One commenter suggested exempting those facilities that have total annual sales less than five million dollars or occupy less than five acres of land. Another commenter thought that all minor permittees should be exempt. EPA believes that the quality of storm water and the extent to which discharges impact receiving water is not necessarily related to the size of the facility or the dollar value of its business. What is important in this regard, is the extent to which steps are taken at facilities to curb the quantity

and type of material that may pollute storm water discharges from these facilities. Therefore EPA has not excluded facilities from permitting on such a basis. This same commenter stated that the proposed rules should not address facilities with multiple functions (industrial and retail). EPA disagrees. If a facility engages in activity that is defined in paragraphs (i) through (xi) above, it is required to apply for a permit regardless of the fact that it also has a retail element. Such facilities need only submit a permit application for the industrial portion of the facility (as long as storm water from the non-industrial portion is segregated, as discussed above). This commenter also felt that more studies needed to be undertaken to determine the best way to regulate industries. EPA agrees that storm water problems need further study and for that reason EPA has devoted substantial manpower and resources to complete comprehensive studies under section 402(p)(5), while also addressing industrial sources that need immediate attention under this rulemaking.

One commenter requested that EPA give examples of storm water discharges from each of the facilities that have been designated for submitting permit applications. Agency believes that this is unnecessary and impractical since every facility, regardless of the type of industry, will have different terrain, hydrology, weather patterns, management practices and control techniques. However, EPA intends to issue guidance on filing permit applications for storm water discharges from industrial facilities which details how an industry goes about filing an industrial permit and dealing with storm water discharges.

Today's rulemaking for storm water discharges associated with industrial activity at § 122.26(c)(1)(i) includes special conditions for storm water discharges originating from mining operations, oil or gas operations (§ 122.26(c)(1)(iii)), and from the construction operations listed above (§ 122.26(c)(1)(ii)). These requirements are discussed in more detail in section VI.F.7 and section VI.F.9 of today's notice.

3. Individual Application Requirements

Today's rule establishes individual and group permit application requirements for storm water discharges associated with industrial activity. These requirements will address facilities precluded from coverage under the general permits to be proposed and promulgated by EPA in the near future. EPA considers it necessary to obtain the information required in individual

permit applications from certain facilities because of the nature of their industrial activity and because of existing institutional mechanisms for issuing and tracking NPDES permits. Furthermore, some States will not have general permitting authority. Facilities located in such States will be required to submit individual applications or participate in a group application. The following response to comments received on these requirements pertains to these facilities.

Under the September 26, 1984, regulation operators of Group I storm water discharges were required to submit NPDES Form 1 and Form 2C permit applications. In response to post-regulation comments received on that rule, EPA proposed new permit application requirements (March 7, 1985, (50 FR 9362) and August 12, 1985, (50 FR 32548)) which would have decreased the analytical sampling requirements of the Form 2C and provided procedures for group applications. Passage of the WQA in 1987 gave the EPA additional time to consider the appropriate permit application requirements for storm water discharges. On December 7, 1988, application requirements were proposed and numerous comments were received. Based upon these comments, modifications and refinements have been made to the industrial storm water permit application.

Some commenters expressed the view that the permit application requirements are too burdensome, require too much paperwork, are of dubious utility, and focus too greatly on the collection of quantitative data. EPA disagrees. In comparison to prior approaches for permitting storm water discharges and other existing permitting programs, EPA has streamlined the permit application process, limited the quantitative data requirements, and required narrative information that will be used to determine permit conditions that relate to the quality of storm water discharge. To the extent that EPA needs non-quantitative information to develop appropriate permit conditions, EPA disagrees with the view of some commenters that the information required is excessive. In response to comments on earlier rulemakings and a comment received on the December 7, 1988, proposal (stressing that the emphasis should be on site management, rather than monitoring, sampling, and reporting) EPA has shifted the emphasis of the permit application requirements for storm water discharges associated with industrial activity from the existing requirements for collection of

quantitative data (sampling data) in Form 2C towards collection of less quantitative data supplemented by additional information needed for evaluation of the nature of the storm water discharges.

The permit application requirements proposed for storm water discharges reduce the amount of quantitative data required in the permit application and exempt discharges which contain entirely storm water (*i.e.* contain no other discharge that, without the storm water component, would require an NPDES permit), from certain reporting requirements of Form 2C. The proposed modifications also would exempt applicants for discharges which contain entirely storm water from several non-quantitative information collection provisions currently required in the Form 2C. The proposed modifications would rely more on descriptive information for assessing impacts of the storm water discharge. One commenter proposed that information that the applicant has submitted for other permits be incorporated by reference into the storm water permit application. EPA disagrees that incorporation by reference is appropriate. The permitting authority will need to have this information readily available for evaluating permit application and permit conditions. Furthermore, EPA feels that the applicant is in the best position to provide the information and verify its accuracy. However, if the applicant has such information and it accurately reflects current circumstances, then the applicant can rely on the information for meeting the information requirements of the application. Another commenter suggested that EPA should only require the information in § 122.26(c)(1) (A) and (B) (*i.e.*, the requirement for a topographic map indicating drainage areas and estimate of impervious areas and material management practices). As explained in greater detail below, EPA is convinced that some quantitative data and the other narrative requirements are necessary for developing appropriate permit conditions.

Form 2F addressing permit applications for storm water discharges associated with industrial activity is included in today's final rule. A complete permit application for discharges composed entirely of storm water, will be comprised of Form 2F and Form 1. Operators of discharges which are composed of both storm water and non-storm water will submit, where required, a Form 1, an entire Form 2C (or Form 2D) and Form 2F when applying. In this case, the applicant will provide quantitative data describing the

discharge during a storm event in Form 2F and quantitative data describing the discharge during non-storm events in Form 2C. Non-quantitative information reported in the Form 2C will not have to be reported again in the Form 2F.

Under today's rule, Form 2F for storm water discharges associated with industrial activity would not require the submittal of all of the quantitative information required in Form 2C, but would require that quantitative data be submitted for:

- Any pollutant limited in an effluent guideline for an industrial applicant's subcategory;
- Any pollutant listed in the facility's NPDES permit for its process wastewater;
- Oil and grease, TSS, COD, pH, BOD5, total phosphorus, total Kjeldahl nitrogen; nitrate plus nitrite nitrogen; and
- Any information on the discharge required under 40 CFR 122.21(g)(7) (iii) and (iv).

In order to characterize the discharge(s) sampled, applicants need to submit information regarding the storm event(s) that generated the sampled discharge, including the date(s) the sample was taken, flow measurements or estimates of the duration of the storm event(s) sampled, rainfall measurements or estimates from the storm event(s) which generated the sampled runoff, and the duration between the storm event sampled and the end of the previous storm event. Information regarding the storm event(s) sampled is necessary to evaluate whether the discharge(s) sampled was generally representative of other discharges expected to occur during storm events and to characterize the amount and nature of runoff discharges from the site.

One commenter stated that the quantitative information should be limited to those pollutants that are expected to be known to the applicant. EPA believes this would be inappropriate since there will be no way of determining initially whether these pollutants are present despite the expectations of the applicant. Once the data is provided, permits can be drafted which address specific pollutants. This rulemaking requires that the applicant test for oil and grease, COD, pH, BOD5, TSS, total Kjeldahl nitrogen, nitrate plus nitrite nitrogen and total phosphorus. Oil and grease and TSS are a common component of storm water and can have serious impacts on receiving waters. Oxygen demand (COD and BOD5) will help the permitting authority evaluate the oxygen depletion potential of the discharge. BOD5 is the most commonly

used indicator of potential oxygen demand. COD is considered a more inclusive indicator of oxygen demand, especially where metals interfere with the BOD5 test. The pH will provide the permitting authority with important information on the potential availability of metals to the receiving flora, fauna and sediment. Total Kjeldahl nitrogen, nitrate plus nitrite nitrogen and total phosphorus are measures of nutrients which can impact water quality. Because this data is useful in developing appropriate permit conditions, EPA disagrees with the argument made by one commenter that quantitative data requirements should be a permit condition and not part of the application process.

In the proposed rule, the Agency used total nitrogen as a parameter. This has been changed to total Kjeldahl nitrogen and nitrate plus nitrite nitrogen for clarity.

Today's rule defines sampling at industrial sites in terms of sampling for those parameters that have effluent limits in existing NPDES permits, as well as for any other conventional or nonconventional parameter that might be expected to be found at the outfall. Comments on the appropriateness of the defined parameters were solicited by the proposal. Numerous commenters maintained that either the parameter list be made industry specific, or that pollutant categories not detected in the initial screen be exempted from further testing. Some suggested that only conventional pollutants, inorganics, and metals be sampled unless reason for others is found.

In terms of specific water quality parameters, it was recommended that surfactants not be tested for unless foam is visible. One commenter also suggested that fecal coliform sampling is inappropriate for industrial permits applications. One commenter favored testing for TOC instead of VOC. In response, VOC has been eliminated from the list of parameters because it will not yield specific usable data. VOC is not specifically required in any sampling in today's rule, except where priority pollutant scans are required.

Some recommended that procedures be modified to facilitate quicker, less expensive lab analyses. Concern was also raised that industry might be required to collect its own rainfall data if there is no nearby observation station. Some commenters stated that EPA should not allow automatic sampling for either biological or oil and grease sampling due to the potential for contamination in sampling equipment.

In response, EPA believes that the sampling requirements for industry in today's rule are reasonable and not burdensome. These requirements address parameters that have effluent limits in existing NPDES permits, as well as for any other conventional or nonconventional parameter that might be expected to be found at the applicants outfall. Under this procedure both industry-specific and site-specific contaminants are already identified in the existing permit. Whether all these parameters need to be made a part of any discharge characterization plans, under the terms of the permit, will be a case-by-case determination for the permitting authority. EPA maintains that the test for surfactants (if in effluent guidelines or in the facility's NPDES permit for process water) is justifiable even when a foam is not obvious at the outfall. The presence of detergents in storm water may be indicated by foam, but the absence of foam does not indicate that detergents are not present.

EPA requested comments on fecal coliform as a parameter. Fecal coliform was included on the list as an indicator of the presence of sanitary sewage. In large concentrations, fecal coliform may be an effective indicator of sanitary sewage as opposed to other animal wastes. EPA believes that sanitary cross connections will also be found at industrial facilities. Furthermore, the test for fecal coliform is an inexpensive test and its inclusion or exclusion should make little impact financially on the individual application costs. Sampling for volatile organic carbon shall be accomplished when required, as it is an appropriate indicator of industrial solvents and organic wastes.

In response to comments, EPA acknowledges that there are certain pollutants that are capable of leaving residues in automatic sampling devices that will potentially contaminate subsequent samples. In these cases, such as for biological monitoring, if such a problem is perceived to exist and it is expected that the contaminant will render the subsequent samples unusable, manual grab samples may be needed. This would include grab samples for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, and fecal streptococcus. EPA is not disallowing the use of automatic sampling because of possible contamination, as this type of sampling may be the best method for obtaining the necessary samples from a selected storm events.

In addition to the conventional pollutants listed above, this final rule requires applicants, when appropriate,

to sample other pollutants based on a consideration of site-specific factors. These parameters account for pollutants associated with materials used for production and maintenance, finished products, waste products and non-process materials such as fertilizers and pesticides that may be present at a facility. Applicants must sample for any pollutant limited in an effluent guideline applicable to the facility or limited in the facility's NPDES permit. These pollutants will generally be associated with the facility's manufacturing process or wastes. Other process and non-process related pollutants, will be addressed by complying with the requirements of 40 CFR 122.21(g)(7) (iii) and (iv).

Section 122.21(g)(7)(iii) requires applicants to indicate whether they know or have reason to believe that any pollutant listed in Table IV (conventional and nonconventional pollutants) of appendix D to 40 CFR part 122 is discharged. If such a pollutant is either directly limited or indirectly limited by the terms of the applicant's existing NPDES permit through limitations on an indicator parameter, the applicant must report quantitative data. For pollutants that are not contained in an effluent limitations guideline, the applicant must either report quantitative data or describe the reasons the pollutant is expected to be discharged. With regard to pollutants listed in Table II (organic pollutants) or Table III (metals, cyanide and total phenol) of appendix D, the applicant must indicate whether they know or have reason to believe such pollutants are discharged from each outfall and, if they are discharged in amounts greater than 10 parts per billion (ppb), the applicant must report quantitative data. An applicant qualifying as a small business under 40 CFR 122.21(g)(8), (e.g., coal mines with a probable total annual production of less than 100,000 tons per year or, for all other applicants, gross total annual sales averaging less than \$100,000 per year (in second quarter 1980 dollars)), is not required to analyze for pollutants listed in Table II of appendix D (the organic toxic pollutants).

Section 122.21(g)(7)(iv) requires applicants to indicate whether they know or have reason to believe that any pollutant in Table V of appendix D to 40 CFR part 122 (certain hazardous substances) is discharged. For every pollutant expected to be discharged, the applicant must briefly describe the reasons the pollutant is expected to be discharged and report any existing quantitative data it has for the pollutant.

When collecting data for permit applications, applicants may make use of 40 CFR 122.21(g)(7), which provides that "when an applicant has two or more outfalls with substantially identical effluents, the Director may allow the applicant to test only one outfall and report that the quantitative data also applies to the substantially identical outfalls." Where the facility has availed itself of this provision, an explanation of why the untested outfalls are "substantially identical" to tested outfalls must be provided in the application. Where the amount of flow associated with the outfalls with substantially identical effluent differs, measurements or estimates of the total flow of each of the outfalls must be provided. Several commenters stated that the time and expense associated with sampling and analysis would be saved if the applicant was able to pick substantially identical outfalls without prior approval of the permitting authority. EPA disagrees that this would be an appropriate devolution of authority to the permit applicant. The permitting authority needs to ensure that these outfalls have been grouped according to appropriate criteria (for example do the outfalls serve similar drainage areas at the facility). Furthermore, EPA is not requiring that the permit applicant engage in sampling to demonstrate that the outfalls are indeed substantially identical, because that would of course defeat the purpose of § 122.21(g)(7). The procedure for establishing identical outfalls is not that onerous and provides a means for industry to save substantially on time and resources for sampling.

EPA proposed and requested comment on a requirement that the facility must sample a storm event that is typical for the area in terms of duration and severity. The storm event must be greater than 0.1 inches and must be at least 96 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. In general, variance of the parameters (such as the duration of the event and the total rainfall of the event) should not exceed 50 percent from the parameters of the average rainfall event in that area. EPA also requested comments on addressing snow melt events under this definition.

Commenters stated that: median or average rainfall is not an acceptable approach; the minimum depth and duration of rainfall must be specified; the allowable 50% variation is questionable; the total depth of the storm is irrelevant; and the storm should be viewed based on the average intensity of the storm. One commenter

suggested that using the median rainfall event would be a better approach than the average rainfall event.

Others insisted that "representative" or typical storms do not exist in semi-arid climates and that representative rainfall must be site-specific (regional) and seasonal. Several commenters contended that the requirement for 96 dry hours between events is not acceptable, with 48 and 72 hours identified as possible alternatives.

One commenter believed that a typical standard design storm, such as the 1-year, 24-hour, or 10-year, 1-hour, would be preferable. Another commenter felt that the storm event should be based on the rainfall required to generate a minimum discharge level. One commenter questioned whether the storm is to be sampled at all sites simultaneously.

To clarify its decision on what storm event should be sampled, EPA notes that its selection of the storm event considers both regional and seasonal variation of precipitation. This is evidenced in the rule with regard to sites in the municipal application (three events sampled), and in the requirements for industrial group applications (a minimum of two applicants, or one applicant in groups of less than 10, to be represented in each precipitation zone (see section VI.F.4 below).

The definition of a 0.1 inch minimum was determined by NURP and other studies to be the minimum rainfall depth capable of producing the rainfall/runoff characteristics necessary to generate a sufficient volume of runoff for meaningful sample analysis. EPA believes by requiring the average storm to be used as the basis for sampling that depth, duration, and therefore average rainfall intensity are being regionally defined. The Agency has also added the option of using the median rainfall event instead of the average. The potential for monitoring events that may not meet this specification should be minimized by allowing the proposed 50 percent variation in rainfall depth and/or duration from event statistics. However, the 50 percent variation need only be met when possible. Further, there is flexibility in the rule where the Director may allow or establish site specific requirements such as the minimum duration between the previous measurable storm event and the storm event sampled, the amount of precipitation from the storm event to be sampled, and the form of precipitation sampled (snowmelt or rainfall). If data is obtained from a rain event that does not meet the criteria above, the Director has

the discretion to accept the data as valid.

The December 7, 1988, proposal called for a 96-hour period between events of measurable rainfall, here defined as 0.1 inch, which provided a four day minimum for the accumulation of pollutants on the surface of the outfalls' tributary areas. The key word in the definition is "measurable", which means that the 96-hour period did not necessarily have to be dry, only that no cleansing rainfall (*i.e.* 0.1 inch rain event) has occurred. However, after reviewing comments on this issue EPA has decided to change the period to 72 hours. Many commenters indicated that 96 hours is too restrictive and that securing a sample under such circumstances would be unnecessarily difficult. EPA agrees that the quality or representativeness of the sample would not be adversely affected by this change.

EPA does not agree with comments that the requirement of a particular "design" storm would be appropriate. Many commenters have expressed concern that they might sample an event not meeting the requirements for industrial group applications as defined. Because there is no way to know with sufficient certainty beforehand that an upcoming event will approximate a one-year, twenty-four hour storm, many events would be unnecessarily sampled before this event is realized.

EPA does not intend that a municipality or industry be required to sample all required outfalls for a single storm. This would represent a unmanageable investment in equipment and manpower. In some areas, it may be necessary to sample multiple sites for a single event due to the irregularity of rainfall, but not all sites.

EPA described parameters for selecting storm events for sampling of municipal and industrial outfalls in the December 7, 1988, proposal. EPA has received several comments regarding the problems that rainfall measurement in general presents. A recurring comment relative to reporting rainfall, and in verifying that the storm itself is representative, deals with the spatial distribution of rainfall. The rainfall measured at an airport does not always represent rainfall at the site, particularly in summer months when thunderstorms are prevalent. One commenter stated that it would be easier to base the selected storm on either a minimum discharge, or on a discharge duration other than on the total precipitation, because these parameters are easily measured at the site and are not dependent on the airport gauges

receiving the same rainfall as the site. A few commenters questioned how to determine typical storm characteristics. One commenter advised that NOAA rainfall reporting stations provide data that represent only daily rainfall totals, not storm event data. One commenter pointed out that the time frame of the sampling requirement does not consider that a particular region may be in the midst of a multi-year drought cycle, and that what little rainfall occurs may have uncharacteristically high levels of pollutants.

The type of rain event sampled is an important parameter in any attempt to characterize system-wide loads based on the sampling results. Rainfall gauges that report only event total depth will provide the information necessary to characterize most events, provided that a reasonable estimate of the event duration can be made. If simulation models are to be used in estimating system-wide loads, rainfall measurement based on time and depth of rainfall will be needed. If the recording stations are not believed to accurately reflect this distribution, then the data will need to be collected by the applicant at a location central to the tributary area of the outfall.

The rainfall data collected by NOAA are in most cases available in the form of hourly rainfall depths. This information can be analyzed to develop characteristic storm depths and durations. In some cases, this information has already been analyzed for many long term reporting stations by various municipalities, states, and universities. The results of these investigations should be available to the applicants.

EPA realizes that prolonged rainless periods occur for both semi-arid areas and areas experiencing droughts and that the first storm after a prolonged dry period may well not be representative of "normal" runoff conditions. In order for the appropriate system-wide characterization of loads to be made, data must be collected. With regard to the municipal permit application, today's rule states that runoff characterization data will be collected during three events at from five to ten sites. The rule gives the Director the flexibility of modifying these requirements.

EPA has defined the parameters for selecting the storm event to be sampled such that at the discretion of the Director, seasonal, including winter, sampling might be required. EPA has received several comments regarding the problems that snowmelt sampling may present. Several commenters are

opposed to monitoring of snowmelt events. The reasons cited include equipment problems and the unreasonableness of expecting this sampling, because of temperatures and the time required for personnel to be waiting for events. A few comments addressed the issues of snow pack depth, ambient temperature, and solar radiation levels, and that the snow pack may filter suspended solids or refreeze such that final melting is uncharacteristically over-polluted relative to normal conditions. Another commenter contended that it is impossible to manage the melting process and therefore unreasonable to expect controls to be implemented relative to snowmelt. In essence, it is contended that there is no first discharge unless the snow pack depth is low and melts quickly.

A few commenters favor monitoring snowmelt, for precisely the same reason that most oppose it: that the runoff from snowmelt is the most polluted runoff generated in some areas on an annual basis. Where this is the case, sampling snowmelt should be undertaken in order to accurately assess impacts to receiving streams. EPA is confident that in areas where automated sampling cannot be relied upon, grab sampling can probably be performed because the nature of the snowmelt process tends to make the timing of samples less of a problem when compared to typical rainfall events. EPA disagrees that management practices, either at industrial facilities or with regard to municipalities, cannot address snowmelt. Some areas may need to reassess their salt application procedures. In addition retention and detention devices may address snowmelt, as well as erosion controls at construction sites. Thus, obtaining samples of snowmelt is appropriate to allow development of such permit conditions.

Today's rule also modifies the Form 2C requirements by exempting applicants from the requirements at § 122.21(g)(2) (line drawings), (g)(4) (intermittent flows), (g)(7) (i), (ii), and (v) (various sampling requirements to characterize discharges) if the discharge covered by the application is composed entirely of storm water. Permit applications for discharges containing storm water associated with industrial activity would require applicants to provide other non-quantitative information which will aid permit writers to identify which storm water discharges are associated with industrial activity and to characterize the nature of the discharge.

Numerous comments were received regarding the requirement to submit a topographic map and site drainage map. Many of these comments offered alternatives to EPA's proposal. Two commenters suggested that a simple sketch of the site would be sufficient. Two commenters stated that one or the other should be adequate. One commenter believed that the drainage map was a good idea, but that the topographic map should be optional. Several commenters submitted that a topographic map was sufficient and that only SPCC plans or SARA submittals should supplement that. Another commenter argued that information relating to the location of the nearest surface water or drinking wells would be sufficient. Other commenters believed that a drainage map alone would indicate all relevant site specific information. Numerous commenters expressed concern that the drainage area map would be too detailed and that one which depicts the general direction of flow should be sufficient. Clarification was requested on whether the final rule would require the location of any drinking water wells. One commenter stated that a U.S.G.S. 7.5 quadrangle map will not illustrate drainage systems in all cases, and that therefore the requirement should be optional.

Several commenters agreed with EPA's proposal. One commenter maintained that drainage maps should be required from developments greater than three acres and from all individual applicants. Several commenters agreed with EPA's proposal that both maps should be provided, with arrows indicating site drainage and entering and leaving points. It was advised that drainage maps are useful in locating sources of storm water contamination, and it is useful to identify areas and activities which require source controls or remedial action. One commenter recommended that the map should extend far enough offsite to demonstrate how the privately owned system connects to the publicly owned system.

After considering the merits of all the comments and the reasons supporting EPA's proposal, EPA is convinced that a topographic map and a site drainage map are necessary components of the industrial application. Existing permit application regulations at 40 CFR 122.21(f)(7) require all permit applicants to submit as part of Form 1 a topographic map extending one mile beyond the property boundaries of the source depicting: the facility and each intake and discharge structure; each hazardous waste treatment, storage, or

disposal facility; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in the map area in public records or otherwise known to the applicant within one-quarter mile of the facility property boundary. (See 47 FR 15304, April 8, 1982.) However, as indicated by the comments the information provided under § 122.21(f)(7) is generally not sufficient by itself for evaluating the nature of storm water discharges associated with industrial activity.

As stated in comments, a drainage map can provide more important site specific information for evaluating the nature of the storm water discharge in comparison to existing requirements, which require a larger map with only general information. The volume of storm water discharge and the pollutants associated with it will depend on the configuration and activities occurring at the industrial site. One commenter suggested that it would be appropriate to submit an aerial photograph of the site with all the topographic and drainage information superimposed on the photograph. EPA agrees that this may be an appropriate method of providing this information. EPA is not requiring a specific format for submitting this information.

EPA is also requiring that a narrative description be submitted to accompany the drainage map. The narrative will provide a description of on-site features including: existing structures (buildings which cover materials and other material covers; dikes; diversion ditches, etc.) and non-structural controls (employee training, visual inspections, preventive maintenance, and housekeeping measures) that are used to prevent or minimize the potential for release of toxic and hazardous pollutants; a description of significant materials that are currently or in the past have been treated, stored or disposed outside; and the method of treatment, storage or disposal used. The narrative will also include: a description of activities at materials loading and unloading areas; the location, manner and frequency in which pesticides, herbicides, soil conditioners and fertilizers are applied; a description of the soil; and a description of the areas which are predominately responsible for first flush runoff. This requirement is unchanged from the proposal.

Some commenters believed that information on pesticides, herbicides, and fertilizers and similar products is irrelevant, incidental to the facility's production activities, and should not be

addressed by this rulemaking. EPA disagrees. As these materials are applied outside and hence subject to storm events, they are significant sources of pollutants in storm water discharges whether applied in residential or industrial settings. By providing this information in the permit application the permit writer will be able to determine whether such activity is associated with industrial activity and the subject of appropriate permit conditions. Nominal or incidental application of these materials at industrial facilities and non-detects in sampling of storm water discharges for the permit application will result, in most cases, in these materials not being addressed specifically in storm water permits.

Today's rule also requires that permit applicants for storm water discharges associated with industrial activity certify that all of the outfalls covered in the permit application have been tested or evaluated for non-storm water discharges which are not covered by an NPDES permit. (The applicant need not test for nonstorm water if the certification of the plant storm water discharges can be evaluated through the use of schematics or other adequate method). Section 405 of the WQA added section 402(p)(3)(B)(ii) to the CWA to require that permits for municipal separate storm sewers effectively prohibit non-storm water discharges to the storm sewer system. As discussed in part VI.F.7.b of today's preamble, untreated non-storm water discharges to storm sewers can create severe, widespread contamination problems and removing such discharges presents opportunities for dramatic improvements in the quality of such discharges. Although section 402(p)(3)(B)(ii) specifically addresses municipal separate storm sewers, EPA believes that illicit non-storm water discharges are as likely to be mixed with storm water at a facility that discharges directly to the waters of the United States as it is at a facility that discharges to a municipal storm sewer. Accordingly, EPA feels that it is appropriate to consider potential non-storm water discharges in permit applications for storm water discharges associated with industrial activity. The certification requirement would not apply to outfalls where storm water is intentionally mixed with process waste water streams which are already identified in and covered by a permit.

This rulemaking requires applicants for individual permits to submit known information regarding the history of significant spills at the facility. Several

commenters indicated that the extent to which this information is required should be modified. One commenter stated that the requirement should be limited to those spills that resulted in a complaint or enforcement action. EPA disagrees. EPA believes that significant spills at a facility should generally include releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (see 40 CFR 110.10 and 40 CFR 117.21) or section 102 of CERCLA (see 40 CFR 302.4). Such a requirement is consistent with these regulations and the perception that such spills are significant enough to mandate the reporting of their occurrence. Some commenters stated that industries have already submitted this information in other contexts and should not be required to have to do it again. For the same reason another commenter felt that submittal of this information represents a waste of manpower and resources. EPA disagrees that requiring this information is unduly burdensome. If this information has already been provided for another purpose it follows that it is readily available to the industrial applicant. Thus, the burden of providing this information cannot be considered undue. Furthermore, the permit authority will need to have this available in order to determine which drainage areas are likely to generate storm water discharges associated with industrial activity, evaluate pollutants of concern, and develop appropriate permit conditions. However, to keep this information requirement within reasonable limits and limited to information already available to individual facilities, EPA has declined to expand the reporting requirements to spills of other materials, such as food as one commenter has suggested. However, EPA has decided to add raw materials used in food processing or production to the list of significant materials. Materials such as these may find their way into storm water discharges in such quantities that serious water quality impacts occur. These materials may find their way into storm water from transportation vehicles carrying materials into the facility, loading docks, processing areas, storage areas, and disposal sites.

One commenter urged that any information requested should be limited to a period of three years, which is the general NPDES records retention requirement under 40 CFR 122.21(p) and 40 CFR 112.7(d)(8). EPA agrees with this comment and has limited historical information requirements to the 3 years prior to the date the application is

submitted. In this manner this regulation will be consistent with records keeping practices under the NPDES and Oil Spill Prevention programs, except sludge programs.

The December 7, 1988, proposal required the applicant to submit a description of each past or present area used for outdoor storage or disposal of significant materials. One commenter felt that the definition of significant material was too imprecise. EPA disagrees that the language should be made more precise by delineating every conceivable material that may add pollutants to storm water. Rather the definition is broad, to encourage permit applicants to list those materials that have the potential to cause water quality impacts. Stating what materials are addressed in meticulous detail may result in potentially harmful materials remaining unconsidered in permits. However, EPA has decided to add "fertilizers, pesticides, and raw materials used in the production or processing of food" to the definition in response to the comment of one State authority that such materials need to be accounted for due to their potential danger to storm water discharge quality. This same commenter recommended that "hazardous chemicals" should be added. EPA agrees, and will delineate those chemicals as "hazardous substances" which are designated under section 101(14) of CERCLA. Further clarification has been added by requiring the listing of any chemical the facility is required to report pursuant to section 313 of title III of SARA.

Another commenter felt that EPA should not require information of past storage of significant materials. EPA agrees that this proposed requirement is overbroad and has limited the time frame to those materials that were stored in areas 3 years or fewer from the date of the permit application. The 3-year limit is consistent with other Agency reporting requirements as discussed above.

One commenter questioned EPA's proposal not to provide for a waiver from the requirement to submit quantitative data if the applicant can demonstrate that it is unnecessary for permit issuance. Another commenter said that a waiver is inappropriate. EPA believes relevant quantitative data are essential to the process, but in this rulemaking the number of pollutants that must be sampled and analyzed is reduced compared to previous regulations. The proposed requirements for quantitative data are limited to pollutants that are appropriate for given

site-specific operations, thereby making a waiver unnecessary.

Although the concept of a waiver is attractive because of the perceived potential reduction in burdens for applicants, EPA believes that because the storm water discharge testing requirements have already been streamlined, a waiver would not in practice provide significant reductions in burden for either applicants or permit issuing authorities. Requirements to provide and verify data demonstrating that a waiver is appropriate for a storm water discharge may prove to be more of a burden to the applicant and the permitting authorities. Establishing such a waiver procedure would be administratively complex and time-consuming for both EPA and the applicants, without any justifiable benefit. Therefore, this rulemaking does not include a waiver provision.

In response to one commenter, EPA wishes to emphasize that if a facility has zero storm water discharge because it is discharging to a detention pond only, a permit application is not required. Only those discharges to the waters of the United States or municipal systems need submit notifications, individual or group permit applications, or notices of intent where applicable. However, if the detention pond overflows or the discharger anticipates that it may overflow, then a permit application should be submitted.

Two commenters agreed with EPA's proposed requirement to have a description of past and present material management practices and controls. EPA believes that this is important information directly relating to the quality of storm water that can be expected at a particular facility and this requirement is retained in today's rule. However, as with other historical information requirements, EPA is limiting past practices to those that occurred within three years of the date that the application is submitted. One commenter argued that past practices should not be considered unless there is evidence that past practices cause current storm water quality problems. EPA anticipates that the information submitted by the applicant will be used to make this determination and that appropriate permit conditions can be developed accordingly.

One commenter requested clarification on the certification requirement that the data and information in the application is true and complete to the best of the certifying officer's knowledge. This is a fundamental and integral part of all NPDES permit applications. It essentially requires the signatory to

assure the permit writer, based upon his or her personal knowledge, that the information has been submitted without a negligent, reckless, or purposeful misrepresentation. EPA intends to interpret this requirement in the same manner for storm water applications as other applications.

4. Group Applications

Today's final rule provides some industries with the option of participating in a group application, in lieu of submitting individual permits. There are several reasons for the group application. First, the group application procedure provides adequate information for issuing permits for certain classes of storm water discharges associated with industrial activity. Second, numerous commenters supported the concept of the group application as a way to reduce the costs and administrative burdens associated with storm water permit applications. Third, group applications will reduce the burden on the regulated community by requiring the submission of quantitative data from only selected members of the group. Fourth, the group application process will reduce the burden on the permit issuing authority by consolidating information for reviewing permit applications and for developing general permits suited to certain industrial groups. Where general permits are not appropriate or cannot be issued, a group application can be used to develop model individual permits, which can significantly reduce the burden of preparing individual permits.

As noted above in today's preamble, EPA intends to promulgate a general permit that will cover many types of industrial activity. Industrial dischargers eligible for such permits will generally be required to seek coverage by submittal of a notice of intent. Facilities that are ineligible for coverage under the general permit will be required to submit an individual permit application or submit a group application. The group application process promulgated today will serve as an important component to implement Tier III of EPA's industrial storm water permitting strategy discussed above. The general permit which EPA intends to promulgate in the near future shall set forth what types of facilities are eligible for coverage.

Some commenters criticized the group application procedure as an abdication of EPA's responsibility to effectively deal with pollutants in storm water discharges. One commenter stated that every facility subject to these regulations should be required to submit quantitative data. In response EPA believes, as do numerous commenters,

that the group application procedure is a legitimate and effective way of dealing with a large volume of currently uncontrolled discharges. The only difference between the group application procedure and issuing individual permits based on individual applications is that the quantitative data requirements from individual facilities will be less if certain procedures are followed. EPA is convinced that marked improvements in the process of issuing permits will be achieved when these procedures are followed. Where the storm water discharge from a particular facility is identified as posing a special environmental risk, it can be required to submit individual applications and therefore separate quantitative data. It should also be noted that submittal of a group application does not exempt a facility from submitting quantitative data on its storm water discharge during the term of the permit.

The final rule refines and clarifies some of the requirements of the group application approach set forth in the December 7, 1988 proposal. Several commenters requested that EPA add a provision which would allow a facility that becomes subject to the regulations to "add on" to a group application after that group application has already been submitted. One commenter indicated that some trade associations are prohibited from engaging in an activity which would not apply to all its members, and that an "add on" provision was needed in the event such a prohibition was invoked. Another commenter noted that where a group is particularly large, for example one that consists of several thousand members, that it would be a logistical feat to ensure that all facilities eligible as members of the group are properly identified and listed on the application within the 120 day deadline for submitting part 1A of the application.

EPA believes that a group applicant should have a limited ability to add facilities to the group after part 1A has been submitted and that a provision which allows a group or group representative an unbridled ability to "add on" is impractical for a number of reasons. First, 10% of the facilities must submit quantitative data. Adding facilities after the group has been formed and approved would change the number of facilities that have to submit quantitative data on behalf of the group. This would result in an unwarranted administrative burden on the reviewing authority, which is in the position of having to examine the quantitative data and determine the appropriateness of group members (and those that are

required to submit quantitative data) within 2 months of receiving part 1 of the group application. Further, during the permit application process permitting authorities will be developing permit conditions for an identified and pre-determined group of facilities. Allowing potentially significant numbers of permit applicants to suddenly inject themselves into a group application could unnecessarily hamper or disrupt the timely development of general and model permits. In addition, if a facility were "added on" the number of facilities having to submit quantitative data may drop below 10%. Thus the facility desiring to "add on" may be put in the position of having to submit the quantitative data themselves, which would clearly defeat the purpose of being a part of the group application.

Nevertheless, EPA has added a provision to 122.26(e) which enables facilities to add on to a group application at the discretion of the EPA's Office of Water Enforcement and Permits, and upon a showing of good cause by the group applicant. For the reasons noted above, EPA anticipates this provision will be invoked only in limited cases where good cause is shown. Facilities not properly identified in the group application, and which cannot meet the good cause test will be required to submit individual permit applications. EPA will advise such facilities within 30 days of receiving the request as to whether the facility may add on.

However, the "add on" facility must meet the following requirements: The application for the additional facility is made within 15 months of the final rule; and the addition of the facility does not reduce the percentage of the facilities that are required to submit quantitative data to below 10% unless there are over 100 facilities that are submitting quantitative data. Approval to become part of a group application is obtained from the group or the trade association and is certified by a representative of the group; approval for adding on to a group is obtained from the Office of Water Enforcement and Permits.

Several commenters stated that the application requirements for groups are so burdensome that the advantages of the process are undermined. These concerns are addressed in greater detail below. Among the requirements which commenters objected are the requirements to list every group member's company by name and address. EPA is convinced that a condition precedent to approving a group application is at least identifying the members of the group. Without such

information it would be impossible to determine if all the facilities are sufficiently similar. EPA disagrees that industries will be dissuaded from using the group application process because the advantages of the process are undermined. Although commenters perceived many burdens associated with individual permit applications, by far the most significant burden identified by the comments is the requirement for obtaining and submitting quantitative data. The group application significantly reduces this burden by requiring only 10% of the facilities to submit quantitative data if the number in the group is over 100. If the number in the group is over 1000, then only 100 of the facilities need submit quantitative information. If group applicants develop cost sharing procedures to reduce the financial and administrative burdens of submitting quantitative data, it is evident that utilizing the group application could save industries as much as 90% on the most economically burdensome aspect of the application.

Several commenters perceived that the group application procedure did not offer them significant savings because under the proposal their particular industry would only be required to test for COD, BOD₅, pH, TSS, oil and grease, nitrogen, and phosphorous. These commenters stated that sampling for these pollutants is not particularly expensive. EPA believes that even if a group is required only to submit minimal quantitative data on particular pollutants, substantial savings can accrue to a particular industry if the group has many members. This is particularly true when the number of outfalls to be sampled, the information on storm events, and flow measurements are factored into the cost analysis. An additional benefit for members of the group as well as for permit issuing agencies is that the process of developing a permit, including drafting and responding to public comments on the permit, is consolidated by the group application process. Accordingly, it is less resource intensive for the group to work with permit issuance authorities to develop well founded permit conditions.

One commenter raised a concern about the situation where one of the facilities that is designated for submitting quantitative data drops out of the group. If this happened, then another facility would have to submit quantitative data. In response, EPA notes that one approach would be for the group to have one or two more facilities submit quantitative data than

needed to avoid problems from such a departure or to account for new additions to the group. Certainly this issue goes directly to the facility selection process which is a critical component of the group application; the facilities need to be carefully selected and reviewed by the group to prevent such difficulties.

Several comments indicated a confusion over what facilities are eligible to take advantage of the group application procedure. Any industry or facility that is required to submit a storm water permit application under these regulations is eligible to participate in a group application. However, whether a facility can obtain a storm water permit under a group application procedure will depend upon whether that facility is a member of the same effluent guideline subcategory, or is sufficiently similar to other members of the group to be appropriate for a general permit or individual permit issued pursuant to the group application. Accordingly, group applications are not limited to national trade associations. The agency believes that the language in § 122.26(c)(2) adequately addresses these concerns. The process does not prohibit a particular company with multiple facilities from filing a group application as long as those facilities are sufficiently similar.

One commenter expressed concern that a single company would not be able to take advantage of the group application benefits unless the company had more than ten facilities. Under such circumstances the company would have to become integrated with a larger group of facilities owned by other companies in order to take advantage of the benefits afforded by the group application procedure. In response, the Agency is providing for a group application of between four and ten members, however at least half the facilities must submit data. One commenter stated that the number of facilities required to submit quantitative data should be determined on a case by case basis. EPA believes that 10 percent for groups with over ten members will be easiest to implement for both industry and EPA, and will ensure that adequate representative quantitative data are obtained so that meaningful determinations of facility similarity can be made and appropriate permit conditions in general or model permits can be developed.

Another commenter suggested that one facility with a multitude of storm water discharge points should be able to use the group permit application to reduce the amount of quantitative data

that it is required to submit. This is an accurate observation but only to the extent that the facility combines with several other facilities to form a group, in which case only 10% of the facilities need submit quantitative data. The group application procedure in today's rule is designed for use by multiple facilities only. However, if an individual facility has 10 outfalls with ten substantially identical effluents the discharger may petition the Director to sample only one of the outfalls, with that data applying to the remaining outfalls. See § 122.21(g)(7). Thus, existing authority already allows for a "group-like" process for sampling a subset of storm water outfalls at a single facility.

Concern was expressed that the spill reporting requirement from each facility in part 1B would preclude any group from demonstrating that the facilities sampled are "representative," because the incidence of past spills is very site-specific. EPA notes that since it has dropped the part 1B requirements for other reasons discussed below, this comment is now moot.

Numerous commenters noted that if a facility is part of a group application and is subsequently rejected as a group applicant, such an entity would not have a full year to submit an individual permit application. EPA agrees that this is a significant concern. Accordingly, those facilities that apply as a member of a group application will be afforded a full year from the time they are notified of their rejection as a member of the group to file an individual application. EPA notes that it intends to act on group application requests within 60 days of receipt; thus this approach will only provide facilities that are rejected from a group application a short extension of the deadline for other individual applications.

One commenter complained that the cost of defending a group's choice of representative facilities may exceed the cost of submitting an individual permit application, thereby reducing the incentive to apply as group. The agency anticipates that the selection process will be one open to negotiation between the affected parties and one that will end in a mutually satisfactory group of facilities. It is the intent of EPA to reduce the costs of submitting a permit application as much as possible, while providing adequate information to support permitting activities.

Another commenter argued that the use of model permits will create a disincentive for participating in a group because model permits may be used by the permit issuing authority to issue individual permits for discharges from

similar facilities that did not participate in the group application. EPA does not agree. The benefit of applying as a group applicant is to take advantage of reduced representative quantitative data requirements. This incentive will exist regardless of whether or how model permits are used. Further, technology transfer can occur during the development of permits based on individual applications as well as those based on group applications.

One commenter suggested moving some of the facility specific information requirements of part 1 of the group application to part 2 of the group application in order to provide more incentive to apply as a group. EPA has considered this and believes such a change would be inappropriate. Part 1 information will be used to make an informed decision about whether individual facilities are appropriate as group members and appropriate for submitting representative quantitative data. Furthermore, information burdens from providing site specific factors in part 1 is relatively minimal, and the information requirements in the proposed part 1B application have been eliminated.

One commenter suggested that trade associations develop model permits since they have the most knowledge about the characteristics of the industries they represent. As noted above, EPA expects that the industries and trade associations will have input, through the permit application process, as to how permit conditions for storm water discharges are developed. While the applicant can submit proposed permit conditions with any type of application, EPA however cannot delegate the drafting of model permits to the permittees. EPA is developing and publishing guidance in conjunction with this rulemaking for developing permit conditions.

One commenter suggested that new dischargers should be able to take advantage of general permits developed pursuant to group applications. As with other general permits, EPA anticipates that such discharges will be able to fall within the scope of a general permit based on a group application where appropriate.

One commenter stated that the group application does not benefit municipalities since there is no requirement for industrial discharges through municipal sewers to apply for a permit. As noted in a previous discussion, industrial discharges through municipal sewers must be covered by an NPDES permit. Such facilities may avail themselves of the group application procedure. Also, municipalities are not

precluded from developing a group application procedure under their management plan for industries that discharge into their municipal system, in order to streamline developing controls for such industries.

One industry wanted clarification that facilities located within a municipality would be eligible to participate in a group application. All industrial activities required to submit an individual permit are entitled to submit as part of group application, except those with existing NPDES permits covering storm water. Those facilities that discharge through a municipal separate storm sewer systems required to submit an individual application (because they do not fall within a general permit) are not precluded from using the group application procedure if appropriate.

Other municipalities expressed confusion over the industrial group application concept. The following responds to these comments. First, municipalities are not eligible for participation in a group application because the group application process is designed for industrial activities. Sampling requirements for municipal permit applications are already limited to a small subset of the outfalls from the system, as discussed below. Furthermore, permits for municipal separate storm sewer systems will be issued on a system-wide or jurisdiction-wide basis, rather than individually for each outfall. Thus, today's regulation already incorporates a "grouplike" permit application process for municipalities. Furthermore, it is highly unlikely that various municipal storm sewer systems would be "substantially similar" enough to justify group treatment in the same way as industrial facilities. In response to another comment, this regulation does not directly give the municipality enforcement power over members of an industrial group who may be discharging through its system. Only the permitting authority and private citizens and organizations (including the municipality acting in such a capacity) will have enforcement power over members of the group once permits are issued to those members.

One commenter believed that the States with authorized NPDES programs rather than EPA should establish permit terms for permits based on group applications. In response to this comment, EPA wishes to clarify its role in the group application process. Group applications will be submitted to EPA headquarters where they will be reviewed and summarized. The

summaries of the group application will be distributed to authorized NPDES States. EPA wishes to emphasize that NPDES States are not bound by draft model permits developed by EPA. States may adopt model permits for use in their particular area, making adjustments for local water quality standards and other regional characteristics. Where general permit coverage is believed to be inappropriate, facilities may be required to apply for individual permits. One commenter objected to the group application procedure because it is not consistent with existing Federal permitting procedures, which will lead to confusion in the regulated community. The agency disagrees with this assessment. The group application is a departure from established NPDES program procedures. However, the comments, when viewed in their entirety, reflect widespread support from the regulated community for a group application procedure. Further, the comments reflect that those affected by this rulemaking understand the components of the group application and the procedures under which permits will be obtained pursuant to the group application.

One commenter expressed concern regarding how BAT limits for groups of similar industries will be developed. Technology based limits will be developed based on the information received from the group applicants. If the group applicants possess similar characteristics in terms of their discharge, BAT/BCT limitations and controls will be developed accordingly for those members of the group. If the discharge characteristics are not similar then applying industries are not appropriate for the group.

One commenter has suggested that the proposed group application is too complex with regard to the part 1A, part 1B, and part 2 group application requirements and that EPA should repropose these provisions. As discussed below, EPA has simplified the industrial group application requirements by eliminating the part 1B application. Thus, reproposal is unnecessary.

One commenter criticized the group application concept as not achieving any type of reduction in administrative burden for NPDES States. EPA disagrees with this assessment. If industries take advantage of the group application procedure, EPA will have an opportunity to review information describing a large number of dischargers in an organized manner. EPA will perform much of the initial review and analysis of the group application, and provide NPDES States

with summaries of the applications thereby reducing the burden on the States. Furthermore, the procedure encourages a potentially large number of facilities to be covered by a general permit, which will clearly reduce the administrative burden of issuing individual permits.

The final rule establishes a regulatory procedure whereby a representative entity, such as a trade association, may submit a group application to the Office of Water Enforcement and Permits (OWEP) at EPA headquarters, in which quantitative data from certain representative members of a group of industrial facilities is supplied. Information received in the group application will be used by EPA headquarters to develop models for individual permits or general permits. These model permits are not issued permits, but rather they will be used by EPA Regions and the NPDES States to issue individual or general permits for participating facilities in the State. In developing such permits, the Region or NPDES State will, where necessary, adapt the model permits to take into account the hydrological conditions and receiving water quality in their area. One commenter expressed the view that having this procedure managed by EPA headquarters would cause delays and it should be delegated to the States and Regions. EPA disagrees that delay will ensue using this procedure. Furthermore, consistency in development of model and general permits can be achieved if application review is coordinated at EPA headquarters.

a. Facilities Covered. Under this rule the group application is submitted for only the facilities specifically listed in the application and not necessarily for an entire industry. The facilities in the group application selected to do sampling must be representative of the group, not necessarily of the industry.

Facilities that are sufficiently similar to those covered in a general permit (issued pursuant to a group application) that commence discharging after the general permit has been issued, must refer to the provisions of that general permit to determine if they are eligible for coverage. Facilities that have already been issued an individual permit for storm water discharges will not be eligible for participation in a group application. Several commenters believed that this restriction is inequitable since they have experienced the administrative burden of submitting a permit application. EPA disagrees. Industries that have already obtained a permit for storm water discharges have developed a storm water management

program, engaged in the collection of quantitative data, and possess familiarity and experience with submitting storm water permit applications. The Agency sees no point to instituting an entirely new permit application process for facilities that have storm water permits issued individually. It makes little sense for these industries to be involved with submitting another permit application before their current permit expires.

As noted above, once a general permit has been issued to a group of dischargers, a new facility may request that they be covered by the general permit. The permitting authority can then examine the request in light of the general permit applicability requirements and determine whether the facility is suitable or not.

b. Scope of Group Applications.

Numerous comments were received on how facilities should be evaluated as members of a group application. Several commenters stated that effluent limitation guideline subcategories are not relevant to pollutants found in storm water, but rather to the facility's everyday activities, and therefore similarity should be based on each facility's discharge or the similarity of pollutants expected to be found in a facility's discharge. Other commenters felt that similarity of operations at facilities should be the criteria. Others, believed that an examination of the facility's impact on storm water quality should be the applied criteria. Other commenters suggested that EPA provide more guidance as to how broadly groups can be defined and that a failure to do so would discourage facilities from going to the trouble and expense of entering into the group application process. Some commenters were concerned that facilities would be rejected as a group because of variations in processes and process wastewater characteristics.

EPA does not agree that effluent limitation guideline subcategories are inappropriate as a method for determining group applications. EPA guideline subcategories are functional classifications, breaking down facilities into groups, for purposes of setting effluent limitations guidelines. The use of EPA subcategories will save time for both applicants and permitting authorities in determining whether a particular group is appropriate for a group application. Furthermore, EPA believes that this method of grouping provides adequate guidance for determining what facilities are grouped together. Establishing groups on the extent to which a facility's discharge

affects storm water quality would not provide applicants with sufficient guidance as to the appropriateness of individual industries for group applications and would not provide information needed to draft appropriate model permit conditions for potentially different types of industries, industrial processes, and material management practices.

However, EPA recognizes that the subcategory designations may not always be available or an effective methodology for grouping applicants. Also, there are situations where processes that are subject to different subcategories are combined. EPA agrees that the group application option should be flexible enough to allow groups to be created where subcategories are too rigid or otherwise inappropriate for developing group applications or where facilities are integrated or overlap into other subcategories. For these reasons, this rulemaking does not limit the submission to EPA subcategories alone, but rather allows groups to be formed where facilities are similar enough to be appropriate for general permit coverage.

In determining whether a group is appropriate for general permit coverage, EPA intends that the group applicant use the factors set forth in 40 CFR 122.26(a)(2)(ii), the current regulations governing general permits, as a guide. If facilities all involve the same or similar types of operations, discharge the same types of wastes, have the same effluent limitation and same or similar monitoring requirements, where applicable, they would probably be appropriate for a group application. To that extent, facilities that attempt to form groups where the constituent makeup of its process wastewater is dissimilar may run the risk of not being accepted for purposes of a group application.

Some commenters expressed the view that categories formed using general permit factors are too broad or that the language is too vague. One commenter expressed the view that the standard is too subjective and that permit writers will be evaluating the similarity of discharge too subjectively, while other commenters felt that the criteria should be broad and flexible. Other commenters stated that the effluent guideline subcategory or general permit coverage factors are not related to storm water discharges, because much of the criteria are based upon what is occurring inside the plant, rather than activities outside of the plant. EPA believes that these criteria are reasonable for defining the scope of a group application. EPA disagrees that

the procedure, which is adequate for the issuance of general permits, is inadequate for the development of a group application. EPA believes that the activities inside a facility will generally correspond to activities outside of the plant that are exposed to storm events, including stack emissions, material storage, and waste products. Furthermore, if facilities are able to demonstrate their storm water discharge has similar characteristics, that is one element in the analysis needed for establishing that the group is appropriate. EPA disagrees that the criteria are too vague. If facilities are concerned that general permit criteria is insufficient guidance, then subcategories under 40 CFR subchapter N should be used. EPA believes that the program will function best if flexibility for creating groups is maintained.

If a NPDES approved State feels that a tighter grouping of applicants is appropriate individual permit applications can be requested from those permit applicants. One commenter indicated that it was not clear whether the group application procedure could be used for all NPDES requirements. EPA would clarify that the group application is designed only to cover storm water discharges from the industrial facilities identified in § 122.26(b)(14).

As noted above, EPA wishes to clarify that facilities with existing individual NPDES permits for storm water are not eligible to participate in the group application process. From an administrative standpoint EPA is not prepared to create an entirely different mechanism for permitting industries which already have such permits.

c. Group Application Requirements. The group application, as proposed, included the following requirements in three separate parts. Part 1A of a group application included: (A) Identification of the participants in the group application by name and location; (B) a narrative description summarizing the industrial activities of participants; (C) a list of significant materials stored outside by participants; and (D) identification of 10 percent of the dischargers participating in the group application for submitting quantitative data. A proposed part 1B of the group application included the following information from each participant in the group application: (A) A site map showing topography (or indicating the outline of drainage areas served by the outfall(s) and related information; (B) an estimate of the area of impervious surfaces (including paved areas and building roofs) and the total area

drained by each outfall and a narrative description of significant materials; (C) a certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested for the presence of non-storm water discharges; (D) existing information regarding significant leaks or spills of toxic or hazardous pollutants at the facility; (E) a narrative description of industrial activities at the facility that are different from or that are in addition to the activities described under part 1A; and (F) a list of all constituents that are addressed in a NPDES permit issued to the facility for any of non-storm water discharge. Part 2 of a group application required quantitative data from 10 percent of the facilities identified.

Some commenters felt that spill histories, drainage maps, material management practices, and information on significant materials stored outside are too burdensome or meaningless for evaluating similarity of discharges among group applicants. Several commenters stated that such requirements where the group may consist of several thousand facilities were impractical and would not assist EPA in developing model permits. Many commenters insisted that the requirements imposed in part 1B would effectively discourage use of the group application procedure. EPA agrees in large part with these comments. After reevaluating the components of part 1B, and the entire rationale for instituting the group application procedure, EPA has decided to excise part 1B from the requirements, and rely on part 1A and part 2 for developing appropriate permit condition. Where appropriate, EPA may require facilities to submit the information, formerly in part 1B, during the term of the permit. In other cases, EPA will establish which facilities must submit individual permit applications where more site specific permits are appropriate.

Under the revised part 1 and part 2, EPA will receive information pertaining to the types of industrial activity engaged in by the group, materials used by the facilities, and representative quantitative data. EPA can use such information to develop management practices that address pollutants in storm water discharges from such facilities. For most facilities, general good housekeeping or management practices will eliminate pollutants in storm water. Such requirements can be further refined by determining the nature of a group's industrial activity and by obtaining information on material used at the facility and representative quantitative data from a

percentage of the facilities. Thus, EPA is confident that model permits and general permits can be developed from the information to be submitted under part 1 and part 2.

One commenter felt that more guidance on what makes a facility representative for sampling as part of a group is needed. In response, the Agency believes the rule as currently drafted provides adequate notice.

Another commenter asked how much sampling needed to be done and how much monitoring will transpire over the life of the permit for members of a group. This will vary from permit to permit and will be determined in permit proceedings. This rulemaking only covers the quantitative data that is to be submitted in the context of the group permit application.

One commenter indicated that because of the amount of diversity in the operations of a particular industry, obtaining a sample that could be considered representative would be extremely difficult. EPA recognizes that obtaining representative quantitative data through the group application process will prove to be difficult; however, EPA has sought to minimize these perceived problems. Under the group application concept, industries must be sufficiently similar to qualify. Industries which have significantly different operations from the rest of the group that affects the quality of their storm water discharge may be required to obtain an individual permit. Use of the nine precipitation zones will enable the data in the permit application to be more easily analyzed and patterns observed on the basis of hydrology and other regional factors. How EPA will evaluate the representativeness of the sample is discussed below.

Several commenters asked why the precipitation zone of group members is relevant to the application. The need to identify precipitation zones arises because the amount of rainfall is likely to have a significant impact on the quality of the receiving water. According to an EPA study (Methodology for Analysis of Detention Basins for Control of Urban Runoff Quality; Office of Water, Nonpoint Source Branch, Sept. 1986) the United States can be divided into nine general precipitation zones. These zones are characterized by differences in precipitation volume, precipitation intensity, precipitation duration, and precipitation intervals. Industrial facilities that seek general permits via the group application option may show significantly different loading rates as a result of these regional precipitation differences. As an example,

precipitation in Seattle, Washington, located in Zone 7, approaches the mean annual storm intensity of .024 inches/hour with a mean annual storm duration of 20 hours for that Zone. In contrast, precipitation in Atlanta, Georgia, located in Zone 3 approaches the mean annual storm intensity of .102 inches/hour and a mean storm duration of 6.2 hours for that Zone. Atlanta, receives on the average four times more precipitation per hour with storms lasting one-third as long. As a result of these differences, if identical facilities within a group application were situated in each of these areas, their storm water discharges would likely exhibit different pollutant characteristics. Accordingly, data should be submitted from facilities in each zone.

One commenter felt that the EPA should abandon or modify its rainfall zone concept, because storm water quality will depend more on what materials are used at the facility than rainfall. EPA disagrees. Because storm water loading rates may differ significantly as a result of regional precipitation differences, it is necessary that for each precipitation zone containing representatives of a group application, the group must provide samples from some of those representatives. In comments to previous rulemakings it was argued that the amount of rainfall will affect the degree of impact a storm water discharge may have on the receiving stream.

One commenter stated that the precipitation zones illustrated in appendix E of the proposed rulemaking do not adequately reflect regional differences in precipitation and that in some cases the zones cut through cities where there are concentrations of industries without differences in their precipitation patterns. The rainfall zone map is a general guide to determining what areas of the country need to be addressed when determining representative rainfall events and quantitative data. When dealing with rainfall on a national scale, it is near impossible to make generalized statements with a great deal of accuracy. In the case of rainfall zones, rainfall patterns may be similar for facilities in close proximity to each other but none the less in different rainfall zones. In response, EPA has created these zones to reflect regional rainfall patterns as accurately as possible. Because of the variable nature of rainfall such circumstances are sure to arise. However, in order to obtain a degree of representativeness EPA is convinced that the use of these rainfall zones as described is appropriate for the

submission of group applications and the quantitative data therein.

The second and third requirements of part 1 of the group application instruct the applicant to describe the industrial activity (processes) and the significant materials used by the group. For the significant materials listed, the applicant is to discuss the materials management practices employed by members of the group. For example, the applicant should identify whether such materials are commonly covered, contained, or enclosed, and whether storm water runoff from materials storage areas is collected in settling ponds prior to discharge or diverted away from such areas to minimize the likelihood of contamination. Also, the approximate percentage of facilities in the group with no practices in place to minimize materials stored outside is to be identified.

EPA considers that the processes and materials used at a particular facility may have a bearing on the quality of the storm water. Thus, if there are different processes and materials used by members of the group, the application must identify those facilities utilizing the different processes and materials, with an explanation as to why these facilities should still be considered similar.

One commenter felt that a facility should be able to describe in its permit application the possibility of individual materials entering receiving waters. EPA supports the applicant adding site specific information which will assist the permit writer making an informed decision about the nature of the facility, the quality of its storm water discharge, and appropriate permit conditions.

The fourth element of part 1 of the group application is a commitment to submit quantitative data from ten percent of the facilities listed. EPA proposed that there must be a minimum of ten and a maximum of one hundred facilities within a group that submit data. Comments reflected some dissatisfaction with this requirement. Some commenters asserted that ten percent was too high a number and would discourage group applications, while one commenter suggested a lesser percentage would be appropriate where the group can certify that facilities are representative. One commenter suggested that EPA have the discretion to allow for a smaller percentage. Several commenters argued that EPA should be satisfied with fewer than ten percent because EPA often relies on data from less than ten percent of the plants in a subcategory when promulgating effluent guidelines and that EPA should rely on data collection goals

with affected groups as was done in the 1985 storm water proposal. Other commenters pointed out that an anomalous situation could arise where the group was small and facilities were scattered throughout the precipitation zones. For example, if a group consisted of 20 members where a minimum of ten facilities had to submit samples, and two or more members were in each precipitation zone; a total of 18 facilities (90% of the group) would have to submit quantitative data. EPA believes that there must be a sufficient number of facilities submitting data for any patterns and trends to be detectable. However, in light of these comments EPA has decided to modify the language in § 122.26(c) to allow 1 discharger in each precipitation zone to submit quantitative data where 10 or fewer of the group members are located in a particular precipitation zone. EPA believes, however, that one hundred facilities would in most cases be sufficient to characterize the nature of the runoff and thus 100 should remain the maximum. If the data are insufficient, EPA has the authority to request more sampling under section 308 of the CWA.

One commenter suggested that the ten facility cutoff was unreasonable, and that instead of cutting off the group at ten, allow a smaller number in the group and allow the facilities to sample ten percent of their outfalls instead. EPA agrees, in part, and will allow groups of between four and ten to submit a group application. However, the ten percent rule would not be effective in such cases. Therefore, at least half the facilities in a group of four to ten will be required to provide quantitative data from at least one outfall, with each precipitation zone represented by at least one facility.

For any group application, in addition to selecting a sufficient number of facilities from each precipitation zone, facilities selected to do the sampling should be representative of the group as a whole in terms of those characteristics identifying the group which were described in the narrative, i.e., number and range of facilities, types of processes used, and any other relevant factors. If there is some variation in the processes used by the group (40 percent of the group of food processors are canners and 60 percent are canners and freezers, for example), the different processes are to be represented. Also, samples are to be provided from facilities utilizing the materials management practices identified, including those facilities which use no materials management practices. The

representation of these different factors, to the extent feasible, is to be roughly equivalent to their proportion in the group.

EPA wishes to emphasize that the provision that ten percent of the facilities need to submit quantitative data only applies to the permit application process. The general or individual permit itself may require quantitative data from each facility.

Submittal of Part 2 of the Group Application. As with part 1, part 2 of the Group Application would be submitted to the Office of Water Enforcement and Permits, in Washington, DC. If the information is incomplete, or simply is found to be an inadequate basis for establishing model permit limits, EPA has the authority under section 308 of the Clean Water Act to require that more information be submitted, which may include sampling from facilities that were part of the group application but did not provide data with the initial submission. If the group application is used by a Region or NPDES State to issue a general permit, the general permit should specify procedures for additional coverage under the permit.

If a part 2 is unacceptable or insufficient, EPA has the option to request additional information or to require that the facilities that participated in the group application submit complete individual applications (e.g. facilities that have submitted Form 1 with the group application may be required to submit Form 2F, or facilities which have submitted complete Form 1 and Form 2F information in the group application generally would not have to submit additional information).

Once the group applications are reviewed and accepted, EPA will use the information to establish draft permit terms and conditions for models for individual and general permits. NPDES approved States and EPA regional offices will continue to be the permit-issuing authority for storm water discharges. The NPDES approved States accepting the group application approach and the EPA Regions may then take the model permits and adapt them for their particular area, making adjustments for local water quality standards and other localized characteristics, and making determinations as to the need for an individual storm water permit where general permit coverage is felt to be inappropriate. Permits would be proposed by the Region or NPDES approved State in accordance with current regulations for public comment before becoming final. In NPDES States without general permit authority, or

where an individual permit is deemed appropriate, the model permit can serve as the basis for issuing an individual permit.

The group application is an NPDES permit application just like any other and, as such, would be handled through normal permitting procedures, subject to the regulatory provisions applicable to permit issuance. Incomplete or otherwise inadequate submissions would be handled in the same manner as any other inadequate permit application. The permit issuing authority would retain the right to require submission of Form 1, Form 2C and Form 2F from any individual discharger it designates.

Some commenters offered other procedures for developing a group application procedure; however, these were frequently entirely different approaches or so novel that a reproposal would be required. One commenter suggested that those industries that are identified as being likely to pollute should be required to submit quantitative data. Numerous commenters contended that a generic approach for meeting the required information requirements for group applications would allow EPA to develop adequate general permits. EPA does not view these approaches as appropriate.

5. Group Application: Applicability in NPDES States

Many commenters expressed concern about how the group application procedure will work within the framework of an NPDES approved State. The relationship between EPA and the States that are authorized to administer the NPDES program, including implementation of the storm water program, is a complicated aspect of this rulemaking. Approved States (there are 38 States and one territory so approved) must have requirements that are at least as stringent as the Federal program; they may be more stringent if they choose. Authority to issue general permits is optional with NPDES States.

EPA has determined that ten percent of the facilities must provide quantitative data in the permit application as noted above. Furthermore, these applications are submitted to EPA headquarters. Consequently States, whether NPDES approved or not, are not in a position to reject or modify this requirement. Such States may determine the amount of sampling to be done pursuant to permit conditions. If they choose to issue general permits they may include such authority in their NPDES program and,

upon approval of the program by EPA, may then issue general permits. Within the context of the NPDES provisions of the CWA, if States do not have general permitting authority, then general permits are not available in those States.

In response to one comment, EPA does not have authority to issue general or individual permits to facilities in NPDES approved states. Today's rule provides a means for affected industries to be covered by general permits developed via the group application procedure as well as from general permits developed independently of the group application process. Accordingly, today's rule anticipates that most NPDES States will seek general permit issuance authority to implement the storm water program in the most efficient and economical way. Without general permit issuance authority NPDES States will be required to issue individual permits covering storm water discharges to potentially thousands of industrial facilities.

One commenter recommended that States with approved NPDES programs should be involved in determining what industries are representative for submitting quantitative data. EPA recognizes that States will have an interest in this determination and may possess insight as to the appropriateness of using some facilities. However, EPA may be managing hundreds of group applications and approving or disapproving them as expeditiously as possible. EPA believes that involving the States in this already administratively complex and time consuming undertaking would be counterproductive. In any event, NPDES approved States are not bound by the determinations of EPA as to the appropriateness of groups or the issuance of permits based on model permits or individual permits. However, States will be encouraged to use model permits that are developed by EPA. EPA will endeavor to design general and model permits that are effective while also adaptable to the concerns of different States. Again, States are able to develop more stringent standards where they deem it to be appropriate. There are currently seventeen States that have authority to issue general permits: Arkansas, Colorado, Illinois, Kentucky, Minnesota, Missouri, Montana, New Jersey, North Dakota, Oregon, Rhode Island, Utah, Washington, West Virginia and Wisconsin. As suggested in the comments, EPA is encouraging more States to develop general permit issuin-

authority in order to facilitate the permitting process.

One commenter advised that the rules should state that a NPDES approved State may accept a group application or require additional information. EPA has decided not to explicitly state this in the rule. However, this comment does raise some points that need to be addressed. Because the group application option is a modification of existing NPDES permit application requirements, the State is free to adopt this option, but is not required to. If the State chooses to adopt the group application and it does not have general permit authority, the group application can be used to issue individual permits. If an approved NPDES State chooses to not issue permits based on the group application, facilities that discharge storm water associated with industrial activity that are located in that State must submit individual applications to the State permitting authority. Before submitting a group application, facilities should ascertain from the State permitting authority whether that State intends to issue permits based upon a group application approved by EPA for the purpose of developing general permits. For facilities that discharge storm water associated with industrial activity which are named in a group application, the Director may require an individual facility to submit an individual application where he or she determines that general permit coverage would be inappropriate for the particular facility.

One commenter stressed that EPA should streamline the procedure for States desiring to obtain general permit coverage. EPA has, over the last year, streamlined this procedure and encourages States to take advantage of this procedure. EPA recommends that States consider obtaining general permit authority as a means to efficiently issue permits for storm water discharges. These States should contact the Office of Water Enforcement and Permits at EPA Headquarters as soon as possible.

6. Group Application: Procedural Concerns

One commenter claimed that the proposed group application process and procedures violated federal law. This commenter claimed that EPA was abrogating its responsibility by allowing a trade association to design a data collection plan in lieu of completing an NPDES application form designed by EPA, thus violating the Federal Advisory Committee Act. The commenter stated that EPA would be improperly influenced by special interests if trade associations were able to design their own storm water data

gathering plans. The commenter further asserted that any decisions by EPA on the content of specific group applications would be rulemakings and thus subject to the provisions of the Administrative Procedure Act.

EPA disagrees with the comment that the group application violates the Federal Advisory Committee Act (FACA). FACA governs only those groups that are established or "utilized" by an agency for the purpose of obtaining "advice" or "recommendations." The group application option does not solicit or involve any "advice" or "recommendations." It simply allows submission of data by certain members of a group in accordance with specific regulatory criteria for determining which facilities are "representative" of a group. As such, the group application is merely a submission in accordance and in compliance with specific regulatory requirements and does not contain discretionary uncircumscribed "advice" or "recommendations" as to which facilities are representative of a group.

Thus, the determination of which facilities should submit testing data in accordance with regulatory criteria is little different from many other regulatory requirements where an applicant must submit information in accordance with certain criteria. For example, under 40 CFR 122.21 all outfalls must be tested except where two or more have "substantially identical" effluents. Similarly, quantitative data for certain pollutants are to be provided where the applicant knows or "has reason to believe" such pollutants are discharged. Both of these provisions allow the applicant to exercise discretion in making certain judgments but such action is circumscribed by regulatory standards. EPA further has authority to require these facilities to submit individual applications. In none of these instances are "recommendations" or "advice" involved. EPA also notes that it is questionable whether, in providing for group applications, it is "soliciting" advice or recommendations from groups or that such groups are being "utilized" by EPA as a "preferred source" of advice. See 48 FR 19324 (April 28, 1983). Furthermore, this data collection effort may be supplemented by EPA if, after review of the data, EPA determines additional data is necessary for permit issuance. Other information gathering may act as a check on the group applications received.

EPA also does not agree with this commenter's claim that the group application scheme represents an

impermissible delegation of the Administrator's function in violation of the CWA regarding data gathering. The Administrator has the broadest discretion in determining what information is needed for permit development as well as the manner in which such information will be collected. The CWA does not require every discharger required to obtain a permit to file an application. Nor does the CWA require that the Administrator obtain data on which a permit is to be based through a formal application process (see 40 CFR 122.21). For years "applications" have not been required from dischargers covered by general permits. EPA currently obtains much information beyond that provided in applications pursuant to section 308 of the CWA. This is especially true with respect to general permit and effluent limitations guidelines development. The group application option is simply another means of data gathering. The Administrator may always collect more data should he determine it necessary upon review of a groups' data submission. And, he may obtain such additional data by whatever means permissible under the Statute that he deems appropriate. Thus, it can hardly be said that by this initial data gathering effort the Administrator has delegated his data gathering responsibilities. In addition, since groups are required to select "representative" facilities, etc., in accordance with specific regulatory requirements established by the Administrator and because EPA will scrutinize part 1 of the group applications and either accept or reject the group as appropriate for a group application, no impermissible delegation has occurred. EPA will make an independent determination of the acceptability of a group application in view of the information required to be submitted by the group applicant, other information available to EPA (such as information on industrial subcategories obtained in developing effluent limitations guidelines as well as individual storm water applications received as a result of today's rule) and any further information EPA may request to supplement part 1 pursuant to section 308 of the CWA. Moreover, any concerns that a general permit may be based upon biased data can be dealt with in the public permit issuance process.

Finally, EPA also does not agree that the group application option violates the Administrative Procedures Act. Again, the group application scheme is simply a data gathering device. EPA could very well have determined to gather data

informally via specific requests pursuant to section 308 of the CWA. In fact, general permit and effluent limitations guideline development proceed along these lines. It would make little sense if the latter informal data gathering process were somehow illegal simply because it is set forth in a rule that allows applicants some relief upon certain showings. In this respect, several of EPA's existing regulations similarly allow an applicant to be relieved from certain data submission requirements upon appropriate demonstrations. For example, testing for certain pollutants and or certain outfalls may be waived under certain circumstances. Most importantly, the operative action of concern that impacts on the public is individual or general permit issuance based upon data obtained. As previously stated, ample opportunity for public participation is provided in the permit issuance proceeding.

7. Permit Applicability and Applications for Oil and Gas and Mining Operations

Oil, gas and mining facilities are among those industrial sites that are likely to discharge storm water runoff that is contaminated by process wastes, toxic pollutants, hazardous substances, or oil and grease. Such contamination can include disturbed soils and process wastes containing heavy metals or suspended or dissolved solids, salts, surfactants, or solvents used or produced in oil and gas operations. Because they have the potential for serious water quality impacts, Congress recognized, throughout the development of the storm water provisions of the Water Quality Act of 1987, the need to control storm water discharges from oil, gas, and mining operations, as well as those associated with other industrial activities.

However, Congress also recognized that there are numerous situations in the mining and oil and gas industries where storm water is channeled around plants and operations through a series of ditches and other structural devices in order to prevent pollution of the storm water by harmful contaminants. From the standpoint of resource drain on both EPA as the permitting agency and potential permit applicants, the conclusion was that operators that use good management practices and make expenditures to prevent contamination must not be burdened with the requirement to obtain a permit. Hence, section 402(1)(2) creates a statutory exemption from storm water permitting requirements for uncontaminated runoff from these facilities.

To implement section 402(1)(2), EPA intends to require permits for

contaminated storm water discharges from oil, gas and mining operations. Storm water discharges that are not contaminated by contact with any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations will not be required to obtain a storm water discharge permit.

The regulated discharge associated with industrial activity is the discharge from any conveyance used for collecting and conveying storm water located at an industrial plant or directly related to manufacturing, processing or raw materials storage areas at an industrial plant. Industrial plants include facilities classified as Standard Industrial Classifications (SIC) 10 through 14 (the mining industry), including oil and gas exploration, production, processing, and treatment operations, as well as transmission facilities. See 40 CFR 122.26(b)(14)(iii). This also includes plant areas that are no longer used for such activities, as well as areas that are currently being used for industrial processes.

a. Oil and Gas Operations. In determining whether storm water discharges from oil and gas facilities are "contaminated", the legislative history reflects that the EPA should consider whether oil, grease, or hazardous materials are present in storm water runoff from the sites described above in excess of reportable quantities (RQs) under section 311 of the Clean Water Act or section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). [Vol. 132 Cong. Rec. H10574 (daily ed. October 15, 1986) Conference Report].

Many of the comments received by EPA regarding this exemption focused on the concern that EPA's test for requiring a permit is and would subject an unnecessarily large number of oil and gas facilities to permit application requirements. Specific comments made in support of this concern are addressed below.

A primary issue raised by commenters centered on how to determine when a storm water discharge from an oil or gas facility is "contaminated", and therefore subject to the permitting program under section 402 of the CWA. Many of the comments received from industry representatives objected to the Agency's intent as expressed in the proposal to use past discharges as a trigger for submitting permit applications.

The proposed rule provided that the notification requirements for releases in excess of RQs established under the CWA and CERCLA would serve as a

basis for triggering the submittal of permit applications for storm water discharges from oil and gas facilities. As described in the proposal, oil and gas operations that have been required to notify authorities of the release of either oil or a hazardous substance via a storm water route would be required to submit a permit application. In other words, any facility required to provide notification of the release of an RQ of oil or a hazardous substance in storm water in the past would be required to apply for a storm water permit under the current rule. In addition, any facility required to provide notification regarding a release occurring from the effective date of today's rule forward would be required to apply for a storm water permit.

Commenters maintained that the use of historical discharges to require permit applications is inconsistent with the language and intent of section 402(1)(2) of the CWA, and relevant legislative history, both of which focus on present contamination. Requiring storm water permits based solely on the occurrence of past contaminated discharges, even where no present contamination is evident, would go beyond the statutory requirement that EPA not issue a permit absent a finding present contamination. Commenters also noted that the proposal did not take into account the fact that past problems leading to such releases may have been corrected, and that requiring an NPDES permit may no longer be necessary. The result of such a requirement, commenters maintained, would be an excessive number of unnecessary permit applications being submitted, at significant cost and minimal benefit to both regulated facilities and regulating authorities.

Commenters also indicated that using the release of reportable quantities of oil, grease or hazardous substances as a permit trigger would identify discharges of an isolated nature, rather than the continuous discharges, which should be the focus of the NPDES permit program under section 402. Such an approach, commenters maintained, is inconsistent with existing regulations under section 311 of the CWA, and would result in permit applications from facilities that are more appropriately regulated under section 311.

Despite these criticisms, many commenters recognized that the Agency is left with the task of determining when discharges from oil and gas facilities are contaminated, in order to regulate them under section 402(1)(2). It was suggested by numerous commenters that the EPA adopt an approach similar to that used under section 311 of the CWA for Spill Prevention Control and Countermeasure

(SPCC) Plans. Under SPCC, facilities that are likely to discharge oil into waters of the United States are required to maintain a SPCC plan. In the event the facility has a spill of 1,000 gallons or 2 or more reportable quantities of oil in a 12 month period, the facility is required to submit its SPCC plan to the Agency. The triggering events proposed by the commenters for storm water permits for oil and gas operations are six reportable sheens or discharges of hazardous substances (other than oil) in excess of section 311 or section 102 reportable quantities via a storm water point source route over any thirty-six month period. It was suggested that if this threshold is reached, an operator would then file a permit application (or join a group application) based upon the presumption that its current storm water discharges are contaminated.

In response to these comments, the Agency believes that past releases that are reportable quantities can be a valid indicator of the potential for present contamination of discharges. The legislative history as cited above supports this conclusion. EPA would note that the existence of a RQ release would serve only as a triggering mechanism for a permit application. Under the proposed rule, evidence of past contamination would merely require submission of a permit application and would not be used as conclusive evidence of current contamination. The determination as to whether a permit would be actually required due to current contaminated discharge would be made by the permitting authority after reviewing the permit application. The fact of a past RQ release does not necessarily imply a conclusive finding of contamination, only that sufficient potential for contamination exists to warrant a permit application or the collection of other further information. Today's rule does not change the proposed approach in this respect. Thus, EPA does not believe that today's rule exceeds the authority of section 402(1)(2).

EPA believes that there is no legal impediment to using past RQ discharges as a trigger for requiring a storm water permit application. EPA notes that, as mentioned above, even those commenters who objected to the proposed test on legal authority grounds merely offered an alternate test that requires more releases to have occurred within a shorter period of time before a permit application is required.

Therefore, the only disagreement that remains is over what constitutes a reasonable test that will identify facilities with the potential for storm

water contamination. EPA notes that neither the statute nor the legislative history provides any guidance on this question. Furthermore, EPA disagrees with the commenters who suggested that 6 releases in the past 3 years or 2 releases in the past year are necessarily more valid measures of the potential for current contamination than EPA's proposed test. There is no statistical or other basis for preferring one test to the other. However, EPA does agree with those commenters that suggest that a single release in the distant past may not accurately reflect current conditions and the current potential for contamination.

EPA has therefore amended today's rule to provide that only oil and gas facilities which have had a release of an RQ of oil or hazardous substances in storm water in the past three years will be required to submit a permit application. EPA believes that limiting the permit trigger to events of the past three years will address commenters' concerns regarding the use of "stale history" in determining whether an application is required. EPA notes that the three year cutoff is consistent with the requirement for industrial facilities to report significant leaks or spills at the facility in their storm water permit applications. See 40 CFR 122.26(c)(1)(i)(D).

Commenters asserted that EPA and the States must have some reasonable basis for concluding that a storm water discharge is contaminated before requiring permit applications or permits. Commenters believed that § 122.26(c)(1)(iii)(B) as proposed implied that the Agency's authority in this respect is unrestricted. In response, EPA may collect such data by whatever appropriate means the statute allows, in order to obtain information that a permit is required. Usually, the most practical tool for doing so is the permit application itself. However, if necessary to supplement the information made available to the Agency, EPA has broad authority to obtain information necessary to determine whether or not a permit is required, under section 308 of the Clean Water Act. Given the plain language of the CWA and the Congressional intent as manifested in the legislative history, the Agency is convinced that the approach described above is appropriate. Yet, as further discussed below, EPA has also deleted as redundant § 122.26(c)(1)(iii)(B).

Regarding the types of facilities included in the storm water regulation, a number of commenters suggested that the Agency has misconstrued the meaning of facilities "associated with

industrial activity", and has proposed an overly broad definition of such facilities in the oil and gas industry. Specifically, commenters suggested that only the manufacturing sector of the oil and gas industry should be subject to storm water permit application requirements, and that exploration and production activities, gas stations, terminals, and bulk plants should all be exempted from storm water permitting requirements. Commenters maintain that this broad interpretation would subject many oil and gas facilities to the storm water permit requirements, when these were not intended by Congress to be so regulated. As a second point related to this issue, some commenters felt that transmission facilities were not intended to be regulated under the storm water provisions, and should be exempted from permit requirements. This would be consistent, it was argued, with legislative history which concluded that transmission facilities do not significantly contribute to the contamination of water.

The Agency disagrees that these facilities do not fall under the storm water permitting requirements as envisioned by Congress. SIC 13, which is relied upon by EPA to identify these oil and gas operations, describes oil and gas extraction industries as including facilities related to crude oil and natural gas, natural gas liquids, drilling oil and gas wells, oil and gas exploration and field services. Moreover, legislative history as it applies to industrial activities, and thus to oil and gas (mining) operations, expressly includes exploration, production, processing, transmission, and treatment operations within the purview of storm water permitting requirements and exemptions. EPA's intent is for storm water permit requirements (and the exemption at hand) to apply to the activities listed above (exploration, production, processing, treatment, and transmission) as they relate to the categories listed in SIC 13.

Commenters requested clarification from the Agency that storm water discharges from oil and gas facilities require a permit or the filing of a permit application only when they are contaminated at the point of discharge into waters of the United States. Commenters noted that large amounts of potentially contaminated stormwater may not enter waters of the United States, or may enter at a point once the discharge is no longer "contaminated". In these cases, it should be clear that no permit or permit application is required.

EPA agrees that oil and gas exploration, production, processing, or

treatment operations or transmission facilities must only obtain a storm water permit when a discharge to waters of the U.S. (including those discharges through municipal separate storm sewers) is contaminated. A permit application will be required when any discharge in the past three years or henceforth meets the test discussed above.

Under the proposed rule, the Agency stated at § 122.26(c)(1)(iii)(B) that the Director may require on a case-by-case basis the operator of an existing or new storm water discharge from an oil or gas exploration, production, processing, or treatment operation, or transmission facility to submit an individual permit application. The Agency has removed this section since CWA section 402(1)(2), as codified in 122.26(c)(1)(iii)(A), adequately addresses every situation where a permit should be required for these facilities.

b. Use of Reportable Quantities to Determine if a Storm Water Discharge from an Oil or Gas Operation is Contaminated. Section 311(b)(5) of the CWA requires reporting of certain discharges of oil or a hazardous substance into waters of the United States (see 44 FR 50766 (August 29, 1979)). Section 304(b)(4) of the Act requires that notification levels for oil and hazardous substances be set at quantities which may be harmful to the public health or welfare of the United States, including but not limited to fish, shellfish, wildlife, and public or private property, shorelines and beaches. Facilities which discharge oil or a hazardous substance in quantities equal to or in excess of an RQ, with certain exceptions, are required to notify the National Response Center (NRC).

Section 102 of CERCLA extended the reporting requirement for releases equal to or exceeding an RQ of a hazardous substance by adding chemicals to the list of hazardous substances, and by extending the reporting requirement (with certain exceptions) to any releases to the environment, not just those to waters of the United States.

Pursuant to section 311 of the CWA, EPA determined reportable quantities for discharges by correlating aquatic animal toxicity ranges with 5 reporting quantities, i.e., 1-, 10-, 100-, 1000-, and 5000- pounds per 24 hour period levels. Reportable quantity adjustments made under CERCLA rely on a different methodology. The strategy for adjusting reportable quantities begins with an evaluation of the intrinsic physical, chemical, and toxicological properties of each designated hazardous substance. The intrinsic properties examined,

called "primary criteria," are aquatic toxicity, mammalian toxicity (oral, dermal, and inhalation), ignitability, reactivity, and chronic toxicity. In addition, substances that were identified as potential carcinogens have been evaluated for their relative activity as potential carcinogens. Each intrinsic property is ranked on a five-tier scale, associating a specific range of values on each scale with a particular reportable quantity value. After the primary criteria reportable quantities are assigned, the hazardous substances are further evaluated for their susceptibility to certain extrinsic degradation processes (secondary criteria). Secondary criteria consider whether a substance degrades relatively rapidly to a less harmful compound, and can be used to raise the primary criteria reportable quantity one level.

Also pursuant to section 311, EPA has developed a reportable quantity for oil and associated reporting requirements at 40 CFR part 110. These requirements, known as the oil sheen regulation, define the RQ for oil to be the amount of oil that violates applicable water quality standards or causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or causes a sludge or emulsion to be deposited.

Reportable quantities developed under the CWA and CERCLA were not developed as effluent guideline limitations which establish allowable limits for pollutant discharges to surface waters. Rather, a major purpose of the notification requirements is to alert government officials to releases of hazardous substances that may require rapid response to protect public health, welfare, and the environment. Notification based on reportable quantities serves as a trigger for informing the government of a release so that the need for response can be evaluated and any necessary response undertaken in a timely fashion. The reportable quantities do not themselves represent any determination that releases of a particular quantity are actually harmful to public health, welfare, or the environment.

EPA requested comment on the use of RQs for determining contamination in discharges from oil and gas facilities. As noted above numerous commenters supported the concept of using reportable quantities under certain circumstances. Comments on the measurement of oil sheens for the purpose of triggering a permit application were divided. Some commented that it is much too stringent because the amount of oil creating a

sheen may be a relatively small amount. Others viewed the test as a quick, easy, practical method that has been effective in the past.

In relying on the reporting requirements associated with releases in excess of RQs for oil or hazardous substances to trigger the submittal of permit applications for oil and gas operations, the Agency believes that the use of the reporting requirements for oil will be particularly useful. The Agency believes that the release of oil to a storm water discharge in amounts that cause an oil sheen is a good indicator of the potential for water quality impacts from storm water releases from oil and gas operations. In addition, given the extremely high number of such operations (the Agency estimates that there are over 750,000 oil wells alone in the United States), relying on the oil sheen test to determine if storm water discharges from such sites are "contaminated" will be a far easier test for operators to determine whether to file a storm water permit application than a test based on sampling. The detection of a sheen does not require sophisticated instrumentation since a sheen is easily perceived by visual observation. EPA agrees with those comments calling the oil sheen test an appropriate measure for triggering a storm water permit application. In adopting this approach, EPA recognizes, as pointed out by many commenters that an oil sheen can be created with a relatively small amount of oil.

One commenter suggested that contamination must be caused by contact with on-site material before being subject to permit application requirements. The Agency agrees with this comment. Those facilities that have had releases in excess of reportable quantities will generally have contamination from contact with on-site material as described in the CWA. Thus, use of the RQ test is an appropriate trigger. As discussed above, determination of whether contamination is present to warrant issuance of a permit will be made in the context of the permit proceeding.

One commenter believed that the use of RQs is inappropriate because "the statute intended to exempt only oil and gas runoff that is not contaminated at all." The Agency wishes to clarify that reportable quantities are being used to determine what facilities need to file permit applications and to describe what is meant by the term "contaminated." The Director may require a permit for any discharges of storm water runoff contaminated by contact with any overburden, raw

material, intermediate product, finished product, by product or waste product at the site of such operations. The use of RQs is solely a mechanism for identifying the facilities most likely to need a storm water permit consistent with the legislative history of section 402(l)(2).

c. Mining Operations. The December 7, 1988 proposal would establish background levels as the standard used to define when a storm water discharge from a mining operation is contaminated. When a storm water discharge from a mining site was found to contain pollutants at levels that exceed background levels, the owner or operator of the site was required to submit a permit application for that operation. The proposal was founded upon language in the legislative history stating that the determination of whether storm water is contaminated by contact with overburden, raw material, intermediate product, finished product, byproduct, or waste products "shall take into consideration whether these materials are present in such stormwater runoff . . . above natural background levels". [Vol. 132 Cong. Rec. H10574 (daily ed. Oct. 15, 1986) Conference Report].

Comments received on this component of the rule suggested that background levels of pollutants would be very difficult to calculate due to the complex topography frequently encountered in alpine mining regions. For example, if a mine is located in a mountain valley surrounded on all sides by hills, the site will have innumerable slopes feeding flow towards it. Under such circumstances, determining how the background level is set would prove impractical. Commenters indicated that it is very difficult to measure or determine background levels at sites where mining has occurred for prolonged periods. In many instances, data on original background levels may not be available due to long-term site activity. As a result, any background level established will vary based on the type and level of previous activity. In addition, mining sites typically have background levels that are naturally distinct from the surrounding areas. This is due to the geologic characteristics that makes them valuable as mining sites to begin with. This also makes it difficult to establish accurate background levels.

Because of these concerns EPA has decided to drop the use of background levels as a measure for determining whether a permit application is required. Accordingly, a permit application will be required when discharges of storm

water runoff from mining operations come into contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site. Similar to the RQ test for oil and gas operations, EPA intends to use the "contact" test solely as a permit application trigger. The determination of whether a mining operation's runoff is contaminated will be made in the context of the permit issuance proceedings.

If the owner or operator determines that no storm water runoff comes into contact with overburden, raw material, intermediate product, finished product, byproduct, or waste products, then there is no obligation to file a permit application. This framework is consistent with the statutory provisions of section 402(1)(2) and is intended to encourage each mining site to adopt the best possible management controls to prevent such contact.

Several commenters stated that EPA's use of total pollutant loadings for determining permit applicability is not consistent with the general framework of the NPDES program. Their concern is that such evaluation criteria depart from how the NPDES program has been administered in the past, based on concentration limits. In addition, commenters requested that EPA clarify that information on mass loading will be used for determining the need for a permit only. Since the analysis of natural background levels as a basis for a permit application has been dropped from this rulemaking, these issues are moot.

Commenters noted that the proposed rule did not specify what impact this rulemaking has on the storm water exemptions in 40 CFR 440.131. The commenters recommended not changing any of these provisions. Some commenters indicated that mining facilities that have NPDES permits should not be subject to additional permitting under the storm water rule. EPA does not intend that today's rule have any effect on the conditional exemptions in 40 CFR 440.131. Where a facility has an overflow or excess discharge of process-related effluent due to stormwater runoff, the conditional exemptions in 40 CFR 440.131 remain available.

Several commenters note that the term overburden, as used in the context of the proposed storm water rule, is not defined and recommended that this term should be defined to delineate the scope of the regulation. EPA agrees that the term overburden should be defined to help properly define the scope the storm water rule. In today's rule, the term

overburden has been clarified to mean any material of any nature overlying a mineral deposit that is removed to gain access to that deposit, excluding topsoil or similar naturally-occurring surface materials that are not disturbed by mining operations. This definition is patterned after the overburden definition in SMCRA, and is designed to exclude undisturbed lands from permit coverage as industrial activity. However, the definition provided in this regulation may be revised at a later date, to achieve consistency with the promulgation of RCRA Subtitle D mining waste regulations in the future.

Numerous commenters raised issues pertaining to the inclusion of inactive mining areas as subject to the stormwater rule. Some commenters indicated that including inactive mine operations in the rule would create an unreasonable hardship on the industry. EPA has included inactive mining areas in today's rule because some mining sites represent a significant source of contaminated stormwater runoff. EPA has clarified that inactive mining sites are those that are no longer being actively mined, but which have an identifiable owner/operator. The rule also clarifies that active and inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, nor sites where minimal activities required for the sole purpose of maintaining the mining claim are undertaken. The Agency would clarify that claims on land where there has been past extraction, beneficiation, or processing of mining materials, but there is currently no active mining are considered inactive sites. However, in such cases the exclusion discussed above for uncontaminated discharges will still apply.

EPA's definition of active and inactive mining operations also excludes those areas which have been reclaimed under SMCRA or, for non-coal mining operations, under similar applicable State or Federal laws. EPA believes that, as a general matter, areas which have undergone reclamation pursuant to such laws have concluded all industrial activity in such a way as to minimize contact with overburden, mine products, etc. EPA and NPDES States, of course, retain the authority to designate particular reclaimed areas for permit coverage under section 402(p)(2)(E).

The proposed rule had included an exemption for areas which have been reclaimed under SMCRA, although the language of the proposed rule

inadvertently identified the wrong universe of coal mining areas. The final rule language has been revised to clarify that areas which have been reclaimed under SMCRA (and thus are no longer subject to 40 CFR part 434 subpart E) are not subject to today's rule. Today's rule thus is consistent with the coal mining effluent guideline in its treatment of areas reclaimed under SMCRA.

In response to comments, EPA has also expanded this concept to exclude from coverage as industrial activity non-coal mines which are released from similar State or Federal reclamation requirements on or after the effective date of this rule. EPA believes it is appropriate, however, to require permit coverage for contaminated runoff from inactive non-coal mines which may have been subject to reclamation regulations, but which have been released from those requirements prior to today's rule. EPA does not have sufficient evidence to suggest that each State's previous reclamation rules and/or Federal requirements, if applicable, were necessarily effective in controlling future storm water contamination.

8. Application Requirements for Construction Activities

As discussed above, EPA has included storm water discharges from activities involving construction operations that result in the disturbance of five acres total land in the regulatory definition of storm water discharges associated with industrial activity.

This is a departure from the proposed rule which required permit applications for discharges from activities involving construction operations that result in the disturbance of less than one acre total land area and (which are not part of a larger common plan of development or sale; or operations that are for single family residential projects, including duplexes, triplexes, or quadruplexes, that result in the disturbance of less than five acre total land areas and which are not part of a larger common plan of development or sale). The reasons for this change are noted below.

Many commenters representing municipalities, States, and industry requested that clearing, grading, and excavation activities not be included in the definition of storm water discharges associated with industrial activity. It was suggested that EPA delay including construction activities until after the studies mandated in section 402(p)(5) of the CWA are completed. Other commenters felt that NPDES permits are not appropriate for construction discharges due to their short term, intermediate and seasonal nature. Another commenter felt that only the

construction activities on the sites of the industrial facilities identified in the other subsections of the definition of "associated with industrial activity" should be included.

EPA believes that storm water permits are appropriate for the construction industry for several reasons. Construction activity at a high level of intensity is comparable to other activity that is traditionally viewed as industrial, such as natural resource extraction. Construction that disturbs large tracts of land will involve the use of heavy equipment such as bulldozers, cranes, and dump trucks. Construction activity frequently employs dynamite and/or other equipment to eliminate trees, bedrock, rockwork, and to fill or level land. Such activities also engage in the installation of haul roads, drainage systems, and holding ponds that are typical of the industrial activity identified in § 122.26(b)(14)(i-x). EPA cannot reasonably place such activity in the same category as light commercial or retail business.

Further, the runoff generated while construction activities are occurring has potential for serious water quality impacts and reflects an activity that is industrial in nature. Where construction activities are intensive, the localized impacts of water quality may be severe because of high unit loads of pollutants, primarily sediments. Construction sites can also generate other pollutants such as phosphorus, nitrogen and nutrients from fertilizer, pesticides, petroleum products, construction chemicals and solid wastes. These materials can be toxic to aquatic organisms and degrade water for drinking and water-contact recreation. Sediment runoff rates from construction sites are typically 10 to 20 times that of agricultural lands, with runoff rates as high as 100 times that of agricultural lands, and 1,000 to 2,000 times that of forest lands. Even small construction sites may have a significant negative impact on water quality in localized areas. Over a short period of time, construction sites can contribute more sediment to streams than was previously deposited over several decades.

EPA is convinced that because of the impacts of construction discharges that are directly to waters of the United States, such discharges should be addressed by permits issued by Federal or NPDES State permitting authorities. It is evident from numerous studies and reports submitted under section 319 of the CWA that discharges from construction sites continue to be a major source of water quality problems and water quality standard violations.

Accordingly EPA is compelled to address these source under these regulations and thereby regulate these sources under a nationally consistent program with an appropriate level of enforcement and oversight.

Techniques to prevent or control pollutants in storm water discharges from construction are well developed and understood. A primary control technique is good site planning. A combination of nonstructural and structural best management practices are typically used on construction sites. Relatively inexpensive nonstructural vegetative controls, such as seeding and mulching, are effective control techniques. In some cases, more expensive structural controls may be necessary, such as detention basins or diversions. The most efficient controls result when a comprehensive storm water management system is in place. Another reason that EPA has decided to address this class of discharges is that it is part of the Agency's recent emphasis on pollution prevention. Studies such as NURP indicate that it is much more cost effective to develop measures to prevent or reduce pollutants in storm water during new development than it is to correct these problems later on. Many of these prevention and control practices, which can take the form of grading patterns as well as other controls, generally remain in place after the construction activities are completed.

a. Permit Application Requirements. In today's rulemaking, EPA has set forth distinct permit application requirements for these construction activities, at § 122.26(c)(1)(ii), to be used where general permits to be developed and promulgated by EPA are inapplicable. Such facilities will be required to provide a map indicating the site's location and the name of the receiving water and a narrative description of:

- The nature of the construction activity;
- The total area of the site and the area of the site that is expected to undergo excavation during the life of the permit;
- Proposed measures, including best management practices, to control pollutants in storm water discharges during construction, including a description of applicable Federal requirements and State or local erosion and sediment control requirements;
- Proposed measures to control pollutants in storm water discharges that will occur after construction operations have been completed, including a description of applicable State or local requirements, and
- An estimate of the runoff coefficient (fraction of total rainfall that will appear

as runoff) of the site and the increase in impervious area after the construction addressed in the permit application is completed, a description of the nature of fill material and existing data describing the soil or the quality of the discharge.

Permit application requirements for construction activities do not include the submission of quantitative data. EPA believes that the changing nature of construction activities at a site to be covered by the permit application requirements generally would not be adequately described by quantitative data. The comments received by EPA support this determination. One State commented that a program they instituted has been based on quantitative data for the past 10 years and has proven to be very awkward, even unworkable.

Twenty commenters responded to the issue of appropriate construction site application deadlines including: Three towns (<100,000 population); one medium municipality; one large municipality; one agency associated with a large municipality; three agencies associated counties; three agencies associated with States; two industries; five industrial associations; and one private organization representing industry. The commenters primarily focused on actual deadlines and permitting authority response time.

Applicants for permits to discharge storm water into the waters of the United States from a construction site would normally be required to submit permits in the same time frame as new sources and new discharges. This rulemaking requires permit applications from such sources to be submitted at least 180 days prior to the date on which the discharge is to commence. Four commenters agreed with the application deadline of 180 days prior to commencement of discharge. Three commenters felt it would be difficult to apply 180 days prior to when the discharge was to begin. Three commenters recommended shortening the time period to 90 days. Numerous other commenters were concerned over delays during the permitting authority's review of the permit application. The commenters requested that a maximum response time be set in the regulation. Suggested maximum response times were 90 and 30 days.

In response to these comments, EPA has changed the application deadline for construction permits from at least 180 days prior to discharge to at least 90 days prior to the date when construction is to commence. This change reflects EPA's recognition of the nature of construction operations in that developers/builders may not be aware

of projects 180 days before they are scheduled to begin.

Numerous commenters expressed concern over who should be responsible for applying for the permit. Two commenters felt the owner should be responsible so that construction bid documents can include the storm water management requirements and to avoid confusion among multiple subcontractors. One commenter thought that either the owner/developer, or general contractor should be responsible. Another commenter suggested that the designer should obtain the permit which would allow all necessary erosion controls to be part of the project plan. Several commenters requested that the responsibility simply be more clearly defined.

In response to these comments, EPA would clarify that the operator will generally be responsible for submitting the permit application. Under existing regulations at § 122.21(b), when a facility is owned by one person but operated by another, then it is the duty of the operator to apply for the permit. Due to the temporary nature of construction activities, EPA believes that the operator is the most appropriate person to be responsible for both short and long term best management practices included on the site. EPA considers the term "operator" to include a general contractor, who would generally be familiar enough with the site to prepare the application or to ensure that the site would be in compliance with the permit requirements. General contractors, in many cases, will often be on site coordinating the operation among his/her staff and any subcontractors. Furthermore, the operator/general contractor would be much more familiar with construction site operations than the owner and should be involved in the site planning from its initial stages. The application requirements in today's rule are designed to provide flexibility in developing controls to reduce pollutants in storm water discharges from construction sites. A significant aspect to this is the role of State and local authorities in control of construction storm water discharges. Sixty-three commenters addressed the question of what the role of State and local authorities should be. Most of these commenters supported local government control of construction discharges and that qualified State programs should satisfy Federal requirements.

Many commenters representing municipalities, States, and industry, felt that local government should have full control over construction storm water

discharges, either under existing programs or those required by their municipal permit. EPA agrees with these comments as far as discharges through municipal storm sewers are concerned. EPA is requiring municipalities that are required to submit municipal permit applications under this regulation to describe their program for controlling storm water discharges from construction activities into their separate storm sewers. It is envisioned that municipalities will have primary responsibility over these discharges through NPDES municipal storm water permits. However, EPA also plans to cover such discharges under general permits to be promulgated in the near future.

In response to several comments that the regulation should provide flexibility for qualified State programs to satisfy Federal requirements, the application requirements recognize that many States have implemented erosion and sediment control programs. The permit application requires a brief description of these programs. This is intended to ensure consistency between NPDES permit requirements and other State controls. Permit applicants will be in the best position to pass on this site-specific information to the permitting authority. States or Federal NPDES authorities will have the ability to exercise authority over these discharges as will other State and local authorities responsible for construction. EPA envisions NPDES permitting efforts will be coordinated with any existing programs.

The proposed rule requested comments on appropriate measures to reduce pollutants in construction site runoff. Numerous commenters representing municipalities, States, and industry responded. Some commenters recommended specific best management practices (BMPs) whereas others suggested ways in which the measures should be incorporated into the program. One commenter suggested that EPA establish design and performance standards for appropriate BMPs. One State commenter recommended requiring a schedule or sequence for use of BMPs. A municipality suggested developing guidance on erosion control at construction sites and disseminating the guidance to educate contractors and construction workers in proper erosion control techniques. The Agency is continuing to review these recommendations for the purposes of permit development and issuance.

Another commenter suggested that further research be done to determine the effectiveness of particular BMPs in reducing pollutants in construction site

runoff. EPA agrees that more research and studies can be undertaken to develop methodologies for more effective storm water controls and will continue to look at these concerns pursuant to section 402(p)(5) studies. However, EPA is convinced that enough information, technology, and proven BMP's are available to address these discharges in this regulation.

Specific BMPs suggested by the commenters include: wheel washing; locked exit roadways, street cleaning methods which exclude sheet washing; clearing and grading codes; construction standards; riparian corridors; solids retention basins; soil erosion barriers; selected excavation; adequate collection systems; vegetate disturbed areas; proper application of fertilizers; proper equipment storage; use of straw bales and filter fabrics; and use of diversions to reduce effective length of slopes. EPA is continuing to evaluate these suggestions for developing appropriate permit conditions for construction activity.

b. Administrative Burdens. Many commenters representing municipalities, States, and industry commented on the administrative burdens of individually permitting each construction site discharging to waters of the United States. The extensive use of general permits for storm water discharges from construction activities that are subject to NPDES requirements is anticipated to minimize administrative delays associated with permit issuance. Many commenters strongly endorsed extensive use of general permits. In addition the Agency will provide as much assistance as possible for developing appropriate permit conditions.

Many commenters responded to the use of acreage limits in determining which construction sites are required to submit a permit application, including several cities, counties and States. Some commenters generally supported the use of an acre limit. Many commenters suggested increasing the acreage limit. Several suggested using a five acre limit for both residential and nonresidential development. Others suggested greater acreage as the cutoff. Two commenters concurred with the proposed limit of one acre/five acres and one commenter suggested lowering the residential limit to one acre.

Other factors were suggested as a means to create a cutoff for requiring permit applications. Several commenters suggested exempting construction that would be completed with a certain time frame, such as construction of less than 12 months. EPA believes that this is

inappropriate because some construction can be intensive and expansive, but nonetheless take place over a short period of time, such as a parking lot. One commenter suggested basing the limit on the quantity of soil moved, i.e., cubic yards. In response, this approach would not be particularly helpful since removal of soil will not necessarily relate to the amount of land surface disturbed and exposed to the elements. Another commenter suggested that where there is single family detached housing construction that should trigger applications as well as the proposed acreage limit. This would not be appropriate since EPA is attempting to focus only on those construction activities that resemble industrial activity. After considering these and similar comments EPA has limited the definition of "storm water discharge associated with industrial activity" by exempting from the definition those construction operations that result in the disturbance of less than five acres of total land area which are not part of a larger common plan of development or sale. In considering the appropriate scope of the definition of storm water discharge associated with industrial activity as it relates to construction activities, EPA recognized that a wide variety of factors can affect the water quality impacts associated with construction site runoff, including the quality of receiving waters, the size of the area disturbed, soil conditions, seasonal rainfall patterns, the slope of area disturbed, and the intensity of construction activities. These factors will be considered by the permit writer when issuing the permit. However, as noted above, EPA views such site-specific factors to be too difficult to define in a regulatory framework that is national in scope. For example, attempting to adjust permit application triggers based upon a myriad of regional rainfall patterns is not a practical solution. However, permit conditions adjusted for specific geographical areas may be appropriate.

Under the December 7, 1988, proposal the definition of industrial activity exempted: construction operations that resulted in the disturbance of less than one acre total land area which was not part of a larger common plan of development or sale; or operations for single family residential projects, including duplexes, triplexes, or quadruplexes, that result in the disturbance of less than five acre total land areas which were not part of a larger common plan of development or sale. EPA distinguished between single family residential development and

other commercial development because other commercial development is more likely to occur in more densely developed areas. Also, it was reasoned that other commercial development provides a more complete opportunity to develop controls that remain in place after the construction activity is completed, since continued maintenance after the permit has expired, is more feasible.

However, EPA has decided to depart from the proposal and use an unqualified five acre area in today's final rule. This limit has been selected, in part, because of administrative concerns. EPA recognizes that State and local sediment and erosion controls may address construction activities disturbing less five acres for residential development; the five acre limit in today's rule is not intended to supersede more stringent State or local sediment and erosion controls. In light of the comments, EPA is convinced that the acreage limit is appropriate for identifying sites that are amount to industrial activity. Several comments suggested higher acreage limits without giving a supporting rationale except administrative concerns. Several commenters agreed that the five acre limit is suitable, but again without specifying why they agreed. EPA is convinced, however, that the acreage limits as finalized in today's rule reflect an earth disturbance and/or removal effort that is industrial in magnitude. Disturbances on large tracts of land will employ more heavy machinery and industrial equipment for removing vegetation and bedrock.

For construction facilities that are not included in the definition of storm water discharge associated with industrial activity, EPA will consider the appropriate procedures and methods to reduce pollutants in construction site runoff under the studies authorized by section 402(p)(5) of the CWA. EPA will also consider under section 402(p)(5) appropriate procedures and methods during post-construction for maintaining structural controls developed pursuant to NPDES permits issued for storm water discharges associated with industrial activity from construction sites.

Numerous commenters requested clarification as to whether permits for storm water discharges from construction activities at an industrial facility are required. EPA is requiring permits for all storm water discharges from construction activities where the land disturbed meets the requirements established in § 122.26(b)(14)(x) and which discharge into waters of the

United States. The location of the construction activity or the ultimate land use at the site does not factor into the analysis.

G. Municipal Separate Storm Sewer Systems

1. Municipal Separate Storm Sewers

Today's rule defines "municipal separate storm sewer" at § 122.26(b)(8) to include any conveyance or system of conveyances that is owned or operated by a State or local government entity and is designed for collecting and conveying storm water which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. It is important to note that today's permit application requirements for discharges from municipal separate storm sewer systems serving a population of 100,000 or more do not apply to discharges from combined sewers (systems designed as both a sanitary sewer and a storm sewer). For purposes of calculating whether a municipal separate storm sewer system meets the large or medium population criteria, a municipality may petition to have the population served by a combined sewer deducted from the total population. Section 122.26(f) of today's rule describes this procedure.

EPA requested comments on whether different language for the definition of municipal separate storm sewer would clarify responsibility under the NPDES permit system. Comments were also requested on whether the definition needed to be clarified by explicitly stating that municipal streets and roads with drainage systems (curb and gutter, ditches, etc.) are part of the municipal storm sewer system, and that the owners or operators of such roads are responsible for such discharges. Numerous comments were received by EPA on this issue. Some commenters questioned whether road culverts and road ditches were municipal separate storm sewers, while others specifically recommended that further clarifying language should be added so that owners and operators of roads and streets understand that they are covered by this regulation. In light of these comments, EPA has clarified that municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains that discharge into the waters of the United States are municipal separate storm sewers. One commenter asked if "other wastes" in the proposed definition of municipal separate storm sewer (40 CFR 122.26(b)(8)(i)) included storm water. In response, EPA has added "storm water" to this definition in order to clarify that the rule addresses such systems.

EPA requested comments on whether legal classifications such as "storm sewers that are not private (e.g. public, district or joint district sewers)" would provide a clearer definition of municipal separate storm sewer than an owner or operator criterion, especially for the purpose of determining responsibility under the NPDES program. Most commenters agreed that the owner/operator concept, and the additional language noted above, is sufficient for this purpose. EPA also requested comments on to what extent the owner/operator concept should apply to municipal governments with land-use authority over lands which contribute storm water runoff to the municipal storm sewer system, and how the responsibility should be clarified. In response to comments on this point, EPA has addressed these concerns in the context of clarifying what municipal entities are responsible for applying for a permit covering storm water discharges from municipal systems in section VI.H. below.

One commenter expressed a desire for clarification as to whether conveyances that were once used for the conveyance of storm water, but are no longer used in that manner, are covered by the definition. EPA emphasizes that this rulemaking only addresses conveyances that are part of a separate storm sewer system that discharges storm water into waters of the United States.

One commenter stated that if EPA intends to regulate roadside collection systems then EPA must repropose since these were not considered by the public. EPA disagrees with this comment since one of the options specifically addressed the inclusion of roadside drainage systems and roads in the definition of municipal separate storm sewer system. In addition, the public recognized the issue in comments on the proposal. EPA would note that several commenters specifically endorsed EPA's inclusion of these conveyances.

2. Effective Prohibition on Non-Storm Water Discharges

Section 402(p)(3)(B)(ii) of the amended CWA requires that permits for discharges from municipal storm sewers shall include a requirement to effectively prohibit non-storm water discharges into the storm sewers. Based on the legislative history of section 405 of the WQA, EPA does not interpret the effective prohibition on non-storm water discharges to municipal separate storm sewers to apply to discharges that are not composed entirely of storm water, as long as such discharge has been issued a separate NPDES permit. Rather,

an "effective prohibition" would require separate NPDES permits for non-storm water discharges to municipal storm sewers. In many cases in the past, applicants for NPDES permits for process wastewaters and other non-storm water discharges have been granted approval to discharge into municipal separate storm sewers, provided that the permit conditions for the discharge are met at the point where the discharge enters into the separate storm sewer. Permits for such discharges must meet applicable technology-based and water-quality based requirements of Sections 402 and 301 of the CWA. If the permit for a non-storm water discharge to a municipal separate storm sewer contains water-quality based limitations, then such limitations should generally be based on meeting applicable water quality standards at the boundary of a State established mixing zone (for States with mixing zones) located in the receiving waters of the United States.

All options will be considered when an applicant applies for a NPDES permit for a non-storm water discharge to a municipal separate storm sewer. In some cases, permits will be denied for discharges to storm sewers that are causing water quality problems in receiving waters. However, not all discharges present such problems; and in these cases EPA or State permit writers may allow such discharges to municipal separate storm sewers within appropriate permit limits.

Today's rule has two permit application requirements that are designed to begin implementation of the effective prohibition. The first requirement discussed in VI.H.6.a., below, addresses a screening analysis which is intended to provide sufficient information to develop priorities for a program to detect and remove illicit discharges. The second provision, discussed in VI.H.7.b., requires municipal applicants to develop a recommended site-specific management plan to detect and remove illicit discharges (or ensure they are covered by an NPDES permit) and to control improper disposal to municipal separate storm sewer systems.

Several commenters suggested that either the definition of "storm water" should include some additional classes of nonprecipitation sources, or that municipalities should not be held responsible for "effectively prohibiting" some classes of nonstorm water discharges into their municipal storm sewers. The various types of discharges addressed by these comments include detention and retention reservoir

releases, water line flushing, fire hydrant flushing, runoff from fire fighting, swimming pool drainage and discharge, landscape irrigation, diverted stream flows, uncontaminated pumped ground water, rising ground water, discharges from potable water sources, uncontaminated waters from cooling towers, foundation drains, non-contact cooling water (such as heating, ventilation, air conditioning (HVAC) water that POTWs require to be discharged to separate storm sewers rather than sanitary sewers), irrigation water, springs, roofdrains, water from crawl space pumps, footing drains, lawn watering, individual car washing, flows from riparian habitats and wetlands. Most of these comments were made with regard to the concern that these were commonly occurring discharges which did not pose significant environmental problems.

EPA disagrees that the above described flows will not pose, in every case, significant environmental problems. At the same time, it is unlikely Congress intended to require municipalities to effectively prohibit individual car washing or discharges resulting from efforts to extinguish a building fire and other seemingly innocent flows that are characteristic of human existence in urban environments and which discharge to municipal separate storm sewers. It should be noted that the legislative history is essentially silent on this point. Accordingly, EPA is clarifying that section 402(p)(3)(B) of the CWA (which requires permits for municipal separate storm sewers to 'effectively' prohibit non-storm water discharges) does not require permits for municipalities to prohibit certain discharges or flows of nonstorm water to waters of the United States through municipal separate storm sewers in all cases. Accordingly, § 122.26(d)(2)(iv)(B)(1) states that the proposed management program shall include: "A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system; the program description shall address the following categories of non-storm water discharges or flows only where such discharges are identified by the municipality as sources of pollutants to waters of the United States: Water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers, uncontaminated pumped ground water discharges from potable water sources,

foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash waters. Program descriptions shall address discharges from fire fighting only where such discharges or flows are identified as significant sources of pollutants to waters of the United States."

However, the Director may include permit conditions that either require municipalities to prohibit or otherwise control any of these types of discharges where appropriate. In the case of fire fighting it is not the intention of these rules to prohibit in any circumstances the protection of life and public or private property through the use of water or other fire retardants that flow into separate storm sewers. However, there may be instances where specified management practices are appropriate where these flows do occur (controlled blazes are one example).

Conveyances which continue to accept other "non-storm water" discharges (e.g. discharges without an NPDES permit) with the exceptions noted above do not meet the definition of municipal separate storm sewer and are not subject to section 402(p)(3)(B) of the CWA unless the non-storm water discharges are issued separate NPDES permits. Instead, conveyances which continue to accept non-storm water discharges which have not been issued separate NPDES permits are subject to sections 301 and 402 of the CWA. For example, combined sewers which convey storm water and sanitary sewage are not separate storm sewers and must comply with permit application requirements at 40 CFR 122.21 as well as other regulatory criteria for combined sewers.

3. Site-Specific Storm Water Quality Management Programs for Municipal Systems

Section 402(p)(3)(iii) of the CWA mandates that permits for discharges from municipal separate storm sewers shall require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including management practices, control techniques and systems, design and engineering methods, and such other provisions as the Director determines appropriate for the control of such pollutants.

When enacting this provision, Congress was aware of the difficulties in regulating discharges from municipal

separate storm sewers solely through traditional end-of-pipe treatment and intended for EPA and NPDES States to develop permit requirements that were much broader in nature than requirements which are traditionally found in NPDES permits for industrial process discharges or POTWs. The legislative history indicates, municipal storm sewer system "permits will not necessarily be like industrial discharge permits. Often, an end-of-the-pipe treatment technology is not appropriate for this type of discharge." [Vol. 132 Cong. Rec. S16425 (daily ed. Oct. 16, 1986)].

A shift towards comprehensive storm water quality management programs to reduce the discharge of pollutants from municipal separate storm sewer systems is appropriate for a number of reasons. First, discharges from municipal storm sewers are highly intermittent, and are usually characterized by very high flows occurring over relatively short time intervals. For this reason, municipal storm sewer systems are usually designed with an extremely high number of outfalls within a given municipality to reduce potential flooding. Traditional end-of-pipe controls are limited by the materials management problems that arise with high volume, intermittent flows occurring at a large number of outfalls. Second, the nature and extent of pollutants in discharges from municipal systems will depend on the activities occurring on the lands which contribute runoff to the system. Municipal separate storm sewers tend to discharge runoff drained from lands used for a wide variety of activities. Given the material management problems associated with end-of-pipe controls, management programs that are directed at pollutant sources are often more practical than relying solely on end-of-pipe controls.

In past rulemakings, much of the criticism of the concept of subjecting discharges from municipal separate storm sewers to the NPDES permit program focused on the perception that the rigid regulatory program applied to industrial process waters and effluents from publicly owned treatment works was not appropriate for the site-specific nature of the sources which are responsible for the discharge of pollutants from municipal storm sewers.

The water quality impacts of discharges from municipal separate storm sewer systems depend on a wide range of factors including: The magnitude and duration of rainfall events, the time period between events, soil conditions, the fraction of land that is impervious to rainfall, land use

activities, the presence of illicit connections, and the ratio of the storm water discharge to receiving water flow. In enacting section 405 of the WQA, Congress recognized that permit requirements for municipal separate storm sewer systems should be developed in a flexible manner to allow site-specific permit conditions to reflect the wide range of impacts that can be associated with these discharges. The legislative history accompanying the provision explained that "[p]ermits for discharges from municipal separate stormwater systems * * * must include a requirement to effectively prohibit non-stormwater discharges into storm sewers and controls to reduce the discharge of pollutants to the maximum extent practicable, * * * These controls may be different in different permits. All types of controls listed in subsection [(p)(3)(C)] are not required to be incorporated into each permit" [Vol. 132 Cong. Rec. H10576 (daily ed. October 15, 1986) Conference Report]. Consistent with the intent of Congress, this rule sets out permit application requirements that are sufficiently flexible to allow the development of site-specific permit conditions.

Several commenters agreed with this approach. One municipality recommended that there be as much flexibility as possible so that the permitting authority can work with each municipality in developing meaningful long-term goals with plans for improving storm water quality. This commenter noted that too many specific regulations that apply nationwide do not take into consideration the climatic and governmental differences within the States. EPA agrees that as much flexibility as possible should be incorporated into the program. However, flexibility should not be built into the program to such an extent that all municipalities do not face essentially the same responsibilities and commitment for achieving the goals of the CWA. EPA believes that these final regulations build in substantial flexibility in designing programs that meet particular needs, without abandoning a nationally consistent structure designed to create storm water control programs.

4. Large and Medium Municipal Storm Sewer Systems

During the 1987 reauthorization of the CWA, Congress established a framework for EPA to implement a permit program for municipal separate storm sewers and establishing phased deadlines for its implementation. The amended CWA establishes priorities for EPA to develop permit application

requirements and issue permits for discharges from three classes of municipal separate storm sewer systems. The CWA requires that NPDES permits be issued for discharges from large municipal separate storm sewer systems (systems serving a population of more than 250,000) by no later than February 4, 1991. Permits for discharges from medium municipal separate storm sewer systems (systems serving a population of more than 100,000, but less than 250,000) must be issued by February 4, 1992. After October 1, 1992, the requirements of sections 301 and 402 of the CWA are restored for all other discharges from municipal separate storm sewers.

The priorities established in the Act are based on the size of the population served by the system. Municipal operators of these systems are generally thought to be more capable of initiating storm water programs and discharges from municipal separate storm sewers serving larger populations are thought to present a higher potential for contributing to adverse water quality impacts. NURP and other studies have verified that the event mean concentration of pollutants in urban runoff from residential and commercial areas remains relatively constant from one area to another, indicating that pollutant loads from urban runoff strongly depend on the total area and imperviousness of developed land, which in turn is related to population.

The term "municipal separate storm sewer system" is not defined by the Act. By not defining the term, Congress intended to provide EPA discretion to define the scope of municipal systems consistent with the objectives of developing site-specific management programs in NPDES permits. EPA considered two key issues in defining the scope of municipal separate storm sewer system: (1) What is a reasonable definition of the term "system," and (2) how to determine the number of people "served" by a storm sewer system. EPA found these two issues to be intertwined. Different approaches to defining the scope of a system allowed for greater or lesser certainty in determining the population served by the system.

In the December 7, 1988, proposal, EPA described seven options for defining "municipal separate storm sewer system." In developing these options the EPA considered:

- The inter-jurisdiction complexities associated with municipal governments;
- The fact that many municipal storm water management programs have traditionally focused on water quantity

concerns, and have not evaluated water quality impacts of system discharges or developed measures to reduce pollutants in such discharges;

- The advantages of developing system-wide storm water management programs for municipal systems;
- The geographic basis necessary for planning of comprehensive management programs to reduce pollutants in discharges from municipal separate storm sewers to the maximum extent practicable;
- The geographic basis necessary to provide flexibility to target controls on areas where water quality impacts associated with discharges from municipal systems are the greatest and to provide an opportunity to develop cost effective controls;
- The need to establish a reasonable number of permits for municipal systems during the initial phases of program development that will provide an adequate basis for a storm water quality management program for over 13,000 municipalities after the October 1, 1992 general prohibition on storm water permits expires; and

- Congressional intent to allow the development of jurisdiction-wide, comprehensive storm water management programs with priorities given to the most heavily populated areas of the country.

a. Overview of Proposed Options and Comments. The December 7, 1988, proposal requested comment on seven options for defining large and medium municipal separate storm sewer system. With the addition of a watershed-based approach suggested by certain commenters, eight options or approaches were addressed by the over 200 commenters on this issue: Option 1—systems owned or operated by incorporated places augmented by integrated discharges; Option 2—systems owned or operated by incorporated places augmented with significant other municipal discharges; Option 3—systems owned or operated by counties; Option 4—systems owned and operated by States or State departments of transportation; Option 5—systems within the boundaries of an incorporated place; Option 6—systems within the boundaries of counties; Option 7—systems in census designated urbanized areas; and Option 8—systems defined by watershed boundaries.

Generally, these options can be classified into two categories. The first category of options, Options 1, 2 and 3, define municipal systems in terms of the municipal entity which owns or operates storm sewers within municipal boundaries of the requisite population. The second category of options would

define municipal systems on a geographic basis. Under Options 4, 5, 6, 7 and 8 all municipal separate storm sewers within the specified geographic area would be part of the municipal system, regardless of which municipal entity owns or operates the storm sewer. EPA did not propose to define the scope of a municipal separate storm sewer system in engineering terms because of practical problems determining the boundaries of and the populations served by "systems" defined in such a manner. In addition an engineering approach based on physical interconnections of storm sewer pipes by itself does not provide a rational basis for developing a storm water program to improve water quality where a large number of individual storm water catchments are found within a municipality.

In the December 7, 1988, proposal, EPA favored those options that relied primarily on the municipal entity which owns or operates or otherwise has jurisdiction over storm sewers. These options were preferred because it was anticipated that the administrative complexities of developing the permit programs would be reduced by decreasing the number of affected municipal entities. However, most commenters were not satisfied that such an approach would reduce administrative burdens or complexities.

The diversity of arguments and rationales offered in comments justifying the selection of particular option, or combinations thereof, were generally a function of geographic, climatic, and institutional differences around the country. As such, there was little substantive agreement with how this program should be implemented as far as defining large and medium municipal separate storm sewer systems. Of all the options, Option 1 generally received the most favorable comment. However, the overwhelming majority of comments suggested different options or other alternatives. Having reviewed the comments at length, EPA is convinced that the definition of municipal separate storm sewers should possess elements of several of the options enumerated above and a mechanism that enables States or EPA Regions to define a system that best suits their various political and geographical conditions.

The following comments were the most pervasive, and represent those issues and concerns of greatest importance to the public: (1) The approach chosen initially must be realistic and achievable administratively; (2) the definition must be flexible enough to accommodate

development of the program on a watershed basis, and incorporate elements of existing programs and frameworks and regional differences in climate, geography, and political institutions; (3) permittees must have legal authority and control over land use; (4) discharges from State highways, identified as a significant source of runoff and pollutants, should be included in the program and combined in some manner with one or more of the other options; (5) the definition should address how the inclusion of interrelated discharges into the municipal separate storm sewer system are timed, decided upon, dealt with, etc.; (6) any approach must address the major sources of pollutants; (7) development of co-permittee management plans must be coordinated or developed on a regional basis and in the same time frame—fragmented or balkanized programs must be avoided; (8) municipalities should be regulated as equitably as possible; (9) flood control districts should be addressed as a system or part of a system; (10) the definition must conform to the legal requirements of the Clean Water Act; and (11) the definition should limit the number of co-permittees as much as possible.

b. Definition of large and medium municipal separate storm sewer system. A combination of the options outlined in the 1988 proposal would address most of these concerns, while achieving a realistic and environmentally beneficial storm water program. Accordingly, EPA has adopted the following definition of large and medium municipal separate storm sewer systems. Large and medium separate storm sewer systems are municipal separate storm sewers that:

(i) Are located in an incorporated place with a population of 100,000 or more or 250,000 or more as determined by the latest Decennial Census by the Bureau of Census (see appendices F and G of part 122 for a list of these places based on the 1980 Census);

(ii) Are located within counties having areas that are designated as urbanized areas by latest decennial Bureau of Census estimates and where the population of such areas exceeds 100,000, after the population in the incorporated places, townships or towns within such counties is excluded (see appendices H and I for a listing of these counties based on the 1980 census) (incorporated places, towns, and townships within these counties are excluded from permit application requirements unless they fall under paragraph (i) or are designated under paragraph (iii)); or (iii) are owned or

operated by a municipality other than those described in paragraph (i) or (ii) that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraphs (i) or (ii). In making this determination the Director may consider the following factors:

- (A) Physical interconnections between the municipal separate storm sewers;
- (B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in subparagraph (i);
- (C) The quantity and nature of pollutants discharged to waters of the United States;
- (D) The nature of the receiving waters;
- or
- (E) Other relevant factors.

(iv) The Director may, upon petition, designate as a system, any municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (i), (ii), and (iii).

Under today's rule at § 122.26(a)(3)(iii) the regional authority shall be responsible for submitting a permit application under the following guidelines: The regional authority together with co-applicants shall have authority over a storm water management program that is in existence, or shall be in existence at the time part 1 of the application is due; the permit applicant or co-applicants shall establish their ability to make a timely submission of part 1 and part 2 of the municipal application; each of the operators of municipal separate storm systems described in paragraphs 122.26(b)(4) (i), (ii), and (iii) and (7)(i), (ii), and (iii), that are under the purview of the designated regional authority, shall comply with the application requirements of § 122.26(d).

As noted above, the finalized definition of large and medium municipal separate storm sewer system is combination of the approaches as proposed. (In the following discussion "paragraph (i)" refers to §§ 122.26 (b)(4)(i) and (b)(7)(i); "paragraph (ii)" refers to §§ 122.26(b)(4)(ii) and (b)(7)(ii); "paragraph (iii)" refers to §§ 122.26 (b)(4)(iii) and (b)(7)(iii); and "paragraph (iv)" refers to §§ 122.26 (b)(4)(iv) and (b)(7)(iv)). Paragraph (i) originates from proposed Option 5 (boundaries of

incorporated places); paragraph (ii) originates from Option 6 (boundaries of counties) and Option 7 (urbanized areas); paragraph (iii) originates from Options 1 and 5; and paragraph (iv) is an outgrowth of comments on all options, especially Option 4 (State owned systems/State highways) and Option 8 (watersheds).

This definition creates a system by virtue of the fact that storm sewers within defined geographical and political areas, and the owner/operators of separate storm sewers in those areas, are addressed or required to obtain permits. Although within these systems, different segments and discharges of storm water conveyances may be owned or operated by different public entities, EPA is convinced by comments that discharges from such conveyances are interrelated to such an extent that all of these conveyances may be properly considered a "system." These comments are identified and discussed in greater detail below.

c. Response to comments. Many commenters urged that the approach taken must be administratively achievable. Option 5 of the proposal (boundaries of incorporated places), which can be equated to paragraphs (i) and (iii) above, was identified by several commenters as the most workable of all the options. Many commenters stated that Option 1 (systems owned or operated by incorporated places) was inappropriate because of special districts and other owners of systems within the incorporated area; and although EPA proposed a designation provision for interrelated discharges in Option 1, commenters advised that it would be impossible to identify these systems, account for their discharges, and exclude or include them in a timely manner if Option 1 was selected (Option 1 only addresses those systems owned or operated by the incorporated place). The final rule would obviate these concerns, since all the publicly owned sewers within the boundaries of the municipality will be required to be covered by a permit.

Other commenters noted that cities sometimes have storm water conveyances owned or operated by numerous entities. One municipality commented that these problems could be more easily resolved using a unified permit/district wide approach, which the final approach outlined above can accomplish. One county stated that Option 1 of the proposal would result in a permanent balkanization of stormwater programs and that a regional approach focusing on the entire system should be established. Another

municipality recommended that all the systems of conveyances within the incorporated city boundaries be issued a permit. In rejecting Option 1 of the proposal, one municipality stated that program inefficiencies would result from implementing a piecemeal program in a contiguous urban environment with different owners and operators. One State conveyed similar concerns. Using a geographical approach, as described in paragraph (i) of the final definition, will best address all of these concerns.

One commenter criticized proposed Option 1 as being contrary to the legal requirements of the WQA, and a further example of EPA's continuing attempt to minimize the scope of a national storm water program. It was noted that the legislative history regarding requirements for large and medium municipal separate storm sewer systems in section 402(p) of the CWA generally does not reference incorporated cities or towns. As a result, the commenter recommended that the term "municipal" in municipal separate storm sewer system refer to separate storm sewers operated by municipal entities meeting the definition of "municipality" in section 502 of the CWA and that the scope of the term "municipal separate storm sewer system" be defined as broadly as possible. This approach would result in defining large and medium municipal separate storm sewer systems to include all municipal separate storm sewers within the 410 counties with a population of 100,000 or more. EPA has adopted the commenter's recommendation to extend the scope of the program to the extent that today's rule covers all municipal separate storm sewers within certain areas rather than only those operated by an incorporated place. EPA disagrees however that it must define the term "system" to include sewers within any municipal boundary of sufficient population with reference to section 502(4). By not providing explicit definitions, section 402(p)(3)(B) of the CWA gives EPA discretion to define how municipal separate storm sewer systems are defined. There is no indication in the language of the CWA or the legislative history that Congress intended that the scope of "municipality" and the scope of "municipal separate storm sewer system" to be identical, particularly since the latter term is not defined in the statute. Furthermore, for the reasons discussed elsewhere in this section, EPA believes that today's definition is a reasonable accommodation of the many conflicting concerns surrounding the proper way to delineate the extent of a

municipal separate storm sewer system serving over 100,000 people.

Several commenters concluded that EPA should be flexible enough to allow the permitting authority broad discretion to establish system wide permits, with flood control districts and/or counties acting as co-permittees with the various incorporated cities within the district boundaries. Commenters expressed concern that Option 1 would not allow for such flexibility.

Arguments that were advanced by commenters in support of proposed Option 1 are equally applicable to paragraph (i), above. Like proposed Option 1, the approach outlined above targets major cities. However, it also has the advantage of addressing municipal separate storm sewer systems which may be interrelated to those owned by the city, a benefit recognized by one municipality that endorsed the selection of proposed Option 5. This will also give the permitting authority more discretion to establish co-permittee relationships.

Paragraph (ii) of the final definition also uses a geographical approach to the definition of municipal storm sewer systems to include municipal storm sewers within urbanized counties. Thus, it closely resembles Option 7 of the proposal. The counties identified in paragraph (ii) have, based on the 1980 Census, a population of 100,000 or more in urbanized,⁵ unincorporated portions of the county. In the unincorporated areas of these counties (or in the 20 States where the Census recognizes minor civil divisions, unincorporated county areas outside of towns or townships), the county is the primary local government entity. In these cases, the county performs many of the same functions as incorporated cities with a population of 100,000, and is generally expected to have the necessary legal and land use authority in these areas to begin to implement storm water management programs. Due to the urbanized nature of their population, discharges from the municipal separate storm sewers in these counties will have many similarities to discharges from municipal systems in incorporated cities with a population of 100,000 or more. Addressing these counties in this fashion will not adversely affect small municipalities (incorporated places,

towns and townships) within the county, as municipal separate storm sewers that are located in the small incorporated places, townships or towns within these counties are not automatically included as part of the system.

EPA has focused on the unincorporated areas because permit applications cannot be required from systems that serve a population less than 100,000, unless designated. EPA received the comment that if the sewers in incorporated places within such counties were included as part of the system for that county, there would be the potential for systems serving a population less than 100,000 to be improperly subject to permit requirements. EPA agrees with the comment, except that EPA reserves the authority to designate sewers in small incorporated places as part of the system subject to permitting, pursuant to paragraph (iii) of the final definition. Incorporated areas within the identified counties will be required to file permit applications if the population served by the municipal separate storm sewer system is 100,000 or more.

As one commenter noted, the counties addressed by the definition will generally be areas of high growth with a growing tax base that can finance a storm water management program. Numerous counties affected by paragraph (ii) commented on the proposal. Several of these indicated a preference for the county government as the permittee. Others indicated that their county had the ability to perform the functions of the permit applicant and permittee. One county brought to EPA's attention that the county had laid plans for a storm water utility scheduled to be in operation in 1989. Several of the counties supported the use of watersheds, or flexible regional approaches, as the basis for the definition of municipal separate storm sewer systems. The modified definition should satisfy these concerns.

EPA recognizes that some of the counties addressed by today's rule have, in addition to areas with high unincorporated urbanized populations, areas that are essentially rural or uninhabited and may not be the subject of planned development. While permits issued for these municipal systems will cover municipal system discharges in unincorporated portions of the county, it is the intent of EPA that management plans and other components of the programs focus on the urbanized and developing areas of the county. Undeveloped lands of the county are not expected to have many, if any, municipal separate storm sewers.

Paragraphs (i) and (ii) above will help resolve the problems associated with permittees not having adequate land use controls, the legal authority to implement controls, and the ownership of the conveyances. This factor was mentioned by numerous commenters on the proposed options, especially county governments. Under paragraphs (i) and (ii), all publicly owned separate storm sewers within the appropriate municipal boundaries will be defined as part of the municipal system. In many cases, a number of municipal operators of these storm sewers will be responsible for discharges from these systems. Since a number of co-permittees may be addressed in the permits for these discharges, problems associated with the ability to control pollutants that are contributed from interrelated discharges will be minimized. State highways or flood control districts, which may have no land use authority in incorporated cities, will be co-permittees with the city which does possess land use authority. EPA envisions that permit conditions for these systems will be written to establish duties that are commensurate with the legal authorities of a co-permittee. For example, under a permit, a flood control district may be responsible for the maintenance of drainage channels that they have jurisdiction over, while a city is responsible for implementing a sediment and erosion ordinance for construction sites which relates to discharges to the drainage channel. Confusion over ownership of conveyances or systems, at least for the purposes of determining whether they require a permit, will be minimized since all conveyances will be covered. Similarly, under paragraph (ii), the affected counties are expected to have the necessary legal and land use authority to implement programs and controls in unincorporated, urbanized areas because the county government is the primary political or governing entity in these geographical areas.

Many commenters from all levels of State and local government expressed concern about controlling pollutants from State highways. Paragraphs (i) and (ii) will result in discharges from separate storm sewers serving State highways and other highways through storm sewers that are located within incorporated places with the appropriate population or highways in unincorporated portions of specified counties being included as part of the large or medium municipal separate storm sewer system, since all municipal separate storm sewers within the boundaries of these political entities are included. Paragraph (iv) can facilitate

⁵ The Bureau of Census defines urbanized areas to provide a description of high-density development. Urbanized areas are comprised of a central city (or cities) with a surrounding closely settled area. The population of the entire urbanized area must be greater than 50,000 persons, and the closely settled area outside of the city, the urban fringe, must generally have a population density greater than 1,000 persons per square mile (just over 1.5 persons per acre) to be included

the submission of a permit application for storm sewers operated as part of an entire State highway system. Paragraph (iv) would allow an entire system in a geographical region under the purview of a State agency (such as a State Department of Transportation) to be designated, where all the permit application requirements and requirements established under § 122.26(a)(iii)(C) can be met.

Paragraphs (i) and (ii) can effectively deal with many of the major sources of pollutants. One municipality noted that Option 5 (paragraph (i)) would require all systems in the incorporated boundaries to obtain permits and institute control measures, rather than just the few owned or operated by incorporated cities. Another municipality noted that this approach could deal with many of the regional variations in sources of pollution. Many commenters, including environmental groups, believed that proposed Option 3 (systems owned or operated by counties), Option 6 (systems within the boundaries of counties), and Option 7 (system in urbanized areas) were good approaches because more sources of pollution would be addressed. It was also maintained that Options 3, 6 and 7 could incorporate watershed planning which, in the view of some commenters, is the only effective way to address pollutants in storm water.

Commenters noted that addressing counties and urbanized areas would focus attention on developing areas which would otherwise be left out in the initial phases of permitting. One commenter noted that most new development in large urbanized areas occurs outside of core cities (incorporated cities with a population of 100,000 or more). Newly developing areas provide opportunities for installing pollutant controls cost effectively. EPA agrees with these comments and notes that paragraph (ii) addresses a significant number of counties with highly developed or developing areas.

However, EPA is convinced that addressing all counties or urbanized areas in the initial phases of the storm water program is ill-advised. Commenters noted that some counties have inappropriate or nonexistent governmental structures, and that a program that addressed all counties in the country with a population of 100,000 or more would be unmanageable, because too many municipal entities nationwide would be involved in the program initially. Commenters advised that defining municipal storm sewer systems solely in terms of the boundaries of census urbanized areas

(Option 7) would result in systems which did not correspond to jurisdictions that are in a position to implement a storm water programs. Thus, EPA has modified Option 7 and combined it with Option 6 to create paragraph (ii) above.

Paragraph (iii) incorporates a designation authority such that municipalities that own or operate discharges from separate storm sewers systems other than those described in paragraph (i) or (ii) may be designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the other discharges of the designated storm sewer and the discharges from the large or medium municipal separate storm sewers. In making this determination the physical interconnections between the municipal separate storm sewers, the location of discharges from the designated municipal separate storm sewer relative to discharges from large or medium municipal separate storm sewers, the quantity and nature of pollutants discharged to waters of the United States, the nature of the receiving waters, or other relevant factors may be considered.

Comments indicated that the designation authority as proposed and described above should be retained. One State noted that this approach gives the most flexibility in making the case-by-case designations, while also delineating in sufficient detail what criteria are used to make the determination. This commenter was concerned about being able to regulate many of the interrelated discharges from counties surrounding incorporated cities.

Paragraph (iv) of the final definition allows the permitting authority, upon petition, to designate as a medium or large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (i), (ii), (iii).

Paragraph (iv) was added to the final definitions to respond to a variety of concerns of commenters. One of the prime concerns of commenters was that the definition of large and medium municipal separate storm sewer systems must be flexible enough to accommodate: Programs on a watershed basis, existing storm water programs and frameworks and regional differences in climate, geography, and

political institutions. Some States were particularly expressive regarding this concern. One State maintained that an inflexible program could totally disrupt ongoing State efforts. Other commenters urged that the regulation encourage the establishment of regional storm water authorities or other mechanisms that can deal with storm water quality on a watershed basis. One State proposed defining the municipal separate storm sewer system to include all municipal separate storm sewers within a core incorporated place of 100,000 or more, and all surrounding incorporated places within the State defined watershed. One of the State water districts advised that the regulations should be flexible enough to allow regional water quality boards to apply the regulations geographically. One national association expressed concern that existing institutional arrangements for flood control and drainage would be ignored, while another warned against fostering a proliferation of inconsistent patchwork programs based on arbitrary definitions and jurisdictions which bear no relationship to water quality.

EPA is convinced that the mechanism described in paragraph (iv) provides a means whereby the mechanisms and concepts identified above can be utilized or created in appropriate circumstances. In addition, § 122.26(f)(4) provides a means for State or local government agencies to petition the Director for the designation of regional authorities responsible for a portion of the storm water program. For example, some States or counties may currently or in the near future have regional storm water management authorities that have the ability to apply for permits under today's rule and carry out the terms of the permit. Some of these authorities may encompass within their jurisdiction large or medium municipal separate storm sewer systems as defined in today's rule. EPA wishes to encourage such entities to assume the role as permittee under today's rule. That is the purpose of paragraph (iv). Such authorities may petition the Director to assume such a role.

Many commenters expressed the view that municipal management plans must be coordinated or developed among permittees on a regional basis and in the same timeframe. Paragraphs (i), (iii) and (iv) would bring in all appropriate municipal entities with jurisdiction over a specified geographical area in the same timeframe. Several commenters, including one State, noted proposed Option 1 would lead to fragmented, ill-coordinated programs. Paragraphs (i), (iii), and (iv) do not suffer this drawback

to the same extent since all the municipal separate storm sewers are addressed within the incorporated place, instead of only those owned or operated by the incorporated place.

Equal treatment of municipalities within a watershed or other specified area was a major subject of comment. Many commenters urged that a degree of fairness could be achieved by requiring permit applications, and the concomitant expenditure of municipal dollars and resources, from all municipalities within an entire urban area that contributes to storm water pollution, rather than from a discrete system within an arbitrary political boundary. Paragraph (i), especially when coupled with paragraphs (ii), (iii), and (iv), can best accomplish a more equitable approach, because all owners and operators of municipal separate storm sewers within a system have responsibilities. In addition, some of the areas outside the incorporated city limits which are engaged in expansive urban or suburban development will be brought into the program. Paragraph (iv) will provide a means for State or regional authorities to use existing or emerging mechanisms to set up storm water management programs, and would require multiple agencies either to become regional co-permittees or to be subject to a regional permit.

Paragraphs (i), (ii), (iii), and (iv) could also require flood control districts to be co-permittees, which was a major concern of counties and numerous cities. One municipality stated that the inclusion of flood control districts would greatly reduce the administrative burden required to prepare a single inter-city discharge agreement and would establish a common legal authority to implement the program. Numerous county agencies believed it imperative that flood control districts be brought into a system-wide permit strategy.

Paragraphs (i) and (iii) may not accommodate the concern of several commenters that the number of co-permittees be kept to a minimum. The fact that all the municipal separate storm sewers within the boundaries of the appropriate incorporated places will be addressed dictates that some permits will have several co-permittees. This is a major concern since it goes directly to achieving an effective initial storm water program. There is concern about being able to bring all the co-permittees together under intra-municipal agreements or contracts within regulatory deadlines. This problem would be resolved in the short term by selecting Option 1. However, Option 1 may still require inter-municipal

agreements because of the designation authority under § 122.26 (b)(4)(ii) and (b)(7)(ii) of the proposal. In addition, such inter-jurisdictional problems will arise after October 1, 1992 when the moratorium on requiring NPDES permits for discharges from other municipal separate storm sewers ends. Under the permitting goals established by the CWA, multi-jurisdictional storm water programs and agreements cannot be avoided. Despite interest in limiting the number of co-permittees, EPA decided not to adopt Option 1 for the reasons already stated.

Section 402(p)(3)(B)(i) of the amended CWA provides that permits for municipal discharges from municipal storm sewers may be issued on a system-wide or jurisdiction-wide basis. This provision is an important mechanism for developing the comprehensive storm water management programs envisioned by the Act.

Under the permit application requirements of today's rule, if the appropriate co-applicants are identified, one permit application may be submitted for a large or medium municipal separate storm sewer system (see section VI.G.4 above). System-wide permit applications can in turn be used to issue system-wide permits which could cover all discharges in the system.

Where several municipal entities are responsible for obtaining a permit for various discharges within a single system, EPA will encourage system-wide permit applications involving the several municipal entities for a number of reasons. The system-wide approach not only provides an appropriate basis for planning activities and coordinating development, but also provides municipal entities participating in a system-wide application the means to spread the resource burden of monitoring, evaluating water quality impacts, and developing and implementing controls.

The system-wide approach provided in today's rule recognizes differences between individual municipalities with responsibilities for discharges from the municipal system. Today's application rule requires information to be submitted that enables the permit issuing authorities to develop tailored programs for each permittee with responsibility for certain components, segments, or portions of the municipal separate storm sewer system. The permit application requirements allow individual municipal entities, participating in system-wide applications, to submit site specific information regarding storm water

quality management programs to reduce pollutants in system discharges as a whole, or from specific points within the system.

In some cases, it may be undesirable for all municipal entities with storm water responsibility within a municipal system to be co-permittees under one system-wide permit. The permit application requirements in today's rule allow individual municipal entities within the system to submit permit applications and obtain a permit for that portion of the storm sewer system for which they are responsible. Thus, several permits may be issued to cover various subdivisions of a single municipal system.

In summary, EPA believes that the definition of municipal storm sewer system adopted in today's rule has several distinct advantages that were identified in comments:

- The definition adopts features of several options;
- The definition targets areas that have the necessary police powers and land use authority to implement the program;
- The definition can utilize watersheds or accommodate existing administrative frameworks and storm water programs;
- The definition provides that all systems within a geographical area including highways and flood control districts will be covered, thereby avoiding fragmented and ill-coordinated programs;
- The definition has flexible designation authority; and
- The definition addresses major sources of pollutants without being overly broad.

H. Permit Application Requirements for Large and Medium Municipal Systems

1. Implementing the Permit Program

Given the differing nature of discharges from municipal separate storm sewer systems in different parts of the country and the varying water quality impacts of municipal storm sewer discharges on receiving waters, today's permit application requirements are designed to lead to the development of site-specific storm water management programs. In order to effectively implement this goal, EPA intends to retain the overall structure of the municipal permit application as proposed in the December 7, 1988, proposal.

2. Structure of the Permit Application

EPA proposed a two-part permit application designed to meet the goal of

developing site-specific storm water quality management programs in NPDES permits. In response to a request for comments on this aspect of the proposal, numerous comments were received. After reviewing these comments, EPA has decided to retain the two-part permit application. Many commenters agreed that the approach as proposed is appropriate for phasing in and developing site specific storm water management programs. One large municipality strongly endorsed the two-part application, stating that it would facilitate the identification of water quality problem areas and the development of priorities for control measures, thereby allowing for more cost-effective program development. Two State agencies expressed the same view, and noted that the two-part approach is reasonable and well structured for efficient development of programs. One large municipality noted it would allow the permit authority and the permit applicant the time needed to gain the knowledge and data to develop site-specific permits. A medium municipality expressed similar views.

Numerous commenters submitted endorsements of a proposal offered by one of the national municipal associations. This approach responded to EPA's request for comments on alternatives to a two-part application process. These comments recommended having permit applicants submit information regarding their existing legal authority, prepare source identification information, describe existing management plans, provide discharge characterization information based on existing data, and prepare a monitoring, characterization and illicit discharge and removal plan in a one-part application. The remaining requirements such as: implementing plans to remove illicit connections, obtaining legal authority, monitoring and characterization, plans for structural controls, preparation of control assessments, preparation of fiscal analysis, and management plan implementation would be part of the permit and take place during the compliance period of the permit. It was argued that this would result in a more orderly development of stormwater management programs while allowing for quick implementation of efforts to eliminate illicit discharges and initiate some BMPs.

After careful review and consideration of these comments, EPA is convinced that this approach would not meet the goals and requirements of section 402 of the Clean Water Act. Section 402(p)(3)(B) of the CWA requires

that permits effectively prohibit non-storm water discharges into storm sewers and incorporate controls that reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system design and engineering methods. The above comments suggesting an alternative for achieving this goal are not entirely compatible with these requirements. In light of the language in the statute, permit conditions should do more than plan for controls during the term of the permit. A strong effort to have the necessary police powers and controls based on pollutant data should be undertaken before permits are issued. In short, the one-part application described by these comments would result in permits that would focus too much on preparation and not enough on implementing controls for pollutants.

In comparison, EPA's approach requires municipalities to submit a two-part application over a two year period. Part one of the application would require information regarding existing programs and the means available to the municipality to control pollutants in its storm water discharges. In addition, part one would require field screening of major outfalls to detect illicit connections. Part two of the permit application would require a limited amount of representative quantitative data and a description of proposed storm water management plans. The purpose of the two-part application process is to develop information, in a reasonable time frame, that would build successful municipal storm water management programs and allow the permit writer to make informed decisions with regard to developing permit conditions. This will include initiating efforts to effectively prohibit non-storm water discharges into storm sewers, and initially implementing controls that reduce the discharge of pollutants to the maximum extent practicable, including management practices and control techniques during the term of the permit. Such an approach clearly meets the statutory mandate of section 402(p)(3)(B).

a. Part 1 Application. Part 1 of the permit application is intended to provide an adequate basis for identifying sources of pollutants to the municipal storm sewer system, to preliminarily identify discharges of storm water that are appropriate for individual permits, and to formulate a strategy for characterizing the discharges from municipal separate storm sewer systems. Several commenters supported retaining these components of the

application process. The components of part 1 of the permit application include:

- General information regarding the permit applicant or co-applicants (§ 122.26(d)(1)(i));
- A description of the existing legal authority of the applicant(s) to control pollutants in storm water discharges and a plan to augment legal authority where necessary (§ 122.26(d)(1)(ii));
- Source identification information including: a topographic map, description of the historic use of ordinances or other controls which limited the discharge of non-storm water discharges to municipal separate storm sewer systems, the location of known municipal separate storm sewer outfalls, projected growth, location of structural controls, and location of waste disposal facilities (§ 122.26(d)(1)(iii));
- Information characterizing the nature of system discharges including existing quantitative data, the results of a field screening analysis to detect illicit discharges and illegal dumping to the municipal system, an identification of receiving waters with known water quality impacts associated with storm water discharges, a proposed plan to characterize discharges from the municipal storm sewer system by estimating pollutant loads and the concentration of representative discharges, and a plan to obtain representative data (§ 122.26(d)(1)(iv)); and
- A description of existing structural and non-structural controls to reduce the discharge of pollutants from the municipal storm sewer (§ 122.26(d)(1)(v)).

One commenter disagreed that source identification should be made part of the permit application process beyond the identification of major municipal storm sewer outfalls. In reply, EPA is convinced that the other elements of the source identification are critical for identifying sources of pollutants and creating a base of knowledge from which informed decisions about permit conditions and further data requirements can be determined. One county stated that it already had engaged in extensive monitoring and modeling of watersheds and that its programs should be substituted for EPA's. In response, EPA anticipates that information collected under various State, county or city programs that matches the information requirements in this rulemaking may be used by the applicants in submissions under this rulemaking where the requirements of the rule are met. However, because of the divergence in data collection techniques and information collected by

these programs, EPA disagrees that it would be appropriate to accept a substitution in its entirety without tailoring such a program to today's specific information requirements. One municipality noted that municipal systems are not well documented and responsibility for them is in question. In response, EPA notes that the source identification procedure is designed, in part, to address such shortcomings.

Several municipalities suggested that legal authority could be demonstrated by providing EPA with copies of appropriate local ordinances to demonstrate their legal authority and a statement from the city attorney. EPA agrees that these methods are appropriate for making this demonstration.

Several commenters noted that there was adequate existing municipal legal authority to carry out the program requirements or such authority could be obtained by the municipality. Other commenters stated that municipalities possess some authority over certain activities but may not have authority over discharges from roads and construction. Numerous commenters, however, claimed that certain municipalities had no existing legal authority to carry out the permit requirements and that obtaining all the necessary legal authority could take several years due to cumbersome legislative and political processes. In response, part 1 of the permit application will establish a schedule for the development of legal authority that will be needed to accomplish the goals of the permit application and permits. Some municipalities will have more advanced storm water programs with appropriate legal authority or the ability to establish necessary ordinances. Providing an appropriate schedule will not present difficulties in these circumstances. EPA also notes that the definitions of large and medium municipal separate storm sewer systems finalized in today's rule will in many cases result in a number of co-applicants participating in a system wide application. It is anticipated that the development of adequate inter-jurisdictional agreements specifying the various responsibilities of the co-permittees may in some cases be very complex, thereby justifying the development of a schedule to complete the task. For example, clarifying the authority over discharges from roads may present difficulties where a number of municipal entities operate different roads in a given jurisdiction. In other limited cases, the MEP standard for municipal permits may translate into

permit conditions that extend the schedule for obtaining necessary legal authority into the term of the permit. These situations will be evaluated on a case-by-case basis by permit issuing authorities.

Numerous commenters supported the field screening analysis as proposed. Comments from three municipalities noted that it would be a cost effective means of identifying problem areas. One municipality noted that illicit connections can be reliably detected by the screening method proposed. In view of these comments EPA has decided to retain this portion of the regulation. However many commenters expressed concern over how the proposed approach would work given the particular circumstances under which some municipal storm water systems are arranged. Several commenters questioned the effectiveness of dry weather monitoring for several reasons, including the shallow depth of some cities' water tables. Accordingly, an alternative approach may be utilized by the municipal permittee, and this is discussed later in section VI.H.3.

Some comments suggested that if any field screening is required that it be done during the term of the permit. EPA believes that field screening should not be done during the term of the permit exclusively. Unless a field screening is accomplished during the permit application phase there will be scant knowledge, if any, upon which illicit connection programs can be established for the term of the permits. EPA views field screening during the application process as an appropriate means of beginning to meet the CWA's requirement of effectively prohibiting non-storm water discharges into municipal separate storm sewers.

The submittal of part 1 of the permit application will allow EPA, or approved NPDES States, to adjust part 2 permit application requirements to assure flexibility for submitting information under part 2, given the site specific characteristics of each municipal storm sewer system.

EPA agrees with the concerns of commenters regarding the estimate of the reduction of pollutant loads from existing management programs. EPA agrees that sufficient data may not be available to establish meaningful estimates. Therefore this component of the proposed part 1 is not a requirement of today's rule.

b. Part 2 Application. Part 2 of the proposed permit application is designed to supplement information found in part 1 and to provide municipalities with the opportunity of proposing a

comprehensive program of structural and non-structural control measures that will control the discharge of pollutants, to the maximum extent practicable, from municipal storm sewers. The components of the proposed part 2 of the permit application included:

- A demonstration that the legal authority of the permit applicant satisfies regulatory criteria (§ 122.26(d)(2)(i));
- Supplementation of the source identification information submitted in part 1 of the application to assure the identification of all major outfalls and land use activities (§ 122.26(d)(2)(ii));
- Information to characterize discharges from the municipal system;
- A proposed management program to control the discharge of pollutants to the maximum extent practicable, from municipal storm sewers (§ 122.26(d)(2)(iv));
- Assessment of the performance of proposed controls (§ 122.26(d)(2)(v));
- A financial analysis estimating the cost of implementing the proposed management programs along with identifying sources of revenue § 122.26(d)(2)(vi);
- A description of the roles and responsibilities of co-applicants (§ 122.26(d)(2)(vii)).

One municipality agreed that the assessment of the performance of controls was a critical component of establishing a viable program and one that could be accomplished within the time frame of the permit application deadlines. One commenter suggested that the applicant describe what financial resources are currently available. In response, EPA will require applicants to describe the municipality's existing budget for storm water programs in part 1 of the permit application requirements. This information will be useful to evaluate the municipality's ability to prepare and implement management plans. In response to other comments, this information will also include an overview of the municipality's financial resources and a description of the municipality's budget, including overall indebtedness and assets.

EPA has retained the financial analysis in this portion of the rule on the advice of two municipal commenters, who agreed that this was an important component of establishing a viable program and one that could be accomplished within the time frame of the permit application deadlines. Another commenter noted that this requirement is appropriate to justify a municipality's proposed management plan.

3. Major Outfalls

In past rulemakings, a controversial issue has been the appropriate sampling requirements for municipal separate storm sewer systems. Earlier storm water rulemakings have been based primarily on the principle that all discharges to waters of the United States from municipal separate storm sewers located in urban areas must be covered by an individual permit. This approach requires that individual permit applications contain quantitative data to be submitted for all such discharges. This approach was criticized because of a potentially unmanageable number of outfalls in some municipal separate storm sewer systems. Most incorporated cities with a population of 100,000 or more do not know the exact number of outfalls from their municipal systems; but based on the comments, the number ranges from 500 to 8,000 or more.

In light of the increased flexibility provided by the WQA and the development of EPA's system-wide approach for regulating municipal separate storm sewer discharges, today's rule will not require submittal of individual permit applications with quantitative data for each outfall of a municipal system. Rather today's rule will encourage system-wide permit applications to provide information suitable for developing effective storm water management programs. Under this approach, not all outfalls of the municipal system will be sampled, but rather more specific and accurate models for estimating pollutant loads and discharge concentrations will be used. The use of these models will require the identification of sources which are responsible for discharging pollutants into municipal separate storm sewers and will not require as much data to calibrate due to the source-specific nature of the model. A number of standard and localized models have been developed for estimating pollutant loads from storm water discharges.

Several commenters support the use of models for developing management plans and estimating pollutant loadings and concentrations. EPA encourages their use where applicable to particular systems.

By adopting an approach that incorporates source identification measures, the amount of quantitative data required to characterize discharges from the municipal system will be reduced because of the increased accuracy of the site-specific models which can be used. Consistent with a system-wide permit application approach, EPA proposed to focus source identification measures on "major

outfalls." The proposed definition of major outfalls includes any municipal separate storm sewer outfall that discharges from a pipe with a diameter of more than 36 inches or its equivalent (discharges from a drainage area of more than 50 acres), or for municipal separate storm sewers that receive storm water from lands zoned for industrial activities, an outfall that discharges from a pipe with a diameter of more than 12 inches or its equivalent (discharges from a drainage area of 2 acres or more).

Numerous entities offered comments on this definition. Several commenters concurred with this proposed definition. One commenter maintained that the data collected at such outfalls would be sufficient to estimate pollutant loads as well as concentrations using well calibrated models. Another municipality stated that 50 acres was an excellent approximation for the average drainage area served by a 36-inch storm sewer. Two States and one county supported the definition as proposed. One large municipal entity supported the definition, stating that screening major outfalls could be accomplished with available staff over a three month period. In light of these comments, EPA has decided to retain, in part, the definition as proposed.

Numerous commenters suggested alternative definitions or otherwise disagreed with the proposed definition. Most of these comments expressed concern about the number of outfalls that would have to be tested or screened if the definition was retained. For this reason EPA has decided to limit the total number of major outfalls or equivalent sampling points that have to be tested to 250 or 500 for medium or large systems respectively. This change is discussed in further detail below.

The following are examples of comments that opposed the definition of a "major outfall" as proposed. Several commenters stated that, in the southwest, 6 to 12 foot outfalls are the norm, and that smaller outfalls should not be addressed unless there is a compelling reason to suspect illicit connections. One commenter suggested a size of 54 inches and 50 acres, while another commenter suggested that 48 inches would be appropriate. One commenter suggested that the diameter for industrial pipes should be 18 inches, while another commenter suggested that 50 acres should be the only criterion.

One commenter noted that pipe size will vary according to rainfall patterns and that a single approach would not work universally. This comment, and other similar points of view as noted

herein, convinces that Agency that a more flexible approach is needed to identify field screening and sampling locations. However, EPA is also convinced that a universal standard is necessary for purposes of identifying drainage areas within the municipal system and discrete areas of land use that are drained by certain sized outfalls. This information is critical since these conveyances, and lands they drain, are sources of pollutants to waters of the United States from municipal systems and are properly the subject of appropriate permit conditions.

Many commenters suggested placing a limit on the number of major outfalls addressed during the field screening phase of the permit application. Two municipalities stated that the proposed definition of major outfalls in terms to the pipe diameter was too small and that too many outfalls would be covered. One municipality stated that under the proposed definition, it would have over 4700 "major outfalls," a number viewed as being unacceptably large. Several municipalities argued that they would be penalized for over-design of their storm drain system. One municipality stated field screening of outfalls should be limited to 200 for medium cities and 500 for large cities. Some commenters suggested EPA set a percentage of major outfalls for screening, because all pipes in some municipalities meet the definition of major outfall. One commenter suggested that a sliding scale be used to determine the number of outfalls tested: those with 50 test all, those with 100-200 test 50%, etc. Other commenters suggested a flat percentage of outfalls or flat number such as 100.

4. Field Screening Program

EPA also received several comments in response to the proposed field screening methodology. Among the major concerns were: End of pipe sampling may not be practical and the more appropriate and accessible location is likely to be the nearest upstream manhole; the type of discharge should be the criterion for selecting sampling points as opposed to pipe size; a system wide evaluation is more appropriate than checking each outfall; within some systems, major outfalls or pipe size will not reflect discharges from suspect or old land use areas; efforts should be focused on locations where illicit connections are expected; sites should be determined by looking at sites within drainage basin areas based on land use within those basins; land use and hydrology of the watershed should be the criteria for selecting points;

screening should be performed at locations that will allow for the location of upstream discharges; the focus should be exclusively on drainage areas rather than pipe size, since pipe size will vary with slope; a prescribed percentage of total flow may be more appropriate; state water quality standards should be utilized along with focusing on actual quality in the reaches of a stream.

EPA is convinced by these comments that today's rule should allow applicants to either field screen all major outfalls as proposed (first procedure) or use a second procedure to provide for the strategic location of sampling points to pinpoint illicit connections. EPA agrees with comments that the size of the outfall will not always reflect the chance of uncovering illicit connections or discharges, and that field screening points should be easily accessible.

This second procedure is as follows: field screening points and/or outfalls are randomly located throughout the storm sewer system by placing a grid over a drainage system map and identifying those cells of the grid which contain a major outfall or segment of the storm sewer system. The grid shall be established using the following guidelines and criteria:

(1) A grid system consisting of perpendicular north-south and east-west lines spaced 1/4 mile apart shall be overlaid on a map of the municipal storm sewer system, creating a series of cells;

(2) All cells that contain a segment of the storm sewer system shall be identified; one field screening point shall be selected in each cell; major outfalls may be used as field screening points;

(3) Field screening points or major outfalls should be located downstream of any sources of suspected illegal or illicit activity;

(4) Field screening points shall be located to the degree practicable at the farthest manhole or other accessible location downstream in the system, within each cell; however, safety of personnel and accessibility of the location should be considered in making this determination;

(5) The assessment and selection of cells shall use the following criteria: Hydrological conditions; total drainage area of the site; population density of the site; traffic density; age of the structures or buildings in the area; history of the area; land use types;

(6) For medium municipal separate storm sewer systems, no more than 250 cells need have identified field screening points; in large municipal separate storm sewer systems, no more than 500 cells need to have identified field screening points for detecting illicit connections;

cells established by the grid that contain no storm sewer segments will be eliminated from consideration; if fewer than 250 cells in medium municipal sewers are created, and fewer than 500 in large systems are created by the overlay on the municipal sewer map, then all those cells which contain a segment of the sewer system shall be subject to field screening (unless access to the separate storm sewer system is impossible);

(7) Large or medium municipal separate storm sewer systems which are unable to utilize the procedures described in paragraphs (1) through (6) above, because a sufficiently detailed map of the separate storm sewer systems is unavailable, shall field screen at least 250 or 500 major outfalls respectively using the following method: the applicant shall establish a grid system consisting of north-south and east-west lines spaced 1/4 mile apart overlaid on a map of the boundaries of a large or medium municipal entity described at § 122.26(b), thereby creating a series of cells; major outfalls in as many different cells as possible shall be selected until 500 major outfalls (large municipalities) or 250 major outfalls (medium municipalities) are selected; a field screening analysis shall be undertaken at these major outfalls.

The methodology outlined above is in response to public comments which indicated that the field screening and sampling of major outfalls as proposed would lead to insurmountable logistical problems in some municipal systems. EPA believes that the above is an effective approach to pinpointing suspected problem points along a given trunkline or segment of separate storm sewer system. Jurisdictions with no extensive or previous history of monitoring, or lack of an intensive monitoring program can utilize the methods described in establishing a program. Furthermore, the approach will allow for the prioritization of outfalls, sampling points, or areas within the municipality where there are suspected illicit connections or discharges, or other circumstances creating higher concentrations and loadings of pollutants.

Paragraph (7) enables municipalities to select major outfalls without regard to the municipal sewer system map that is required for using the procedure described in paragraphs (1) through (6). However, the applicant must still select outfalls within the cells created by overlaying a 1/4 mile grid over a map of the boundaries of the large or medium municipal entity defined under § 122.26(b), and select major outfalls within as many of those cells as

possible, up to 500 (large municipal systems) or 250 (medium municipal systems). In this manner, as many different areas and land uses within the municipal system will be covered by the field screening component of the municipal application.

In order to keep the costs of the program within the anticipated limits of the proposed regulation, the number of outfalls or sampling locations using the grid system is to be limited to 500 for large municipal separate storm sewer systems and 250 for medium municipal separate storm sewer systems.

In response to several comments, EPA has clarified the definition of major outfalls with regard to the words, "pipe with an inside diameter of 36 inches or more or its equivalent" and "a pipe with an inside diameter of 12 inches or more or its equivalent." This definition has been modified to specify that single pipes or single conveyances with the appropriate diameter or equivalent are covered.

EPA's proposal required municipal permit applicants to submit a fiscal analysis of expenditures that will be required in order to implement the proposed management plans required in part 2 of the application. The description of fiscal resources should include a description of the source of the funds. Some commenters felt that a fiscal analysis should only be required during the term of the permit. In response, EPA believes that during the two years of permit application development, the permit applicant should be in a position to submit information on the ability and means for financing storm water management programs during the term of the permit. EPA views this information as an important means of evaluating the scope of program and whether the permittee will be devoting adequate resources to implementing the program before that program is mapped out in the permit itself.

5. Source Identification

The identification of sources which contribute pollutants to municipal separate storm sewers is a critical step in characterizing the nature and extent of pollutants in discharges and in developing appropriate control measures. Source identification can be useful for providing an analysis of pollutant source contribution and for identifying the relationship between pollutant sources and receiving water quality problems. In cases where end-of-pipe controls alone are not practicable, it is essential to identify the source of pollutants into the municipal storm

sewer systems to support a targeted approach to control pollutant sources.

The relative contribution of pollutants from various sources will be highly site-specific. The first step in developing a targeted approach for controlling pollutants in discharges from municipal storm sewer systems is identifying the various sources in each drainage basin that will contribute pollutants to the municipal storm sewer system.

This rulemaking phases in the source identification requirements of the permit program by establishing minimum objectives in part 1 of the application and by requiring applicants to submit a source identification plan in part 2 of the application to provide additional information during the term of the permit. The minimum source identification requirements of part 1 of the application have been designed to provide sufficient information to provide an initial characterization of pollutants in the discharges from the municipal storm sewer system. EPA realizes that with many large, complex municipal storm sewer systems, it may be difficult to identify all outfalls during the permit application process. Accordingly, EPA is requiring that known outfalls be reported in part 1 of the application. Part 1 of the application will also include: A description of procedures and a proposed program to identify additional major outfalls; the identification of the drainage area associated with known outfalls; a description of major land use classifications in each drainage area, descriptions of soils, the location of industrial facilities, open dumps, landfills or RCRA hazardous waste facilities which discharge storm water to the municipal storm sewer system; and ten year projections of population growth and development activities (population data and development projections will be useful for future predictions of loadings to receiving waters from municipal storm sewer systems, and capacities required for treatment systems). In general, population projections should reflect various scenarios of development (high, medium, low relative to recent trends).

Part 2 of the application will supplement the information reported in part 1 of the application so that, at a minimum, all major outfalls are identified.

Under today's rule, municipal or public entities responsible for applying for and obtaining an NPDES permit will be required to identify the location of an open dump, sanitary landfill, municipal incinerator or hazardous waste treatment, storage, and disposal facility under RCRA which may discharge storm water to the system as well as all

facilities which discharge storm water associated with industrial activity into a large or medium municipal separate storm sewer system.

Requiring these source identification measures is supported by the legislative history of section 405 of the WQA, which instructs that "[i]n writing any permit for a municipal separate storm sewer, EPA or the State should pay particular attention to the nature and uses of the drainage area and the location of any industrial facility, open dump, landfill, or hazardous waste treatment, storage, or disposal facility which may contribute pollutants to the discharge." (emphasis added) [Vol 133 Cong. Rec. S752 (daily ed. Jan. 14, 1987)].

One municipality questioned the purpose of the topographic map and commented that the scale of the topographic map is too large to indicate any of the required outfall, drainage, industrial or structural control information. In response, the purpose of the topographic map is to identify receiving waters, major storm water sewer lines that contribute discharges to these waters, and potential sources of storm water pollution. EPA disagrees that a USGS 7.5 scale map is inappropriate for identifying these features within a municipal system. The scale afforded by such a map provides sufficient detail to allow specified delineation of outfalls, while not requiring an overly burdensome map in terms of size. Numerous commenters noted the value of source identification information and generally supported submitting this information in the permit application.

Many commenters questioned the value of the source identification information for the purpose of characterizing pollutant loads and concentrations. Conversely, one commenter opined that the requirement would provide sufficient information to estimate pollutant loadings from each outfall using loading models to estimate loadings by watershed. In response, the source identification information serves several purposes. It is the first step for identifying potential sources of pollutants from which more in depth analysis can be accomplished, under the discharge characterization component of the application. Also, where appropriate, it may be used in conjunction with models to estimate loadings and concentrations. EPA has also taken note of the many comments that question or dismiss the concept of determining pollutant loads and concentrations solely from source identification. Accordingly, EPA is convinced that at least some of the sampling requirements as proposed are

necessary to facilitate more accurate system specific estimates of pollutant concentrations and loadings. These are discussed below, in the discharge characterization section.

One commenter suggested that aerial photos be submitted in lieu of topographic maps. EPA agrees that an aerial photograph of the appropriate scale that communicates the same information as a topographic map may be substituted. Today's final rule reflects this flexibility.

The source identification component of the municipal application also requires that municipal applicants identify the industrial activity within the drainage area associated with each major outfall. One commenter stated that where multiple storm sewers outfalls discharge to a stream reach, municipalities should be allowed to delineate a single sewer-shed for identifying sources of industrial activity. In response, the rule does not delimit an applicant's ability to identify industries in groups according to a common series of storm sewer outfalls, if that is an easier or more appropriate methodology for that particular applicant. However, EPA would view this as appropriate only where the land use is of one type, such as industrial. Where land use is mixed within the drainage area associated with each major outfall, such differences need to be identified.

In response to comments, to the extent that EPA is requesting that applicants identify the types of industrial facilities operating within the municipality, the municipality is free to use Standard Industrial Classification (SIC) or other systems which identify the principal products or services of the facility. One commenter disagreed with EPA's decision to require a list of water bodies that are listed under CWA sections 304(1), 319(a), 314(a), and 320, because the States already have this information and that requesting it from permittees could result in "omissions, misunderstandings, and mistakes." EPA believes that these waters should be identified in the application so that appropriate permit conditions can be developed that address storm water discharges that are adversely affecting such waters. EPA believes that having this information immediately at the disposal of the municipality and the permit writer will speed the process and alert the municipality of storm water discharges to listed water bodies and potentially polluted storm water discharges to those waters.

6. Characterization of Discharges

The characterization plan and data collection required in today's rule as elements of Part-one and Part-two of the municipal permit application is comprised of several major components:

- A screening analysis to provide information to develop a program for detecting and controlling illicit connections and illegal dumping to the municipal separate storm sewer system;
- Initial quantitative data to allow the development of a representative sampling program to be incorporated as a permit condition;
- System-wide estimates of annual pollutant loadings and the mean concentration of pollutants in storm water discharges, and a schedule to provide estimates during the term of the permit for each major outfall of the seasonal pollutant loadings and the event mean concentration of pollutants in storm water discharges; and
- An identification of receiving waters with known water quality impacts associated with storm water discharges.

Several commenters noted the importance of developing and targeting management programs based on discharge characterization data and monitoring. Numerous other commenters stressed the importance of a program to identify and eliminate illicit connections and improper disposal. EPA agrees that discharge characterization is an important component of developing management programs. Most of the discharge characterization components of the municipal application procedure have been retained as proposed. However some changes and clarifications have been made, and these are noted below.

a. *Screening analysis for illicit discharges (part 1 of application)*. Illicit discharges (non-storm water discharges without a NPDES permit), and illegal dumping to municipal separate storm sewer systems occur in a relatively haphazard manner. Due to the unpredictability of such discharges, today's permit applications require a field analysis for the development of priorities for detecting and controlling such discharges. A field screening approach will provide a means of detecting high levels of pollutants in dry weather flows, which is one indicator of illicit connections. Results of a field test of such discharges will provide further information about the nature of the discharge to determine if further investigation is warranted. Visual observation of dry weather flows has been shown to be one the most effective

means for tracking down illicit connections and improper disposal.

As discussed in greater detail in section VI.H.7.b of today's preamble, EPA is proposing to require that municipal applicants submit a comprehensive plan to develop a program to detect and control illicit connections and illegal dumping. In order to develop appropriate priorities for these programs, applicants shall submit the results of a screening analysis to be performed on major outfalls or "field screening points" in the systems to detect the presence of illicit hookups and illegal dumping. The results of the screening analysis, referred to as the field screen, would be reported in part 1 of the permit application.

Under the requirements for a field screen, the applicant or co-applicants will submit a description of observations of dry weather discharges from major outfalls or "field screening points" identified in part 1 of the application. At a minimum, the field screen would include a description of visual observations made during a dry weather period. If any flow is observed during a dry weather period, two grab samples will be collected during a 24 hour period with a minimum period of four hours between samples. For all such samples, a description of the color, odor, turbidity, the presence of an oil sheen or surface scum as well as any other relevant observation regarding the potential presence of non-storm water discharges or illegal dumping would be provided. In addition, the applicant should provide the results of a field screen which includes on-site estimates of pH, total chlorine, total copper, total phenol, detergents (or surfactants) along with a description of the flow. EPA is not requiring analytical methods approved under 40 CFR part 136 be used exclusively in the field screen. Rather, the use of inexpensive field sampling techniques such as the use of colorimetric detection methods is anticipated. Where the field screen does not involve analytical methods approved under 40 CFR part 136, the applicant is required to provide a description of the method used which includes the name of the manufacturer of the test method, including the range and accuracy of the test. Appropriate field techniques for a field screen of dry weather discharges are discussed in EPA guidance for municipal storm water discharge permit applications.

It should be clarified that data from the field screen is generally not appropriate for comprehensive evaluation of water quality impacts, or estimating pollutant loadings. Rather,

the information from the field screen in part 1 of the application will be used along with other information, such as the age of development and degree of industrial activity in the drainage basin, to identify areas or outfalls which are appropriate targets for management programs and for investigations directed at identifying and controlling non-storm water discharges to separate storm sewers during the term of the permit.

In the December 7, 1988, proposal, EPA proposed a second phase of the screening analysis requiring that wet-weather and dry-weather samples be collected and analyzed in accordance with analytical methods approved under 40 CFR part 136 from designated major outfalls for a larger set of pollutants identified with illicit connections. Comments essentially viewed this proposal as too ambitious for the permit application. One commenter recommended that this procedure could best be accomplished during the term of the permit. Some comments maintained that the collection of analytical samples as a follow up to an initial field screen analysis was not the most cost-effective, practicable or efficient method for pinpointing illicit connections. EPA recognizes that several municipal programs to detect and control illicit connections and other non-storm water discharges have been successfully developed and implemented without the use of extensive analytical sampling (for example, programs in Fort Worth, TX and Washtenaw County, MI). After identifying and analyzing the comments on this aspect of the proposal EPA has withdrawn this element of the proposal from today's rule. EPA believes that a follow-up phase to the initial field screening is more appropriate during the term of the permit. Thus, EPA has dropped the field screening requirement proposed for Part 2 of the application.

b. *Representative data (Part 2 of application)*. The NURP study showed that pollutant concentrations in urban runoff can exhibit significant variation. Pollutant concentrations in such discharges vary during storm events and from storm event to storm event. Given the complex, variable nature of storm water discharges from municipal systems, EPA favors a permit scheme where the collection of representative data is primarily a task that will be accomplished through monitoring programs during the term of the permit. Permit writers have the necessary flexibility to develop monitoring requirements that more accurately reflect the true nature of highly variable and complex discharges.

Today's rule provides for an initial assessment of the quality of discharges from municipal separate storm sewers based primarily on source identification measures and existing information received in the permit application. This information will be used to begin to characterize system discharges. The analysis developed under this approach will not rely solely on sampling data collected during the application process, but will also incorporate existing data bases such as the one developed under the NURP study. Today's rule requires that some quantitative data will be collected to ensure the system discharges can be appropriately represented by the various existing data bases and to provide a basis for developing a monitoring plan to be implemented as a permit condition.

Today's rule requires that quantitative data be submitted for discharges from selected storm events at between 5 and 10 outfalls or field screening points. The municipality will recommend and the Director will then designate the outfalls or field screening points as representative of the commercial, residential and industrial land use activities of the drainage area contributing to the system, on the basis of information received in part 1 of the application. The applicant will be required to collect samples of a storm discharge from three storm events occurring one month apart for each designated outfall or field screening point. This is a modification to the December 7, 1988, proposal wherein only one of the 5 to 10 outfalls was to be sampled during three storm events, and the remaining sampled only once. This requirement may be modified by the Director if the type and frequency of storm events require different sampling. The Director may require samples of discharge to be collected during snow melts or during specified seasons. The Director may also require additional testing during a single event if it is unlikely that there will be three storm events suitable for sampling during the year. Furthermore, the Director may allow exemptions to the three storm event requirement when climatic conditions create good cause for such exemptions; for example, arid regions or areas experiencing drought conditions during the period when applications are developed could be exempted.

EPA has added requirements to sample more storm events in response to comments that the sampling procedure proposed would not necessarily yield representative data. Commenters indicated that: rain events of different intensity may yield different levels and

types of pollutants; a rain event after a dry spell of several months will not be representative when compared to rain events occurring closer together, due to the build up of constituents; one sample may reflect short term effects such as improper disposal rather than long term effects; and that rain events are generally too variable to rely on the limited sampling as proposed. Clearly the data collected from sampling storm water discharges has a tendency to vary greatly. The more sampling that is accomplished, the greater extent to which this variability may be accounted for and appropriate management programs developed.

In selecting the amount of data to be collected during the permit application process, EPA has attempted to balance the usefulness of this data against the economic and logistical constraints in actually obtaining it. In some cases the data obtained will support initial loading and concentration estimates obtained using various modeling techniques, from which appropriate permit conditions can be developed. Data obtained may be supplemented with further data collection during the term of the permit.

EPA believes that the requirement that selected major municipal outfalls or "field screening points" be sampled for more than one event will provide verification that the characterization of discharge is valid. Where an ongoing sampling program is defined for the term of the permit, samples taken during the first few years of this period can be used to verify the application results. If a municipality or an industry questions the conclusions drawn from the characterization sampling, it may at its discretion choose to perform additional sampling to either confirm or dispel these concerns.

All samples collected will be analyzed for all pollutants listed in Table II, (organic pollutants), and Table III, (toxic metals, cyanide and total phenol) of appendix D of 40 CFR part 122, and for the pollutants listed in Table M-1 below:

Table M-1

Total suspended solids (TSS)	Total dissolved solids.
COD	BOD.
Oil and grease	Fecal coliform.
Fecal streptococcus	pH.
Dissolved phosphorus	
Total ammonia plus organic nitrogen.	Total phosphorus.
Total Kjeldahl nitrogen	Nitrate plus nitrite.

A portion of the NURP program involved monitoring 120 priority pollutants in storm water discharges

from lands used for residential, commercial and light industrial activities. The NURP program excluded testing for asbestos and dioxin. Results for seven other organic priority pollutants were not considered valid due to changes in, or constraints on test methods. Seventy-seven priority pollutants were detected in samples of storm water discharges from lands used for residential, commercial and light industries taken during the NURP study, including 14 inorganic and 63 organic pollutants. Table M-2 shows the priority pollutants which were detected in at least ten percent of the discharge samples which were sampled for priority pollutants.

TABLE M-2.—PRIORITY POLLUTANTS DETECTED IN AT LEAST 10% OF NURP SAMPLES

[In percent]	
Metals and inorganics	Frequency of detection
Antimony.....	13
Arsenic.....	52
Beryllium.....	12
Cadmium.....	48
Chromium.....	58
Copper.....	91
Cyanides.....	23
Lead.....	94
Nickel.....	43
Selenium.....	11
Zinc.....	94
Pesticides:	
Alpha-hexachlorocyclohexane.....	20
Alpha-endosulfan.....	19
Chlordane.....	17
Lindane.....	15
Halogenated aliphatics:	
Methane, dichloro.....	11
Phenols and cresols:	
Phenol.....	14
Phenol, pentachloro.....	19
Phenol, 4-nitro.....	10
Phthalate esters:	
Phthalate, bis(2-ethylhexyl).....	22
Polycyclic aromatic hydrocarbons:	
Chrysene.....	10
Fluoranthene.....	18
Phenanthrene.....	12
Pyrene.....	15

The NURP data also showed a significant number of these samples exceeded various freshwater water quality criteria. The exceedence of water quality criteria does not necessarily imply that an actual violation of standards will exist in the receiving water body in question. Rather, the enumeration of exceedences serves as a screening function to identify those constituents whose presence in urban storm water runoff may warrant high priority for further evaluation.

Members of this group represent all of the major organic chemical fractions

found in Table II of appendix D of 40 CFR part 122 (volatiles, acid compounds, base/neutrals, pesticides). Today's rule requires testing for all organic constituents in Table II rather than limiting the sampling requirements to the 24 toxic constituents found in the NURP study because they will provide a better description of the discharge at essentially the same cost. (The cost of analyzing samples for organic chemicals strongly depends on the number of major organic chemical fractions tested). The NURP study focused on characterizing storm water discharges from lands used for residential, commercial and light industrial activities. In general, the NURP study did not focus on other sources of pollutants to municipal separate storm sewer systems and, therefore, does not reflect all potential pollutants that may be present in discharges from municipal separate storm sewer systems.

The sampling requirements for the permit application address a limited number of sampling locations but require analysis for a wide range of pollutants. Sampling for a wide range of pollutants as a permit application requirement should provide permit writers with appropriate data to target more specific pollutants when developing requirements for a monitoring program during the term of the permit.

Numerous commenters stated that monitoring for all priority pollutants seemed excessive. However, EPA is convinced that it is more appropriate for permit conditions to focus on and prioritize particular pollutant problems after data covering a broad spectrum of pollutants are developed. As noted above, NURP identified 77 priority pollutants in urban runoff, but only from residential, commercial, and light industrial (e.g. industrial parks) areas. One municipal entity stated that this approach is a reasonable and realistic means of providing some useful baseline data, while others recommended sampling a variety of parameters that are included in Tables M-1 and M-2. Another municipal entity stated that characterization of outfall discharge quality during storm events is necessary as a means of targeting source control activities.

EPA is working with the United States Geological Survey (USGS) to evaluate the availability of USGS technical assistance to municipalities through cooperative funding programs to aid in collecting representative quantitative data of storm water discharges from municipal systems.

USGS data collection programs with municipalities typically include storm

water discharge samples obtained at various times during a storm hydrograph event. Various USGS field procedures can be used to obtain discharge data for pipes, culverts, etc., typically found in urban areas. Pollutant models can be calibrated with data and long-term rainfall records to simulate the quality of system discharges and compared to other storm water models.

In addition, EPA recognizes that many municipalities have participated in studies, such as NURP, that involve sampling of urban runoff as well as other components of discharges from municipal separate storm sewer systems. All existing storm water sampling data along with relevant water quality data, sediment data, fish tissue data or biosurvey data taken over the last ten years is considered relevant and, under today's rule, must be submitted with part I of the application. Sampling data that is submitted must be accompanied with a narrative description of the drainage area served by the outfall monitored, a description of the sampling and quality control program, and the location of receiving water monitoring.

EPA requested comments on the use of existing data, such as that generated under the NURP study, to satisfy the requirement of providing representative sampling data. Commenters did not agree on the value of NURP results as an indicator of representative data. Several commenters expressed the view that existing data could be used to satisfy in whole or in part the representative sampling requirements of the storm water permit application. However, commenters generally did not offer suggested criteria that could be used to verify the validity of existing data. One commenter believed that intensive sampling over a period of ten years in 12 basins, when combined with NURP data, would be adequate.

One commenter supported the use of data, such as that obtained from the NURP study, to target sampling programs. EPA supports such a methodology and has retained this portion of the proposed discharge characterization component. EPA received strong support from an environmental group for retaining this information requirement in part 1 of the application.

In light of these comments EPA believes it is appropriate to retain the representative sampling requirements without resorting to the use of existing data exclusively. Because of the inherent variability in reliability and applicability of existing data, EPA is convinced that a nationally consistent methodology for collecting data is

appropriate. This data can then be used in conjunction with other existing data and models to develop appropriate site specific management programs and more generalized management program strategies. Where existing data and data collected under today's rule varies or does not match, further sampling under the term of the permit will be accomplished to more accurately assess the discharge of pollutants.

c. Loading and Concentration Estimates (part 2 of application). The assessment of the water quality impacts of discharges from municipal separate storm sewer systems on receiving waters requires the analysis of both pollutant loadings and concentrations of pollutants in discharges.

The loading and concentration estimates in today's rule will be used to evaluate two types of water quality impacts: (1) Short-term impacts; and (2) long-term impacts. Specifically, the regulation requires estimates of the annual pollutant load of the cumulative discharges to waters of the United States from municipal outfalls and the event mean concentration of the cumulative discharges to waters of the United States municipal outfalls during a storm event for BOD₅, COD, TSS, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, total phosphorus, dissolved phosphorus, cadmium, copper, lead, and zinc. Estimates shall be accompanied by a description of the procedures for estimating constituent loads and concentrations, including any modelling, data analysis, and calculation methods. Municipalities have options in the use of methodologies, including those presented in NURP for calculating loads.

Short term impacts from discharges from municipal separate storm sewers involve changes in water quality that occur during and shortly after storm events. Examples of short-term impacts that can lead to impairments include periodic dissolved oxygen depression due to the oxidation of contaminants, high bacteria levels, fish kills, acute effects of toxic pollutants, contact recreation impairments and loss of submerged macrophytes.

Characterization of instream pollutant concentrations based on estimated pollutant concentrations in system discharges are important for evaluating these types of impacts.

Long-term water quality impacts from discharges from municipal separate storm sewers may be caused by contaminants associated with suspended solids that settle in receiving water sediments and by nutrients which enter receiving water systems with long

retention times. Pollutant loading data are important for evaluation of impairments such as loss of storage capacity in streams, estuaries, reservoirs, lakes and bays, lake eutrophication caused by high nutrient loadings, and destruction of benthic habitat. Other examples of the long-term water quality impacts include depressed dissolved oxygen caused by the oxidation of organics in bottom sediments and biological accumulation of toxics as a result of uptake by organisms in the food chain. An estimate of annual pollutant loading associated with discharges from municipal storm water sewer systems is necessary to evaluate the magnitude and severity of the environmental impacts of such discharges and to evaluate the effectiveness of controls which are imposed at a later time.

Municipal storm water sewer systems generally handle runoff from large drainage areas and the sources of pollution are usually very diffuse. The concentrations of many pollutants in discharges from these systems are often low relative to many industrial process and POTW discharges. The water quality impacts of low concentration pollution discharges tend to be cumulative and need to be evaluated in terms of aggregate loadings as well as pollutant concentrations. A site-specific loading analysis can be used to evaluate the relative contribution of various pollutant sources.

7. Storm Water Quality Management Plans

Today's rule facilitates the development of site-specific permit conditions by requiring large and medium municipal permit applicants to submit, along with other information, a description of existing structural and non-structural prevention and control measures on discharges of pollutants from municipal storm sewers in part I of the permit application. Section 122.26(d)(2)(iv) requires the applicant to identify in part 2 of the application, to the degree necessary to meet the MEP standard, additional prevention or control measures which will be implemented during the life of the permit. Although, in many cases, it will not be possible to identify all prevention and control measures that are appropriate as permit conditions, EPA believes that the process of identifying components of a comprehensive prevention and/or control program should begin early and that applicants should be given the opportunity to identify and propose the components of the program that they believe are

appropriate for first preventing or controlling discharges of pollutants:

As noted earlier, EPA recognizes that problems associated with storm water, combined sewer overflows (CSOs) and infiltration and inflow (I&I) are all inter-related even though they are treated somewhat differently under the law. EPA believes that it is important to begin linking these programs and activities and, because of the potential cost to local governments, to investigate the use of innovative, nontraditional approaches to reducing or preventing contamination of storm water. The application process for developing municipal storm water management plans provides an ideal opportunity between steps 1 and 2 for considering the full range of nontraditional, preventive approaches.

The permit application requirements in today's rule require the applicant or co-applicants to develop management programs for four types of pollutant sources which discharge to large and medium municipal storm sewer systems. Discharges from large and medium municipal storm sewer systems are usually expected to be composed primarily of: (1) Runoff from commercial and residential areas; (2) storm water runoff from industrial areas; (3) runoff from construction sites; and (4) non-storm water discharges. Part 2 of the permit application has been designed to allow the applicant the opportunity to propose MEP control measures for each of these components of the discharge. Discharges from some municipal systems may also contain pollutants from other sources, such as runoff from land disposal activities (leaking septic tanks, landfills and land application of sewage sludge). Where other sources, such as land disposal, contribute significant amounts of pollutants to a municipal storm sewer system, appropriate control measures should be included on a site-specific basis. Proposed management programs will then be evaluated in the development of permit conditions.

There is some overlap in the manner in which these pollutant sources are characterized and their sources identified. For instance, improper disposal of oil into storm drains is often associated with do-it-yourself automobile oil changes in residential areas, or improper application or over-use of herbicides and pesticides in residential areas can also occur in industrial areas. Also, some control measures will reduce pollutant loads for multiple components of the municipal storm sewer discharge. These measures should be identified under all

appropriate places in the application; as discussed below, however, double counting of pollutant removal must be avoided when the total assessment of control measures is performed.

Although many land use programs have multiple purposes, including the reduction of pollutants in discharges from municipal separate storm sewer systems, the proposed management programs in today's rule are intended to address only those controls which can be implemented by the permit applicant or co-applicants. EPA cannot abrogate its responsibilities under the CWA to implement the NPDES permit program by relying on pollution control programs that are outside the NPDES program. For example, municipal permit management programs may not rely exclusively on erosion or sediment control laws for implementing that portion of management programs that address discharges from construction sites, unless such laws implement NPDES permit program requirements entirely and that such implementation is a part of the permit.

EPA anticipates that storm water management programs will evolve and mature over time. The permits for discharges from municipal separate storm sewer systems will be written to reflect changing conditions that result from program development and implementation and corresponding improvements in water quality. The proposed permit applications will require applicants to provide a description of the range of control measures considered for implementation during the term of the permit. Flexibility in developing permit conditions will be encouraged by providing applicants an opportunity to identify in the permit application priority controls appropriate for the initial implementation of management programs. Many commenters endorsed the flexible site-specific storm water program approach as proposed as a method for addressing regional water quality control programs in a cost effective manner. To this extent, EPA agrees with one municipality that management programs should focus on more serious problems and sources of pollutants identified in the municipal system. However, EPA believes that to implement section 402(p)(3), comprehensive storm water management programs which address a number of major sources of pollutants to a system are necessary. Municipal programs should not be focused solely on a single source of pollution, such as illicit connections.

One commenter maintained that management program development

should be flexible enough to allow for consideration of what is attainable based on the area's climate, vegetation, hydrology, and land uses. EPA agrees with this comment. Some strategies for reducing pollutants in the northeast will not be practical in the southwest, such as management programs for deicing activities. The permit application process will determine what strategies are appropriate in different locations.

Several commenters supported addressing storm water pollutant problems through management practices or programs rather than end of pipe controls or treatment. EPA agrees with this comment to the extent that storm water management practices are a general theme of this rulemaking with regard to municipal permits. However, there will be cases where such discharges are best addressed through technology such as retention, detention or infiltration ponds.

One commenter reacted unfavorably to the flexible site-specific management plan approach stating that there is no hard criteria upon which to judge the adequacy of programs. Another commenter felt that there should be a BAT standard for municipal permits. Another commenter stated that the rule should contain specific BMPs that the permittee must comply with. EPA disagrees with these comments. The Clean Water Act requires municipalities to apply for permits that will reduce pollutants in discharges to the maximum extent practicable and sets out the types of controls that are contemplated to deal with storm water discharges from municipalities. The language of CWA section 402(p)(3) contemplates that, because of the fundamentally different characteristics of many municipalities, municipalities will have permits tailored to meet particular geographical, hydrological, and climatic conditions. Management practices and programs may be incorporated into the terms of the permit where appropriate. Permit conditions, which require that storm water management programs be developed and implemented or require specific practices, are enforceable in accordance with the terms of the permit. EPA disagrees with the notion that this regulation, which addressed permit application requirements, should create mandatory permit requirements which may have no legitimate application to a particular municipality. The whole point of the permit scheme for these discharges is to avoid inflexibility in the types and levels of control. Further, to the degree that such mandatory requirements may be appropriate, these requirements should be established

under the authority of section 402(p)(6) of the CWA and not in this rulemaking, which addresses permit application requirements.

Some commenters suggested that management programs should be developed as part of the permit conditions and not as part of the permit application. EPA agrees that management programs and their ongoing development should be part of the permit term. However, EPA is convinced, and many commenters agree, that the permit application should contain information on what the permittee has done to date and what it proposes and plans to do during the permit term based upon its discharge characterization and source identification data. This is a reasonable and logical approach and one that meets the intent and letter of section 402(p)(3) of the CWA. As stated above, this would be an appropriate method for implementing storm water management programs that should mature and evolve over time.

Applicants will propose priorities based on a consideration of appropriate controls including, but not limited to, consideration of controls that address: reducing pollutants to municipal separate storm sewer system discharges that are associated with storm water from commercial and residential areas (§ 122.26(d)(2)(iv)(A)); illicit discharges and illegal disposal (§ 122.26(d)(2)(iv)(B)); storm water from industrial areas (§ 122.26(d)(2)(iv)(C)); and runoff from construction sites (§ 122.26(d)(2)(iv)(D)). Permits for different municipalities will place different emphasis on controlling various components of discharges from municipal storm sewers. For example, the potential for cross-connections (such as municipal sewage or industrial process wastewater discharges to a municipal separate storm sewer) is generally expected to be greater in municipalities with older developed areas. On the other hand, municipalities with larger areas of new development will have a greater opportunity to focus controls to reduce pollutants in storm water generated by the area after it is developed, discharges from construction sites, and other planning activities.

EPA requested comments on the process and methods for developing appropriate priorities in management programs proposed in applications and how the development of these priorities can be coordinated with controls on other discharges to ensure the achievement of water quality standards and the goals of the CWA.

Discharges from diffuse sources in residential areas was recognized by several commenters as a significant source of pollutants. Accordingly, these elements of the management plans have been retained. In conjunction with the importance of developing programs for illicit connections, numerous commenters stated that education programs are a priority. Another commenter emphasized that ordinances prohibiting such discharges and their enforcement is a crucial means of a successful program in this regard. EPA agrees with these comments and consequently will retain those portions of management program development that include a description of a program for educational activities such as public information for the proper disposal of oil and toxic materials and the use of herbicides, pesticides and fertilizers.

Some commenters noted that discharge characterization is necessary for development of appropriate management plans. EPA agrees with these comments and has retained the discharge characterization components in this rulemaking. However, EPA disagrees that the results of all discharge characterization procedures (*i.e.*, part 1 and part 2) are necessary to describe and propose a program as required in part 2 of the application. The application of various models is available to permit applicants, where needed, to develop appropriate management programs. All available site specific discharge characterization data should be available to the permit writer to draft appropriate conditions for the term of the permit.

One commenter noted that an important aspect of developing management plans is establishing the necessary legal authority to improve water quality. EPA agrees with this comment and has retained those aspects of the regulation which call for development and attainment of adequate legal authority in both parts of the municipal application.

One commenter stated that programs should address previously identified water quality problems in other programs that are required by section 304(1) of the CWA. EPA agrees that identified water quality problems need to be addressed by management programs, and the municipal permit application will call for an identification of these waters. However, EPA does not endorse addressing these waters to the exclusion of all others within the boundaries of the municipal separate storm sewer system. Some waters may experience substantial degradation after rain events and still not be listed under

section 304(1). Further, water quality impacts in listed waters may not be related to storm water discharges, while other non-listed waters do have water quality impacts from storm water discharges. Similarly, EPA agrees with one commenter that it may be desirable to focus attention and resources on certain problem watersheds within a municipality, and controls may be imposed and programs prioritized on that basis. However, such a focus should not be to the exclusion of other waters and watersheds that have water quality problems (although less troublesome) traceable to storm water discharges. The CWA requires that permits address discharges to waters of the United States, not just waters previously targeted under special programs.

Some commenters expressed concern that the permit application requires the design of management programs before knowing what will be in the permits. EPA disagrees with the thrust of this comment, that is that the order of requirements is inappropriate. The permit applicant will have two years to develop proposed plans which can be considered by permit writers in the development of the permit. Based upon a consideration of the management program proposed by the municipality and other relevant information, permits can be tailored for individual programs. One commenter stated that the cornerstone of management programs are inspection and enforcement programs. EPA agrees that these two elements are important components. Without inspection and enforcement mechanisms the programs will undoubtedly falter. Accordingly these requirements in the description of management programs in the permit application have been retained. In a similar vein, one commenter emphasized the importance of developing legal authority, financial capability, and administrative infrastructure. EPA agrees with this comment and has retained those aspects of the regulation that call for a description of applicants plans and resources in these areas.

One commenter stressed that control of discharges into the municipal system from industries is an important goal of municipal storm water management programs. EPA agrees with this comment and has retained the proposed description of management programs to address discharges from industrial sources. Other commenters identified industries as the principal contributors of pollutants to municipal separate storm sewer systems.

In addition, EPA will continue to evaluate procedures and methods to control storm water discharges to the extent necessary to mitigate impacts on water quality in the studies required under section 402(p)(5) of the CWA. One purpose of these studies will be to evaluate the costs and water quality benefits associated with implementing these procedures and methods. This evaluation will address a number of factors which impact the implementation costs associated with these programs, such as the extent to which similar municipal ordinances are currently being implemented, the degree to which existing municipal programs (such as flood management programs or construction site inspections) can be expanded to address water quality concerns, the resource intensiveness of the control, and whether the control program will involve public or private expenditures. This information, along with information gained during permit implementation will aid in the dynamic long-term development of municipal storm water management programs.

a. *Measures to reduce pollutants in runoff from commercial and residential areas.* The NURP program evaluated runoff from lands primarily dedicated to residential and commercial activities. The areas evaluated in the study reflect some other activities, such as light industry, which are commonly dispersed among residential and commercial areas. The NURP study selected sampling locations that were thought to be relatively free of illicit discharges and storm water from heavy industrial sites including storm water runoff from heavy construction sites. Of course, in a study such as NURP it was impossible to totally isolate various contributions to the runoff. In developing the permit application requirements in today's rule EPA has, in general, relied on the NURP definition of urban runoff—runoff from lands used for residential, commercial and light industrial activities.

NURP and numerous other studies have shown that runoff from residential and commercial areas washes a number of pollutants into receiving waters. Of equal importance is the volume of storm water runoff leaving urban areas during storm events. Large intermittent volumes of runoff can destroy aquatic habitat. As the percentage of paved surfaces increases, the volume and rate of runoff and the corresponding pollutant loads also increase. Thus, the amount of storm water runoff from commercial and residential areas and the pollutant loadings associated with storm water runoff increases as development progresses; and they

remain at an elevated level for the lifetime of the development.

Proposed § 122.26(d)(2)(iv)(A) requires municipal storm sewer system applicants to provide in part 2 of the application a description of a proposed management program that will describe priorities for implementing management programs based on a consideration of appropriate controls including:

- A description of maintenance activities and a maintenance schedule for structural controls;
- A description of planning procedures including a comprehensive master plan to control after construction is completed, the discharge of pollutants from municipal separate storm sewers which receive discharges from new development and significant redevelopment after construction is completed (in response to comment this contemplates an engineering policy and procedure strategy with long term planning);
- A description of practices for operating and maintaining public highways and procedures for reducing the impact on receiving waters of such discharges from municipal storm sewer system;
- A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies; and
- A description of a program to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities.

Water quality problems caused by municipal storm sewer discharges will generally be most acute in heavily developed areas. Prevention measures may be desirable and cost effective. However, structural control measures may also be effective, although opportunities for implementing these measures may be limited in previously developed areas. Commonly used structural technologies include a wide variety of treatment techniques, including first flush diversion systems, detention/infiltration basins, retention basins, extended detention basins, infiltration trenches, porous pavement, oil/grit separators, grass swales, and swirl concentrators. A major problem associated with sound storm water management is the need for operating

and maintaining the system for its expected life.

The unavailability of land in highly developed areas often makes the use of structural controls infeasible for modifying many existing systems. Non-structural practices can play a more important role. Non-structural practices can include erosion control, streambank management techniques, street cleaning operations, vegetation/lawn maintenance controls, debris removal, road salt application management and public awareness programs.

As noted above, the first component of the proposed program to reduce pollutants in storm water from commercial and residential areas which discharge to municipal storm sewer systems is to describe maintenance activities and schedule. The second component of the proposed program to reduce pollutants in storm water from commercial and residential areas which discharge to municipal storm sewer systems provides that applicants describe the planning procedures and a comprehensive master plan that will assure that increases of pollutant loading associated with newly developed areas are, to the maximum extent practicable, limited. These measures should address storm water from commercial and residential areas which discharge to the municipal storm sewer that occur after the construction phase of development is completed. Controls for construction activities are addressed later in today's rule. One commenter noted the feasibility of developing management plans for newly developing areas. EPA agrees with this comment and has retained that portion of the regulation that deals with a description of controls for areas of new development. Similarly, one municipality stressed the importance and achievability of addressing storm water discharges from construction sites.

As urban development occurs, the volume of storm water and its rate of discharge increases. These increases are caused when pavement and structures cover soils and destroy vegetation which otherwise would slow and absorb runoff. Development also accelerates erosion through alteration of the land surface. Areas that are in the process of development offer the greatest potential for utilizing the full range of structural and non-structural best management practices. If these measures are to provide controls to reduce pollutant discharges after the area has been developed, comprehensive planning must be used to incorporate these measures as the area is in the process of

developing. These measures offer an important opportunity to limit increases in pollutant loads.

The third component of § 122.26(d)(2)(iv)(A) provides a description of practices for operating and maintaining public roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems. General guidelines recommended for managing highway storm water runoff include litter control, pesticide/herbicide use management, reducing direct discharges, reducing runoff velocity, grassed channels, curb elimination, catchbasin maintenance, appropriate streetcleaning, establishing and maintaining vegetation, development of management controls for salt storage facilities, education and calibration practices for deicing application, infiltration practices, and detention/retention practices.

The fourth component of § 122.26(d)(2)(iv)(A) provides that applicants identify procedures that enable flood management agencies to consider the impact of flood management projects on the water quality of receiving streams. A well-developed storm water management program can reduce the amount of pollutants in storm water discharges as well as benefit flood control objectives. As discussed above, increased development can increase both the quantity of runoff from commercial and residential areas and the pollutant load associated with such discharges. Disturbing the land cover, altering natural drainage patterns, and increasing impervious area all increase the quantity and rate of runoff, thereby increasing both erosion and flooding potential. An integrated planning approach helps planners make the best decisions to benefit both flood control and water quality objectives.

The fifth component of § 122.26(d)(2)(iv)(A) would provide that municipal applicants submit a description of a program to reduce, to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer. Such a program may include controls such as educational activities and other measures for commercial applicators and distributors and controls for application in public rights-of-way and at municipal facilities. Discharges of these materials to municipal storm sewer systems can be controlled by proper application of these materials. Some commenters noted that insecticides used in residential areas are

a probable source of pollutants in storm water discharges from residential areas, as well as salting and other de-icing activities. In response to this comment, part of a community management plan may include controls or education programs to limit the impacts of these sources of pollutants. One commenter noted that many communities already have household toxic disposal programs. Where appropriate these can be incorporated into municipal management programs.

Some commenters suggested substituting the management program description for residential and commercial areas with a simple identification of applicable management practices. EPA agrees that identification of appropriate management practices is a critical component of a program description for these areas. In essence, this is what the program description is designed to achieve. However, for the reasons discussed in greater detail above, EPA is convinced that an appropriate program must address all of the components of the management program for residential and commercial areas that are outlined in today's rule. Further, for the purposes of writing a permit with enforceable conditions, the application should identify a schedule to implement management practices. The applicant should be able to estimate the reduction in pollutant loads as a result of the development of certain management practices and programs (§ 122.26(d)(2)(v)). A program may also include public education programs, which are not necessarily viewed as traditional BMPs.

b. Measures for illicit discharges and improper disposal. The CWA requires that NPDES permits for discharges from municipal storm sewers "shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers." In today's rule, EPA will begin to implement this statutory mandate by focusing on two types of discharges to large and medium municipal separate storm sewer systems. See § 122.26(d)(1)(iv)(D) and (d)(2)(iv)(B). One type of non-storm water discharges are illicit discharges which are plumbed into the system or that result from leakage of sanitary sewage system. The other class of non-storm water discharges result from the improper disposal of materials such as used oil and other toxic materials.

Illicit discharges. In some municipalities, illicit connections of sanitary, commercial and industrial discharges to storm sewer systems have had a significant impact on the water quality of receiving waters. Although the

NURP study did not emphasize identifying illicit connections to storm sewers other than to assure that monitoring sites used in the study were free from sanitary sewage contamination, the study concluded that illicit connections can result in high bacterial counts and dangers to public health. The study also noted that removing such discharges presented opportunities for dramatic improvements in the quality of urban storm water discharges.

Other studies have shown that illicit connections to storm sewers can create severe, wide-spread contamination problems. For example, the Huron River Pollution Abatement Program inspected 660 businesses, homes and other buildings located in Washtenaw County, Michigan and identified 14% of the buildings as having improper storm drain connections. Illicit discharges were detected at a higher rate of 60% for automobile related businesses, including service stations, automobile dealerships, car washes, body shops and light industrial facilities. While some of the problems discovered in this study were the result of improper plumbing or illegal connections, a majority were approved connections at the time they were built. Many commenters emphasized the identification and elimination of illicit connections as a priority, including leakage from sanitary sewers. EPA agrees with these comments and intends to retain this portion of the program without modification.

A wide variety of technologies exist for detecting illicit discharges. The effectiveness of these measures largely depends upon the site-specific design of the system. Under today's rule, permit applicants would develop a description of a proposed management program, including priorities for implementing the program and a schedule to implement a program to identify illicit discharges to the municipal storm sewer system. This rulemaking will require the initial priorities for analyzing various portions of the system and the appropriate detection techniques to be used.

Improper disposal. The permit application requirements for municipal storm sewer systems include a requirement that the municipal permit applicant describe a program to assist and facilitate in the proper management of used oil and toxic materials. Improper management of used oil can lead to discharges to municipal storm sewers that in turn may have a significant impact on receiving water bodies. EPA estimates that, annually, 267 million gallons of used oil, including 135 million gallons of used oil from do-it-yourself

automobile oil changes, are disposed of improperly. An additional 70 million gallons of used oil, most coming from service stations and repair shops, are used for road oiling. Many commenters emphasized the elimination of discharges composed of improperly disposed of oil and toxic material. One commenter identified motor oil as the major source of oil contamination and that EPA needs to encourage proper disposal of used oil. Several other commenters emphasized the importance of recycling programs for oil. EPA agrees with these comments and intends to retain this portion of the program without modification. One commenter identified public awareness and timely reporting of illegal dumping as critical components of this portion of the program. EPA agrees with this comment and intends for management programs to deal with this problem.

c. Measures to reduce pollutants in storm water discharges through municipal separate storm sewers from municipal landfills, hazardous waste treatment, disposal and recovery facilities that are subject to section 313 of title III of SARA. As discussed in section VI.C of today's preamble, industrial facilities that discharge storm water through a large or medium municipal separate storm sewer system are required to apply for a permit under § 122.26(c) or seek coverage under a promulgated general permit. Today's rule also requires the municipal storm sewer permittee to describe a program to address industrial dischargers that are covered under the municipal storm sewer permit. Today's rule requires the municipal applicant to identify such discharges (see source identification requirements under § 122.26(d)(2)(ii)), provide a description of a program to monitor pollutants in runoff from certain industrial facilities that discharge to the municipal separate storm sewer system, identify priorities and procedures for inspections, and establish and implement control measures for such discharges. Should a municipality suspect that an individual discharger is discharging pollutants in storm water above acceptable limits, and the owner/operator of the system has no authority over the discharge, the municipality should contact the NPDES permitting authority for appropriate action. Two examples of possible action are: if the facility already has an individual permit, the permit may be reopened and further controls imposed; or if the facility is covered by a promulgated general permit, then an individual site-specific permit application may be required.

In the December 7, 1988, proposal, EPA requested comments concerning what storm water discharges from industrial facilities through municipal systems should be monitored. One of the proposed approaches was to require data on portions of the municipal system which receive storm water from facilities which are listed in the proposed regulatory definition at § 122.26(b)(14) of "storm water discharge associated with industrial activity" (with the exception of construction activities and uncontaminated storm water from oil and gas operations) which discharge through the municipal system. However, given the large number of facilities meeting this definition that discharge through municipal systems, a monitoring program that requires the submission of quantitative data regarding portions of the municipal systems receiving storm water from such facilities may not be practicable. Such a requirement could, for some systems, potentially become the most resource intensive requirements in the municipal permit. Therefore, EPA proposed various ways to develop appropriate targeting for monitoring programs.

EPA requested comments on a requirement that, at a minimum, monitoring programs address discharges from municipal separate storm sewer outfalls that contain storm water discharges from municipal landfills, hazardous waste treatment, disposal and recovery facilities, and runoff from industrial facilities that are subject to section 313 of title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). Section 313 of title III requires that operators or certain facilities that manufacture, import, process, or otherwise use certain toxic chemicals report annually their releases of those chemicals to any environmental media. Section 313(b) of title III specifies that a facility is covered for the purposes of reporting if it meets all of the following criteria.

- The facility has ten or more full-time employees;
- The facility is in Standard Industrial Classification (SIC) codes 20 through 39;
- The facility manufactured (including quantities imported), processed, or otherwise used a listed chemical in amounts that exceed certain threshold quantities during the calendar year for which reporting is required.

Listed chemicals include 329 toxic chemicals listed at 40 CFR 372.45. After 1989, the threshold quantities of listed chemicals that the facility must manufacture, import or process (in order to trigger the submission of a release

report) is 25,000 pounds per year. The threshold for a use other than manufacturing, importing or processing of listed toxic chemicals is 10,000 pounds per year. EPA promulgated a final regulation clarifying these reporting requirements on February 16, 1988, (53 FR 4500).

EPA received numerous comments regarding limiting the types of facilities that are initially subject to monitoring and municipal management programs. Numerous municipalities agreed that focusing on the above facilities is an appropriate means for setting priorities for the development of control measures to eliminate or reduce pollutants associated with industrial facilities. Commenters agreed that the potential for toxic materials in discharges is high because of the high volume of such materials at these facilities and that information regarding discharges and material management practices will be available through section 313 of SARA. One commenter noted that building on an established program will contribute to establishing an effective storm water program. Accordingly, EPA has specified at § 122.26(d)(2)(ii)(C) that the municipal applicant must describe a program that identifies priorities and procedures for inspections and establishing and implementing control measures for these facilities.

Several commenters suggested that these facilities should not be singled out because the presence of the threshold amounts of SARA 313 chemicals does not indicate that significant quantities of those chemicals are likely to enter the facility's storm water runoff. Instead it was suggested that municipalities should monitor storm sewers as a whole to determine what chemicals are present and therefore what facilities are responsible. EPA disagrees with these comments. The object of these requirements is initially to set priorities for monitoring requirements. Then, if the situation requires, controls can be developed and instituted. If a facility is a member of this class of facilities and does not discharge excessive quantities of SARA 313 chemicals, then it may not be subjected to further monitoring and controls. As noted above, the selection of facilities is only a means of setting priorities for facilities for the development of municipal plans.

EPA agrees, however, that there will be other facilities that are significant sources of pollutants and should be addressed by municipalities as soon as possible under management programs. Accordingly, those industrial facilities that the municipal permit applicant determines to be contributing a

substantial pollutant loading to the municipal storm sewer system shall be addressed in this portion of the municipal management program.

EPA also requested comments on monitoring programs for municipal discharges including the submission of quantitative data on the following constituents:

- Any pollutants limited in an effluent guidelines for the industry subcategories, where applicable;
- Any pollutant listed in a discharging facility's NPDES permits for process wastewater, where applicable;
- Oil and grease, pH, BOD₅, COD, TSS, total phosphorus, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen;
- Any information on discharges required under 40 CFR 122.21(g)(7)(iii) and (iv).

These are the same constituents that are to be addressed in individual permit applicants for storm water discharges associated with industrial activity.

Several industries and municipalities submitted comments on this issue. Some commenters agreed that these are appropriate parameters. Some commenters advised that the ability of municipalities to implement this aspect of the program depended on industries submitting this data. Several industries provided comments suggesting that the approach should allow the permittee flexibility in determining which parameters are chosen because of the burdens of monitoring and the complexity of materials and flows in municipal systems.

In light of these comments, EPA has retained § 122.26(d)(2)(iv)(C) as proposed requiring municipalities to describe a monitoring program which utilizes the above parameters. Monitoring for these parameters provides consistency with the individual application requirements for industries, provides uniformity in municipal applications, and will narrow the parameters to conform to the types of industries discharging into the municipal systems. Monitoring programs may consist of programs undertaken by the municipality exclusively or requirements imposed on industry by the municipality, or a combination of approaches. Appropriate procedures are discussed in municipal permit application guidance.

EPA requested comments on appropriate means for municipalities to determine what facilities are contributing pollutants to municipal systems. Many commenters responded with numerous methodologies. Some of these have been addressed in guidance.

Municipalities will have options in selecting the most appropriate methodology given their circumstances as described in their permit applications.

EPA initially favors establishing monitoring requirements to be applied to those outfalls that directly discharge to waters of the United States. EPA received one comment from a municipality with regard to this issue which agreed that this was the most logical approach. Monitoring of outfalls close to the point of discharge to waters of the United States is generally preferable when attempting to identify priorities for developing pollutant control programs. However, under certain circumstances, it may be preferable to monitor at the point where the runoff from the industrial facility discharges to the municipal system. For example, if many facilities discharge substantially similar storm water to a municipal system it may be more practicable to monitor discharges from representative facilities in order to characterize pollutants in the discharge.

As noted by numerous industries, if municipal characterization plans reveal problems from certain industrial dischargers, then such facilities may be required to provide further data from their own monitoring. As noted above, EPA envisions that this data could then be used to develop appropriate control practices or techniques and/or require individual permit applications if a general permit covering the facility proves inadequate.

Comments were also solicited as to whether end-of-pipe treatment generally was more appropriate than source controls for storm water from industrial facilities which discharge to municipal systems. Many commenters, including both municipalities and industries, stated that source controls are the only practical and feasible means of controlling pollutants in storm water runoff, and specifically opposed the concept of end-of-pipe treatment or other controls. Some commenters maintained that, from an economic and environmental standpoint, end-of-pipe treatment may be the only effective means. One advised that the prompt cleanup of spills, controlled wash down of process areas, covering of material loading areas, storm water runoff diversion, covered storage areas, detention basins or other such mechanisms would prevent storm water from mixing with pollutants and possibly discharging them into receiving waters. Another noted that in the urban areas, there is little potential for treatment; consequently, it would seem

that controls and/or retrofitting existing facilities would be necessary when violations are found and that citizens will be better served by source controls appropriate to the individual problem.

EPA agrees with these comments to the extent that source controls and management programs are the general thrust of these regulations. However, in some situations end-of-pipe treatment, such as holding ponds, may be the only reasonable alternative. EPA disagrees with one industrial commenter that the municipalities should be almost entirely responsible for treating municipal discharges at the end-of-the-pipe without reliance on source controls by industrial dischargers. Municipal programs may require controls on industrial sources with demonstrated storm water discharge problems. One industrial association noted that its member companies already have incentive to properly handle their materials and facilities because of other environmental programs with spill and erosion controls.

Numerous commenters stated that the program addressing industrial dischargers through municipal systems needs to be clearly defined in order to eliminate, as much as possible, potential conflicts between the system operator and dischargers. EPA has provided a framework for development of management plans to control pollutants from these particular sources. However, because of the differences in municipal systems and hydrology nationwide, EPA is not convinced that program specificity is an appropriate approach. The concept of the management program is to provide flexibility to the permit applicants to develop regional site specific control programs.

One commenter suggested that required controls should be limited to a facility's proportional contribution (based on concentration) of pollutants. EPA disagrees. Most facilities discharging through a municipal separate storm sewer will need to be covered by a general or individual permit. These permits will control the introduction of pollutants from that facility through the municipal storm sewer to the waters of the U.S. Any additional controls placed on the facility by the municipality will be at the discretion of the municipality. EPA is not requiring municipalities to adopt a particular level of controls on industrial facilities as suggested by the commenter.

One commenter questioned how dischargers that discharged both into the waters of the United States and through a municipal system will be addressed and whether there is a

potential for inconsistent requirements. Industries that discharge storm water associated with industrial activity into the waters of the United States are required to be covered by individual permits or general permits for such discharges. Dischargers of storm water associated with industrial activity through municipal separate storm sewer systems will be subject to municipal management programs that address such discharges as well as to an individual or general NPDES permit for those discharges. EPA does not believe there is a significant risk of inconsistent requirements, since each industrial facility must meet BAT/BCT-level controls in its NPDES permit. EPA doubts that municipalities will impose much more stringent controls.

Many commenters stated that if cities and municipalities are to be responsible for industrial storm water discharges through their system, then municipalities should have authority to make determinations as to what industries should be regulated, how they are regulated, and when enforcement actions are undertaken. In response, EPA notes that the proposal has been changed and that municipalities will not be solely responsible for industries discharging through their system. Nonetheless, municipalities will be required to meet the terms of their permits related to industrial dischargers. Municipalities may undertake programs that go beyond the threshold requirements of the permit. Some municipal entities stated that municipal permittees should be able to require permit applications from industries in the same manner that EPA does and also require permits. In response, if operators of large and medium municipal separate storm sewer systems wish to employ such a program, then this portion of the management program may incorporate such practices.

d. Measures to reduce pollutants in runoff from construction sites into municipal systems. Section VI.F.8 of today's rule discusses EPA's proposal to define the term "storm water discharge associated with industrial activity" to include runoff from construction sites, including preconstruction activities except operations that result in the disturbance of less than 5 acres total land area which are not part of a larger common plan of development or sale. Under today's rule, facilities that discharge runoff from construction sites that meet this definition will be required to submit permit applications unless they are to be covered by another individual or general NPDES permit. Permit application requirements for such discharges are at 40 CFR 122.26(c)(1)(ii).

Section 122.26(d)(2)(iv)(D) of today's rule requires applicants for a permit for large or medium municipal separate storm sewer systems to submit a description of a proposed management program to control pollutants in construction site runoff that discharges to municipal systems. Under this provision, municipal applicants will submit a description of a program for implementing and maintaining structural and non-structural best management practices for controlling storm water runoff at construction sites. The program will address procedures for site planning, enforceable requirements for nonstructural and structural best management practices, procedures for inspecting sites and enforcing control measures, and educational and training measures. Generally, construction site ordinances are effective when they are implemented. However, in many areas, even though ordinances exist, they have limited effectiveness because they are not adequately implemented. Maintaining best management practices also presents problems. Retention and infiltration basins fill up and silt fences may break or be overtopped. Weak inspection and enforcement point to the need for more emphasis on training and education to complement regulatory programs. Permits issued to municipalities will address these concerns.

8. Assessment of Controls

EPA proposed that municipal applicants provide an initial assessment of the effectiveness of the control method for structural or non-structural controls which have been proposed in the management program. Some commenters stated that the assessment of controls should be left to the term of the permit because the effectiveness of controls will be hard to establish. EPA believes that an initial estimate or assessment is needed because the performance of appropriate management controls is highly dependent on site-specific factors. The assessment will be used in conjunction with the development of pollutant loading and concentration estimates (*see VI.H.6.c*) and the evaluation of water quality benefits associated with implementing controls. Such assessments do not have to be verified with quantitative data, but can be based on accepted engineering design practices. Further more precise assessments based upon quantitative data can be undertaken during the term of the permit.

I. Annual Reports

As discussed earlier in today's preamble, EPA has provided for proposed flexible permit application requirements to facilitate the development of site-specific programs to control the discharge of pollutants from large and medium municipal separate storm sewer systems. Many municipalities are in the early stages of the complex task of developing a program suitable for controlling pollutants in discharges under a NPDES permit, while other municipalities have relatively sophisticated programs in place. In order to ensure that such site-specific programs are developed in a timely manner, EPA proposed to require permittees of municipal separate storm sewer systems to submit status reports every year which reflect the development of their control programs.

The reports will be used by the permitting authority to aid in evaluating compliance with permit conditions and where necessary, modify permit conditions to address changed conditions. EPA requested comments on the appropriate content of the annual reports. Based on these comments EPA has added the following in these reports: an analysis of data, including monitoring data, that is accumulated throughout the year; new outfalls or discharges; annual expenditures; identification of water quality improvements or degradation on watershed basis; budget for year following each annual report; and administrative information including enforcement activities, inspections, and public education programs. EPA views this information as important for evaluating the municipal program. Annual monitoring data and identified water quality improvements are important for evaluating the success of management programs in reducing pollutants. If new outfalls come into existence during the term of the permit, these may be sources of pollutants and appropriate permit conditions will be developed. Annual reports should reflect the level of enforcement activity and inspections undertaken to ensure that the legal authority developed by the municipality is properly exercised. Many of the management programs depend upon an ongoing high level of public education. Accordingly, the undertaking of these programs on an annual basis should be documented.

J. Application Deadlines

The CWA provided a statutory time frame for implementing the storm water permit application process and issuance and compliance with permits.

The CWA requires EPA to promulgate permit application requirements for storm water discharges associated with industrial activity and for large municipal separate storm sewer systems by "no later than two years" after the date of enactment (*i.e.* no later than February 4, 1989). In conjunction with this requirement, the Act requires that permit applications for these classes of discharges be submitted within one year after the statutory date by which EPA is to promulgate permit application requirements by providing that such applications "shall be filed no later than three years" after the date of enactment of the WQA (*i.e.*, no later than February 4, 1990).

The CWA also requires EPA to promulgate final regulations governing storm water permit application requirements for discharges from municipal separate storm sewer systems serving a population of 100,000 or more but less than 250,000 by "no later than four years" after enactment (*i.e.* no later than February 4, 1991). Permit applications for medium municipal separate storm sewer systems "shall be filed no later than five years" after the date of enactment of the CWA (*i.e.*, no later than February 4, 1992). The CWA did not establish the time period between designation and permit application submittal for case-by-case designations under section 402(p)(2)(E).

Comments on earlier rulemakings involving storm water application deadlines have established that applicants need adequate time to obtain "representative" storm water samples. Many commenters have indicated that at least one full year is needed to obtain such samples. This is because many discharges are located in areas where testing during dry seasons or winter would not be feasible. The intermittent and unpredictable nature of storm water discharges can result in difficult and time-consuming data gathering. Moreover, some operators of municipal separate storm sewer systems have many storm water discharges associated with industrial activity, which can require considerable time to identify, analyze, and submit applications. This creates a tremendous practical problem for the extremely high number of unpermitted storm water discharges. The public's interest in a sound storm water program and the development of a useful storm water data base is best served by establishing an application deadline which will allow sufficient time to gather, analyze, and prepare meaningful applications. Based on a consideration of these factors, EPA proposed that individual permit

applications for storm water discharges associated with industrial activity which currently are not covered by a permit and that are required to obtain a permit, be submitted one year after the final rule is promulgated.

EPA received numerous comments from industries on the one year requirement for submitting applications. Several commenters supported the proposed deadline as realistic, while others believed more time was needed to meet the information and quantitative requirement.

EPA rejects the assertion by some commenters that a year is too short a period of time to obtain the required quantitative data. Today's rule generally requires applications for storm water discharges associated with industrial activity to be submitted on or before November 18, 1991. Operators of storm water discharges associated with industrial activity which discharge through a municipal separate storm sewer are subject to the same application deadline as other storm water discharges associated with industrial activity. Since final regulation at § 122.21(g)(7) provides considerable latitude for selecting rain events for quantitative data, EPA is convinced that in most cases data can be obtained during the one year time frame. If data cannot be collected during the one year time frame because of anomalous weather (*e.g.* drought conditions), then permitting authorities may grant additional time for submitting that data on a case-by-case basis. See § 122.21(g)(7).

Operators of storm water discharges which are currently covered by a permit will not be required to submit a permit application until their existing permit expires. In recognition of the time required to collect storm water discharge data, EPA will allow facilities which currently have a NPDES permit for a storm water discharge and which must reapply for permit renewal during the first year following promulgation of today's permit application requirements the option of applying in accordance with existing Form 1 and Form 2C requirements (in lieu of applying in accordance with the revised application requirements).

As discussed in section VI.D.4 and section VI.F.6 of today's preamble, EPA has established a two part permit application both for both group applications for sufficiently similar facilities that discharge storm water associated with industrial activity and for operators of large or medium municipal separate storm sewer systems. The deadlines for submitting

permit applications in today's rule provide adequate time for: (1)

Applicants to prepare Part 1 of the application; (2) EPA or an approved State to adequately review applications; and (3) applicants to prepare the contents of the part 2 application.

Part 1 of the group application for storm water discharges associated with industrial activity must be submitted within 120 days from the publication of these final permit application regulations. This time is necessary to form groups and for individual members of the group to prepare the non-quantitative information required in part 1 of the application. Part 1 of the group application will be submitted to EPA Headquarters in Washington, DC and reviewed within 60 days after being received. Part 2 of the application would then be submitted within one year after the part 1 application is approved. It should be noted that many facilities located in States in which general permits can be issued, will be eligible for coverage by a storm water general permit to be promulgated in the near future. Such facilities may either seek coverage under such general permits or participate in the group application.

Several comments were received by EPA that indicated that a period of 120 days was too short a period for groups to be formed. EPA disagrees with these comments. The information that EPA is requiring to be submitted by the group or group representative is information that is generally available such as the location of the facility, its industrial activity, and material management practices. EPA believes that 120 days is sufficient to gather and submit this information along with an identification of 10% of the facilities which will submit quantitative data. To ameliorate any difficulties for applicants, EPA has provided a means for late facilities to "add on" where appropriate, on a case-by-case basis, as discussed in section VI.F.4. above.

Several comments were received with regard to the requirement that new dischargers submit an application at least 180 days before the date on which the discharge is to commence. One commenter noted that it will be difficult for a facility to know when a storm water discharge is to commence since precipitation and runoff cannot be predicted to any degree of accuracy. In response, new dischargers must apply for a storm water permit application 180 days before that facility commences manufacturing, processing, or raw material storage operations which may result in the discharge of pollutants from

storm water runoff, and 90 days for new construction sites.

For large municipal separate storm sewer systems (systems serving a population of more than 250,000), EPA proposed that part 1 of the permit application be submitted within one year of the date of the final regulations, with approval or disapproval by the permit issuing authority of the provisions of the part 1 permit application within 90 days after receiving part 1 of the application. The Part 2 portion of the application was to be submitted within two years of the date of promulgation.

For medium municipal separate storm sewer systems (systems serving a population of more than 100,000, but less than 250,000), EPA proposed that permit applications would be required nine months after the date of the final rule, with approval or disapproval of the provisions of the part 1 permit application within 90 days after receiving the part 1 application. The part 2 portion of the application would then be submitted no later than one year after the part 1 application has been approved.

Numerous comments were received by EPA from municipalities on these proposed deadlines. Many of these comments reflect the sentiment that the deadlines are too tight and that the required information would not be available for submission within the required time frame. Some commenters suggested deadlines that would add over three years to the permit application process. Other commenters suggested a revamped application process and a shorter deadline of 18 months. Some commenters explained that additional time would be needed to obtain adequate legal authority, while another stated that an inventory of outfalls required more time. One commenter maintained that intergovernmental agreements will require more time to prepare, and others expressed the view that more time was needed for the review of part 1 of the application by permitting authorities. Others felt more time was needed for collecting data, or hiring additional staff to accomplish the work. Most of these commenters did not provide specific details regarding what would be an appropriate amount of time and why.

After reviewing these comments EPA has decided to modify some of the deadlines as proposed. EPA is convinced that to properly achieve the goals of the CWA, the permit application requirements as discussed in previous sections are appropriate; but that the deadlines for medium municipal

separate storm sewer systems should be adjusted so that the program's goals can be properly accomplished. After reviewing comments, EPA believes that medium municipalities will have fewer resources and existing institutional arrangements than large cities and therefore more time should be granted to these cities for submitting parts 1 and 2 of the application.

Accordingly EPA will require large municipal systems to submit part 1 of the permit application no later than November 18, 1991. Part 1 will be reviewed and approved or disapproved by the Director within 90 days. Part 2 of the application will then be submitted November 16, 1992. Medium municipal systems will submit part 1 of the application on May 18, 1992. Approval or disapproval by the Director will be accomplished within 90 days. Part 2 of the application will be submitted by May 17, 1993. These deadlines will give large systems two years to complete the application process, and medium systems 2 years and 6 months to submit applications. EPA is convinced that the permit application schedule is warranted and should provide adequate time to prepare the application.

In establishing these regulatory deadlines EPA is fully aware that they are not synchronized with the statutory deadlines as established by Congress. One commenter argued that the deadlines as proposed were contrary to the deadlines established by Congress and that EPA had no authority to extend these deadlines. (For large municipal separate storm sewer systems and storm water discharges associated with industrial activity, Congress established a deadline of February 4, 1990, for submission of permit applications; for medium municipal separate storm sewer systems, the deadline is February 4, 1992.) In response, this regulation provides certain deadlines for meeting the substantive requirements of this rulemaking—requirements which EPA is convinced are necessary for the development of enforceable and sound storm water permits. EPA believes it is important to give applicants sufficient time to reasonably comply with the permit application requirements set out today. EPA will therefore accept applications for storm water discharge permits up to the dates specified in today's rule. By establishing these regulatory deadlines, however, EPA is not attempting to waive or revoke the statutory deadlines established in Section 402(p) of the CWA and does not assert the authority to do so. The statutory permit application deadlines

continue to be enforceable requirements.

EPA was not able to promulgate the final application regulations for storm water discharges before the February 4, 1990, deadline for industrial and large municipal dischargers despite its best efforts. Further, as noted above, EPA is not able to waive the statutory deadline. Dischargers concerned with complying with the statutory deadline should submit a permit application as required under this rulemaking as expeditiously as possible.

Operators of storm water discharges that are not specifically required to file a permit application under today's rule may be required to obtain a permit for their discharge on the basis of a case-by-case designation by the Administrator or the NPDES State.

The Administrator or NPDES State may also designate storm water discharges (except agricultural storm water discharges), that contribute to a violation of a water quality standard or that are significant contributors of pollutants to waters of the United States for a permit. Prior to a case-by-case determination that an individual permit is required for a storm water discharge, the Administrator or NPDES State may require the operator of the discharge to submit a permit application. 40 CFR 124.52(c) requires the operator of designated storm water discharges to submit a permit application within 60 days of notice, unless permission for a later date is granted. The 60-day deadline is consistent with the procedures for designating other discharges for a NPDES permit on a case-by-case basis found at 40 CFR 124.52. The 60-day deadline recognizes that case-by-case designations often require an expedited response, however, flexibility exists to allow for case-by-case extensions.

The December 7, 1988, proposal also proposed Part 504 State Storm Water Management Programs. The Agency has not included this component in today's rule. The Agency believes this program element is appropriate for addressing in regulations promulgated under section 402(p)(6) of the CWA.

VII. Economic Impact

EPA has prepared an Information Collection Request for the purpose of estimating the information collection burden imposed on Federal, State and local governments and industry for revisions to NPDES permit application requirements for storm water discharges codified in 40 CFR part 122. EPA is promulgating these revisions in response to Section 402(p)(4) of the Clean Water Act, as amended by the Water Quality

Act of 1987 (WQA). The revisions would apply to: Storm water discharges associated with industrial activity; discharges from municipal separate storm sewer systems serving a population of 250,000 or more and discharges from municipal separate storm sewer systems serving a population of 100,000 or more, but less than 250,000.

The estimated annual cost of applying for NPDES permits for discharges from municipal separate storm sewer systems is \$4.2 million. EPA estimates that an average permit application for a large municipality will cost \$76,681 and require 4,534 hours to prepare. The average application for a medium municipality will cost \$49,249 (2,912 hours) to prepare. The annual respondent cost for NPDES permit applications, notices of intent, and notifications for facilities with discharges associated with industrial activity is estimated to be \$9.5 million (271,248 hours). EPA estimates that the average preparation cost of an individual industrial permit application would be \$1,007 (28.6 hours). Average Group application will cost \$74.00 per facility (2.1 hours). The average cost of the notification and notice of intent to be covered by general permit is \$17.00 (0.5 hours).

The annual cost to the Federal Government and approved States for administration of the program is estimated to be \$588,603. The total cost for municipalities, industry, and State and Federal authorities is estimated to be \$14.5 million annually.

In general, the cost estimates provided in the ICR focus primarily on the costs associated with developing, submitting and reviewing the permit applications associated with today's rule. EPA will continue to evaluate procedures and methods to control storm water discharges to the extent necessary to mitigate impacts on water quality in the studies required under section 402(p)(5) of the CWA. Executive Order 12291 requires EPA and other agencies to perform regulatory analyses of major regulations. Major rules are those which impose a cost on the economy of \$100 million or more annually or have certain other economic impacts. Today's proposed amendments would generally make the NPDES permit application regulations more flexible and less burdensome for the regulated community. These regulations do not, satisfy any of the criteria specified in section 1(b) of the Executive Order and, as such, do not constitute a major rule. This regulation was submitted to the Office of Management and Budget (OMB) for review.

VIII. Paperwork Reduction Act

The information collection requirements in this rule have been submitted for approval to the Office of Management and Budget (OMB) under provision of the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.* and have been assigned OMB control number 2040-0086.

Public reporting burden for permit applications for storm water discharges associated with industrial activity (other than from construction facilities) is estimated to average 28.6 hours per individual permit application, 0.5 hours per notice of intent to be covered by general permit, and 2.1 hours per group applicant. The public reporting burden for permit applications for storm water discharges associated with industrial activity from construction activities submitting individual applications is estimated to average 4.5 hours per response. The public reporting burden for facilities which discharge storm water associated with industrial activity to municipal separate storm sewers serving a population over 100,000 to notify the operator of the municipal separate storm sewer system is estimated to average 0.5 hours per response.

The reporting burden for system-wide permit applications for discharges from municipal separate storm sewer systems serving a population of 250,000 or more is estimated to average 4,534 hours per response. The reporting burden for system-wide permit applications for discharges from municipal separate storm sewer systems serving a population of 100,000 or more, but less than 250,000 is estimated to average 2,912 hours per response. Estimates of reporting burden include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

IX. Regulatory Flexibility Act

Under the Regulatory Flexibility Act, 5 U.S.C. 601 *et seq.*, EPA is required to prepare a Regulatory Flexibility Analysis to assess the impact of rules on small entities. No Regulatory Flexibility Analysis is required, however, where the head of the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities.

Today's amendments to the regulations would generally make the NPDES permit applications regulations more flexible and less burdensome for permittees. Accordingly, I hereby

certify, pursuant to 5 U.S.C. 605(b), that these amendments do not, have a significant impact on a substantial number of small entities.

List of Subjects in 40 CFR Parts 122, 123, and 124

Administrative practice and procedure, Environmental protection, Reporting and recordkeeping requirements, Water pollution control.

Authority: Clean Water Act, 33 U.S.C. 1251 *et seq.*

Dated: October 31, 1990.

William K. Reilly,

Administrator.

For the reasons stated in the preamble, parts 122, 123, and 124 of title 40 of the Code of Federal Regulations are amended as follows:

PART 122—EPA ADMINISTERED PERMIT PROGRAMS; THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Subpart B—Permit Application and Special NPDES Program Requirements

1. The authority citation for part 122 continues to read as follows:

Authority: Clean Water Act, 33 U.S.C. 1251 *et seq.*

2. Section 122.1 is amended by revising paragraph (b)(2)(iv) to read as follows:

§ 122.1 Purpose and scope.

* * * * *

(b) * * *

(2) * * *

(iv) Discharges of storm water as set forth in § 122.26; and

* * * * *

3. Section 122.21 is amended by revising paragraph (c)(1), by removing the last sentence of paragraph (f)(7), by removing paragraph (f)(9), by adding two sentences at the end of paragraph (g)(3), by revising paragraph (g)(7) introductory text, by removing and reserving paragraph (g)(10) and by revising the introductory text of paragraph (k) to read as follows:

§ 122.21 Application for a permit (applicable to State programs, see § 123.25).

* * * * *

(c) *Time to apply.* (1) Any person proposing a new discharge, shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission for a later date has been granted by the Director. Facilities proposing a new discharge of storm water associated with industrial activity shall submit an application 180 days before that facility commences

industrial activity which may result in a discharge of storm water associated with that industrial activity. Facilities described under § 122.26(b)(14)(x) shall submit applications at least 90 days before the date on which construction is to commence. Different submittal dates may be required under the terms of applicable general permits. Persons proposing a new discharge are encouraged to submit their applications well in advance of the 90 or 180 day requirements to avoid delay. See also paragraph (k) of this section and § 122.26 (c)(1)(i)(G) and (c)(1)(ii).

* * * * *

(g) * * *

(3) * * * The average flow of point sources composed of storm water may be estimated. The basis for the rainfall event and the method of estimation must be indicated.

* * * * *

(7) Effluent characteristics.

Information on the discharge of pollutants specified in this paragraph (except information on storm water discharges which is to be provided as specified in § 122.26). When "quantitative data" for a pollutant are required, the applicant must collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR part 136. When no analytical method is approved the applicant may use any suitable method but must provide a description of the method. When an applicant has two or more outfalls with substantially identical effluents, the Director may allow the applicant to test only one outfall and report that the quantitative data also apply to the substantially identical outfalls. The requirements in paragraphs (g)(7) (iii) and (iv) of this section that an applicant must provide quantitative data for certain pollutants known or believed to be present do not apply to pollutants present in a discharge solely as the result of their presence in intake water; however, an applicant must report such pollutants as present. Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform and fecal streptococcus. For all other pollutants, 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than 24 hours. In addition, for discharges other than storm water discharges, the Director may waive composite sampling for any outfall for which the applicant demonstrates that the use of an automatic sampler is infeasible and that

the minimum of four (4) grab samples will be a representative sample of the effluent being discharged. For storm water discharges, all samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area. For all applicants, a flow-weighted composite shall be taken for either the entire discharge or for the first three hours of the discharge. The flow-weighted composite sample for a storm water discharge may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes (applicants submitting permit applications for storm water discharges under § 122.26(d) may collect flow weighted composite samples using different protocols with respect to the time duration between the collection of sample aliquots, subject to the approval of the Director). However, a minimum of one grab sample may be taken for storm water discharges from holding ponds or other impoundments with a retention period greater than 24 hours. For a flow-weighted composite sample, only one analysis of the composite of aliquots is required. For storm water discharge samples taken from discharges associated with industrial activities, quantitative data must be reported for the grab sample taken during the first thirty minutes (or as soon thereafter as practicable) of the discharge for all pollutants specified in § 122.26(c)(1). For all storm water permit applicants taking flow-weighted composites, quantitative data must be reported for all pollutants specified in § 122.26 except pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, and fecal streptococcus. The Director may allow or establish appropriate site-specific sampling procedures or requirements, including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rain fall), protocols for collecting samples under 40 CFR part 136, and additional time for submitting data on a

case-by-case basis. An applicant is expected to "know or have reason to believe" that a pollutant is present in an effluent based on an evaluation of the expected use, production, or storage of the pollutant, or on any previous analyses for the pollutant. (For example, any pesticide manufactured by a facility may be expected to be present in contaminated storm water runoff from the facility.)

(k) *Application requirements for new sources and new discharges.* New manufacturing, commercial, mining and silvicultural dischargers applying for NPDES permits (except for new discharges of facilities subject to the requirements of paragraph (h) of this section or new discharges of storm water associated with industrial activity which are subject to the requirements of § 122.26(c)(1) and this section (except as provided by § 122.26(c)(1)(ii)) shall provide the following information to the Director, using the application forms provided by the Director:

4. Section 122.22(b) introductory text is revised to read as follows:

§ 122.22 Signatories to permit applications and reports (applicable to State programs, see § 123.25).

(b) All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

5. Section 122.26 is revised to read as follows:

§ 122.26 Storm water discharges (applicable to State NPDES programs, see § 123.25).

(a) *Permit requirement.* (1) Prior to October 1, 1992, discharges composed entirely of storm water shall not be required to obtain a NPDES permit except:

(i) A discharge with respect to which a permit has been issued prior to February 4, 1987;

(ii) A discharge associated with industrial activity (see § 122.26(a)(4));

(iii) A discharge from a large municipal separate storm sewer system;

(iv) A discharge from a medium municipal separate storm sewer system;

(v) A discharge which the Director, or in States with approved NPDES programs, either the Director or the EPA Regional Administrator, determines to contribute to a violation of a water

quality standard or is a significant contributor of pollutants to waters of the United States. This designation may include a discharge from any conveyance or system of conveyances used for collecting and conveying storm water runoff or a system of discharges from municipal separate storm sewers, except for those discharges from conveyances which do not require a permit under paragraph (a)(2) of this section or agricultural storm water runoff which is exempted from the definition of point source at § 122.2.

The Director may designate discharges from municipal separate storm sewers on a system-wide or jurisdiction-wide basis. In making this determination the Director may consider the following factors:

(A) The location of the discharge with respect to waters of the United States as defined at 40 CFR 122.2.

(B) The size of the discharge;

(C) The quantity and nature of the pollutants discharged to waters of the United States; and

(D) Other relevant factors.

(2) The Director may not require a permit for discharges of storm water runoff from mining operations or oil and gas exploration, production, processing or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with or that has not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations.

(3) *Large and medium municipal separate storm sewer systems.* (i) Permits must be obtained for all discharges from large and medium municipal separate storm sewer systems.

(ii) The Director may either issue one system-wide permit covering all discharges from municipal separate storm sewers within a large or medium municipal storm sewer system or issue distinct permits for appropriate categories of discharges within a large or medium municipal separate storm sewer system including, but not limited to: all discharges owned or operated by the same municipality; located within the same jurisdiction; all discharges within a system that discharge to the same watershed; discharges within a system that are similar in nature; or for individual discharges from municipal separate storm sewers within the system.

(iii) The operator of a discharge from a municipal separate storm sewer which is part of a large or medium municipal separate storm sewer system must either:

(A) Participate in a permit application (to be a permittee or a co-permittee) with one or more other operators of discharges from the large or medium municipal storm sewer system which covers all, or a portion of all, discharges from the municipal separate storm sewer system;

(B) Submit a distinct permit application which only covers discharges from the municipal separate storm sewers for which the operator is responsible; or

(C) A regional authority may be responsible for submitting a permit application under the following guidelines:

(1) The regional authority together with co-applicants shall have authority over a storm water management program that is in existence, or shall be in existence at the time part 1 of the application is due;

(2) The permit applicant or co-applicants shall establish their ability to make a timely submission of part 1 and part 2 of the municipal application;

(3) Each of the operators of municipal separate storm sewers within the systems described in paragraphs (b)(4)(i), (ii), and (iii) or (b)(7)(i), (ii), and (iii) of this section, that are under the purview of the designated regional authority, shall comply with the application requirements of paragraph (d) of this section.

(iv) One permit application may be submitted for all or a portion of all municipal separate storm sewers within adjacent or interconnected large or medium municipal separate storm sewer systems. The Director may issue one system-wide permit covering all, or a portion of all municipal separate storm sewers in adjacent or interconnected large or medium municipal separate storm sewer systems.

(v) Permits for all or a portion of all discharges from large or medium municipal separate storm sewer systems that are issued on a system-wide, jurisdiction-wide, watershed or other basis may specify different conditions relating to different discharges covered by the permit, including different management programs for different drainage areas which contribute storm water to the system.

(vi) Co-permittees need only comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are operators.

(4) *Discharges through large and medium municipal separate storm sewer systems.* In addition to meeting the requirements of paragraph (c) of this section, an operator of a storm water discharge associated with industrial activity which discharges through a large or medium municipal separate storm sewer system shall submit, to the operator of the municipal separate storm sewer system receiving the discharge no later than May 15, 1991, or 180 days prior to commencing such discharge: the name of the facility; a contact person and phone number; the location of the discharge; a description, including Standard Industrial Classification, which best reflects the principal products or services provided by each facility; and any existing NPDES permit number.

(5) *Other municipal separate storm sewers.* The Director may issue permits for municipal separate storm sewers that are designated under paragraph (a)(1)(v) of this section on a system-wide basis, jurisdiction-wide basis, watershed basis or other appropriate basis, or may issue permits for individual discharges.

(6) *Non-municipal separate storm sewers.* For storm water discharges associated with industrial activity from point sources which discharge through a non-municipal or non-publicly owned separate storm sewer system, the Director, in his discretion, may issue: a single NPDES permit, with each discharger a co-permittee to a permit issued to the operator of the portion of the system that discharges into waters of the United States; or, individual permits to each discharger of storm water associated with industrial activity through the non-municipal conveyance system.

(i) All storm water discharges associated with industrial activity that discharge through a storm water discharge system that is not a municipal separate storm sewer must be covered by an individual permit, or a permit issued to the operator of the portion of the system that discharges to waters of the United States, with each discharger to the non-municipal conveyance a co-permittee to that permit.

(ii) Where there is more than one operator of a single system of such conveyances, all operators of storm water discharges associated with industrial activity must submit applications.

(iii) Any permit covering more than one operator shall identify the effluent limitations, or other permit conditions, if any, that apply to each operator.

(7) *Combined sewer systems.* Conveyances that discharge storm

water runoff combined with municipal sewage are point sources that must obtain NPDES permits in accordance with the procedures of § 122.21 and are not subject to the provisions of this section.

(8) Whether a discharge from a municipal separate storm sewer is or is not subject to regulation under this section shall have no bearing on whether the owner or operator of the discharge is eligible for funding under title II, title III or title VI of the Clean Water Act. See 40 CFR part 35, subpart I, appendix A(b)H.2.j.

(b) *Definitions.* (1) *Co-permittee* means a permittee to a NPDES permit that is only responsible for permit conditions relating to the discharge for which it is operator.

(2) *Illicit discharge* means any discharge to a municipal separate storm sewer that is not composed entirely of storm water except discharges pursuant to a NPDES permit (other than the NPDES permit for discharges from the municipal separate storm sewer) and discharges resulting from fire fighting activities.

(3) *Incorporated place* means the District of Columbia, or a city, town, township, or village that is incorporated under the laws of the State in which it is located.

(4) *Large municipal separate storm sewer system* means all municipal separate storm sewers that are either:

(i) Located in an incorporated place with a population of 250,000 or more as determined by the latest Decennial Census by the Bureau of Census (appendix F); or

(ii) Located in the counties listed in appendix H, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

(iii) Owned or operated by a municipality other than those described in paragraph (b)(4) (i) or (ii) of this section and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph (b)(4) (i) or (ii) of this section. In making this determination the Director may consider the following factors:

(A) Physical interconnections between the municipal separate storm sewers;

(B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers

described in paragraph (b)(4)(i) of this section;

(C) The quantity and nature of pollutants discharged to waters of the United States;

(D) The nature of the receiving waters; and

(E) Other relevant factors; or

(iv) The Director may, upon petition, designate as a large municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraph (b)(4) (i), (ii), (iii) of this section.

(5) *Major municipal separate storm sewer outfall* (or "major outfall") means a municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more).

(6) *Major outfall* means a major municipal separate storm sewer outfall.

(7) *Medium municipal separate storm sewer system* means all municipal separate storm sewers that are either:

(i) Located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the latest Decennial Census by the Bureau of Census (appendix G); or

(ii) Located in the counties listed in appendix I, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties; or

(iii) Owned or operated by a municipality other than those described in paragraph (b)(4) (i) or (ii) of this section and that are designated by the Director as part of the large or medium municipal separate storm sewer system due to the interrelationship between the discharges of the designated storm sewer and the discharges from municipal separate storm sewers described under paragraph (b)(4) (i) or (ii) of this section. In making this determination the Director may consider the following factors:

(A) Physical interconnections between the municipal separate storm sewers;

(B) The location of discharges from the designated municipal separate storm sewer relative to discharges from municipal separate storm sewers described in paragraph (b)(7)(i) of this section;

(C) The quantity and nature of pollutants discharged to waters of the United States;

(D) The nature of the receiving waters; or

(E) Other relevant factors; or

(iv) The Director may, upon petition, designate as a medium municipal separate storm sewer system, municipal separate storm sewers located within the boundaries of a region defined by a storm water management regional authority based on a jurisdictional, watershed, or other appropriate basis that includes one or more of the systems described in paragraphs (b)(7) (i), (ii), (iii) of this section.

(8) *Municipal separate storm sewer* means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;

(ii) Designed or used for collecting or conveying storm water;

(iii) Which is not a combined sewer; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

(9) *Outfall* means a *point source* as defined by 40 CFR 122.2 at the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.

(10) *Overburden* means any material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil or similar

naturally-occurring surface materials that are not disturbed by mining operations.

(11) *Runoff coefficient* means the fraction of total rainfall that will appear at a conveyance as runoff.

(12) *Significant materials* includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

(13) *Storm water* means storm water runoff, snow melt runoff, and surface runoff and drainage.

(14) *Storm water discharge associated with industrial activity* means the discharge from any conveyance which is used for collecting and conveying storm water and which is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR part 122. For the categories of industries identified in paragraphs (b)(14) (i) through (x) of this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and finished products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the categories of industries identified in paragraph (b)(14)(xi) of this section, the term includes only storm water discharges from all the areas (except access roads and rail lines) that are listed in the previous sentence where material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to

storm water. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are Federally, State, or municipally owned or operated that meet the description of the facilities listed in this paragraph (b)(14)(i)-(xi) of this section) include those facilities designated under the provisions of paragraph (a)(1)(v) of this section. The following categories of facilities are considered to be engaging in "industrial activity" for purposes of this subsection:

(i) Facilities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards under 40 CFR subchapter N (except facilities with toxic pollutant effluent standards which are exempted under category (xi) in paragraph (b)(14) of this section);

(ii) Facilities classified as Standard Industrial Classifications 24 (except 2434), 26 (except 265 and 267), 28 (except 283), 29, 31, 32 (except 323), 33, 3441, 373;

(iii) Facilities classified as Standard Industrial Classifications 10 through 14 (mineral industry) including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 CFR 434.11(1) because the performance bond issued to the facility by the appropriate SMCRA authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with, any overburden, raw material, intermediate products, finished products, byproducts or waste products located on the site of such operations; (inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator; inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined

materials, nor sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim;

(iv) Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under subtitle C of RCRA;

(v) Landfills, land application sites, and open dumps that receive or have received any industrial wastes (waste that is received from any of the facilities described under this subsection) including those that are subject to regulation under subtitle D of RCRA;

(vi) Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093;

(vii) Steam electric power generating facilities, including coal handling sites;

(viii) Transportation facilities classified as Standard Industrial Classifications 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171 which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, airport deicing operations, or which are otherwise identified under paragraphs (b)(14) (i)-(vii) or (ix)-(xi) of this section are associated with industrial activity;

(ix) Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA;

(x) Construction activity including clearing, grading and excavation activities except: operations that result in the disturbance of less than five acres of total land area which are not part of a larger common plan of development or sale;

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36,

37 (except 373), 38, 39, 4221-25, (and which are not otherwise included within categories (ii)-(x));

(c) *Application requirements for storm water discharges associated with industrial activity*—(1) *Individual application*. Dischargers of storm water associated with industrial activity are required to apply for an individual permit, apply for a permit through a group application, or seek coverage under a promulgated storm water general permit. Facilities that are required to obtain an individual permit, or any discharge of storm water which the Director is evaluating for designation (see 40 CFR 124.52(c)) under paragraph (a)(1)(v) of this section and is not a municipal separate storm sewer, and which is not part of a group application described under paragraph (c)(2) of this section, shall submit an NPDES application in accordance with the requirements of § 122.21 as modified and supplemented by the provisions of the remainder of this paragraph. Applicants for discharges composed entirely of storm water shall submit Form 1 and Form 2F. Applicants for discharges composed of storm water and non-storm water shall submit Form 1, Form 2C, and Form 2F. Applicants for new sources or new discharges (as defined in § 122.2 of this part) composed of storm water and non-storm water shall submit Form 1, Form 2D, and Form 2F.

(i) Except as provided in § 122.26(c)(1) (ii)-(iv), the operator of a storm water discharge associated with industrial activity subject to this section shall provide:

(A) A site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) of the facility including: each of its drainage and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each past or present area used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied, each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility;

(B) An estimate of the area of impervious surfaces (including paved areas and building roofs) and the total area drained by each outfall (within a mile radius of the facility) and a narrative description of the following: Significant materials that in the three years prior to the submittal of this application have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage or disposal of such materials; materials management practices employed, in the three years prior to the submittal of this application, to minimize contact by these materials with storm water runoff; materials loading and access areas; the location, manner and frequency in which pesticides, herbicides, soil conditioners and fertilizers are applied; the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the ultimate disposal of any solid or fluid wastes other than by discharge;

(C) A certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested or evaluated for the presence of non-storm water discharges which are not covered by a NPDES permit; tests for such non-storm water discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. The certification shall include a description of the method used, the date of any testing, and the on-site drainage points that were directly observed during a test;

(D) Existing information regarding significant leaks or spills of toxic or hazardous pollutants at the facility that have taken place within the three years prior to the submittal of this application;

(E) Quantitative data based on samples collected during storm events and collected in accordance with § 122.21 of this part from all outfalls containing a storm water discharge associated with industrial activity for the following parameters:

(1) Any pollutant limited in an effluent guideline to which the facility is subject;

(2) Any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit);

(3) Oil and grease, pH, BOD₅, COD, TSS, total phosphorus, total Kjeldahl nitrogen, and nitrate plus nitrite nitrogen;

(4) Any information on the discharge required under paragraph § 122.21(g)(7) (iii) and (iv) of this part;

(5) Flow measurements or estimates of the flow rate, and the total amount of discharge for the storm event(s) sampled, and the method of flow measurement or estimation; and

(6) The date and duration (in hours) of the storm event(s) sampled, rainfall measurements or estimates of the storm event (in inches) which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event (in hours);

(F) Operators of a discharge which is composed entirely of storm water are exempt from the requirements of § 122.21 (g)(2), (g)(3), (g)(4), (g)(5), (g)(7)(i), (g)(7)(ii), and (g)(7)(v); and

(G) Operators of new sources or new discharges (as defined in § 122.2 of this part) which are composed in part or entirely of storm water must include estimates for the pollutants or parameters listed in paragraph (c)(1)(i)(E) of this section instead of actual sampling data, along with the source of each estimate. Operators of new sources or new discharges composed in part or entirely of storm water must provide quantitative data for the parameters listed in paragraph (c)(1)(i)(E) of this section within two years after commencement of discharge, unless such data has already been reported under the monitoring requirements of the NPDES permit for the discharge. Operators of a new source or new discharge which is composed entirely of storm water are exempt from the requirements of § 122.21 (k)(3)(ii), (k)(3)(iii), and (k)(5).

(ii) The operator of an existing or new storm water discharge that is associated with industrial activity solely under paragraph (b)(14)(x) of this section, is exempt from the requirements of § 122.21(g) and paragraph (c)(1)(i) of this section. Such operator shall provide a narrative description of:

(A) The location (including a map) and the nature of the construction activity;

(B) The total area of the site and the area of the site that is expected to undergo excavation during the life of the permit;

(C) Proposed measures, including best management practices, to control pollutants in storm water discharges during construction, including a brief description of applicable State and local erosion and sediment control requirements;

(D) Proposed measures to control pollutants in storm water discharges that will occur after construction operations have been completed, including a brief description of

applicable State or local erosion and sediment control requirements;

(E) An estimate of the runoff coefficient of the site and the increase in impervious area after the construction addressed in the permit application is completed, the nature of fill material and existing data describing the soil or the quality of the discharge; and

(F) The name of the receiving water.

(iii) The operator of an existing or new discharge composed entirely of storm water from an oil or gas exploration, production, processing, or treatment operation, or transmission facility is not required to submit a permit application in accordance with paragraph (c)(1)(i) of this section, unless the facility:

(A) Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 117.21 or 40 CFR 302.6 at anytime since November 16, 1987; or

(B) Has had a discharge of storm water resulting in the discharge of a reportable quantity for which notification is or was required pursuant to 40 CFR 110.6 at any time since November 16, 1987; or

(C) Contributes to a violation of a water quality standard.

(iv) The operator of an existing or new discharge composed entirely of storm water from a mining operation is not required to submit a permit application unless the discharge has come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations.

(v) Applicants shall provide such other information the Director may reasonably require under § 122.21(g)(13) of this part to determine whether to issue a permit and may require any facility subject to paragraph (c)(1)(ii) of this section to comply with paragraph (c)(1)(i) of this section.

(2) *Group application for discharges associated with industrial activity.* In lieu of individual applications or notice of intent to be covered by a general permit for storm water discharges associated with industrial activity, a group application may be filed by an entity representing a group of applicants (except facilities that have existing individual NPDES permits for storm water) that are part of the same subcategory (see 40 CFR subchapter N, part 405 to 471) or, where such grouping is inapplicable, are sufficiently similar as to be appropriate for general permit coverage under § 122.28 of this part. The part 1 application shall be submitted to the Office of Water Enforcement and Permits, U.S. EPA, 401 M Street, SW., Washington, DC 20460 (EN-336) for

approval. Once a part 1 application is approved, group applicants are to submit Part 2 of the group application to the Office of Water Enforcement and Permits. A group application shall consist of:

(i) *Part 1.* Part 1 of a group application shall:

(A) Identify the participants in the group application by name and location. Facilities participating in the group application shall be listed in nine subdivisions, based on the facility location relative to the nine precipitation zones indicated in appendix E to this part.

(B) Include a narrative description summarizing the industrial activities of participants of the group application and explaining why the participants, as a whole, are sufficiently similar to be a covered by a general permit;

(C) Include a list of significant materials stored exposed to precipitation by participants in the group application and materials management practices employed to diminish contact by these materials with precipitation and storm water runoff;

(D) Identify ten percent of the dischargers participating in the group application (with a minimum of 10 dischargers, and either a minimum of two dischargers from each precipitation zone indicated in appendix E of this part in which ten or more members of the group are located, or one discharger from each precipitation zone indicated in appendix E of this part in which nine or fewer members of the group are located) from which quantitative data will be submitted in part 2. If more than 1,000 facilities are identified in a group application, no more than 100 dischargers must submit quantitative data in Part 2. Groups of between four and ten dischargers may be formed. However, in groups of between four and ten, at least half the facilities must submit quantitative data, and at least one facility in each precipitation zone in which members of the group are located must submit data. A description of why the facilities selected to perform sampling and analysis are representative of the group as a whole in terms of the information provided in paragraph (c)(1)(i)(B) and (i)(C) of this section, shall accompany this section. Different factors impacting the nature of the storm water discharges, such as processes used and material management, shall be represented, to the extent feasible, in a manner roughly equivalent to their proportion in the group.

(ii) *Part 2.* Part 2 of a group application shall contain quantitative

data (NPDES Form 2F), as modified by paragraph (c)(1) of this section, so that when part 1 and part 2 of the group application are taken together, a complete NPDES application (Form 1, Form 2C, and Form 2F) can be evaluated for each discharger identified in paragraph (c)(2)(i)(D) of this section.

(d) *Application requirements for large and medium municipal separate storm sewer discharges.* The operator of a discharge from a large or medium municipal separate storm sewer or a municipal separate storm sewer that is designated by the Director under paragraph (a)(1)(v) of this section, may submit a jurisdiction-wide or system-wide permit application. Where more than one public entity owns or operates a municipal separate storm sewer within a geographic area (including adjacent or interconnected municipal separate storm sewer systems), such operators may be a coapplicant to the same application. Permit applications for discharges from large and medium municipal storm sewers or municipal storm sewers designated under paragraph (a)(1)(v) of this section shall include:

(1) *Part 1.* Part 1 of the application shall consist of:

(i) *General information.* The applicants' name, address, telephone number of contact person, ownership status and status as a State or local government entity.

(ii) *Legal authority.* A description of existing legal authority to control discharges to the municipal separate storm sewer system. When existing legal authority is not sufficient to meet the criteria provided in paragraph (d)(2)(i) of this section, the description shall list additional authorities as will be necessary to meet the criteria and shall include a schedule and commitment to seek such additional authority that will be needed to meet the criteria.

(iii) *Source identification.* (A) A description of the historic use of ordinances, guidance or other controls which limited the discharge of non-storm water discharges to any Publicly Owned Treatment Works serving the same area as the municipal separate storm sewer system.

(B) A USGS 7.5 minute topographic map (or equivalent topographic map with a scale between 1:10,000 and 1:24,000 if cost effective) extending one mile beyond the service boundaries of the municipal storm sewer system covered by the permit application. The following information shall be provided:

(1) The location of known municipal storm sewer system outfalls discharging to waters of the United States;

(2) A description of the land use activities (e.g. divisions indicating undeveloped, residential, commercial, agricultural and industrial uses) accompanied with estimates of population densities and projected growth for a ten year period within the drainage area served by the separate storm sewer. For each land use type, an estimate of an average runoff coefficient shall be provided;

(3) The location and a description of the activities of the facility of each currently operating or closed municipal landfill or other treatment, storage or disposal facility for municipal waste;

(4) The location and the permit number of any known discharge to the municipal storm sewer that has been issued a NPDES permit;

(5) The location of major structural controls for storm water discharge (retention basins, detention basins, major infiltration devices, etc.); and

(6) The identification of publicly owned parks, recreational areas, and other open lands.

(iv) *Discharge characterization.* (A) Monthly mean rain and snow fall estimates (or summary of weather bureau data) and the monthly average number of storm events.

(B) Existing quantitative data describing the volume and quality of discharges from the municipal storm sewer, including a description of the outfalls sampled, sampling procedures and analytical methods used.

(C) A list of water bodies that receive discharges from the municipal separate storm sewer system, including downstream segments, lakes and estuaries, where pollutants from the system discharges may accumulate and cause water degradation and a brief description of known water quality impacts. At a minimum, the description of impacts shall include a description of whether the water bodies receiving such discharges have been:

(1) Assessed and reported in section 305(b) reports submitted by the State, the basis for the assessment (evaluated or monitored), a summary of designated use support and attainment of Clean Water Act (CWA) goals (fishable and swimmable waters), and causes of nonsupport of designated uses;

(2) Listed under section 304(l)(1)(A)(i), section 304(l)(1)(A)(ii), or section 304(l)(1)(B) of the CWA that is not expected to meet water quality standards or water quality goals;

(3) Listed in State Nonpoint Source Assessments required by section 319(a) of the CWA that, without additional action to control nonpoint sources of pollution, cannot reasonably be expected to attain or maintain water

quality standards due to storm sewers, construction, highway maintenance and runoff from municipal landfills and municipal sludge adding significant pollution (or contributing to a violation of water quality standards);

(4) Identified and classified according to eutrophic condition of publicly owned lakes listed in State reports required under section 314(a) of the CWA (include the following: A description of those publicly owned lakes for which uses are known to be impaired; a description of procedures, processes and methods to control the discharge of pollutants from municipal separate storm sewers into such lakes; and a description of methods and procedures to restore the quality of such lakes);

(5) Areas of concern of the Great Lakes identified by the International Joint Commission;

(6) Designated estuaries under the National Estuary Program under section 320 of the CWA;

(7) Recognized by the applicant as highly valued or sensitive waters;

(8) Defined by the State or U.S. Fish and Wildlife Services's National Wetlands Inventory as wetlands; and

(9) Found to have pollutants in bottom sediments, fish tissue or biosurvey data.

(D) *Field screening.* Results of a field screening analysis for illicit connections and illegal dumping for either selected field screening points or major outfalls covered in the permit application. At a minimum, a screening analysis shall include a narrative description, for either each field screening point or major outfall, of visual observations made during dry weather periods. If any flow is observed, two grab samples shall be collected during a 24 hour period with a minimum period of four hours between samples. For all such samples, a narrative description of the color, odor, turbidity, the presence of an oil sheen or surface scum as well as any other relevant observations regarding the potential presence of non-storm water discharges or illegal dumping shall be provided. In addition, a narrative description of the results of a field analysis using suitable methods to estimate pH, total chlorine, total copper, total phenol, and detergents (or surfactants) shall be provided along with a description of the flow rate. Where the field analysis does not involve analytical methods approved under 40 CFR part 136, the applicant shall provide a description of the method used including the name of the manufacturer of the test method along with the range and accuracy of the test. Field screening points shall be either major outfalls or other outfall points (or

any other point of access such as manholes) randomly located throughout the storm sewer system by placing a grid over a drainage system map and identifying those cells of the grid which contain a segment of the storm sewer system or major outfall. The field screening points shall be established using the following guidelines and criteria:

(1) A grid system consisting of perpendicular north-south and east-west lines spaced $\frac{1}{4}$ mile apart shall be overlaid on a map of the municipal storm sewer system, creating a series of cells;

(2) All cells that contain a segment of the storm sewer system shall be identified; one field screening point shall be selected in each cell; major outfalls may be used as field screening points;

(3) Field screening points should be located downstream of any sources of suspected illegal or illicit activity;

(4) Field screening points shall be located to the degree practicable at the farthest manhole or other accessible location downstream in the system, within each cell; however, safety of personnel and accessibility of the location should be considered in making this determination;

(5) Hydrological conditions; total drainage area of the site; population density of the site; traffic density; age of the structures or buildings in the area; history of the area; and land use types;

(6) For medium municipal separate storm sewer systems, no more than 250 cells need to have identified field screening points; in large municipal separate storm sewer systems, no more than 500 cells need to have identified field screening points; cells established by the grid that contain no storm sewer segments will be eliminated from consideration; if fewer than 250 cells in medium municipal sewers are created, and fewer than 500 in large systems are created by the overlay on the municipal sewer map, then all those cells which contain a segment of the sewer system shall be subject to field screening (unless access to the separate storm sewer system is impossible); and

(7) Large or medium municipal separate storm sewer systems which are unable to utilize the procedures described in paragraphs (d)(1)(iv)(D) (1) through (6) of this section, because a sufficiently detailed map of the separate storm sewer systems is unavailable, shall field screen no more than 500 or 250 major outfalls respectively (or all major outfalls in the system, if less); in such circumstances, the applicant shall establish a grid system consisting of north-south and east-west lines spaced $\frac{1}{4}$ mile apart as an overlay to the

boundaries of the municipal storm sewer system, thereby creating a series of cells; the applicant will then select major outfalls in as many cells as possible until at least 500 major outfalls (large municipalities) or 250 major outfalls (medium municipalities) are selected; a field screening analysis shall be undertaken at these major outfalls.

(E) *Characterization plan.* Information and a proposed program to meet the requirements of paragraph (d)(2)(iii) of this section. Such description shall include: the location of outfalls or field screening points appropriate for representative data collection under paragraph (d)(2)(iii)(A) of this section, a description of why the outfall or field screening point is representative, the seasons during which sampling is intended, a description of the sampling equipment. The proposed location of outfalls or field screening points for such sampling should reflect water quality concerns (see paragraph (d)(1)(iv)(C) of this section) to the extent practicable.

(v) *Management programs.* (A) A description of the existing management programs to control pollutants from the municipal separate storm sewer system. The description shall provide information on existing structural and source controls, including operation and maintenance measures for structural controls, that are currently being implemented. Such controls may include, but are not limited to: Procedures to control pollution resulting from construction activities; floodplain management controls; wetland protection measures; best management practices for new subdivisions; and emergency spill response programs. The description may address controls established under State law as well as local requirements.

(B) A description of the existing program to identify illicit connections to the municipal storm sewer system. The description should include inspection procedures and methods for detecting and preventing illicit discharges, and describe areas where this program has been implemented.

(vi) *Fiscal resources.* (A) A description of the financial resources currently available to the municipality to complete part 2 of the permit application. A description of the municipality's budget for existing storm water programs, including an overview of the municipality's financial resources and budget, including overall indebtedness and assets, and sources of funds for storm water programs.

(2) *Part 2.* Part 2 of the application shall consist of:

(i) *Adequate legal authority.* A demonstration that the applicant can

operate pursuant to legal authority established by statute, ordinance or series of contracts which authorizes or enables the applicant at a minimum to:

(A) Control through ordinance, permit, contract, order or similar means, the contribution of pollutants to the municipal storm sewer by storm water discharges associated with industrial activity and the quality of storm water discharged from sites of industrial activity;

(B) Prohibit through ordinance, order or similar means, illicit discharges to the municipal separate storm sewer;

(C) Control through ordinance, order or similar means the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than storm water;

(D) Control through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system;

(E) Require compliance with conditions in ordinances, permits, contracts or orders; and

(F) Carry out all inspection, surveillance and monitoring procedures necessary to determine compliance and noncompliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer.

(ii) *Source identification.* The location of any major outfall that discharges to waters of the United States that was not reported under paragraph (d)(1)(iii)(B)(2) of this section. Provide an inventory, organized by watershed of the name and address, and a description (such as SIC codes) which best reflects the principal products or services provided by each facility which may discharge, to the municipal separate storm sewer, storm water associated with industrial activity;

(iii) *Characterization data.* When "quantitative data" for a pollutant are required under paragraph (d)(a)(iii)(A)(3) of this paragraph, the applicant must collect a sample of effluent in accordance with 40 CFR 122.21(g)(7) and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR part 136. When no analytical method is approved the applicant may use any suitable method but must provide a description of the method. The applicant must provide information characterizing the quality and quantity of discharges covered in the permit application, including:

(A) Quantitative data from representative outfalls designated by the Director (based on information received

in part 1 of the application, the Director shall designate between five and ten outfalls or field screening points as representative of the commercial, residential and industrial land use activities of the drainage area contributing to the system or, where there are less than five outfalls covered in the application, the Director shall designate all outfalls developed as follows:

(1) For each outfall or field screening point designated under this subparagraph, samples shall be collected of storm water discharges from three storm events occurring at least one month apart in accordance with the requirements at § 122.21(g)(7) (the Director may allow exemptions to sampling three storm events when climatic conditions create good cause for such exemptions);

(2) A narrative description shall be provided of the date and duration of the storm event(s) sampled, rainfall estimates of the storm event which generated the sampled discharge and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;

(3) For samples collected and described under paragraphs (d)(2)(iii)(A)(1) and (A)(2) of this section, quantitative data shall be provided for: the organic pollutants listed in Table II; the pollutants listed in Table III (toxic metals, cyanide, and total phenols) of appendix D of 40 CFR part 122, and for the following pollutants:

Total suspended solids (TSS)
Total dissolved solids (TDS)
COD
BOD₅
Oil and grease
Fecal coliform
Fecal streptococcus
pH
Total Kjeldahl nitrogen
Nitrate plus nitrite
Dissolved phosphorus
Total ammonia plus organic nitrogen
Total phosphorus

(4) Additional limited quantitative data required by the Director for determining permit conditions (the Director may require that quantitative data shall be provided for additional parameters, and may establish sampling conditions such as the location, season of sample collection, form of precipitation (snow melt, rainfall) and other parameters necessary to insure representativeness);

(B) Estimates of the annual pollutant load of the cumulative discharges to waters of the United States from all identified municipal outfalls and the event mean concentration of the

cumulative discharges to waters of the United States from all identified municipal outfalls during a storm event (as described under § 122.21(c)(7)) for BOD₅, COD, TSS, dissolved solids, total nitrogen, total ammonia plus organic nitrogen, total phosphorus, dissolved phosphorus, cadmium, copper, lead, and zinc. Estimates shall be accompanied by a description of the procedures for estimating constituent loads and concentrations, including any modelling, data analysis, and calculation methods;

(C) A proposed schedule to provide estimates for each major outfall identified in either paragraph (d)(2)(ii) or (d)(1)(iii)(B)(1) of this section of the seasonal pollutant load and of the event mean concentration of a representative storm for any constituent detected in any sample required under paragraph (d)(2)(iii)(A) of this section; and

(D) A proposed monitoring program for representative data collection for the term of the permit that describes the location of outfalls or field screening points to be sampled (or the location of instream stations), why the location is representative, the frequency of sampling, parameters to be sampled, and a description of sampling equipment.

(iv) *Proposed management program.* A proposed management program covers the duration of the permit. It shall include a comprehensive planning process which involves public participation and where necessary intergovernmental coordination, to reduce the discharge of pollutants to the maximum extent practicable using management practices, control techniques and system, design and engineering methods, and such other provisions which are appropriate. The program shall also include a description of staff and equipment available to implement the program. Separate proposed programs may be submitted by each coapplicant. Proposed programs may impose controls on a systemwide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. Proposed programs will be considered by the Director when developing permit conditions to reduce pollutants in discharges to the maximum extent practicable. Proposed management programs shall describe priorities for implementing controls. Such programs shall be based on:

(A) A description of structural and source control measures to reduce pollutants from runoff from commercial and residential areas that are discharged from the municipal storm sewer system that are to be implemented during the life of the permit, accompanied with an estimate of

the expected reduction of pollutant loads and a proposed schedule for implementing such controls. At a minimum, the description shall include:

(1) A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers;

(2) A description of planning procedures including a comprehensive master plan to develop, implement and enforce controls to reduce the discharge of pollutants from municipal separate storm sewers which receive discharges from areas of new development and significant redevelopment. Such plan shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed. (Controls to reduce pollutants in discharges from municipal separate storm sewers containing construction site runoff are addressed in paragraph (d)(2)(iv)(D) of this section;

(3) A description of practices for operating and maintaining public streets, roads and highways and procedures for reducing the impact on receiving waters of discharges from municipal storm sewer systems, including pollutants discharged as a result of deicing activities;

(4) A description of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies and that existing structural flood control devices have been evaluated to determine if retrofitting the device to provide additional pollutant removal from storm water is feasible;

(5) A description of a program to monitor pollutants in runoff from operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste, which shall identify priorities and procedures for inspections and establishing and implementing control measures for such discharges (this program can be coordinated with the program developed under paragraph (d)(2)(iv)(C) of this section); and

(6) A description of a program to reduce to the maximum extent practicable, pollutants in discharges from municipal separate storm sewers associated with the application of pesticides, herbicides and fertilizer which will include, as appropriate, controls such as educational activities, permits, certifications and other measures for commercial applicators and distributors, and controls for application in public right-of-ways and at municipal facilities.

(B) A description of a program, including a schedule, to detect and remove (or require the discharger to the municipal separate storm sewer to obtain a separate NPDES permit for) illicit discharges and improper disposal into the storm sewer. The proposed program shall include:

(1) A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system; this program description shall address all types of illicit discharges, however the following category of non-storm water discharges or flows shall be addressed where such discharges are identified by the municipality as sources of pollutants to waters of the United States: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (program descriptions shall address discharges or flows from fire fighting only where such discharges or flows are identified as significant sources of pollutants to waters of the United States);

(2) A description of procedures to conduct on-going field screening activities during the life of the permit, including areas or locations that will be evaluated by such field screens;

(3) A description of procedures to be followed to investigate portions of the separate storm sewer system that, based on the results of the field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources of non-storm water (such procedures may include: sampling procedures for constituents such as fecal coliform, fecal streptococcus, surfactants (MBAS), residual chlorine, fluorides and potassium; testing with fluorometric dyes; or conducting in storm sewer inspections where safety and other considerations allow. Such description shall include the location of storm sewers that have been identified for such evaluation);

(4) A description of procedures to prevent, contain, and respond to spills that may discharge into the municipal separate storm sewer;

(5) A description of a program to promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges from municipal separate storm sewers;

(6) A description of educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials; and

(7) A description of controls to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewer systems where necessary;

(C) A description of a program to monitor and control pollutants in storm water discharges to municipal systems from municipal landfills, hazardous waste treatment, disposal and recovery facilities, industrial facilities that are subject to section 313 of title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA), and industrial facilities that the municipal permit applicant determines are contributing a substantial pollutant loading to the municipal storm sewer system. The program shall:

(1) Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges;

(2) Describe a monitoring program for storm water discharges associated with the industrial facilities identified in paragraph (d)(2)(iv)(C) of this section, to be implemented during the term of the permit, including the submission of quantitative data on the following constituents: any pollutants limited in effluent guidelines subcategories, where applicable; any pollutant listed in an existing NPDES permit for a facility; oil and grease, COD, pH, BOD₅, TSS, total phosphorus, total Kjeldahl nitrogen, nitrate plus nitrite nitrogen, and any information on discharges required under 40 CFR 122.21(g)(7) (iii) and (iv).

(D) A description of a program to implement and maintain structural and non-structural best management practices to reduce pollutants in storm water runoff from construction sites to the municipal storm sewer system, which shall include:

(1) A description of procedures for site planning which incorporate consideration of potential water quality impacts;

(2) A description of requirements for nonstructural and structural best management practices;

(3) A description of procedures for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the

characteristics of soils and receiving water quality; and

(4) A description of appropriate educational and training measures for construction site operators.

(v) *Assessment of controls.* Estimated reductions in loadings of pollutants from discharges of municipal storm sewer constituents from municipal storm sewer systems expected as the result of the municipal storm water quality management program. The assessment shall also identify known impacts of storm water controls on ground water.

(vi) *Fiscal analysis.* For each fiscal year to be covered by the permit, a fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs under paragraphs (d)(2) (iii) and (iv) of this section. Such analysis shall include a description of the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.

(vii) Where more than one legal entity submits an application, the application shall contain a description of the roles and responsibilities of each legal entity and procedures to ensure effective coordination.

(viii) Where requirements under paragraph (d)(1)(iv)(E), (d)(2)(ii), (d)(2)(iii)(B) and (d)(2)(iv) of this section are not practicable or are not applicable, the Director may exclude any operator of a discharge from a municipal separate storm sewer which is designated under paragraph (a)(1)(v), (b)(4)(ii) or (b)(7)(ii) of this section from such requirements. The Director shall not exclude the operator of a discharge from a municipal separate storm sewer identified in appendix F, G, H or I of part 122, from any of the permit application requirements under this paragraph except where authorized under this section.

(e) *Application deadlines.* Any operator of a point source required to obtain a permit under paragraph (a)(1) of this section that does not have an effective NPDES permit covering its storm water outfalls shall submit an application in accordance with the following deadlines:

(1) For any storm water discharge associated with industrial activity identified in paragraph (b)(14) (i)-(xi) of this section, that is not part of a group application as described in paragraph (c)(2) of this section or which is not covered under a promulgated storm water general permit, a permit application made pursuant to paragraph (c) of this section shall be submitted to the Director by November 18, 1991;

(2) For any group application submitted in accordance with paragraph (c)(2) of this section:

(i) Part 1 of the application shall be submitted to the Director, Office of Water Enforcement and Permits by March 18, 1991;

(ii) Based on information in the part 1 application, the Director will approve or deny the members in the group application within 60 days after receiving part 1 of the group application.

(iii) Part 2 of the application shall be submitted to the Director, Office of Water Enforcement and Permits no later than 12 months after the date of approval of the part 1 application.

(iv) Facilities that are rejected as members of a group by the permitting authority shall have 12 months to file an individual permit application from the date they receive notification of their rejection.

(v) A facility listed under paragraph (b)(14) (i)-(xi) of this section may add on to a group application submitted in accordance with paragraph (e)(2)(i) of this section at the discretion of the Office of Water Enforcement and Permits, and only upon a showing of good cause by the facility and the group applicant; the request for the addition of the facility shall be made no later than February 18, 1992; the addition of the facility shall not cause the percentage of the facilities that are required to submit quantitative data to be less than 10%, unless there are over 100 facilities in the group that are submitting quantitative data; approval to become part of group application must be obtained from the group or the trade association representing the individual facilities.

(3) For any discharge from a large municipal separate storm sewer system:

(i) Part 1 of the application shall be submitted to the Director by November 18, 1991;

(ii) Based on information received in the part 1 application the Director will approve or deny a sampling plan under paragraph (d)(1)(iv)(E) of this section within 90 days after receiving the part 1 application;

(iii) Part 2 of the application shall be submitted to the Director by November 18, 1992.

(4) For any discharge from a medium municipal separate storm sewer system:

(i) Part 1 of the application shall be submitted to the Director by May 18, 1992.

(ii) Based on information received in the part 1 application the Director will approve or deny a sampling plan under paragraph (d)(1)(iv)(E) of this section within 90 days after receiving the part 1 application.

(iii) Part 2 of the application shall be submitted to the Director by May 17, 1993.

(5) A permit application shall be submitted to the Director within 60 days of notice, unless permission for a later date is granted by the Director (see 40 CFR 124.52(c)), for:

(i) A storm water discharge which the Director, or in States with approved NPDES programs, either the Director or the EPA Regional Administrator, determines that the discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States (see paragraph (a)(1)(v) of this section);

(ii) A storm water discharge subject to paragraph (c)(1)(v) of this section.

(6) Facilities with existing NPDES permits for storm water discharges associated with industrial activity shall maintain existing permits. New applications shall be submitted in accordance with the requirements of 40 CFR 122.21 and 40 CFR 122.26(c) 180 days before the expiration of such permits. Facilities with expired permits or permits due to expire before May 18, 1992, shall submit applications in accordance with the deadline set forth under paragraph (e)(1) of this section.

(f) *Petitions.* (1) Any operator of a municipal separate storm sewer system may petition the Director to require a separate NPDES permit (or a permit issued under an approved NPDES State program) for any discharge into the municipal separate storm sewer system.

(2) Any person may petition the Director to require a NPDES permit for a discharge which is composed entirely of storm water which contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States.

(3) The owner or operator of a municipal separate storm sewer system may petition the Director to reduce the Census estimates of the population served by such separate system to account for storm water discharged to combined sewers as defined by 40 CFR 35.2005(b)(11) that is treated in a publicly owned treatment works. In municipalities in which combined sewers are operated, the Census estimates of population may be reduced proportional to the fraction, based on estimated lengths, of the length of combined sewers over the sum of the length of combined sewers and municipal separate storm sewers where an applicant has submitted the NPDES permit number associated with each discharge point and a map indicating areas served by combined sewers and

the location of any combined sewer overflow discharge point.

(4) Any person may petition the Director for the designation of a large or medium municipal separate storm sewer system as defined by paragraphs (b)(4)(iv) or (b)(7)(iv) of this section.

(5) The Director shall make a final determination on any petition received under this section within 90 days after receiving the petition.

6. Section 122.28(b)(2)(i) is revised to read as follows:

§ 122.28 General permits (applicable to State NPDES programs, see § 123.25).

* * * * *

(b) * * *

(2) *Requiring an individual permit.* (i) The Director may require any discharger authorized by a general permit to apply for and obtain an individual NPDES permit. Any interested person may petition the Director to take action under this paragraph. Cases where an individual NPDES permit may be required include the following:

(A) The discharger or "treatment works treating domestic sewage" is not in compliance with the conditions of the general NPDES permit;

(B) A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source or treatment works treating domestic sewage;

(C) Effluent limitation guidelines are promulgated for point sources covered by the general NPDES permit;

(D) A Water Quality Management plan containing requirements applicable to such point sources is approved;

(E) Circumstances have changed since the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;

(F) Standards for sewage sludge use or disposal have been promulgated for the sludge use and disposal practice covered by the general NPDES permit; or

(G) The discharge(s) is a significant contributor of pollutants. In making this determination, the Director may consider the following factors:

(1) The location of the discharge with respect to waters of the United States;

(2) The size of the discharge;

(3) The quantity and nature of the pollutants discharged to waters of the United States; and

(4) Other relevant factors;

* * * * *

State	Incorporated place
Missouri	Kansas City. St. Louis.
Nebraska	Omaha.
New Jersey	Newark.
New Mexico	Albuquerque.
New York	Buffalo. Bronx Borough. Brooklyn Borough. Manhattan Borough. Queens Borough. Staten Island Borough.
North Carolina	Charlotte.
Ohio	Cincinnati. Cleveland. Columbus. Toledo.
Oklahoma	Oklahoma City. Tulsa.
Oregon	Portland.
Pennsylvania	Philadelphia. Pittsburgh.
Tennessee	Memphis. Nashville/Davidson.
Texas	Austin. Dallas. El Paso. Fort Worth. Houston. San Antonio. Norfolk.
Virginia	Virginia Beach.
Washington	Seattle.
Wisconsin	Milwaukee.

Appendix G to Part 122—Incorporated Places With Populations Greater Than 100,000 and Less Than 250,000 According to Latest Decennial Census by Bureau of Census

State	Incorporated place
Alabama	Huntsville. Mobile.
Alaska	Montgomery.
Arizona	Anchorage. Mesa.
Arkansas	Tempe.
California	Little Rock. Anaheim. Bakersfield. Berkeley. Concord. Fremont. Fresno. Fullerton. Garden Grove. Glendale. Huntington Beach. Modesto. Oxnard. Pasadena. Riverside. San Bernardino. Santa Ana. Stockton. Sunnyvale. Torrance.
Colorado	Aurora. Colorado Springs. Lakewood. Pueblo.
Connecticut	Bridgeport. Hartford. New Haven. Stamford. Waterbury.
Florida	Fort Lauderdale.

State	Incorporated place
Georgia	Hialeah. Hollywood. Orlando. St. Petersburg. Columbus. Macon. Savannah.
Idaho	Boise City.
Illinois	Peoria. Rockford. Evansville.
Indiana	Fort Wayne. Gary. South Bend.
Iowa	Cedar Rapids. Davenport. Des Moines.
Kansas	Kansas City. Topeka.
Kentucky	Lexington-Fayette.
Louisiana	Baton Rouge. Shreveport.
Massachusetts	Springfield. Worcester.
Michigan	Ann Arbor. Flint. Grand Rapids. Lansing. Livonia. Sterling Heights. Warren.
Mississippi	Jackson.
Missouri	Independence. Springfield.
Nebraska	Lincoln.
Nevada	Las Vegas. Reno.
New Jersey	Elizabeth. Jersey City. Paterson.
New York	Albany. Rochester. Syracuse. Yonkers.
North Carolina	Durham. Greensboro. Raleigh. Winston-Salem.
Ohio	Akron. Dayton. Youngstown.
Oregon	Eugene.
Pennsylvania	Allentown. Erie. Providence.
Rhode Island	Columbia.
South Carolina	Chattanooga.
Tennessee	Knoxville.
Texas	Amarillo. Arlington. Beaumont. Corpus Christi. Garland. Irving. Lubbock. Pasadena. Waco.
Utah	Salt Lake City.
Virginia	Alexandria. Chesapeake. Hampton. Newport News. Portsmouth. Richmond. Roanoke. Spokane. Tacoma. Madison.
Washington	
Wisconsin	

Appendix H to Part 122—Counties with Unincorporated Urbanized Areas With a Population of 250,000 or More According to the Latest Decennial Census by the Bureau of Census

State	County	Unincorporated urbanized population
California	Los Angeles	912,664
	Sacramento	449,056
	San Diego	304,758
Delaware	New Castle	257,184
Florida	Dade	781,949
Georgia	DeKalb	396,379
Hawaii	Honolulu	688,178
Maryland	Anne Arundel	271,458
	Baltimore	601,308
	Montgomery	447,993
	Prince George's	450,188
Texas	Harris	409,601
Utah	Salt Lake	304,632
Virginia	Fairfax	527,178
Washington	King	336,800

Appendix I to Part 122—Counties With Unincorporated Urbanized Areas Greater Than 100,000, But Less Than 250,000 According to the Latest Decennial Census by the Bureau of Census

State	County	Unincorporated urbanized population
Alabama	Jefferson	102,917
Arizona	Pima	111,479
California	Alameda	187,474
	Contra Costa	158,452
	Kern	117,231
	Orange	210,693
	Riverside	115,719
	San Bernardino	146,644
Florida	Broward	159,370
	Escambia	147,892
	Hillsborough	238,292
	Orange	245,325
	Palm Beach	167,089
	Pinellas	194,389
	Polk	104,150
	Sarasota	110,009
Georgia	Clayton	100,742
	Cobb	204,121
	Richmond	118,529
Kentucky	Jefferson	224,958
Louisiana	Jefferson	140,836
North Carolina	Cumberland	142,727
Nevada	Clark	201,775
Oregon	Multnomah	141,100
	Washington	109,348
South Carolina	Greenville	135,398
	Richland	124,684
Virginia	Arlington	152,599
	Henrico	161,204
	Chesterfield	108,348
Washington	Snohomish	103,493
	Pierce	196,113

PART 123—STATE PROGRAM REQUIREMENTS

8. The authority citation for part 123 continues to read as follows:

Authority: Clean Water Act, 33 U.S.C. 1251 *et seq.*

9. Section 123.25 is amended by revising paragraph (a)(9) to read as follows:

§ 123.25 Requirements for permitting.

(a) * * *

(9) § 122.26—(Storm water discharges);

PART 124—PROCEDURES FOR DECISIONMAKING

10. The authority citation for part 124 continues to read as follows:

Authority: Resource Conservation and Recovery Act, 42 U.S.C. 6901 *et seq.*; Safe Drinking Water Act, 42 U.S.C. 300f *et seq.*; Clean Water Act, 33 U.S.C. 1251 *et seq.*; and Clean Air Act, 42 U.S.C. 1857 *et seq.*

11. Section 124.52 is revised to read as follows:

§ 124.52 Permits required on a case-by-case basis.

(a) Various sections of part 122, subpart B allow the Director to

determine, on a case-by-case basis, that certain concentrated animal feeding operations (§ 122.23), concentrated aquatic animal production facilities (§ 122.24), storm water discharges (§ 122.26), and certain other facilities covered by general permits (§ 122.28) that do not generally require an individual permit may be required to obtain an individual permit because of their contributions to water pollution.

(b) Whenever the Regional Administrator decides that an individual permit is required under this section, except as provided in paragraph (c) of this section, the Regional Administrator shall notify the discharger in writing of that decision and the reasons for it, and shall send an application form with the notice. The discharger must apply for a permit under § 122.21 within 60 days of notice, unless permission for a later date is granted by the Regional Administrator. The question whether the designation was proper will remain open for consideration during the public comment period under § 124.11 or § 124.118 and in any subsequent hearing.

(c) Prior to a case-by-case determination that an individual permit is required for a storm water discharge under this section (*see* 40 CFR 122.26 (a)(1)(v) and (c)(1)(v)), the Regional Administrator may require the discharger to submit a permit application or other information regarding the discharge under section 308 of the CWA. In requiring such information, the Regional Administrator shall notify the discharger in writing and shall send an application form with the notice. The discharger must apply for a permit under § 122.26 within 60 days of notice, unless permission for a later date is granted by the Regional Administrator. The question whether the initial designation was proper will remain open for consideration during the public comment period under § 124.11 or § 124.118 and in any subsequent hearing.

Note: The following form will not appear in the Code of Federal Regulations.

BILLING CODE 6560-50-M

Continued from the Front

IV. Narrative Description of Pollutant Sources					
A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.					
Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed, in the last three years, to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.					
C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.					
Outfall Number	Treatment				List Codes from Table 2F-1
V. Nonstormwater Discharges					
A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.					
Name and Official Title (type or print)			Signature		Date Signed
B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.					
VI. Significant Leaks or Spills					
Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.					

EPA ID Number (copy from Item I of Form 1)

Continued from Page 2

VII. Discharge Information

A, B, C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables VII-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E: Potential discharges not covered by analysis - Is any pollutant listed in Table 2F-2 a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

Yes (list all such pollutants below) No (go to Section VIII)

VIII. Biological Toxicity Testing Data

Yes (list results below) No (go to Section IX)

IX. Contract Analysis Information

Yes No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed

X. Certification

A. Name & Official Title (type or print) B. Area Code and Phone No.

C. Signature D. Date Signed

Instructions - Form 2F
Application for Permit to Discharge Storm Water
Associated with Industrial Activity

Who Must File Form 2F

Form 2F must be completed by operators of facilities which discharge storm water associated with industrial activity or by operators of storm water discharges that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard.

Operators of discharges which are composed entirely of storm water must complete Form 2F (EPA Form 3510-2F) in conjunction with Form 1 (EPA Form 3510-1).

Operators of discharges of storm water which are combined with process wastewater (process wastewater is water that comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, waste product, or wastewater) must complete and submit Form 2F, Form 1, and Form 2C (EPA Form 3510-2C).

Operators of discharges of storm water which are combined with nonprocess wastewater (nonprocess wastewater includes noncontact cooling water and sanitary wastes which are not regulated by effluent guidelines or a new source performance standard, except discharges by educational, medical, or commercial chemical laboratories) must complete Form 1, Form 2F, and Form 2E (EPA Form 3510-2E).

Operators of new sources or new discharges of storm water associated with industrial activity which will be combined with other nonstormwater new sources or new discharges must submit Form 1, Form 2F, and Form 2D (EPA Form 3510-2D).

Where to File Applications

The application forms should be sent to the EPA Regional Office which covers the State in which the facility is located. Form 2F must be used only when applying for permits in States where the NPDES permits program is administered by EPA. For facilities located in States which are approved to administer the NPDES permits program, the State environmental agency should be contacted for proper permit application forms and instructions.

Information on whether a particular program is administered by EPA or by a State agency can be obtained from your EPA Regional Office. Form 1, Table 1 of the "General Instructions" lists the addresses of EPA Regional Offices and the States within the jurisdiction of each Office.

Completeness

Your application will not be considered complete unless you answer every question on this form and on Form 1. If an item does not apply to you, enter "NA" (for not applicable) to show that you considered the question.

Public Availability of Submitted Information

You may not claim as confidential any information required by this form or Form 1, whether the information is reported on the forms or in an attachment. Section 402(j) of the Clean Water Act requires that all permit applications will be available to the public. This information will be made available to the public upon request.

Any information you submit to EPA which goes beyond that required by this form, Form 1, or Form 2C you may claim as confidential, but claims for information which are effluent data will be denied.

If you do not assert a claim of confidentiality at the time of submitting the information, EPA may make the information public without further notice to you. Claims of confidentiality will be handled in accordance with EPA's business confidentiality regulations at 40 CFR Part 2.

Definitions

All significant terms used in these instructions and in the form are defined in the glossary found in the General Instructions which accompany Form 1.

EPA ID Number

Fill in your EPA Identification Number at the top of each odd-numbered page of Form 2F. You may copy this number directly from item 1 of Form 1.

Item I

You may use the map you provided for item XI of Form 1 to determine the latitude and longitude of each of your outfalls and the name of the receiving water.

Item II-A

If you check "yes" to this question, complete all parts of the chart, or attach a copy of any previous submission you have made to EPA containing the same information.

Item II-B

You are not required to submit a description of future pollution control projects if you do not wish to or if none is planned.

Item III

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including:

each of its drainage and discharge structures;

the drainage area of each storm water outfall;

paved areas and building within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied;

each of its hazardous waste treatment, storage or disposal facilities (including each area not required to have a RCRA permit which is used for accumulating hazardous waste for less than 90 days under 40 CFR 262.34);

each well where fluids from the facility are injected underground; and

springs, and other surface water bodies which receive storm water discharges from the facility;

Item IV-A

For each outfall, provide an estimate of the area drained by the outfall which is covered by impervious surfaces. For the purpose of this application, impervious surfaces are surfaces where storm water runs off at rates that are significantly higher than background rates (e.g., predevelopment levels) and include paved areas, building roofs, parking lots, and roadways. Include an estimate of the total area (including all impervious and pervious areas) drained by each outfall. The site map required under item III can be used to estimate the total area drained by each outfall.

Item IV-B

Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored, or disposed in a manner to allow exposure to storm water; method of treatment, storage or disposal of these materials; past and present materials management practices employed, in the last three years, to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied. Significant materials should be identified by chemical name, form (e.g., powder, liquid, etc.), and type of container or treatment unit. Indicate any materials treated, stored, or disposed of together. "Significant materials" includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of CERCLA; any chemical the facility is required to report pursuant to Section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges.

Item IV-C

For each outfall, structural controls include structures which enclose material handling or storage areas, covering materials, berms, dikes, or diversion ditches around manufacturing, production, storage or treatment units, retention ponds, etc. Nonstructural controls include practices such as spill prevention plans, employee training, visual inspections, preventive maintenance, and housekeeping measures that are used to prevent or minimize the potential for releases of pollutants.

Item V

Provide a certification that all outfalls that should contain storm water discharges associated with industrial activity have been tested or evaluated for the presence of non-storm water discharges which are not covered by an NPDES permit. Tests for such non-storm water discharges may include smoke tests, fluorometric dye tests, analysis of accurate schematics, as well as other appropriate tests. Part B must include a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test. All non-storm water discharges must be identified in a Form 2C or Form 2E which must accompany this application (see beginning of instructions under section titled "Who Must File Form 2F" for a description of when Form 2C and Form 2E must be submitted).

Item VI

Provide a description of existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years.

Item VII-A, B, and C

These items require you to collect and report data on the pollutants discharged for each of your outfalls. Each part of this item addresses a different set of pollutants and must be completed in accordance with the specific instructions for that part. The following general instructions apply to the entire item.

General Instructions

Part A requires you to report at least one analysis for each pollutant listed. Parts B and C require you to report analytical data in two ways. For some pollutants addressed in Parts B and C, if you know or have reason to know that the pollutant is present in your discharge, you may be required to list the pollutant and test (sample and analyze) and report the levels of the pollutants in your discharge. For all other pollutants addressed in Parts B and C, you must list the pollutant if you know or have reason to know that the pollutant is present in the discharge, and either report quantitative data for the pollutant or briefly describe the reasons the pollutant is expected to be discharged. (See specific instructions on the form and below for Parts A through C.) Base your determination that a pollutant is present in or absent from your discharge on your knowledge of your raw materials, material management practices, maintenance chemicals, history of spills and releases, intermediate and final products and byproducts, and any previous analyses known to you of your effluent or similar effluent.

- A. Sampling:** The collection of the samples for the reported analyses should be supervised by a person experienced in performing sampling of industrial wastewater or storm water discharges. You may contact EPA or your State permitting authority for detailed guidance on sampling techniques and for answers to specific questions. Any specific requirements contained in the applicable analytical methods should be followed for sample containers, sample preservation, holding times, the collection of duplicate samples, etc. The time when you sample should be representative, to the extent feasible, of your treatment system operating properly with no system upsets. Samples should be collected from the center of the flow channel, where turbulence is at a maximum, at a site specified in your present permit, or at any site adequate for the collection of a representative sample.

For pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, and fecal coliform, grab samples taken during the first 30 minutes (or as soon thereafter as practicable) of the discharge must be used (you are not required to analyze a flow-weighted composite for these parameters). For all other pollutants both a grab sample collected during the first 30 minutes (or as soon thereafter as practicable) of the discharge and a flow-weighted composite sample must be analyzed. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period of greater than 24 hours.

All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area.

A grab sample shall be taken during the first thirty minutes of the discharge (or as soon thereafter as practicable), and a flow-weighted composite shall be taken for the entire event or for the first three hours of the event.

Grab and composite samples are defined as follows:

Grab sample: An individual sample of at least 100 milliliters collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge. This sample is to be analyzed separately from the composite sample.

Flow-Weighted Composite sample: A flow-weighted composite sample may be taken with a continuous sampler that proportions the amount of sample collected with the flow rate or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire event or for the first three hours of the event, with each aliquot being at least 100 milliliters and collected with a minimum period of fifteen minutes between aliquot collections. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. Where GC/MS Volatile Organic Analysis (VOA) is required, aliquots must be combined in the laboratory immediately before analysis. Only one analysis for the composite sample is required.

Data from samples taken in the past may be used, provided that:

All data requirements are met;

Sampling was done no more than three years before submission; and

All data are representative of the present discharge.

Among the factors which would cause the data to be unrepresentative are significant changes in production level, changes in raw materials, processes, or final products, and changes in storm water treatment. When the Agency promulgates new analytical methods in 40 CFR Part 136, EPA will provide information as to when you should use the new methods to generate data on your discharges. Of course, the Director may request additional information, including current quantitative data, if they determine it to be necessary to assess your discharges. The Director may allow or establish appropriate site-specific sampling procedures or requirements, including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rainfall), protocols for collecting samples under 40 CFR Part 136, and additional time for submitting data on a case-by-case basis.

- B. Reporting:** All levels must be reported as concentration and as total mass. You may report some or all of the required data by attaching separate sheets of paper instead of filling out pages VII-1 and VII-2 if the separate sheets contain all the required information in a format which is consistent with pages VII-1 and VII-2 in spacing and in identification of pollutants and columns. Use the following abbreviations in the columns headed "Units."

Concentration		Mass	
ppm	parts per million	lbs	pounds
mg/l	milligrams per liter	ton	tons (English tons)
ppb	parts per billion	mg	milligrams
ug/l	micrograms per liter	g	grams
kg	kilograms	T	tonnes (metric tons)

All reporting of values for metals must be in terms of "total recoverable metal," unless:

- (1) An applicable, promulgated effluent limitation or standard specifies the limitation for the metal in dissolved, valent, or total form; or
- (2) All approved analytical methods for the metal inherently measure only its dissolved form (e.g., hexavalent chromium); or
- (3) The permitting authority has determined that in establishing case-by-case limitations it is necessary to express the limitations on the metal in dissolved, valent, or total form to carry out the provisions of the CWA. If you measure only one grab sample and one flow-weighted composite sample for a given outfall, complete only the "Maximum Values" columns and insert "1" into the "Number of Storm Events Sampled" column. The permitting authority may require you to conduct additional analyses to further characterize your discharges.

If you measure more than one value for a grab sample or a flow-weighted composite sample for a given outfall and those values are representative of your discharge, you must report them. You must describe your method of testing and data analysis. You also must determine the average of all values within the last year and report the concentration mass under the "Average Values" columns, and the total number of storm events sampled under the "Number of Storm Events Sampled" columns.

- C. **Analysis:** You must use test methods promulgated in 40 CFR Part 136; however, if none has been promulgated for a particular pollutant, you may use any suitable method for measuring the level of the pollutant in your discharge provided that you submit a description of the method or a reference to a published method. Your description should include the sample holding time, preservation techniques, and the quality control measures which you used. If you have two or more substantially identical outfalls, you may request permission from your permitting authority to sample and analyze only one outfall and submit the results of the analysis for other substantially identical outfalls. If your request is granted by the permitting authority, on a separate sheet attached to the application form, identify which outfall you did test, and describe why the outfalls which you did not test are substantially identical to the outfall which you did test.

Part VII-A

Part VII-A must be completed by all applicants for all outfalls who must complete Form 2F.

Analyze a grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results except use only grab samples for pH and oil and grease. See discussion in General Instructions to Item VII for definitions of grab sample collected during the first thirty minutes of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

Part VII-B

List all pollutants that are limited in an effluent guideline which the facility is subject to (see 40 CFR Subchapter N to determine which pollutants are limited in effluent guidelines) or any pollutant listed in the facility's NPDES permit for its process wastewater (if the facility is operating under an existing NPDES permit). Complete one table for each outfall. See discussion in General instructions to item VII for definitions of grab sample collected during the first thirty minutes (or as soon thereafter as practicable) of discharge and flow-weighted composite sample. The "Average Values" column is not compulsory but should be filled out if data are available.

Analyze a grab sample collected during the first thirty minutes of the discharge and flow-weighted composite samples for all pollutants in this Part, and report the results, except as provided in the General Instructions.

Part VII-C

Part VII-C must be completed by all applicants for all outfalls which discharge storm water associated with industrial activity, or that EPA is evaluating for designation as a significant contributor of pollutants to waters of the United States, or as contributing to a violation of a water quality standard. Use both a grab sample and a composite sample for all pollutants you analyze for in this part except use grab samples for residual chlorine and fecal coliform. The "Average Values" column is not compulsory but should be filled out if data are available. Part C requires you to address the pollutants in Table 2F-2, 2F-3, and 2F-4 for each outfall. Pollutants in each of these Tables are addressed differently.

Table 2F-2: For each outfall, list all pollutants in Table 2F-2 that you know or have reason to believe are discharged (except pollutants previously listed in Part VII-B). If a pollutant is limited in an effluent guideline limitation which the facility is subject to (e.g., use of TSS as an indicator to control the discharge of iron and aluminum), the pollutant should be listed in Part VII-B. If a pollutant in table 2F-2 is indirectly limited by an effluent guideline limitation through an indicator, you must analyze for it and report data in Part VII-C. For other pollutants listed in Table 2F-2 (those not limited directly or indirectly by an effluent limitation guideline), that you know or have reason to believe are discharges, you must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

Table 2F-3: For each outfall, list all pollutants in Table 2F-3 that you know or have reason to believe are discharged. For every pollutant in Table 2F-3 expected to be discharged in concentrations of 10 ppb or greater, you must submit quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, you must submit quantitative data if any of these four pollutants is expected to be discharged

in concentrations of 100 ppb or greater. For every pollutant expected to be discharged in concentrations less than 10 ppb (or 100 ppb for the four pollutants listed above), then you must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

Small Business Exemption - If you are a "small business," you are exempt from the reporting requirements for the organic toxic pollutants listed in Table 2F-3. There are two ways in which you can qualify as a "small business". If your facility is a coal mine, and if your probable total annual production is less than 100,000 tons per year, you may submit past production data or estimated future production (such as a schedule of estimated total production under 30 CFR 795.14(c)) instead of conducting analyses for the organic toxic pollutants. If your facility is not a coal mine, and if your gross total annual sales for the most recent three years average less than \$100,000 per year (in second quarter 1980 dollars), you may submit sales data for those years instead of conducting analyses for the organic toxic pollutants. The production or sales data must be for the facility which is the source of the discharge. The data should not be limited to production or sales for the process or processes which contribute to the discharge, unless those are the only processes at your facility. For sales data, in situations involving intracorporate transfer of goods and services, the transfer price per unit should approximate market prices for those goods and services as closely as possible. Sales figures for years after 1980 should be indexed to the second quarter of 1980 by using the gross national product price deflator (second quarter of 1980=100). This index is available in National Income and Product Accounts of the United States (Department of Commerce, Bureau of Economic Analysis).

Table 2F-4: For each outfall, list any pollutant in Table 2F-4 that you know or believe to be present in the discharge and explain why you believe it to be present. No analysis is required, but if you have analytical data, you must report them. **Note:** Under 40 CFR 117.12(a)(2), certain discharges of hazardous substances (listed at 40 CFR 177.21 or 40 CFR 302.4) may be exempted from the requirements of section 311 of CWA, which establishes reporting requirements, civil penalties, and liability for cleanup costs for spills of oil and hazardous substances. A discharge of a particular substance may be exempted if the origin, source, and amount of the discharged substances are identified in the NPDES permit application or in the permit, if the permit contains a requirement for treatment of the discharge, and if the treatment is in place. To apply for an exclusion of the discharge of any hazardous substance from the requirements of section 311, attach additional sheets of paper to your form, setting forth the following information:

1. The substance and the amount of each substance which may be discharged.
2. The origin and source of the discharge of the substance.
3. The treatment which is to be provided for the discharge by:
 - a. An onsite treatment system separate from any treatment system treating your normal discharge;
 - b. A treatment system designed to treat your normal discharge and which is additionally capable of treating the amount of the substance identified under paragraph 1 above; or
 - c. Any combination of the above.

See 40 CFR 117.12(a)(2) and (c), published on August 29, 1979, in 44 FR 50766, or contact your Regional Office (Table 1 on Form 1, Instructions), for further information on exclusions from section 311.

Part VII-D

If sampling is conducted during more than one storm event, you only need to report the information requested in Part VII-D for the storm event(s) which resulted in any maximum pollutant concentration reported in Part VII-A, VII-B, or VII-C.

Provide flow measurements or estimates of the flow rate, and the total amount of discharge for the storm event(s) sampled, the method of flow measurement, or estimation. Provide the data and duration of the storm event(s) sampled, rainfall measurements, or estimates of the storm event which generated the sampled runoff and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

Part VII-E

List any toxic pollutant listed in Tables 2F-2, 2F-3, or 2F-4 which you currently use or manufacture as an intermediate or final product or byproduct. In addition, if you know or have reason to believe that 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) is discharged or if you use or manufacture 2,4,5-trichlorophenoxy acetic

acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate (Ronne); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); then list TCDD. The Director may waive or modify the requirement if you demonstrate that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue your permit. You may not claim this information as confidential; however, you do not have to distinguish between use or production of the pollutants or list the amounts.

Item VIII

Self explanatory. The permitting authority may ask you to provide additional details after your application is received.

Item X

The Clean Water Act provides for severe penalties for submitting false information on this application form.

Section 309(c)(4) of the Clean Water Act provides that "Any person who knowingly makes any false material statement, representation, or certification in any application, . . . shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than 2 years, or by both. If a conviction of such person is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or by both." 40 CFR Part 122.22 requires the certification to be signed as follows:

(A) For a corporation: by a responsible corporate official. For purposes of this section, a responsible corporate official means (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25,000,000 (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

Note: EPA does not require specific assignments or delegation of authority to responsible corporate officers identified in 122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate position under 122.22(a)(1)(ii) rather than to specific individuals.

(B) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(C) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

Table 2F-1
Codes for Treatment Units

Physical Treatment Processes			
1-A	Ammonia Stripping	1-M	Grit Removal
1-B	Dialysis	1-N	Microstraining
1-C	Diatomaceous Earth Filtration	1-O	Mixing
1-D	Distillation	1-P	Moving Bed Filters
1-E	Electrodialysis	1-Q	Multimedia Filtration
1-F	Evaporation	1-R	Rapid Sand Filtration
1-G	Flocculation	1-S	Reverse Osmosis (Hyperfiltration)
1-H	Flotation	1-T	Screening
1-I	Foam Fractionation	1-U	Sedimentation (Setting)
1-J	Freezing	1-V	Slow Sand Filtration
1-K	Gas-Phase Separation	1-W	Solvent Extraction
1-L	Grinding (Comminutors)	1-X	Sorption
Chemical Treatment Processes			
2-A	Carbon Adsorption	2-G	Disinfection (Ozone)
2-B	Chemical Oxidation	2-H	Disinfection (Other)
2-C	Chemical Precipitation	2-I	Electrochemical Treatment
2-D	Coagulation	2-J	Ion Exchange
2-E	Dechlorination	2-K	Neutralization
2-F	Disinfection (Chlorine)	2-L	Reduction
Biological Treatment Processes			
3-A	Activated Sludge	3-E	Pre-Aeration
3-B	Aerated Lagoons	3-F	Spray Irrigation/Land Application
3-C	Anaerobic Treatment	3-G	Stabilization Ponds
3-D	Nitrification-Denitrification	3-H	Trickling Filtration
Other Processes			
4-A	Discharge to Surface Water	4-C	Reuse/Recycle of Treated Effluent
4-B	Ocean Discharge Through Outfall	4-D	Underground Injection
Sludge Treatment and Disposal Processes			
5-A	Aerobic Digestion	5-M	Heat Drying
5-B	Anaerobic Digestion	5-N	Heat Treatment
5-C	Belt Filtration	5-O	Incineration
5-D	Centrifugation	5-P	Land Application
5-E	Chemical Conditioning	5-Q	Landfill
5-F	Chlorine Treatment	5-R	Pressure Filtration
5-G	Composting	5-S	Pyrolysis
5-H	Drying Beds	5-T	Sludge Lagoons
5-I	Elutriation	5-U	Vacuum Filtration
5-J	Flotation Thickening	5-V	Vibration
5-K	Freezing	5-W	Wet Oxidation
5-L	Gravity Thickening		

Table 2F-2**Conventional and Nonconventional Pollutants Required To Be Tested by Existing Discharger if Expected To Be Present**

Bromide
Chlorine, Total Residual
Color
Fecal Coliform
Fluoride
Nitrate-Nitrite
Nitrogen, Total Kjeldahl
Oil and Grease
Phosphorus, Total Radioactivity
Sulfate
Sulfide
Sulfite
Surfactants
Aluminum, Total
Barium, Total
Boron, Total
Cobalt, Total
Iron, Total
Magnesium, Total
Molybdenum, Total
Magnesium, Total
Tin, Total
Titanium, Total

Table 2F-3
Toxic pollutants required to be
identified by applicant if expected to be present*

Toxic Pollutants and Total Phenol		
Antimony, Total	Copper, Total	Silver, Total
Arsenic, Total	Lead, Total	Thallium, Total
Beryllium, Total	Mercury, Total	Zinc, Total
Cadmium, Total	Nickel, Total	Cyanide, Total
Chromium, Total	Selenium, Total	Phenols, Total
GC/MS Fraction Volatiles Compounds		
Acrolein	Dichlorobromomethane	1,1,2,2-Tetrachloroethane
Acrylonitrile	1,1-Dichloroethane	Tetrachloroethylene
Benzene	1,2-Dichloroethane	Toluene
Bromoform	1,1-Dichloroethylene	1,2-Trans-Dichloroethylene
Carbon Tetrachloride	1,2-Dichloropropane	1,1,1-Trichloroethane
Chlorobenzene	1,3-Dichloropropylene	1,1,2-Trichloroethane
Chlorodibromomethane	Ethylbenzene	Trichloroethylene
Chloroethane	Methyl Bromide	Vinyl Chloride
2-Chloroethylvinyl Ether	Methyl Chloride	
Chloroform	Methylene Chloride	
Acid Compounds		
2-Chlorophenol	2,4-Dinitrophenol	Pentachlorophenol
2,4-Dichlorophenol	2-Nitrophenol	Phenol
2,4-Dimethylphenol	4-Nitrophenol	2,4,6-Trichlorophenol
4,6-Dinitro-O-Cresol	p-Chloro-M-Cresol	
Base/Neutral		
Acenaphthene	2-Chloronaphthalene	Fluoranthene
Acenaphthylene	4-Chlorophenyl Phenyl Ether	Fluorene
Anthracene	Chrysene	Hexachlorobenzene
Benidine	Dibenzo(a,h)anthracene	Hexachlorobutadiene
Benzo(a)anthracene	1,2-Dichlorobenzene	Hexachloroethane
Benzo(a)pyrene	1,3-Dichlorobenzene	Indeno(1,2,3-cd)pyrene
3,4-Benzofluoranthene	1,4-Dichlorobenzene	Isophorone
Benzo(ghi)perylene	3,3'-Dichlorobenzidine	Naphthalene
Benzo(k)fluoranthene	Diethyl Phthalate	Nitrobenzene
Bis(2-chloroethoxy)methane	Dimethyl Phthalate	N-Nitrosodimethylamine
Bis(2-chloroethyl)ether	Di-N-Butyl Phthalate	N-Nitrosodi-N-Propylamine
Bis(2-chloroisopropyl)ether	2,4-Dinitrotoluene	N-Nitrosodiphenylamine
Bis(2-ethylhexyl)phthalate	2,6-Dinitrotoluene	Phenanthrene
4-Bromophenyl Phenyl Ether	Di-N-Octylphthalate	Pyrene
Butylbenzyl Phthalate	1,2-Diphenylhydrazine (as Azobenzene)	1,2,4-Trichlorobenzene
Pesticides		
Aldrin	Dieldrin	PCB-1254
Alpha-BHC	Alpha-Endosulfan	PCB-1221
Beta-BHC	Beta-Endosulfan	PCB-1232
Gamma-BHC	Endosulfan Sulfate	PCB-1248
Delta-BHC	Endrin	PCB-1260
Chlordane	Endrin Aldehyde	PCB-1016
4,4'-DDT	Heptachlor	Toxaphene
4,4'-DDE	Heptachlor Epoxide	
4,4'-DDD	PCB-1242	

Table 2F-4
Hazardous substances required to be
identified by applicant if expected to be present

Toxic Pollutant		
Hazardous Substances		
Asbestos		
Acetaldehyde	Dinitrobenzene	Napthenic acid
Allyl alcohol	Diquat	Nitrotoluene
Allyl chloride	Disulfoton	Parathion
Amyl acetate	Diuron	Phenolsulfonate
Aniline	Epichlorohydrin	Phosgene
Benzonitrile	Ethion	Propargite
Benzyl chloride	Ethylene diamine	Propylene oxide
Butyl acetate	Ethylene dibromide	Pyrethrins
Butylamine	Formaldehyde	Quinoline
Carbaryl	Furfural	Resorcinol
Carbofuran	Guthion	Stronthium
Carbon disulfide	Isoprene	Strychnine
Chlorpyrifos	Isopropanolamine	Styrene
Coumaphos	Kelthane	2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
Cresol	Kepon	TDE (Tetrachlorodiphenyl ethane)
Crotonaldehyde	Malathion	2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]
Cyclohexane	Mercaptodimethur	Trichlorofan
2,4-D (2,4-Dichlorophenoxyacetic acid)	Methoxychlor	Triethylamine
Diazinon	Methyl mercaptan	Trimethylamine
Dicamba	Methyl methacrylate	Uranium
Dichlobenil	Methyl parathion	Vanadium
Dichlone	Mevinphos	Vinyl acetate
2,2-Dichloropropionic acid	Mexacarbate	Xylene
Dichlorvos	Monoethyl amine	Xylenol
Diethyl amine	Monomethyl amine	Zirconium
Dimethyl am.ne	Naled	

[FR Doc. 90-26315 Filed 11-9-90 12 17 pm]

BILLING CODE 6560-50-C

Wednesday
December 8, 1999

Environmental Protection Agency

Part II

**Environmental
Protection Agency**

40 CFR Parts 9, 122, 123, and 124
National Pollutant Discharge Elimination
System—Regulations for Revision of the
Water Pollution Control Program
Addressing Storm Water Discharges;
Final Rule

Report to Congress on the Phase II
Storm Water Regulations; Notice

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9, 122, 123, and 124

[FRL—6470–8]

RIN 2040–AC82

National Pollutant Discharge Elimination System—Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: Today's regulations (Phase II) expand the existing National Pollutant Discharge Elimination System (NPDES) storm water program (Phase I) to address storm water discharges from small municipal separate storm sewer systems (MS4s) (those serving less than 100,000 persons) and construction sites that disturb one to five acres. Although these sources are automatically designated by today's rule, the rule allows for the exclusion of certain sources from the national program based on a demonstration of the lack of impact on water quality, as well as the inclusion of others based on a higher likelihood of localized adverse impact on water quality. Today's regulations also exclude from the NPDES program storm water discharges from industrial facilities that have "no exposure" of industrial activities or materials to storm water. Finally, today's rule extends from August 7, 2001 until March 10, 2003 the deadline by which certain industrial facilities owned by small MS4s must obtain coverage under an NPDES permit. This rule establishes a cost-effective, flexible approach for reducing environmental harm by storm water discharges from many point sources of storm water that are currently unregulated.

EPA believes that the implementation of the six minimum measures identified for small MS4s should significantly reduce pollutants in urban storm water compared to existing levels in a cost-effective manner. Similarly, EPA believes that implementation of Best Management Practices (BMP) controls at small construction sites will also result in a significant reduction in pollutant discharges and an improvement in surface water quality. EPA believes this rule will result in monetized financial, recreational and health benefits, as well as benefits that EPA has been unable to monetize. Expected benefits include reduced scouring and erosion of streambeds, improved aesthetic quality

of waters, reduced eutrophication of aquatic systems, benefit to wildlife and endangered and threatened species, tourism benefits, biodiversity benefits and reduced costs for siting reservoirs. In addition, the costs of industrial storm water controls will decrease due to the exclusion of storm water discharges from facilities where there is "no exposure" of storm water to industrial activities and materials.

DATES: This regulation is effective on February 7, 2000. The incorporation by reference of the rainfall erosivity factor publication listed in the rule is approved by the Director of the Federal Register as of February 7, 2000. For judicial review purposes, this final rule is promulgated as of 1:00 p.m. Eastern Standard Time, on December 22, 1999 as provided in 40 CFR 23.2.

ADDRESSES: The complete administrative record for the final rule and the ICR have been established under docket numbers W-97-12 (rule) and W-97-15 (ICR), and includes supporting documentation as well as printed, paper versions of electronic comments. Copies of information in the record are available upon request. A reasonable fee may be charged for copying. The record is available for inspection and copying from 9 a.m. to 4 p.m., Monday through Friday, excluding legal holidays, at the Water Docket, EPA, East Tower Basement, 401 M Street, SW, Washington, DC. For access to docket materials, please call 202/260-3027 to schedule an appointment.

FOR FURTHER INFORMATION CONTACT: George Utting, Office of Wastewater Management, Environmental Protection Agency, Mail Code 4203, 401 M Street, SW, Washington, DC 20460; (202) 260-5816; sw2@epa.gov.

SUPPLEMENTARY INFORMATION: Entities potentially regulated by this action include:

Category	Examples of regulated entities
Federal, State, Tribal, and Local Governments.	Operators of small separate storm sewer systems, industrial facilities that discharge storm water associated with industrial activity or construction activity disturbing 1 to 5 acres.
Industry	Operators of industrial facilities that discharge storm water associated with industrial activity.
Construction Activity.	Operators of construction activity disturbing 1 to 5 acres.

This table is not intended to be exhaustive, but rather provides a guide

for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility or company is regulated by this action, you should carefully examine the applicability criteria in §§ 122.26(b), 122.31, 122.32, and 123.35 of the final rule. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

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 - I. Congressional Review Act

I. Background

A. Proposed Rule and Pre-Proposal Outreach

On January 9, 1998 (63 FR 1536), EPA proposed to expand the National Pollutant Discharge Elimination System (NPDES) storm water program to include storm water discharges from municipal separate storm sewer systems (MS4s) and construction sites that were smaller than those previously included in the program. The proposal also addressed industrial sources that have "no exposure" of industrial activities and materials to storm water. Today, EPA is promulgating a final rule to implement most of the proposed revisions with minor changes based on public comments received on the proposal. Today's final rule also extends the deadline by which certain industrial facilities operated by municipalities of less than 100,000 population must be covered by a NPDES permit; the

deadline is changed from August 7, 2001 until March 10, 2003.

In 1972, Congress amended the Federal Water Pollution Control Act (commonly referred to as the Clean Water Act (CWA)) to prohibit the discharge of any pollutant to waters of the United States from a point source unless the discharge is authorized by an NPDES permit. The NPDES program is a program designed to track point sources and require the implementation of the controls necessary to minimize the discharge of pollutants. Initial efforts to improve water quality under the NPDES program primarily focused on reducing pollutants in industrial process wastewater and municipal sewage. These discharge sources were easily identified as responsible for poor, often drastically degraded, water quality conditions.

As pollution control measures for industrial process wastewater and municipal sewage were implemented and refined, it became increasingly evident that more diffuse sources of water pollution were also significant causes of water quality impairment. Specifically, storm water runoff draining large surface areas, such as agricultural and urban land, was found to be a major cause of water quality impairment, including the nonattainment of designated beneficial uses.

In 1987, Congress amended the CWA to require implementation, in two phases, of a comprehensive national program for addressing storm water discharges. The first phase of the program, commonly referred to as "Phase I," was promulgated on November 16, 1990 (55 FR 47990). Phase I requires NPDES permits for storm water discharge from a large number of priority sources including municipal separate storm sewer systems ("MS4s") generally serving populations of 100,000 or more and several categories of industrial activity, including construction sites that disturb five or more acres of land.

Today's rule, which is the second phase of the storm water program, expands the existing program to include discharges of storm water from smaller municipalities in urbanized areas and from construction sites that disturb between one and five acres of land. Today's rule allows certain sources to be excluded from the national program based on a demonstrable lack of impact on water quality. The rule also allows other sources not automatically regulated on a national basis to be designated for inclusion based on increased likelihood for localized adverse impact on water quality.

Today's rule also conditionally excludes storm water discharges from industrial facilities that have "no exposure" of industrial activities or materials to storm water. Today's rule and the effort that led to its development are commonly referred to as "Phase II." On August 7, 1995, EPA promulgated a final rule that required facilities to be regulated under Phase II to apply for a NPDES permit by August 7, 2001, unless the NPDES permitting authority designates them as requiring a permit by an earlier date. (60 FR 40230). That rule is referred to as "the Interim Phase II Rule." Today's rule replaces the Interim Phase II rule.

EPA performed extensive outreach and worked with a variety of stakeholders prior to proposing today's rule. On September 9, 1992, EPA published a notice requesting information and public comment on how to prepare regulations under CWA section 402(p)(6) (see 57 FR 41344). The notice identified three sets of issues associated with developing new NPDES storm water regulations: (1) How should EPA identify unregulated sources of storm water to protect water quality, (2) what types of control strategies should EPA develop for these sources, and (3) what are appropriate deadlines for implementing new requirements. The notice recognized that potential sources for coverage under the section 402(p)(6) regulations would fall into two main categories: municipal separate storm sewer systems and individual (commercial and residential) sources. EPA received more than 130 comments on the September 9, 1992, notice. For further discussion of the comments received, see *Storm Water Discharges Potentially Addressed by Phase II of the National Pollutant Discharge Elimination System: Report to Congress* (EPA, 1995a), pp. 1–21 to 1–22, and Appendix J (which provides a detailed summary of the comments received as they relate to the specific issues raised in the notice).

In early 1993, the Rensselaerville Institute and EPA held public and expert meetings to assist in developing and analyzing options for identifying unregulated sources and possible controls. The report on the 1993 meetings identified two options that were favored by the various groups that participated. One option was a program that allowed States to select sources to be controlled in a manner consistent with criteria developed by EPA. A second option was a tiered approach under which EPA would select high priority sources for control by NPDES permits and States would select other sources for control under a State water

quality program other than the NPDES program. For additional details see the "Report on the EPA Storm Water Management Program (Rensselaerville Study)," Appendix I of *Storm Water Discharges Potentially Addressed by Phase II of the National Pollutant Discharge Elimination System: Report to Congress* (EPA, 1995a).

EPA also conducted outreach with representatives of small entities in conjunction with the convening of a Small Business Advocacy Review Panel under the Small Business Regulatory Enforcement Fairness Act (SBREFA). This process is discussed in section IV.E of today's preamble. For additional background see the discussion in the preamble to the proposal for today's rule.

To assist EPA by providing advice and recommendations regarding the urban municipal wet weather water pollution control program, EPA established the Urban Wet Weather Flows Federal Advisory Committee (hereinafter, "FACA Committee") under the Federal Advisory Committee Act (FACA). The Office of Management and Budget approved the charter for the FACA Committee on March 10, 1995. The FACA Committee provided a forum for identifying and addressing issues associated with water quality impacts from storm water sources.

The FACA Committee established two subcommittees: the Storm Water Phase II FACA Subcommittee and the Sanitary Sewer Overflows (SSOs) FACA Subcommittee. Consistent with the requirements of FACA, the membership of both the FACA Committee and the subcommittees was balanced among EPA's various outside stakeholder interests, including representatives from municipalities, States, Indian Tribes, EPA, industrial and commercial sectors, agriculture, and environmental and public interest groups.

The Storm Water Phase II FACA Subcommittee ("Subcommittee") met fourteen times between September 1995 and June 1998. The 32 Subcommittee members discussed possible regulatory frameworks at these meetings as well as during numerous other meetings and conference calls. Members of the FACA Committee provided views regarding the development of the "no exposure" provision and other provisions in drafts of the Phase II rule. EPA provided Subcommittee members with four successive drafts of the proposed rule and preamble, outlines of the rule, summaries of the written comments received on each draft, and documents identifying the changes made to each draft. In the course of providing input to the Committee, individual

Subcommittee members provided significant input and advice that EPA considered in the context of public comments received. Ultimately, the Subcommittee did not provide a written report back to the FACA Committee, and the FACA Committee did not provide written advice and recommendations to EPA. The Agency, therefore, did not rely on group recommendations in developing today's rule, but does consider the process to have resulted in important public outreach.

B. Water Quality Concerns/ Environmental Impact Studies and Assessments

Storm water runoff from lands modified by human activities can harm surface water resources and, in turn, cause or contribute to an exceedance of water quality standards by changing natural hydrologic patterns, accelerating stream flows, destroying aquatic habitat, and elevating pollutant concentrations and loadings. Such runoff may contain or mobilize high levels of contaminants, such as sediment, suspended solids, nutrients (phosphorous and nitrogen), heavy metals and other toxic pollutants, pathogens, toxins, oxygen-demanding substances (organic material), and floatables (U.S. EPA. 1992).

Environmental Impacts of Storm Water Discharges: A National Profile. EPA 841-R-92-001. Office of Water. Washington, DC). After a rain, storm water runoff carries these pollutants into nearby streams, rivers, lakes, estuaries, wetlands, and oceans. The highest concentrations of these contaminants often are contained in "first flush" discharges, which occur during the first major storm after an extended dry period (Schueler, T.R. 1994. "First Flush of Stormwater Pollutants Investigated in Texas." Note 28. *Watershed Protection Techniques* 1(2)). Individually and combined, these pollutants impair water quality, threatening designated beneficial uses and causing habitat alteration or destruction.

Uncontrolled storm water discharges from areas of urban development and construction activity negatively impact receiving waters by changing the physical, biological, and chemical composition of the water, resulting in an unhealthy environment for aquatic organisms, wildlife, and humans. The following sections discuss the studies and data that address and support this finding.

Although water quality problems also can occur from agricultural storm water discharges and return flows from irrigated agriculture, this area of

concern is statutorily exempted from regulation as a point source under the Clean Water Act and is not discussed here. (See CWA section 502(14)). Other storm water sources not specifically identified in the regulations may be of concern in certain areas and can be addressed on a case-by-case (or category-by-category) basis through the NPDES designation authority preserved by CWA section 402(p)(2)(6), as well as today's rule.

1. Urban Development

Urbanization alters the natural infiltration capability of the land and generates a host of pollutants that are associated with the activities of dense populations, thus causing an increase in storm water runoff volumes and pollutant loadings in storm water discharged to receiving waterbodies (U.S. EPA, 1992). Urban development increases the amount of impervious surface in a watershed as farmland, forests, and meadowlands with natural infiltration characteristics are converted into buildings with rooftops, driveways, sidewalks, roads, and parking lots with virtually no ability to absorb storm water. Storm water and snow-melt runoff wash over these impervious areas, picking up pollutants along the way while gaining speed and volume because of their inability to disperse and filter into the ground. What results are storm water flows that are higher in volume, pollutants, and temperature than the flows in less impervious areas, which have more natural vegetation and soil to filter the runoff (U.S. EPA, 1997. *Urbanization and Streams: Studies of Hydrologic Impacts*. EPA 841-R-97-009. Office of Water. Washington, DC).

Studies reveal that the level of imperviousness in an area strongly correlates with the quality of the nearby receiving waters. For example, a study in the Puget Sound lowland ecoregion found that when the level of basin development exceeded 5 percent of the total impervious area, the biological integrity and physical habitat conditions that are necessary to support natural biological diversity and complexity declined precipitously (May, C.W., E.B. Welch, R.R. Horner, J.R. Karr, and B.W. May. 1997. *Quality Indices for Urbanization Effects in Puget Sound Lowland Streams*, Technical Report No. 154. University of Washington Water Resources Series). Research conducted in numerous geographical areas, concentrating on various variables and employing widely different methods, has revealed a similar conclusion: stream degradation occurs at relatively low levels of imperviousness, such as 10 to 20 percent (even as low as 5 to 10

percent according to the findings of the Washington study referenced above) (Schueler, T.R. 1994. "The Importance of Imperviousness." *Watershed Protection Techniques* 1(3); May, C., R.R. Horner, J.R. Karr, B.W. Mar, and E.B. Welch. 1997. "Effects Of Urbanization On Small Streams In The Puget Sound Lowland Ecoregion." *Watershed Protection Techniques* 2(4); Yoder, C.O., R.J. Miltner, and D. White. 1999. "Assessing the Status of Aquatic Life Designated Uses in Urban and Suburban Watersheds." In *Proceedings: National Conference on Retrofits Opportunities in Urban Environments*. EPA 625-R-99-002, Washington, DC; Yoder, C.O and R.J. Miltner. 1999. "Assessing Biological Quality and Limitations to Biological Potential in Urban and Suburban Watersheds in Ohio." In *Comprehensive Stormwater & Aquatic Ecosystem Management Conference Papers*, Auckland, New Zealand). Furthermore, research has indicated that few, if any, urban streams can support diverse benthic communities at imperviousness levels of 25 percent or more. An area of medium density single family homes can be anywhere from 25 percent to nearly 60 percent impervious, depending on the design of the streets and parking (Schueler, 1994).

In addition to impervious areas, urban development creates new pollution sources as population density increases and brings with it proportionately higher levels of car emissions, car maintenance wastes, pet waste, litter, pesticides, and household hazardous wastes, which may be washed into receiving waters by storm water or dumped directly into storm drains designed to discharge to receiving waters. More people in less space results in a greater concentration of pollutants that can be mobilized by, or disposed into, storm water discharges from municipal separate storm sewer systems. A modeling system developed for the Chesapeake Bay indicated that contamination of the Bay and its tributaries from runoff is comparable to, if not greater than, contamination from industrial and sewage sources (Cohn-Lee, R. and D. Cameron. 1992. "Urban Stormwater Runoff Contamination of the Chesapeake Bay: Sources and Mitigation." *The Environmental Professional*, Vol. 14).

a. Large-Scale Studies and Assessments

In support of today's regulatory designation of MS4s in urbanized areas, the Agency relied on broad-based assessments of urban storm water runoff and related water quality impacts, as well as more site-specific studies. The

first national assessment of urban runoff characteristics was completed for the *Nationwide Urban Runoff Program (NURP)* study (U.S. EPA. 1983. *Results of the Nationwide Urban Runoff Program, Volume 1—Final Report*. Office of Water. Washington, D.C.). The NURP study is the largest nationwide evaluation of storm water discharges, which includes adverse impacts and sources, undertaken to date.

EPA conducted the NURP study to facilitate understanding of the nature of urban runoff from residential, commercial, and industrial areas. One objective of the study was to characterize the water quality of discharges from separate storm sewer systems that drain residential, commercial, and light industrial (industrial parks) sites. Storm water samples from 81 residential and commercial properties in 22 urban/suburban areas nationwide were collected and analyzed during the 5-year period between 1978 and 1983. The majority of samples collected in the study were analyzed for eight conventional pollutants and three heavy metals.

Data collected under the NURP study indicated that discharges from separate storm sewer systems draining runoff from residential, commercial, and light industrial areas carried more than 10 times the annual loadings of total suspended solids (TSS) than discharges from municipal sewage treatment plants that provide secondary treatment. The NURP study also indicated that runoff from residential and commercial areas carried somewhat higher annual loadings of chemical oxygen demand (COD), total lead, and total copper than effluent from secondary treatment plants. Study findings showed that fecal coliform counts in urban runoff typically range from tens to hundreds of thousands per hundred milliliters of runoff during warm weather conditions, with the median for all sites being around 21,000/100 ml. This is generally consistent with studies that found that fecal coliform mean values range from 1,600 coliform fecal units (CFU)/100 ml to 250,000 cfu/100 ml (Makepeace, D.K., D.W. Smith, and S.J. Stanley. 1995. "Urban Storm Water Quality: Summary of Contaminant Data." *Critical Reviews in Environmental Science and Technology* 25(2):93-139). Makepeace, et al., summarized ranges of contaminants from storm water, including physical contaminants such as total solids (76—36,200 mg/L) and copper (up to 1.41 mg/L); organic chemicals; organic compounds, such as oil and grease (up to 110 mg/L); and microorganisms.

Monitoring data summarized in the NURP study provided important information about urban runoff from residential, commercial, and light industrial areas. The study concluded that the quality of urban runoff can be affected adversely by several sources of pollution that were not directly evaluated in the study, including illicit discharges, construction site runoff, and illegal dumping. Data from the NURP study were analyzed further in the U.S. Geological Survey (USGS) Urban Storm Water Data Base for 22 Metropolitan Areas Throughout the United States study (Driver, N.E., M.H. Mustard, R.B. Rhinesmith, and R.F. Middleburg. 1985. *U.S. Geological Survey Urban Storm Water Data Base for 22 Metropolitan Areas Throughout the United States*. Report No. 85-337 USGS, Lakewood, CO). The USGS report summarized additional monitoring data compiled during the mid-1980s, covering 717 storm events at 99 sites in 22 metropolitan areas and documented problems associated with metals and sediment concentrations in urban storm water runoff. More recent reports have confirmed the pollutant concentration data collected in the NURP study (Marsalek, J. 1990. "Evaluation of Pollutant Loads from Urban Nonpoint Sources." *Wat. Sci. Tech.* 22(10/11):23-30; Makepeace, et al., 1995).

Commenters argued that the NURP study does not support EPA's contention that urban activities significantly jeopardize attainment of water quality standards. One commenter argued that the NURP study and the 1985 USGS study are seriously out of date. Because they were issued 10 years or more before the implementation of the current storm water permit program, the data in those reports do not reflect conditions that exist after implementation of permits issued by authorized States and EPA for storm water from construction sites, large municipalities, and industrial activities.

In response, EPA notes that it is not relying solely on the NURP study to describe current water quality impairment. Rather, EPA is citing NURP as a source of data on typical pollutant concentrations in urban runoff. Recent studies have not found significantly different pollutant concentrations in urban runoff when compared to the original NURP data (see Makepeace, et al., 1995; Marsalek, 1990; and Pitt, et al., 1995).

America's Clean Water—the States' Nonpoint Source Assessment (Association of State and Interstate Water Pollution Control Administrators (ASIWPCA). 1985. *America's Clean Water—The States' Nonpoint Source*

Assessment. Prepared in cooperation with the U.S. EPA, Office of Water, Washington, DC), a comprehensive study of diffuse pollution sources conducted under the sponsorship of the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) and EPA revealed that 38 States reported urban runoff as a major cause of designated beneficial use impairment and 21 States reported storm water runoff from construction sites as a major cause of beneficial use impairment. In addition, the 1996 305(b) Report (U.S. EPA. 1998. *The National Water Quality Inventory, 1996 Report to Congress*. EPA 841-R-97-008. Office of Water, Washington, DC), provides a national assessment of water quality based on biennial reports submitted by the States as required under CWA section 305(b) of the CWA. In the CWA 305(b) reports, States, Tribes, and Territories assess their individual water quality control programs by examining the attainment or nonattainment of the designated uses assigned to their rivers, lakes, estuaries, wetlands, and ocean shores. A designated use is the legally applicable use specified in a water quality standard for a watershed, waterbody, or segment of a waterbody. The designated use is the desirable use that the water quality should support. Examples of designated uses include drinking water supply, primary contact recreation (swimming), and aquatic life support. Each CWA 305(b) report indicates the assessed fraction of a State's waters that are fully supporting, partially supporting, or not supporting designated beneficial uses.

In their reports, States, Tribes, and Territories first identified and then assigned the sources of water quality impairment for each impaired waterbody using the following categories: industrial, municipal sewage, combined sewer overflows, urban runoff/storm sewers, agricultural, silvicultural, construction, resource extraction, land disposal, hydrologic modification, and habitat modification. The 1996 Inventory, based on a compilation of 60 individual 305(b) reports submitted by States, Tribes, and Territories, assessed the following percentages of total waters nationwide: 19 percent of river and stream miles; 40 percent of lake, pond, and reservoir acres; 72 percent of estuary square miles; and 6 percent of ocean shoreline waters. The 1996 Inventory indicated that approximately 40 percent of the Nation's assessed rivers, lakes, and estuaries are impaired. Waterbodies deemed as "impaired" are either

partially supporting designated uses or not supporting designated uses.

The 1996 Inventory also found urban runoff/discharges from storm sewers to be a major source of water quality impairment nationwide. Urban runoff/storm sewers were found to be a source of pollution in 13 percent of impaired rivers; 21 percent of impaired lakes, ponds, and reservoirs; and 45 percent of impaired estuaries (second only to industrial discharges). In addition, urban runoff was found to be the leading cause of ocean impairment for those ocean miles surveyed.

In addition, a recent USGS study of urban watersheds across the United States has revealed a link between urban development and contamination of local waterbodies. The study found the highest levels of organic contaminants, known as polycyclic aromatic hydrocarbons (PAHs) (products of combustion of wood, grass, and fossil fuels), in the reservoirs of urbanized watersheds (U.S. Geological Survey (USGS). 1998. *Research Reveals Link Between Development and Contamination in Urban Watersheds*. USGS news release. USGS National Water-Quality Assessment Program).

Urban storm water also can contribute significant amounts of toxicants to receiving waters. Pitt, et. al. (1993), found heavy metal concentrations in the majority of samples analyzed. Industrial or commercial areas were likely to be the most significant pollutant source areas (Pitt, R., R. Field, M. Lalor, M. Brown 1993. "Urban stormwater toxic pollutants: assessment, sources, and treatability" *Water Environment Research*, 67(3):260-75).

b. Local and Watershed-Based Studies

In addition to the large-scale nationwide studies and assessments, a number of local and watershed-based studies from across the country have documented the detrimental effects of urban storm water runoff on water quality. A study of urban streams in Milwaukee County, Wisconsin, found local streams to be highly degraded due primarily to urban runoff, while three studies in the Atlanta, Georgia, region were characterized as being "the first documentation in the Southeast of the strong negative relationship between urbanization and stream quality that has been observed in other ecoregions" (Masterson, J. and R. Bannerman. 1994. "Impacts of Storm Water Runoff on Urban Streams in Milwaukee County, Wisconsin." Paper presented at National Symposium on Water Quality: American Water Resources Association; Schueler, T.R. 1997. "Fish Dynamics in Urban Streams Near Atlanta, Georgia."

Technical Note 94. *Watershed Protection Techniques* 2(4)). Several other studies, including those performed in Arizona (Maricopa County), California (San Jose's Coyote Creek), Massachusetts (Green River), Virginia (Tuckahoe Creek), and Washington (Puget Sound lowland ecoregion), all had the same finding: runoff from urban areas greatly impair stream ecology and the health of aquatic life; the more heavily developed the area, the more detrimental the effects (Lopes, T. and K. Fossum. 1995. "Selected Chemical Characteristics and Acute Toxicity of Urban Stormwater, Streamflow, and Bed Material, Maricopa County, Arizona." *Water Resources Investigations Report* 95-4074. USGS; Pitt, R. 1995. "Effects of Urban Runoff on Aquatic Biota." In *Handbook of Ecotoxicology*; Pratt, J. and R. Coler. 1979. "Ecological Effects of Urban Stormwater Runoff on Benthic Macroinvertebrates Inhabiting the Green River, Massachusetts." Completion Report Project No. A-094. Water Resources Research Center. University of Massachusetts at Amherst.; Schueler, T.R. 1997. "Historical Change in a Warmwater Fish Community in an Urbanizing Watershed." Technical Note 93. *Watershed Protection Techniques* 2(4); May, C., R. Horner, J. Karr, B. Mar, and E. Welch. 1997. "Effects Of Urbanization On Small Streams In The Puget Sound Lowland Ecoregion." *Watershed Protection Techniques* 2(4)).

Pitt and others also described the receiving water effects on aquatic organisms associated with urban runoff (Pitt, R.E. 1995. "Biological Effects of Urban Runoff Discharges" In *Stormwater Runoff and Receiving Systems: Impact, Monitoring, and Assessment*, ed. E.E Herricks, Lewis Publishers; Crunkilton, R., J. Kleist, D. Bierman, J. Ramcheck, and W. DeVita. 1999. "Importance of Toxicity as a Factor Controlling the Distribution of Aquatic Organisms in an Urban Stream." In *Comprehensive Stormwater & Aquatic Ecosystem Management Conference Papers*. Auckland, New Zealand).

In Wisconsin, runoff samples were collected from streets, parking lots, roofs, driveways, and lawns. Source areas were broken up into residential, commercial, and industrial. Geometric mean concentration data for residential areas included total solids of about 500-800 mg/L from streets and 600 mg/L from lawns. Fecal coliform data from residential areas ranged from 34,000 to 92,000 cfu/100 mL for streets and driveways. Contaminant concentration data from commercial and industrial source areas were lower for total solids

and fecal coliform, but higher for total zinc (Bannerman, R.T., D.W. Owens, R.B. Dods, and N.J. Hornewer. 1993. "Sources of Pollutants in Wisconsin Stormwater." *Wat. Sci. Tech.* 28(3-5):241-59).

Bannerman, et al. also found that streets contribute higher loads of pollutants to urban storm water than any other residential development source. Two small urban residential watersheds were evaluated to determine that lawns and streets are the largest sources of total and dissolved phosphorus in the basins (Waschbusch, R.J., W.R. Selbig, and R.T. Bannerman. 1999. "Sources of Phosphorus in Stormwater and Street Dirt from Two Urban Residential Basins In Madison, Wisconsin, 1994-95." *Water Resources Investigations Report* 99-4021. U.S. Geological Survey). A number of other studies have indicated that urban roadways often contain significant quantities of metal elements and solids (Sansalone, J.J. and S.G. Buchberger. 1997. "Partitioning and First Flush of Metals in Urban Roadway Storm Water." *ASCE Journal of Environmental Engineering* 123(2); Sansalone, J.J., J.M. Koran, J.A. Smithson, and S.G. Buchberger. 1998. "Physical Characteristics of Urban Roadway Solids Transported During Rain Events" *ASCE Journal of Environmental Engineering* 124(5); Klein, L.A., M. Lang, N. Nash, and S.L. Kirschner. 1974. "Sources of Metals in New York City Wastewater" *J. Water Pollution Control Federation* 46(12):2653-62; Barrett, M.E, R.D. Zuber, E.R. Collins, J.F. Malina, R.J. Charbeneau, and G.H. Ward., 1993. "A Review and Evaluation of Literature Pertaining to the Quantity and Control of Pollution from Highway Runoff and Construction." Research Report 1943-1. Center for Transportation Research, University of Texas, Austin).

c. Beach Closings/Advisories

Urban wet weather flows have been recognized as the primary sources of estuarine pollution in coastal communities. Urban storm water runoff, sanitary sewer overflows, and combined sewer overflows have become the largest causes of beach closings in the United States in the past three years. Storm water discharges from urban areas not only pose a threat to the ecological environment, they also can substantially affect human health. A survey of coastal and Great Lakes communities reports that in 1998, more than 1,500 beach closings and advisories were associated with storm water runoff (Natural Resources Defense Council. 1999. "A Guide to Water Quality at Vacation Beaches" New York, NY). Other reports

also document public health, shellfish bed, and habitat impacts from storm water runoff, including more than 823 beach closings/advisories issued in 1995 and more than 407 beach closing/advisories issued in 1996 due to urban runoff (Natural Resources Defense Council. 1996. *Testing the Waters Volume VI: Who Knows What You're Getting Into*. New York, NY; NRDC. 1997. *Testing the Waters Volume VII: How Does Your Vacation Beach Rate*. New York, NY; Morton, T. 1997. *Draining to the Ocean: The Effects of Stormwater Pollution on Coastal Waters*. American Oceans Campaign, Santa Monica, CA). The Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay (Haile, R.W., et. al. 1996. "An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay." *Final Report prepared for the Santa Monica Bay Restoration Project*) concluded that there is a 57 percent higher rate of illness in swimmers who swim adjacent to storm drains than in swimmers who swim more than 400 yards away from storm drains. This and other studies document a relationship between gastrointestinal illness in swimmers and water quality, the latter of which can be heavily compromised by polluted storm water discharges.

2. Non-Storm Water Discharges Through Municipal Storm Sewers

Studies have shown that discharges from MS4s often include wastes and wastewater from non-storm water sources. Federal regulations (§ 122.26(b)(2)) define an illicit discharge as "* * * any discharge to an MS4 that is not composed entirely of storm water * * *," with some exceptions. These discharges are "illicit" because municipal storm sewer systems are not designed to accept, process, or discharge such wastes. Sources of illicit discharges include, but are not limited to: sanitary wastewater; effluent from septic tanks; car wash, laundry, and other industrial wastewaters; improper disposal of auto and household toxics, such as used motor oil and pesticides; and spills from roadway and other accidents.

Illicit discharges enter the system through either direct connections (e.g., wastewater piping either mistakenly or deliberately connected to the storm drains) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by drain outlets, and paint or used oil dumped directly into a drain). The result is untreated discharges that contribute high levels of pollutants,

including heavy metals, toxics, oil and grease, solvents, nutrients, viruses and bacteria into receiving waterbodies. The NURP study, discussed earlier, found that pollutant levels from illicit discharges were high enough to significantly degrade receiving water quality and threaten aquatic, wildlife, and human health. The study noted particular problems with illicit discharges of sanitary wastes, which can be directly linked to high bacterial counts in receiving waters and can be dangerous to public health.

Because illicit discharges to MS4s can create severe widespread contamination and water quality problems, several municipalities and urban counties performed studies to identify and eliminate such discharges. In Michigan, the Ann Arbor and Ypsilanti water quality projects inspected 660 businesses, homes, and other buildings and identified 14 percent of the buildings as having improper storm sewer drain connections. The program assessment revealed that, on average, 60 percent of automobile-related businesses, including service stations, automobile dealerships, car washes, body shops, and light industrial facilities, had illicit connections to storm sewer drains. The program assessment also showed that a majority of the illicit discharges to the storm sewer system resulted from improper plumbing and connections, which had been approved by the municipality when installed (Washtenaw County Statutory Drainage Board, 1987. Huron River Pollution Abatement Program).

In addition, an inspection of urban storm water outfalls draining into Inner Grays, Washington, indicated that 32 percent of these outfalls had dry weather flows. Of these flows, 21 percent were determined to have pollutant levels higher than the pollutant levels expected in typical urban storm water runoff characterized in the NURP study (U.S. EPA, 1993. *Investigation of Inappropriate Pollutant Entries Into Storm Drainage Systems—A User's Guide*. EPA 600/R-92/238. Office of Research and Development, Washington, DC). That same document reports a study in Toronto, Canada, that found that 59 percent of outfalls from the MS4 had dry-weather flows. Chemical tests revealed that 14 percent of these dry-weather flows were determined to be grossly polluted.

Inflows from aging sanitary sewer collection systems are one of the most serious illicit discharge-related problems. Sanitary sewer systems frequently develop leaks and cracks, resulting in discharges of pollutants to receiving waters through separate storm

sewers. These pollutants include sanitary waste and materials from sewer main construction (e.g., asbestos cement, brick, cast iron, vitrified clay). Municipalities have long recognized the reverse problem of storm water infiltration into sanitary sewer collection systems; this type of infiltration often disrupts the operation of the municipal sewage treatment plant.

The improper disposal of materials is another illicit discharge-related problem that can result in contaminated discharges from separate storm sewer systems in two ways. First, materials may be disposed of directly in a catch basin or other storm water conveyance. Second, materials disposed of on the ground may either drain directly to a storm sewer or be washed into a storm sewer during a storm event. Improper disposal of materials to street catch basins and other storm sewer inlets often occurs when people mistakenly believe that disposal to such areas is an environmentally sound practice. Part of the confusion may occur because some areas are served by combined sewer systems, which are part of the sanitary sewer collection system, and people assume that materials discharged to a catch basin will reach a municipal sewage treatment plant. Materials that are commonly disposed of improperly include used motor oil; household toxic materials; radiator fluids; and litter, such as disposable cups, cans, and fast-food packages. EPA believes that there has been increasing success in addressing these problems through initiatives such as storm drain stenciling and recycling programs, including household hazardous waste special collection days.

Programs that reduce illicit discharges to separate storm sewers have improved water quality in several municipalities. For example, Michigan's Huron River Pollution Abatement Program found the elimination of illicit connections caused a measurable improvement in the water quality of the Washtenaw County storm sewers and the Huron River (Washtenaw County Statutory Drainage Board, 1987). In addition, an illicit detection and remediation program in Houston, Texas, has significantly improved the water quality of Buffalo Bayou. Houston estimated that illicit flows from 132 sources had a flow rate as high as 500 gal/min. Sources of the illicit discharges included broken and plugged sanitary sewer lines, illicit connections from sanitary lines to storm sewer lines, and floor drain connections (Glanton, T., M.T. Garrett, and B. Goloby. 1992. *The Illicit Connection: Is*

It the Problem? *Wat. Env. Tech.* 4(9):63-8).

3. Construction Site Runoff

Storm water discharges generated during construction activities can cause an array of physical, chemical, and biological water quality impacts. Specifically, the biological, chemical, and physical integrity of the waters may become severely compromised. Water quality impairment results, in part, because a number of pollutants are preferentially absorbed onto mineral or organic particles found in fine sediment. The interconnected process of erosion (detachment of the soil particles), sediment transport, and delivery is the primary pathway for introducing key pollutants, such as nutrients (particularly phosphorus), metals, and organic compounds into aquatic systems (Novotny, V. and G. Chesters. 1989. "Delivery of Sediment and Pollutants from Nonpoint Sources: A Water Quality Perspective." *Journal of Soil and Water Conservation*, 44(6):568-76). Estimates indicate that 80 percent of the phosphorus and 73 percent of the Kjeldahl nitrogen in streams is associated with eroded sediment (U.S. Department of Agriculture. 1989. "The Second RCA Appraisal, Soil, Water and Related Resources on Nonfederal Land in the United States, Analysis of Condition and Trends." Cited in Fennessey, L.A.J., and A.R. Jarrett. 1994. "The Dirt in a Hole: A Review of Sedimentation Basins for Urban Areas and Construction Sites." *Journal of Soil and Water Conservation*, 49(4):317-23).

In watersheds experiencing intensive construction activity, the localized impacts of water quality may be severe because of high pollutant loads, primarily sediments. Siltation is the largest cause of impaired water quality in rivers and the third largest cause of impaired water quality in lakes (U.S. EPA, 1998). The 1996 305(b) report also found that construction site discharges were a source of pollution in: 6 percent of impaired rivers; 11 percent of impaired lakes, ponds, and reservoirs; and 11 percent of impaired estuaries. Introduction of coarse sediment (coarse sand or larger) or a large amount of fine sediment is also a concern because of the potential of filling lakes and reservoirs (along with the associated remediation costs for dredging), as well as clogging stream channels (e.g., Paterson, R.G., M.I. Luger, E.J. Burby, E.J. Kaiser, H.R. Malcolm, and A.C. Beard. 1993. "Costs and Benefits of Urban Erosion and Sediment Control: North Carolina Experience." *Environmental Management* 17(2):167-78). Large inputs of coarse sediment into

stream channels initially will reduce stream depth and minimize habitat complexity by filling in pools (U.S. EPA. 1991. *Monitoring Guidelines to Evaluate Effects of Forestry Activities on Streams in the Pacific Northwest and Alaska*. EPA 910/9-91-001. Seattle, WA). In addition, studies have shown that stream reaches affected by construction activities often extend well downstream of the construction site. For example, between 4.8 and 5.6 kilometers of stream below construction sites in the Patuxent River watershed were observed to be impacted by sediment inputs (Fox, H.L. 1974. "Effects of Urbanization on the Patuxent River, with Special Emphasis on Sediment Transport, Storage, and Migration." Ph.D. dissertation. Johns Hopkins University, Baltimore, MD. As Cited in Klein, R.D. 1979. "Urbanization and Stream Quality Impairment." *Water Resources Bulletin* 15(4): 948-63).

A primary concern at most construction sites is the erosion and transport process related to fine sediment because rain splash, rills (i.e., a channel small enough to be removed by normal agricultural practices and typically less than 1-foot deep), and sheetwash encourage the detachment and transport of this material to waterbodies (Storm Water Quality Task Force. 1993. *California Storm Water Best Management Practice Handbooks—Construction Activity*. Oakland, CA: Blue Print Service). Construction sites also can generate other pollutants associated with onsite wastes, such as sanitary wastes or concrete truck washout.

Although streams and rivers naturally carry sediment loads, erosion from construction sites and runoff from developed areas can elevate these loads to levels well above those in undisturbed watersheds. It is generally acknowledged that erosion rates from construction sites are much greater than from almost any other land use (Novotny, V. and H. Olem. 1994. *Water Quality: Prevention, Identification, and Management of Diffuse Pollution*. New York: Van Nostrand Reinhold). Results from both field studies and erosion models indicate that erosion rates from construction sites are typically an order of magnitude larger than row crops and several orders of magnitude greater than rates from well-vegetated areas, such as forests or pastures (USDA. 1970. "Controlling Erosion on Construction Sites." *Agriculture Information Bulletin*, Washington, DC; Meyer, L.D., W.H. Wischmeier, and W.H. Daniel. 1971. "Erosion, Runoff and Revegetation of Denuded Construction Sites." *Transactions of the ASAE* 14(1):138-41;

Owen, O.S. 1975. *Natural Resource Conservation*. New York: MacMillan. As cited in Paterson, et al., 1993).

A recent review of the efficiency of sediment basins indicated that inflows from 12 construction sites had a mean TSS concentration of about 4,500 mg/L (Brown, W.E. 1997. "The Limits of Settling." Technical Note No. 83. *Watershed Protection Techniques* 2(3)). In Virginia, suspended sediment concentrations from housing construction sites were measured at 500-3,000 mg/L, or about 40 times larger than the concentrations from already-developed urban areas (Kuo, C.Y. 1976. "Evaluation of Sediment Yields Due to Urban Development." Bulletin No. 98. Virginia Water Resources Research Center, Virginia Polytechnic Institute and State University, Blacksburg, VA).

Similar impacts from storm water runoff have been reported in a number of other studies. For example, Daniel, et al., monitored three residential construction sites in southeastern Wisconsin and determined that annual sediment yields were more than 19 times the yields from agricultural areas (Daniel, T.C., D. McGuire, D. Stoffel, and B. Miller. 1979. "Sediment and Nutrient Yield from Residential Construction Sites" *Journal of Environmental Quality* 8(3):304-08). Daniel, et al., identified total storm runoff, followed by peak storm runoff, as the most influential factors controlling the sediment loadings from residential construction sites. Daniel, et al., also found that suspended sediment concentrations were 15,000-20,000 mg/L in moderate events and up to 60,000 mg/L in larger events.

Wolman and Schick (Wolman, M.G. and A.P. Schick. 1967. "Effects of Construction on Fluvial Sediment, Urban and Suburban Areas of Maryland." *Water Resources Research* 3(2): 451-64) studied the impacts of development on fluvial systems in Maryland and determined that sediment yields in areas undergoing construction were 1.5 to 75 times greater than detected in natural or agricultural catchments. The authors summarize the potential impacts of construction on sediment yields by stating that "the equivalent of many decades of natural or even agricultural erosion may take place during a single year from areas cleared for construction" (Wolman and Schick, 1967).

A number of studies have examined the effects of road construction on erosion rates and sediment yields. A highway construction project in West Virginia disturbed only 4.2 percent of a 4.72-square-mile basin, but resulted in a

three-fold increase in suspended sediment yields (Downs, S.C. and D.H. Appel. 1986. *Progress Report on the Effects of Highway Construction on Suspended-Sediment Discharge in the Coal River and Trace Fork, West Virginia, 1975-81*. USGS Water Resources Investigations Report 84-4275. Charlestown, WV). During the largest storm event, it was estimated that 80 percent of the sediment in the stream originated from the construction site. As is often the case, the increase in suspended sediment load could not be detected further downstream, where the drainage area was more than 50 times larger (269 square miles).

Another study evaluated the effect of 290 acres of highway construction on watersheds ranging in size from 5 to 38 square miles. Suspended sediment loads in the smallest watershed increased by 250 percent, and the estimated sediment yield from the construction area was 37 tons/acre during a 2-year period (Hainly, R.A. 1980. *The Effects of Highway Construction on Sediment Discharge into Blockhouse Creek and Stream Valley Run, Pennsylvania*. USGS Water Resources Investigations Report 80-68. Harrisburg, PA). A more recent study in Hawaii showed that highway construction increased suspended sediment loads by 56 to 76 percent in three small (1 to 4 square mile) basins (Hill, B.R. 1996. *Streamflow and Suspended-Sediment Loads Before and During Highway Construction, North Halawa, Haiku, and Kamooalii Drainage Basins, Oahu, Hawaii, 1983-91*. USGS Water Resources Investigations Report 96-4259. Honolulu, HI). A 1970 study determined that sediment yields from construction areas can be as much as 500 times the levels detected in rural areas (National Association of Counties Research Foundation. 1970. *Urban Soil Erosion and Sediment Control*. Water Pollution Control Research Series, Program #15030 DTL. Federal Water Quality Administration, U.S. Department of Interior. Washington, DC)

Yorke and Herb (Yorke, T.H., and W.J. Herb. 1978. *Effects of Urbanization on Streamflow and Sediment Transport in the Rock Creek and Anacostia River Basins, Montgomery County, Maryland, 1962-74*. USGS Professional Paper 1003, Washington, DC) evaluated nine subbasins in the Maryland portion of the Anacostia watershed for more than a decade in an effort to define the impacts of changing land use/land cover on sediment in runoff. Average annual suspended sediment yields for construction sites ranged from 7 to 100 tons/acre. Storm water discharges from construction sites that occur when the land area is disturbed (and prior to

surface stabilization) can significantly impact designated uses. Examples of designated uses include public water supply, recreation, and propagation of fish and wildlife. The siltation process described previously can threaten all three designated uses by (1) depositing high concentrations of pollutants in public water supplies; (2) decreasing the depth of a waterbody, which can reduce the volume of a reservoir or result in limited use of a water body by boaters, swimmers, and other recreational enthusiasts; and (3) directly impairing the habitat of fish and other aquatic species, which can limit their ability to reproduce.

Excess sediment can cause a number of other problems for waterbodies. It is associated with increased turbidity and reduced light penetration in the water column, as well as more long-term effects associated with habitat destruction and increased difficulty in filtering drinking water. Numerous studies have examined the effect that excess sediment has on aquatic ecosystems. For example, sediment from road construction activity in Northern Virginia reduced aquatic insect and fish communities by up to 85 percent and 40 percent, respectively (Reed, J.R. 1997. "Stream Community Responses to Road Construction Sediments." Bulletin No. 97. Virginia Water Resources Research Center, Virginia Polytechnic Institute, Blacksburg, VA. As cited in Klein, R.D. 1990. *A Survey of Quality of Erosion and Sediment Control and Storm Water Management in the Chesapeake Bay Watershed*. Annapolis, MD: Chesapeake Bay Foundation). Other studies have shown that fine sediment (fine sand or smaller) adversely affects aquatic ecosystems by reducing light penetration, impeding sight-feeding, smothering benthic organisms, abrading gills and other sensitive structures, reducing habitat by clogging interstitial spaces within a streambed, and reducing the intergravel dissolved oxygen by reducing the permeability of the bed material (Everest, F.H., J.C. Beschta, K.V. Scrivener, J.R. Koski, J.R. Sedell, and C.J. Cederholm. 1987. "Fine Sediment and Salmonid Production: A Paradox." *Streamside Management: Forestry and Fishery Interactions*, Contract No. 57, Institute of Forest Resources, University of Washington, Seattle, WA). For example, 4.8 and 5.6 kilometers of stream below construction sites in the Patuxent River watershed in Maryland were found to have fine sediment amounts 15 times greater than normal (Fox, 1974. As cited in Klein, 1979). Benthic organisms in the streambed can be smothered by

sediment deposits, causing changes in aquatic flora and fauna, such as fish species composition (Wolman and Schick, 1967). In addition, the primary cause of coral reef degradation in coastal areas is attributed to land disturbances and dredging activities due to urban development (Rogers, C.S. 1990. "Responses of Coral Reefs and Reef Organizations to Sedimentation." *Marine Ecology Progress Series*, 62:185-202).

EPA believes that the water quality impact from small construction sites is as high as or higher than the impact from larger sites on a per acre basis. The concentration of pollutants in the runoff from smaller sites is similar to the concentrations in the runoff from larger sites. The proportion of sediment that makes it from the construction site to surface waters is likely the same for larger and smaller construction sites in urban areas because the runoff from either site is usually delivered directly to the storm drain network where there is no opportunity for the sediment to be filtered out.

The expected contribution of total sediment yields from small sites depends, in part, on the extent to which erosion and sedimentation controls are being applied. Because current storm water regulations are more likely to require erosion and sedimentation controls on larger sites in urban areas, smaller construction sites that lack such programs are likely to contribute a disproportionate amount of the total sediment from construction activities (MacDonald, L.H. 1997. *Technical Justification for Regulating Construction Sites 1-5 Acres in Size*. Unpublished report submitted to U.S. EPA, Washington, DC). Smaller construction sites are less likely to have an effective plan to control erosion and sedimentation, are less likely to properly implement and maintain their plans, and are less likely to be inspected (Brown, W. and D. Caraco. 1997. *Controlling Storm Water Runoff Discharges from Small Construction Sites: A National Review*. Submitted to Office of Wastewater Management, U.S. EPA, Washington, DC., by the Center for Watershed Protection, Silver Spring, MD). The proportion of sediment that makes it from the construction site to surface waters is likely the same for larger and smaller construction sites in urban areas because the runoff from either site is usually delivered directly to the storm drain network, where there is no opportunity for the sediment to be filtered out.

To confirm its belief that sediment yields from small sites are as high as or higher than the 20 to 150 tons/acre/year

measured from larger sites, EPA gave a grant to the Dane County, Wisconsin Land Conservation Department, in cooperation with the USGS, to evaluate sediment runoff from two small construction sites. The first was a 0.34 acre residential lot and the second was a 1.72 acre commercial office development. Runoff from the sites was channeled to a single discharge point for monitoring. Each site was monitored before, during, and after construction.

The Dane County study found that total solids concentrations from these small sites are similar to total solids concentrations from larger construction sites. Results show that for both of the study sites, total solids and suspended solids concentrations were significantly higher during construction than either before or after construction. For example, preconstruction total solids concentrations averaged 642 mg/L during the period when ryegrass was established, active construction total solids concentrations averaged 2,788 mg/L, and post-construction total solids concentrations averaged 132 mg/L (on a pollutant load basis, this equaled 7.4 lbs preconstruction, 35 lbs during construction, and 0.6 lbs post-construction for total solids). While this site was not properly stabilized before construction, after construction was complete and the site was stabilized, post-construction concentrations were more than 20 times less than during construction. The results were even more dramatic for the commercial site. The commercial site had one preconstruction event, which resulted in total solids concentrations of 138 mg/L, while active construction averaged more than 15,000 mg/L and post-construction averaged only 200 mg/L (on a pollutant load basis, this equaled 0.3 lbs preconstruction, 490 lbs during construction, and 13.4 lbs post-construction for total solids). The active construction period resulted in more than 75 times more sediment than either before or after construction (Owens, D.W., P. Jopke, D.W. Hall, J. Balousek and A. Roa. 1999. "Soil Erosion from Small Construction Sites." Draft USGS Fact Sheet. USGS and Dane County Land Conservation Department, WI). The total solids concentrations from these small sites in Wisconsin are similar to total solids concentrations from larger construction sites. For example, a study evaluating the effects of highway construction in West Virginia found that a small storm produced a sediment concentration of 7,520 mg/L (Downs and Appel, 1986).

One important aspect of small construction sites is the number of small sites relative to larger construction sites

and total land area within the watershed. Brown and Caraco surveyed 219 local jurisdictions to assess erosion and sediment control (ESC) programs. Seventy respondents provided data on the number of ESC permits for construction sites smaller than 5 acres. In 27 cases (38 percent of the respondents), more than three-quarters of the permits were for sites smaller than 5 acres; in another 18 cases (26 percent), more than half of the permits were for sites smaller than 5 acres.

In addition, data on the total acreage disturbed by smaller construction sites have been collected recently in two States (MacDonald, 1997). The most recent and complete data set is the listing of the disturbed area for each of the 3,831 construction sites permitted in North Carolina for 1994–1995 and 1995–1996. Nearly 61 percent of the sites that were 1 acre or larger were between 1.0 and 4.9 acres in size. This proportion was consistent between years. Data showed that this range of sites accounted for 18 percent of the total area disturbed by construction. The values showed very little variation between the 2 years of data. The total disturbed area for all sites over this 2-year period was nearly 33,000 acres, or about 0.1 percent of the total area of North Carolina.

EPA estimates that construction sites disturbing greater than 5 acres disturb 2.1-million acres of land (78.1 percent of the total) while sites disturbing between 1 and 5 acres of land disturb 0.5-million acres of land (19.4 percent). The remaining sites on less than 1 acres of land disturb 0.07-million acres of land (only 2.5 percent of the total). Given the high erosion rates associated with most construction sites, small construction sites can be a significant source of water quality impairment, particularly in small watersheds that are undergoing rapid development. Exempting sites under 1 acre will exclude only about 2.5 percent of acreage from program coverage, but will exclude a far higher number of sites, approximately 25 percent.

Several studies have determined that the most effective construction runoff control programs rely on local plan review and field enforcement (Paterson, R. G. 1994. "Construction Practices: the Good, the Bad, and the Ugly." *Watershed Protection Techniques* 1(3)). In his review, Paterson suggests that, given the critical importance of field implementation of erosion and sediment control programs and the apparent shortcomings that exist, much more focus should be given to plan implementation.

Several commenters disputed the data presented in the proposed rule for storm water discharges from smaller construction sites. One commenter stated that EPA has not adequately explained the basis for permitting construction activity down to 1 disturbed acre. Another commenter stated that EPA did not present sufficient data on water quality impacts from construction sites disturbing less than 5 acres.

EPA believes that the data presented above sufficiently support nationwide designation of storm water discharges from construction activity disturbing more than 1 acre. Based on total disturbed land area within a watershed, the cumulative effects of numerous small construction sites can have impacts similar to those of larger sites in a particular area. In addition, waivers for storm water discharges from smaller construction activity will exclude sites not expected to impair water quality. EPA will continue to collect water quality data on construction site storm water runoff.

C. Statutory Background

In 1972, Congress enacted the CWA to prohibit the discharge of any pollutant to waters of the United States from a point source unless the discharge is authorized by an NPDES permit. Congress added CWA section 402(p) in 1987 to require implementation of a comprehensive program for addressing storm water discharges. Section 402(p)(1) required EPA or NPDES-authorized States or Tribes to issue NPDES permits for the following five classes of storm water discharges composed entirely of storm water ("storm water discharges") specifically listed under section 402(p)(2):

(A) a discharge subject to an NPDES permit before February 4, 1987

(B) a discharge associated with industrial activity

(C) a discharge from a municipal separate storm sewer system serving a population of 250,000 or more

(D) a discharge from a municipal separate storm sewer system serving a population of 100,000 or more but less than 250,000

(E) a discharge that an NPDES permitting authority determines to be contributing to a violation of a water quality standard or a significant contributor of pollutants to the waters of the United States.

Section 402(p)(3)(A) requires storm water discharges associated with industrial activity to meet all applicable provisions of section 402 and section 301 of the CWA, including technology-based requirements and any more

stringent requirements necessary to meet water quality standards. Section 402(p)(3)(B) establishes NPDES permit standards for discharges from municipal separate storm sewer systems, or MS4s. NPDES permits for discharges from MS4s (1) may be issued on a system or jurisdiction-wide basis, (2) must include a requirement to effectively prohibit non-storm water discharges into the storm sewers, and (3) must require controls to reduce pollutant discharges to the maximum extent practicable, including best management practices, and other provisions as the Administrator or the States determine to be appropriate for the control of such pollutants. At this time, EPA determines that water quality-based controls, implemented through the iterative processes described today are appropriate for the control of such pollutants and will result in reasonable further progress towards attainment of water quality standards. See sections II.L and II.H.3 of the preamble.

In CWA section 402(p)(4), Congress established statutory deadlines for the initial steps in implementing the NPDES program for storm water discharges. This section required development of NPDES permit application regulations, submission of NPDES permit applications, issuance of NPDES permits for sources identified in section 402(p)(2), and compliance with NPDES permit conditions. In addition, this section required industrial facilities and large MS4s to submit NPDES permit applications for storm water discharges by February 4, 1990. Medium MS4s were to submit NPDES permit applications by February 4, 1992. EPA and authorized NPDES States were prohibited from requiring an NPDES permit for any other storm water discharges until October 1, 1994.

Section 402(p)(5) required EPA to conduct certain studies and submit a report to Congress. This requirement is discussed in the following section.

Section 402(p)(6) requires EPA, in consultation with States and local officials, to issue regulations for the designation of additional storm water discharges to be regulated to protect water quality. It also requires EPA to extend the existing storm water program to regulate newly designated sources. At a minimum, the extension must establish (1) priorities, (2) requirements for State storm water management programs, and (3) expeditious deadlines. Section 402(p)(6) specifies that the program may include performance standards, guidelines, guidance, and management practices and treatment requirements, as

appropriate. Today's rule implements this section.

D. EPA's Reports to Congress

Under CWA section 402(p)(5), EPA, in consultation with the States, was required to conduct a study. The study was to identify unregulated sources of storm water discharges, determine the nature and extent of pollutants in such discharges, and establish procedures and methods to mitigate the impacts of such discharges on water quality. Section 402(p)(5) also required EPA to report the results of the first two components of that study to Congress by October 1, 1988, and the final report by October 1, 1989.

In March 1995, EPA submitted to Congress a report that reviewed and analyzed the nature of storm water discharges from municipal and industrial facilities that were not already regulated under the initial NPDES regulations for storm water (U.S. Environmental Protection Agency, Office of Water. 1995. *Storm Water Discharges Potentially Addressed by Phase II of the National Pollutant Discharge Elimination System Storm Water Program: Report to Congress*. Washington, D.C. EPA 833-K-94-002) ("Report"). The Report also analyzed associated pollutant loadings and water quality impacts from these unregulated sources. Based on identification of unregulated municipal sources and analysis of information on impacts of storm water discharges from municipal sources, the Report recommended that the NPDES program for storm water focus on the 405 "urbanized areas" identified by the Bureau of the Census. The Report further found that a number of discharges from unregulated industrial facilities warranted further investigation to determine the need for regulation. It classified these unregulated industrial discharges in two groups: Group A and Group B. Group A comprised sources that may be considered a high priority for inclusion in the NPDES program for storm water because discharges from these sources are similar or identical to already regulated sources. These "look alike" storm water discharge sources were not covered in the initial NPDES regulations for storm water due to the language used to define "associated with industrial activity." In the initial regulations for storm water, "industrial activity" is identified using Standard Industrial Classification (SIC) codes. The use of SIC codes led to incomplete categorization of industrial activities with discharges that needed to be regulated to protect water quality. Group B consisted of 18 industrial

sectors, which included sources that EPA expected to contribute to storm water contamination due to the activities conducted and pollutants anticipated onsite (e.g., vehicle maintenance, machinery and electrical repair, and intensive agricultural activities).

EPA reported on the latter component of the section 402(p)(5) study via President Clinton's Clean Water Initiative, which was released on February 1, 1994 (U.S. Environmental Protection Agency, Office of Water. 1994. *President Clinton's Clean Water Initiative*. Washington, D.C. EPA 800-R-94-001) ("Initiative"). The Initiative addressed a number of issues associated with NPDES requirements for storm water discharges and proposed (1) establishing a phased compliance with a water quality standards approach for discharges from municipal separate storm sewer systems with priority on controlling discharges from municipal growth and development areas, (2) clarifying that the maximum extent practicable standard should be applied in a site-specific, flexible manner, taking into account cost considerations as well as water quality effects, (3) providing an exemption from the NPDES program for storm water discharges from industrial facilities with no activities or significant materials exposed to storm water, (4) providing extensions to the statutory deadlines to complete implementation of the NPDES program for the storm water program, (5) targeting urbanized areas for the requirements in the NPDES program for storm water, and (6) providing control of discharges from inactive and abandoned mines located on Federal lands in a more targeted, flexible manner. Additionally, prior to promulgation of today's rule, section 431 of the Agency's Appropriation Act for FY 2000 (Departments of Veterans Affairs and Housing and Urban Development and Independent Agencies Appropriations Act of 2000, Public Law 106-74, section 432 (1999)) directed EPA to report on certain matters to be covered in today's rule. That report supplements the study required by CWA Section 402(p)(5). EPA is publishing the availability of that report elsewhere in this issue of the **Federal Register**.

Several commenters asserted that the Report to Congress is an inadequate basis for the designation and regulation of sources covered under today's final rule, specifically the nationwide designation of small municipal separate storm sewer systems within urbanized areas and construction activities disturbing between one and five acres.

EPA believes that it has developed an adequate record for today's regulation both through the Report to Congress and the Clean Water Initiative and through more recent activities, including the FACA Subcommittee process, regulatory notices and evaluation of comments, and recent research and analysis. EPA does not interpret the congressional reporting requirements of CWA section 402(p)(5) to be the sole basis for determining sources to be regulated under today's final rule.

EPA's decision to designate on a national basis small MS4s in urbanized areas is supported by studies that clearly show a direct correlation between urbanization and adverse water quality impacts from storm water discharges. (Schueler, T. 1987. *Controlling Urban Runoff: A Practical Manual for Planning & Designing Urban BMPs*. Metropolitan Washington Council of Governments). "Urbanized areas"—within which all small MS4s would be covered—represent the most intensely developed and dense areas of the Nation. They constitute only two percent of the land area but 63 percent of the total population. See section I.B.1, Urban Development, above, for studies and assessments of the link between urban development and storm water impacts on water resources.

Commenters argued that the Report to Congress does not address storm water discharges from construction sites. They further argued that the designation of small construction sites per today's final rule goes beyond the President's 1994 Initiative because the Initiative only recommends requiring municipalities to implement a storm water management program to control unregulated storm water sources, "including discharges from construction of less than 5 acres, which are part of growth, development and significant redevelopment activities." They point out that the Initiative provides that unregulated storm water discharges not addressed through a municipal program would not be covered by the NPDES program. Commenters assert that EPA has not developed a record independent of its section 402(p)(5) studies that demonstrates the necessity of regulating under a separate NPDES permit storm water discharges from smaller construction sites "to protect water quality." EPA disagrees.

EPA evaluated the nature and extent of pollutants from construction site sources in a process that was separate and distinct from the development of the Report to Congress. Today's decision to regulate certain storm water discharges from construction sites disturbing less than 5 acres arose in part

out of the 9th Circuit remand in *NRDC v. EPA*, 966 F.2d 1292 (9th Cir. 1992). In that case, the court remanded portions of the Phase I storm water regulations related to discharges from construction sites. Those regulations define "storm water discharges associated with industrial activity" to include only those storm water discharges from construction sites disturbing 5 acres or more of total land area (see 40 CFR 122.26(b)(14)(x)). In its decision, the court concluded that the 5-acre threshold was improper because the Agency had failed to identify information "to support its perception that construction activities on less than 5 acres are non-industrial in nature" (966 F.2d at 1306). The court remanded the below 5 acre exemption to EPA for further proceedings (966 F.2d at 1310).

In a **Federal Register** notice issued on December 18, 1992, EPA noted that it did not believe that the Court's decision had the effect of automatically subjecting small construction sites to the existing application requirements and deadlines. EPA believed that additional notice and comment were necessary to clarify the status of these sites. The information received during the notice and comment process and additional research, as discussed in section I.B.3 Construction Site Runoff, formed the basis for the designation of construction activity disturbing between one and five acres on a nationwide basis. EPA's objectives in today's proposal include an effort to (1) address the 9th Circuit remand, (2) address water quality concerns associated with construction activities that disturb less than 5 acres of land, and (3) balance conflicting recommendations and concerns of stakeholders.

One commenter noted that EPA's proposal would fail to regulate industrial facilities identified as Group A and Group B in the March 1995 *Report to Congress*. EPA is relying on the analysis in the Report, which provided that the recommendation for coverage was meant as guidance and was not intended to be an identification of specific categories that must be regulated under Section 402(p)(6). *Report to Congress*, p. 4-1. The Report recognized the existence of limited data on which to base loadings estimates to support the nationwide designation of individual or categories of sources. *Report to Congress*, p. 4-44. Furthermore, during FACA Subcommittee discussion, EPA continued to urge stakeholders to provide further data relating to industrial and commercial storm water sources, which EPA did not receive. EPA concluded that, due to insufficient

data, these sources were not appropriate for nationwide designation at this time.

E. Industrial Facilities Owned or Operated by Small Municipalities

Congress granted extensions to the NPDES permit application process for selected classes of storm water discharges associated with industrial activity. On December 18, 1991, Congress enacted the Intermodal Surface Transportation Efficiency Act (ISTEA), which postponed NPDES permit application deadlines for most storm water discharges associated with industrial activity at facilities that are owned or operated by small municipalities. EPA and States authorized to administer the NPDES program could not require any municipality with a population of less than 100,000 to apply for or obtain an NPDES permit for any storm water discharge associated with industrial activity prior to October 1, 1992, except for storm water discharges from airports, power plants, or uncontrolled sanitary landfills. See 40 CFR 122.26(e)(1); 57 FR 11524, April 2, 1992 (reservation of NPDES application deadlines for ISTEA facilities).

The facilities exempted by ISTEA discharge storm water in the same manner (and are expected to use identical processes and materials) as the industrial facilities regulated under the 1990 Phase I regulations. Accordingly, these facilities pose similar water quality problems. The extended moratorium for these facilities was necessary to allow municipalities additional time to comply with NPDES requirements. The proposal for today's rule would have maintained the existing deadline for seeking coverage under an NPDES permit (August 7, 2001).

Today's rule changes the permit application deadline for such municipally owned or operated facilities discharging industrial storm water to make it consistent with the application date for small regulated MS4s. Because EPA missed its March 1999 deadline for promulgating today's rule, and the deadline for MS4s to submit permit applications has been extended to three years and 90 days from the date of this notice, the deadline for permitting ISTEA sources has been similarly extended. The permitting of these sources is discussed below in section "II.I.3. ISTEA Sources."

F. Related Nonpoint Source Programs

Today's rule addresses point source discharges of storm water runoff and non-storm water discharges into MS4s. Many of these sources have been addressed by nonpoint source control

programs, which are described briefly below.

In 1987, section 319 was added to the CWA to provide a framework for funding State and local efforts to address pollutants from nonpoint sources not addressed by the NPDES program. To obtain funding, States are required to submit Nonpoint Source Assessment Reports identifying State waters that, without additional control of nonpoint sources of pollution, could not reasonably be expected to attain or maintain applicable water quality standards or other goals and requirements of the CWA. States are also required to prepare and submit for EPA approval a statewide Nonpoint Source Management Program for controlling nonpoint source water pollution to navigable waters within the State and improving the quality of such waters. State program submittals must identify specific best management practices (BMPs) and measures that the State proposes to implement in the first four years after program submission to reduce pollutant loadings from identified nonpoint sources to levels required to achieve the stated water quality objectives.

State nonpoint source programs funded under section 319 can include both regulatory and nonregulatory State and local approaches. Section 319(b)(2)(B) specifies that a combination of "nonregulatory or regulatory programs for enforcement, technical assistance, financial assistance, education, training, technology transfer, and demonstration projects" may be used, as necessary, to achieve implementation of the BMPs or measures identified in the section 319 submittals.

Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA) of 1990 provides that States with approved coastal zone management programs must develop coastal nonpoint pollution control programs and submit them to EPA and the National Oceanic and Atmospheric Administration (NOAA) for approval. Failure to submit an approvable program will result in a reduction of Federal grants under both the Coastal Zone Management Act and section 319 of the CWA.

State coastal nonpoint pollution control programs under CZARA must include enforceable policies and mechanisms that ensure implementation of the management measures throughout the coastal management area. *EPA issued Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters* under section 6217(g) in

January 1993. The guidance identifies management measures for five major categories of nonpoint source pollution. The management measures reflect the greatest degree of pollutant reduction that is economically achievable for each of the listed sources. These management measures provide reference standards for the States to use in developing or refining their coastal nonpoint programs. A few management measures, however, contain quantitative standards that specify pollutant loading reductions. For example, the New Development Management Measure, which is applicable to construction in urban areas, requires (1) that by design or performance the average annual total suspended solid loadings be reduced by 80 percent and (2) to the extent practicable, that the pre-development peak runoff rate and average volume be maintained.

EPA and NOAA published *Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance* (1993). The document clarifies that States generally must implement management measures for each source category identified in the EPA guidance developed under section 6217(g). Coastal Nonpoint Pollution Control Programs are not required to address sources that are clearly regulated under the NPDES program as point source discharges. Specifically, such programs would not need to address small MS4s and construction sites covered under NPDES storm water permits (both general and individual).

II. Description of Program

A. Overview

1. Objectives EPA Seeks To Achieve in Today's Rule

EPA seeks to achieve several objectives in today's final rule. First,

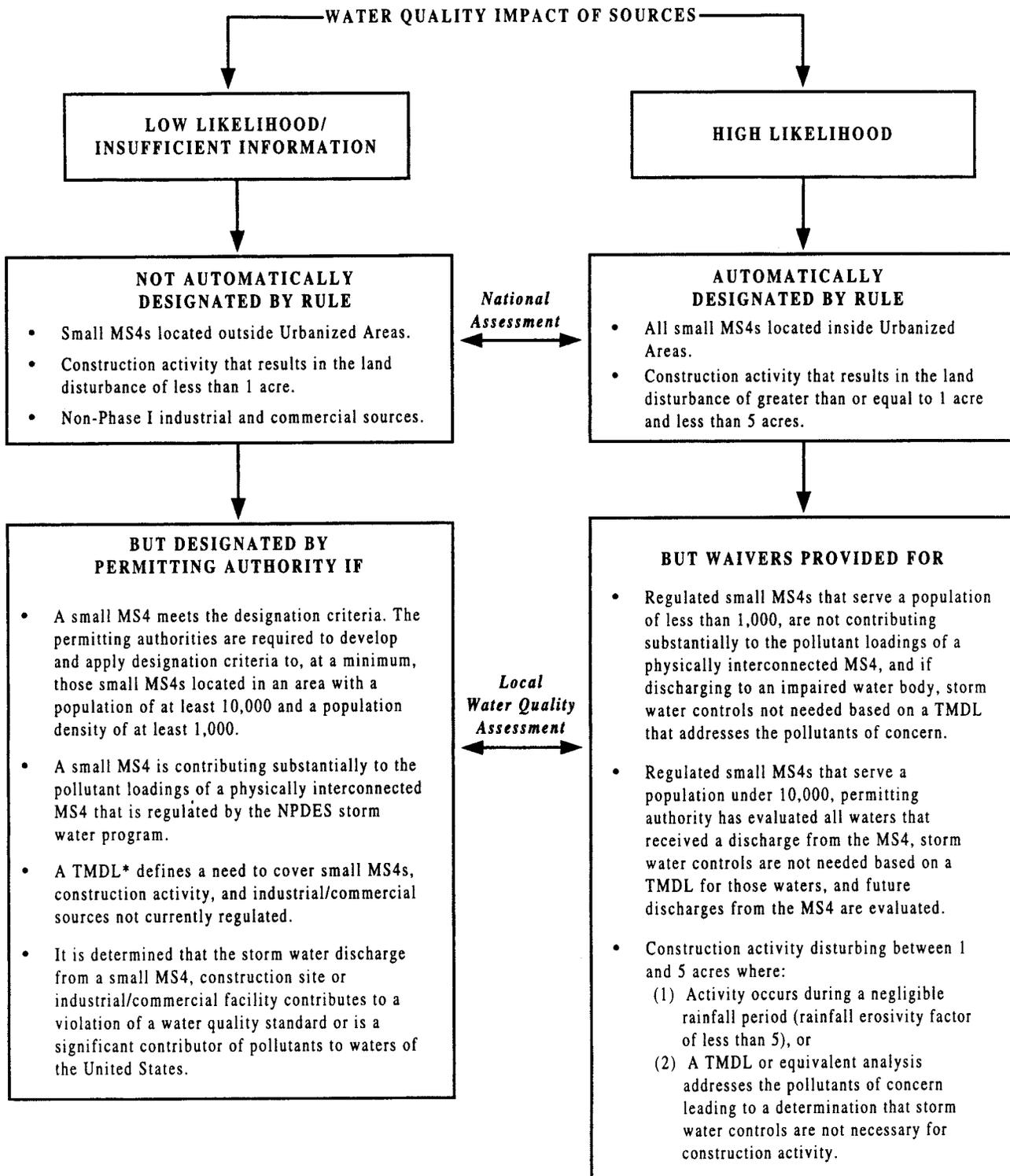
EPA is implementing the requirement under CWA section 402(p)(6) to provide a comprehensive storm water program that designates and controls additional sources of storm water discharges to protect water quality. Second, EPA is addressing storm water discharges from the activities exempted under the 1990 storm water permit application regulations that were remanded by the Ninth Circuit Court of Appeals in *NRDC v. EPA*, 966 F.2d 1292 (9th Circuit, 1992). These are construction activities disturbing less than 5 acres and so-called "light" industrial activities not exposed to storm water (see discussion of "no exposure" below). Third, EPA is providing coverage for the so-called "donut holes" created by the existing NPDES storm water program. Donut holes are geographic gaps in the NPDES storm water program's regulatory scheme. They are MS4s located within areas covered by the existing NPDES storm water program, but not currently addressed by the storm water program because it is based on political jurisdictions. Finally, EPA also is trying to promote watershed planning as a framework for implementing water quality programs where possible.

Although EPA had options for different approaches (see alternatives discussed in the January 9, 1998, proposed regulation), EPA believes it can best achieve its objectives through flexible innovations within the framework of the NPDES program. Unlike the interim section 402(p)(6) storm water regulations EPA promulgated in 1995, EPA no longer designates all of the unregulated storm water discharges for nationwide coverage under the NPDES program for storm water. The framework for today's final rule is one that balances automatic designation on a nationwide basis and

locally-based designation and waivers. Nationwide designation applies to those classes or categories of storm water discharges that EPA believes present a high likelihood of having adverse water quality impacts, regardless of location. Specifically, today's rule designates discharges from small MS4s located in urbanized areas and storm water discharges from construction activities that result in land disturbance equal to or greater than one and less than five acres. As noted under Section I.B., Water Quality Concerns/Environmental Impact Studies and Assessments, these two categories of storm water sources, when unregulated, tend to cause significant adverse water quality impacts. Additional sources are not covered on a nationwide basis either because EPA currently lacks information indicating a consistent potential for adverse water quality impact or because EPA believes that the likelihood of adverse impacts on water quality is low, with some localized exceptions. Additional individual sources or categories of storm water discharges could, however, be covered under the program through a local designation process. A permitting authority may designate additional small MS4s after developing designation criteria and applying those criteria to small MS4s located outside of an urbanized area, in particular those with a population of 10,000 or more and a population density of at least 1,000. Exhibit 1 illustrates the designation framework for today's final rule.

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EXHIBIT 1.—PHASE II SOURCE DECISIONS



*EPA will continue to require States to comply with their Total Maximum Daily Load (TMDL) implementation schedules.

The designation framework for today's final rule provides a significant degree of flexibility. The proposed provisions for nationwide designation of storm water discharges from construction and from small MS4s in urbanized areas allowed for a waiver of applicable requirements based on appropriate water quality conditions. Today's final rule expands and simplifies those waivers.

The permitting authority may waive the requirement for a permit for any small MS4 serving a jurisdiction with a population of less than 1,000 unless storm water controls are needed because the MS4 is contributing to a water quality impairment. The permitting authority may also waive permit coverage for MS4s serving a jurisdiction with a population of less than 10,000 if all waters that receive a discharge from the MS4 have been evaluated and discharges from the MS4 do not significantly contribute to a water quality impairment or have the potential to cause an impairment. Today's rule also allows States with a watershed permitting approach to phase in coverage for MS4s in jurisdictions with populations under 10,000.

Water quality conditions are also the basis for a waiver of requirements for storm water discharges from construction activities disturbing between one and five acres. For these small construction sources, the rule provides significant flexibility for waiving otherwise applicable regulatory requirements where a permitting authority determines, based on water quality and watershed considerations, that storm water discharge controls are not needed.

Coverage can be extended to municipal and construction sources outside the nationwide designated classes or categories based on watershed and case-by-case assessments. For the municipal storm water program, today's rule provides broad discretion to NPDES permitting authorities to develop and implement criteria for designating storm water discharges from small MS4s outside of urbanized areas. Other storm water discharges from unregulated industrial, commercial, and residential sources will not be subject to the NPDES permit requirements unless a permitting authority determines on a case-by-case basis (or on a categorical basis within identified geographic areas such as a State or watershed) that regulatory controls are needed to protect water quality. EPA believes that the flexibility provided in today's rule facilitates watershed planning.

2. General Requirements for Regulated Entities Under Today's Rule

As previously noted, today's final rule defines additional classes and categories of storm water discharges for coverage under the NPDES program. These designated dischargers are required to seek coverage under an NPDES permit. Furthermore, all NPDES-authorized States and Tribes are required to implement these provisions and make any necessary amendments to current State and Tribal NPDES regulations to ensure consistency with today's final rule. EPA remains the NPDES permitting authority for jurisdictions without NPDES authorization.

Today's final rule includes some new requirements for NPDES permitting authorities implementing the CWA section 402(p)(6) program. EPA has made a significant effort to build flexibility into the program while attempting to maintain an appropriate level of national consistency. Permitting authorities must ensure that NPDES permits issued to MS4s include the minimum control measures established under the program. Permitting authorities also have the ability to make numerous decisions including who is regulated under the program, i.e., case-by-case designations and waivers, and how responsibilities should be allocated between regulated entities.

Today's final rule extends the NPDES program to include discharges from the following: small MS4s within urbanized areas (with the exception of systems waived from the requirements by the NPDES permitting authority); other small MS4s meeting designation criteria to be established by the permitting authority; and any remaining MS4 that contributes substantially to the storm water pollutant loadings of a physically interconnected MS4 already subject to regulation under the NPDES program. Small MS4s include urban storm sewer systems owned by Tribes, States, political subdivisions of States, as well as the United States, and other systems located within an urbanized area that fall within the definition of an MS4. These include, for example, State departments of transportation (DOTs), public universities, and federal military bases.

Today's final rule requires all regulated small MS4s to develop and implement a storm water management program. Program components include, at a minimum, 6 minimum measures to address: public education and outreach; public involvement; illicit discharge detection and elimination; construction site runoff control; post-construction storm water management in new

development and redevelopment; and pollution prevention and good housekeeping of municipal operations. These program components will be implemented through NPDES permits. A regulated small MS4 is required to submit to the NPDES permitting authority, either in its notice of intent (NOI) or individual permit application, the BMPs to be implemented and the measurable goals for each of the minimum control measures listed above.

The rule addresses all storm water discharges from construction site activities involving clearing, grading and excavating land equal to or greater than 1 acre and less than 5 acres, unless requirements are otherwise waived by the NPDES permitting authority. Discharges from such sites, as well as construction sites disturbing less than 1 acre of land that are designated by the permitting authority, are required to implement requirements set forth in the NPDES permit, which may reference the requirements of a qualifying local program issued to cover such discharges.

The rule also addresses certain other sources regulated under the existing NPDES program for storm water. For municipally-owned industrial sources required to be regulated under the existing NPDES storm water program but exempted from immediate compliance by the Intermodal Surface Transportation Act of 1991 (ISTEA), the rule revises the existing deadline for seeking coverage under an NPDES permit (August 7, 2001) to make it consistent with the application date for small regulated MS4s. (See section I.3. below.) The rule also provides relief from NPDES storm water permitting requirements for industrial sources with no exposure of industrial materials and activities to storm water.

3. Integration of Today's Rule With the Existing Storm Water Program

In developing an approach for today's final rule, numerous early interested stakeholders encouraged EPA to seek opportunities to integrate, where possible, the proposed Phase II requirements with existing Phase I requirements, thus facilitating a unified storm water discharge control program. EPA believes that this objective is met by using the NPDES framework. This framework is already applied to regulated storm water discharge sources and is extended to those sources designated under today's rule. This approach facilitates program consistency, public access to information, and program oversight.

EPA believes that today's final rule provides consistency in terms of program coverage and requirements for existing and newly designated sources. For example, the rule includes most of the municipal donut holes, those MS4s located in incorporated places, townships or towns with a population under 100,000 that are within Phase I counties. These MS4s are not addressed by the existing NPDES storm water program while MS4s in the surrounding county are currently addressed. In addition, the minimum control measures required in today's rule for regulated small MS4s are very similar to a number of the permit requirements for medium and large MS4s under the existing storm water program. Following today's rule, permit requirements for all regulated MS4s (both those under the existing program and those under today's rule) will require implementation of BMPs. Furthermore, with regard to the development of NPDES permits to protect water quality, EPA intends to apply the August 1, 1996, *Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits* (hereinafter, "Interim Permitting Approach") (see Section I.L.1. for further description) to all MS4s covered by the NPDES program.

EPA is applying NPDES permit requirements to construction sites below 5 acres that are similar to the existing requirements for those above 5 acres and above. In addition, today's rule allows compliance with qualifying local, Tribal, or State erosion and sediment controls to meet the erosion and sediment control requirements of the general permits for storm water discharges associated with construction, both above and below 5 acres.

4. General Permits

EPA recommends using general permits for all newly regulated storm water sources under today's rule. The use of general permits, instead of individual permits, reduces the administrative burden on permitting authorities, while also limiting the paperwork burden on regulated parties seeking permit authorization. Permitting authorities may, of course, require individual permits in some cases to address specific concerns, including permit non-compliance.

EPA recommends that general permits for MS4s, in particular, be issued on a watershed basis, but recognizes that each permitting authority must decide how to develop its general permit(s). Permit conditions developed to address concerns and conditions of a specific watershed could reflect a watershed

plan; such permit conditions must provide for attainment of applicable water quality standards (including designated uses), allocations of pollutant loads established by a TMDL, and timing requirements for implementation of a TMDL. If the permitting authority issues a State-wide general permit, the permitting authority may include separate conditions tailored to individual watersheds or urbanized areas. Of course, for a newly regulated MS4, modification of an existing individual MS4 permit to include the newly regulated MS4 as a "limited co-permittee" also remains an option.

5. Tool Box

During the FACA process, many Storm Water Phase II FACA Subcommittee representatives expressed an interest, which was endorsed by the full Committee, in having EPA develop a "tool box" to assist States, Tribes, municipalities, and other parties involved in the Phase II program. EPA made a commitment to work with Storm Water Phase II FACA Subcommittee representatives in developing such a tool box, with the expectation that a tool box would facilitate implementation of the storm water program in an effective and cost-efficient manner. EPA has developed a preliminary working tool box (available on EPA's web page at www.epa.gov/owm/sw/toolbox). EPA intends to have the tool box fully developed by the time of the first general permits. EPA also intends to update the tool box as resources and data become available. The tool box will include the following eight main components: fact sheets; guidances; a menu of BMPs for the six MS4 minimum measures; an information clearinghouse; training and outreach efforts; technical research; support for demonstration projects; and compliance monitoring/assistance tools. EPA intends to issue the menu of BMPs, both structural and non-structural, by October 2000. In addition, EPA will issue by October 2000 a "model" permit and will issue by October 2001 guidance materials on the development of measurable goals for municipal programs.

In an attempt to avoid duplication, the Agency has undertaken an effort to identify and coordinate sources of information that relate to the storm water discharge control program from both inside and outside the Agency. Such information includes research and demonstration projects, grants, storm water management-related programs, and compendiums of available documents, including guidances, related

directly or indirectly to the comprehensive NPDES storm water program. Based on this effort, EPA is developing a tool box containing fact sheets and guidance documents pertaining to the overall program and rule requirements (e.g., guidance on municipal and construction programs, and permitting authority guidance on designation and waiver criteria); models of current programs aimed at assisting States, Tribes, municipalities, and others in establishing programs; a comprehensive list of reference documents organized according to subject area (e.g., illicit discharges, watersheds, water quality standards attainment, funding sources, and similar types of references); educational materials; technical research data; and demonstration project results. The information collected by EPA will not only provide the background for tool box materials, but will also be made available through an information clearinghouse on the world wide web.

With assistance from EPA, the American Public Works Association (APWA) developed a workbook and series of workshops on the proposed Phase II rule. Ten workshops were held from September 1998 through May 1999. Depending on available funding, these workshops may continue after publication of today's final rule. EPA also intends to provide training to enable regional offices to educate States, Tribes, and municipalities about the storm water program and the availability of the tool box materials.

The CWA currently provides funding mechanisms to support activities related to storm water. These mechanisms will be described in the tool box. Activities funded under grant and loan programs, which could be used to assist in storm water program development, include programs in the nonpoint source area, storm water demonstration projects, source water protection and wastewater construction projects. EPA has already provided funding for numerous research efforts in these areas, including a database of BMP effectiveness studies (described below), an assessment of technologies for storm water management, a study of the effectiveness of storm water BMPs for controlling the impacts of watershed imperviousness, protocols for wet weather monitoring, development of a dynamic model for wet weather flows, and numerous outreach projects.

EPA has entered into a cooperative agreement with the Urban Water Resources Research Council of the American Society of Civil Engineers (ASCE) to develop a scientifically-based management tool for the information

needed to evaluate the effectiveness of urban storm water runoff BMPs nationwide. The long-term goal of the National Stormwater BMP Database project is to promote technical design improvements for BMPs and to better match their selection and design to the local storm water problems being addressed. The project team has collected and evaluated hundreds of existing published BMP performance studies and created a database covering about 75 test sites. The database includes detailed information on the design of each BMP and its watershed characteristics, as well as its performance. Eventually the database will include the nationwide collection of information on the characteristics of structural and non-structural BMPs, data collection efforts (e.g., sampling and flow gaging equipment), climatological characteristics, watershed characteristics, hydrologic data, and constituent data. The database will continue to grow as new BMP data become available. The initial release of

the database, which includes data entry and retrieval software, is available on CD-ROM and operates on Windows®-compatible personal computers. The ASCE project team envisions that periodic updates to the database will be distributed through the Internet. The team is currently developing a system for Internet retrieval of selected database records, and this system is expected to be available in early 2000.

EPA and ASCE invite BMP designers, owners and operators to participate in the continuing database development effort. To make this effort successful, a large database is essential. Interested persons are encouraged to submit their BMP performance evaluation data and associated BMP watershed characteristics for potential entry into the database. The software included in the CD-ROM allows data providers to enter their BMP data locally, retain and edit the data as needed, and submit them to the ASCE Database Clearinghouse when ready.

To obtain a copy of the database, please contact Jane Clary, Database Clearinghouse Manager, Wright Water Engineers, Inc., 2490 W. 26th Ave., Suite 100A, Denver, CO 80211; Phone 303-480-1700; E-mail clary@wrightwater.com.

In addition, EPA requests that researchers planning to conduct BMP performance evaluations compile and collect BMP reporting information according to the standard format developed by ASCE. The format is provided with the database software and is also available on the ASCE website at www.asce.org/peta/tech/nsbd01.html.

6. Deadlines Established in Today's Action

Exhibit 2 outlines the various deadlines established under today's final rule. EPA believes that the dates allow sufficient time for completion of both the NPDES permitting authority's and the permittee's program responsibilities.

EXHIBIT 2—STORM WATER PHASE II ACTIONS DEADLINES

Activity	Deadline date
NPDES-authorized States modify NPDES program if no statutory change is required.	1 year from date of publication of today's rule in the Federal Register .
NPDES-authorized States modify NPDES program if statutory change is required.	2 years from date of publication of today's rule in the Federal Register .
EPA issues a menu of BMPs for regulated small MS4s	October 27, 2000
ISTEA sources submit permit application	3 years and 90 days from date of publication of today's rule in the Federal Register .
Permitting authority issues general permit(s) (if this type of permit coverage is selected).	3 years from date of publication of today's rule in the Federal Register .
Regulated small MS4s submit permit application:	
a. If designated under § 122.32(a)(1) unless the permitting authority has established a phasing schedule under § 123.35(d)(3).	a. 3 years and 90 days from date of publication of today's rule in the Federal Register .
b. If designated under § 122.32(a)(2) or §§ 122.26(a)(9)(i) (C) or (D).	b. Within 180 days of notice.
Storm water discharges associated with small construction activity submit permit application:	
a. If designated under § 122.26(b)(15)(i)	a. 3 years and 90 days from date of publication of today's rule in the Federal Register
b. If designated under § 122.26(b)(15)(ii)	b. Within 180 days of notice.
Permitting authority designates small MS4s under § 123.35(b)(2)	3 years from date of publication of today's rule in the Federal Register or 5 years from date of publication of today's rule in the Federal Register if a watershed plan is in place
Regulated small MS4s' program fully developed and implemented	Up to 5 years from date of permit issuance.
Reevaluation of the municipal storm water rules by EPA	13 years from date of publication of today's rule in the Federal Register
Permitting authority determination on a petition	Within 180 days of receipt.
Non-municipal sources designated under § 122.26(a)(9)(i) (C) or (D) submit permit application.	Within 180 days of notice.
Submission of No Exposure Certification	Every 5 years.

B. Readable Regulations

Today, EPA is finalizing new regulations in a "readable regulation" format. This reader-friendly, plain language approach is a departure from traditional regulatory language and should enhance the rule's readability. These plain language regulations use

questions and answers, "you" to identify the person who must comply, and terms like "must" rather than "shall" to identify a mandate. This new format, which minimizes layers of subparagraphs, should also allow the reader to easily locate specific provisions of the regulation.

Some sections of today's final rule are presented in the traditional language and format because these sections amend existing regulations. The readable regulation format was not used in these existing provisions in an attempt to avoid confusion or disruption

of the readability of the existing regulations.

Most commenters supported EPA's use of plain language and agreed with EPA that the question and answer format makes the rule easier to understand. Three commenters thought that EPA should retain the traditional rule format. The June 1, 1998, Presidential memorandum directs all government agencies to write documents in plain language. Based on the majority of the comments, EPA has retained the plain language format used in the January 9, 1998, proposal in today's final rule.

The proposal to today's final rule included guidance as well as legal requirements. The word "must" indicates a requirement. Words like "should," "could," or "encourage" indicate a recommendation or guidance. In addition, the guidance was set off in parentheses to distinguish it from requirements.

EPA received numerous comments supporting the inclusion of guidance in the text of the Code of Federal Regulations (CFR), as well as comments opposing inclusion of guidance. Supporters stated that preambles and guidance documents are often not accessible when rules are implemented. Any language not included in the CFR is therefore not available when it may be most needed. Commenters that opposed including guidance in the CFR expressed the concern that any language in the rule might be interpreted as a requirement, in spite of any clarifying language. They suggested that guidance be presented in the preamble and additional guidance documents.

The majority of commenters on this issue thought that the guidance should be retained but the distinction between requirements and guidance should be better clarified. Suggestions included clarifying text, symbols, and a change from use of the word "should" to "EPA recommends" or "EPA suggests". EPA believes that it is important to include the guidance in the rule and agrees that the distinction between requirements and EPA recommendations must be very clear. In today's final rule, EPA has put the guidance in paragraphs entitled "Guidance" and replaced the word "should" with "EPA recommends." This is intended to clarify that the recommendations contained in the guidance paragraphs are not legally binding.

C. Program Framework: NPDES Approach

Today's rule regulates Phase II sources using the NPDES permit program. EPA interprets Clean Water

Act section 402(p)(6) as authorizing the Agency to develop a storm water program for Phase II sources either as part of the existing NPDES permit program or as a stand alone non-NPDES program such as a self-implementing rule. Under either approach, EPA interprets section 402(p)(6) as directing EPA to publish regulations that "regulate" the remaining unregulated sources, specifically to establish requirements that are federally enforceable under the CWA. Although EPA believes that it has the discretion to not require sources regulated under CWA section 402(p)(6) to be covered by NPDES permits, the Agency has determined, for the reasons discussed below, that it is most appropriate to use NPDES permits in implementing the program to address the sources designated for regulation in today's rule.

As discussed in Section II.A, Overview, EPA sought to achieve certain goals in today's final rule. EPA believes that the NPDES program best achieves EPA's goals for today's final rule for the reasons discussed below.

Requiring Phase II sources to be covered by NPDES permits helps address the consistency problems currently caused by municipal "donut holes." Donut holes are gaps in program coverage where a small unregulated MS4 is located next to or within a regulated larger MS4 that is subject to an NPDES permit under the Phase I NPDES storm water program. The existence of such "donut holes" creates an equity problem because similar discharges may remain unregulated even though they cause or contribute to the same adverse water quality impacts. Using NPDES permits to regulate the unregulated discharges in these areas is intended to facilitate the development of a seamless regulatory program for the mitigation and control of contaminated storm water discharges in an urbanized area. For example, today's rule allows a newly regulated MS4 to join as a "limited" co-permittee with a regulated MS4 by referencing a common storm water management program. Such cooperation should be further encouraged by the fact that the minimum control measures required in today's rule for regulated small MS4s are very similar to a number of the permit requirements for medium and large MS4s under the Phase I storm water program. The minimum control measures applicable to discharges from smaller MS4s are described with slightly more generality than under the Phase I permit application regulations for larger MS4s, thus enabling maximum flexibility for operators of

smaller MS4s to optimize efforts to protect water quality.

Today's rule also applies NPDES permit requirements to construction sites below 5 acres that are similar to the existing requirements for those 5 acres and above. In addition, the rule would allow compliance with qualifying local, Tribal, or State erosion and sediment controls to meet the erosion and sediment control requirements of the general permits for storm water discharges associated with construction, both above and below 5 acres.

Incorporating the CWA section 402(p)(6) program into the NPDES program capitalizes upon the existing governmental infrastructure for administration of the NPDES program. Moreover, much of the regulated community already understands the NPDES program and the way it works.

Another goal of the NPDES program approach is to provide flexibility in order to facilitate and promote watershed planning and sensitivity to local conditions. NPDES permits promote those goals in several ways. NPDES general permits may be used to cover a category of regulated sources on a watershed basis or within political boundaries. The NPDES permitting process provides a mechanism for storm water controls tailored on a case-by-case basis, where necessary. In addition, the NPDES permit requirements of a permittee may be satisfied by another cooperating entity. Finally, NPDES permits may incorporate the requirements of existing State, Tribal and local programs, thereby accommodating State and Tribes seeking to coordinate the storm water program with other programs, including those that focus on watershed-based nonpoint source regulation.

In promoting the watershed approach to program administration, EPA believes NPDES general permits can cover a category of dischargers within a defined geographic area. Areas can be defined very broadly to include political boundaries (e.g., county), watershed boundaries, or State or Tribal land.

NPDES permits generally require an application or a notice of intent (NOI) to trigger coverage. This information exchange assures communication between the permitting authority and the regulated community. This communication is critical in ensuring that the regulated community is aware of the requirements and the permitting authority is aware of the potential for adverse impacts to water quality from identifiable locations. The NPDES permitting process includes the public as a valuable stakeholder and ensures

that the public is included and information is made publicly available.

Another concern for EPA and several stakeholders was that the program ensure citizen participation. The NPDES approach ensures opportunities for citizen participation throughout the permit issuance process, as well as in enforcement actions. NPDES permits are also federally enforceable under the CWA.

EPA believes that the use of NPDES permits makes a significant difference in the degree of compliance with regulations in the storm water program. The NPDES program provides for public participation in the development, enforcement and revision of storm water management programs. Citizen suit enforcement has assisted in focusing attention on adverse water quality impacts on a localized, public priority basis. Citizens frequently rely on the NPDES permitting process and the availability of NOIs to track program implementation and help them enforce regulatory requirements.

NPDES permits are also advantageous to the permittee. The NPDES permit informs the permittee about the scope of what it is expected to do in compliance with the Clean Water Act. As explained more fully in EPA's April 1995 guidance, *Policy Statement on Scope of Discharge Authorization and Shield Associated with NPDES Permits*, compliance with an NPDES permit constitutes compliance with the Clean Water Act (see CWA section 402(k)). In addition, NPDES permittees are excluded from duplicative regulatory regimes under the Resource Conservation and Recovery Act and the Comprehensive Emergency Response, Compensation and Liability Act under RCRA's exclusions to the definition of "solid waste" and CERCLA's exemption for "federally permitted releases."

EPA considered suggestions that the Agency authorize today's rule to be implemented as a self-implementing rule. This would be a regulation promulgated at the Federal, State, or Tribal level to control some or all of the storm water dischargers regulated under today's rule. Under this approach, a rule would spell out the specific requirements for dischargers and impose the restrictions and conditions that would otherwise be contained in an NPDES permit. It would be effective until modified by EPA, a State, or a Tribe, unlike an NPDES permit which cannot exceed a duration of five years. Some stakeholders believed that this approach would reduce the burden on the regulated community (e.g., by not requiring permit applications), and considerably reduce the amount of

additional paperwork, staff time and accounting required to administer the proposed permit requirements.

EPA is sensitive to the interest of some stakeholders in having a streamlined program that minimizes the burden associated with permit administration and maximizes opportunities for field time spent by regulatory authorities. Key provisions in today's rule address some of these concerns by promoting a streamlined approach to permit issuance by, for example, using general permits and allowing the incorporation of existing programs. By adopting the NPDES approach rather than a self-implementing rule, today's rule also allows for consistent regulation between larger MS4s and construction sites regulated under the existing storm water management rule and smaller sources regulated under today's rule.

EPA believes that it is most appropriate to use NPDES permits to implement a program to address the sources regulated by today's rule. In addition to the reasons discussed above, NPDES permits provide a better mechanism than would a self-implementing rule for tailoring storm water controls on a case-by-case basis, where necessary. One commenter reasoned this concern could be addressed by including provisions in the regulation that allow site-specific BMPs (*i.e.*, case-by-case permits), suggesting storm water discharges that might require site-specific BMPs can be identified during the designation process of the regulatory authority. EPA believes that, in addition to its complexity, the commenter's approach lacks the other advantages of the NPDES permitting process.

A self-implementing rule would not ensure the degree of public participation that the NPDES permit process provides for the development, enforcement and revision of the storm water management program. A self-implementing rule also might not have provided the regulated community the "permit shield" under CWA section 402(k) that is provided by an NPDES permit. Based on all these considerations, EPA declined to adopt a self-implementing rule approach and adopted the NPDES approach.

Some State representatives sought alternative approaches for State implementation of the storm water program for Phase II sources. These State representatives asserted that a non-NPDES alternative approach best facilitated watershed management and avoided duplication and overlapping regulations. These representatives believed the NPDES approach would undercut State programs that had

developed storm water controls tailored to local watershed concerns. Finally, a number of commenters expressed the view that States implement a variety of programs not based on the CWA that are effective in controlling storm water, and that EPA should provide incentives for their implementation and improvement in performance.

Throughout the development of the rule, State representatives sought alternatives to the NPDES approach for State implementation of the storm water program for Phase II sources. Discussions focused on an approach whereby States could develop an alternative program that EPA would approve or disapprove based on identified criteria, including that the alternative non-NPDES program would result in "equivalent or better protection of water quality." The State representatives, however, were unable to propose or recommend criteria for gauging whether a program would provide equivalent protection. EPA also did not receive any suggestions for objective, workable criteria in response to the Agency's explicit request for specific criteria (by which EPA could objectively judge such programs) in the preamble to the proposed rule.

EPA evaluated several existing State initiatives to address storm water and found many cases where standards under State programs may be coordinated with the Federal storm water program. Where the NPDES permit is developed in coordination with State standards, there are opportunities to avoid duplication and overlapping requirements. Under today's rule, an NPDES permitting authority may include conditions in the NPDES permit that direct an MS4 to follow the requirements imposed under State standards, rather than the requirements of § 122.34(b). This is allowed as long as the State program at a minimum imposes the relevant requirements of § 122.34(b). Additional opportunities follow from other provisions in today's rule.

Seeking to further explore the feasibility of a non-NPDES approach, the Agency, after the proposal, had extensive discussions with representatives of a number of States. Discussions related specifically to possible alternatives for regulations of urban storm water discharges and MS4s specifically. The Agency also sought input on these issues from other stakeholders.

As a result of these discussions, many of the commenters provided input on issues such as: whether or not the Agency should require NPDES permits; whether location of MS4s in urbanized

areas should be the basis for designation or whether designation should be based on other determinations relating to water quality; whether States should be allowed to satisfy the conditions of the rule through the use of existing State programs; and issues concerning timing and resources for program implementation.

In response, today's rule still follows the regulatory scheme of the proposed rule, but incorporates additional flexibility to address some of the concerns raised by commenters.

In order to facilitate implementation by States that utilize a watershed permitting approach or similar approach (*i.e.*, based on a State's unified watershed assessments), today's rule allows States to phase in coverage for MS4s in jurisdictions with a population less than 10,000. Under such an approach, States could focus their resources on a rolling basis to assist smaller MS4s in developing storm water programs.

In addition, in response to concerns that the rule should not require permit coverage for MS4s that do not significantly contribute to water quality impairments, today's rule provides options for two waivers for small MS4s. The rule allows permitting authorities to exempt from the requirement for a permit any MS4 serving a jurisdiction with a population less than 1,000, unless the State determines that the MS4 must implement storm water controls because it is significantly contributing to a water quality impairment. A second waiver option applies to MS4s serving a jurisdiction with a population less than 10,000. For those MS4s, the State must determine that discharges from the MS4 do not significantly contribute to a water quality impairment, or have the potential for such an impairment, in order to provide the exemption. The State must review this waiver on a periodic basis no less frequently than once every five years.

Throughout the development of today's rule, commenters questioned whether the Clean Water Act authorized the use of the NPDES permit program, pointing out that the text of CWA 402(p)(6) does not use the word "permit." Based on the absence of the word "permit" and the express mention of State storm water management programs, the commenters asserted that Congress did not intend for Phase II sources to be regulated using NPDES permits.

EPA disagrees with the commenters' interpretation of section 402(p)(6). Section 402(p)(6) does not preclude use of permits as part of the

"comprehensive program" to regulate designated sources. The language provides EPA with broad discretion in the establishment of the "comprehensive program." Absence of the word "permit" (a term that the statute does not otherwise define) does not preclude use of a permit, which is a familiar and reasonably well understood regulatory implementation vehicle. First, section 402(p)(6) says that EPA must establish a comprehensive program that "shall, at a minimum, establish priorities, establish requirements for State stormwater management programs, and establish expeditious deadlines." The "at a minimum" language suggests that the Agency may, and perhaps should, develop a comprehensive program that does more than merely attend to these minimum criteria. Use of the term "at a minimum" preserves for the Agency broad discretion to establish a comprehensive program that includes use of NPDES permits.

Further, in the final sentence of the section, Congress included additional language to affirm the Agency's discretion. The final sentence clarifies that the Phase II program "may include performance standards, guidelines, guidance, and management practices and treatment requirements, as appropriate." Under existing CWA programs, performance standards, (effluent limitations) guidelines, management practices, and treatment requirements are typically implemented through NPDES or dredge and fill permits.

Although EPA believes that it had the discretion to not require permits, the Agency has determined that it is reasonable to interpret section 402(p)(6) to authorize permits. Moreover, for the reasons discussed above, the Agency believes that it is appropriate to use NPDES permits in implementing today's rule.

D. Federal Role

Today's final rule describes EPA's approach to expand the existing storm water program under CWA section 402(p)(6). As in all other Federal programs, the Federal government plays an integral role in complying with, developing, implementing, overseeing, and enforcing the program. This section describes EPA's role in the revised storm water program.

1. Develop Overall Framework of the Program

The storm water discharge control program under CWA section 402(p)(6) consists of the rule, tool box, and permits. EPA's primary role is to ensure

timely development and implementation of all components. Today's rule is a refinement of the first step in developing the program. EPA is fully committed to continuing to work with involved stakeholders on developing the tool box and issuing permits. As noted in today's rule, EPA will assess the municipal storm water program based on (1) evaluations of data from the NPDES municipal storm water program, (2) research concerning water quality impacts on receiving waters from storm water, and (3) research on BMP effectiveness. (Section II.H, Municipal Role, provides a more detailed discussion of this provision.)

EPA is planning to standardize minimum requirements for construction and post-construction BMPs in a new rulemaking under Title III of the CWA. While larger construction sites are already subject to NPDES permits (and smaller sites will be subject to permits pursuant to today's rule), the permits generally do not contain specific requirements for BMP design or performance. The permits require the preparation of storm water pollution prevention plans, but actual BMP selection and design is at the discretion of permittees, in conformance with applicable State and local requirements. Where there are existing State and local requirements specific to BMPs, they vary widely, and many jurisdictions do not have such requirements.

In developing these regulations, EPA intends to evaluate the inclusion of design and maintenance criteria as minimum requirements for a variety of BMPs used for erosion and sediment control at construction sites, as well as for permanent BMPs used to manage post-construction storm water discharges. The Agency plans to consider the merits and performance of all appropriate management practices (both structural and non-structural) that can be used to reduce adverse water quality impacts. EPA does not intend to require the use of particular BMPs at specific sites, but plans to assist builders and developers in BMP selection by publishing data on the performance to be expected by various BMP types. EPA would like to build upon the successes of some of the effective State and local storm water programs currently in place around the country, and to establish nation-wide criteria to support builders and local jurisdictions in appropriate BMP selection.

2. Encourage Consideration of Smart Growth Approaches

In the proposal, EPA invited comment on possible approaches for providing

incentives for local decision making that would limit the adverse impacts of growth and development on water quality. EPA asked for comments on this "smart growth" approach.

EPA received comments on all sides of this issue. A number of commenters supported the idea of "smart growth" incentives but did not present concrete ideas. Several commenters suggested "smart growth" criteria. States that have adopted "smart growth" laws were worried that EPA's focus on urbanized areas for municipal requirements could encourage development outside of designated growth areas. Today's final rule clearly allows States to expand coverage of their municipal storm water program outside of urbanized areas. In addition, the flexibility of the six municipal minimum measures should avoid encouragement of development into rural rather than urban areas. For example, as part of the post-construction minimum measure, EPA recommends that municipalities consider policies and ordinances that encourage infill development in higher density urban areas, and areas with existing infrastructure, in order to meet the measure's intent.

EPA also received several comments expressing concern that incorporating "smart growth" incentives threatened the autonomy of local governments. One commenter was worried that "incentives" could become more onerous than the minimum measures. EPA is very aware of municipal concerns about possible federal interference with local land use planning. EPA is also cognizant of the difficulty surrounding incentives for "smart growth" activities due to these concerns. However, the Agency believes it has addressed these concerns by proposing a flexible approach and will continue to support the concept of "smart growth" by encouraging policies that limit the adverse impacts of growth and development on water quality.

3. Provide Financial Assistance

Although Congress has not established a fund to fully finance implementation of the proposed extension of the existing NPDES storm water program under CWA section 402(p)(6), numerous federal financing programs (administered by EPA and other federal agencies) can provide some financial assistance. The primary funding mechanism is the Clean Water State Revolving Fund (SRF) program, which provides sources of low-cost financing for a range of water quality infrastructure projects, including storm water. In addition to the SRF, federal financial assistance programs include

the Water Quality Cooperative Agreements under CWA section 104(b)(3), Water Pollution Control Program grants to States under CWA section 106, and the Transportation Equity Act for the 21st Century (TEA-21) among others. In addition, Section 319 funds may be used to fund any urban storm water activities that are not specifically required by a draft or final NPDES permit. EPA will develop a list of potential funding sources as part of the tool box implementation effort. EPA anticipates that some of these programs will provide funds to help develop and, in limited circumstances, implement the CWA section 402(p)(6) storm water discharge control program.

EPA received numerous comments that requested additional funding. Congress provided one substantial new source of potential funding for transportation related storm water projects—TEA-21. The Department of Transportation has included a number of water-related provisions in its TEA-21 planning. These include Transportation Enhancements, Environmental Restoration and Pollution Abatement, and Environmental Streamlining. More information on TEA-21 is available at the following internet sites: www.fhwa.dot.gov/tea21/outreach.htm and www.tea21.org.

4. Implement the Program in Jurisdictions Not Authorized To Administer the NPDES Program

Because today's final rule uses the NPDES framework, EPA will be the NPDES permitting authority in several States, Tribal jurisdictions, and Territories. As such, EPA will have the same responsibilities as any other NPDES permitting authority—issuing permits, designating additional sources, and taking appropriate enforcement actions—and will seek to tailor the storm water discharge control program to the specific needs in that State, Tribal jurisdiction, or Territory. EPA also plans to provide support and oversight, including outreach, training, and technical assistance to the regulated communities. Section II.G. of today's preamble provides a separate discussion related to the NPDES permitting authority's responsibilities for today's final rule.

5. Oversee State and Tribal Programs

Under the NPDES program, EPA plays an oversight role for NPDES-approved States and Tribes. In this role, EPA and the State or Tribe work together to implement, enforce, and improve the NPDES program. Part of this oversight role includes working with States and

Tribes to modify their programs where programmatic or implementation concerns impede program effectiveness. This role will be vitally important when States and Tribes make adjustments to develop, implement, and enforce today's extension of the existing NPDES storm water discharge control program. In addition, States maintain a continuing planning process (CPP) under CWA section 303(e), which EPA periodically reviews to assess the program's achievements.

In its oversight role, EPA takes action to address States and Tribes who have obtained NPDES authorization but are not fulfilling their obligations under the NPDES program. If an NPDES-authorized State or Tribe fails to implement an adequate NPDES storm water program, for example, EPA typically enters into extensive discussions to resolve outstanding issues. EPA has the authority to withdraw the entire NPDES program when resolution cannot be reached. Partial program withdrawal is not provided for under the CWA except for partial approvals.

EPA is also working with the States and Tribes to improve nonpoint source management programs and assessments to incorporate key program elements. Key nonpoint source program elements include setting short and long term goals and objectives; establishing public and private partnerships; using a balanced approach incorporating Statewide and watershed-wide abatement of existing impairments; preventing future impairments; developing processes to address both impaired and threatened waters; reviewing and upgrading all program components, including program revisions on a 5-year cycle; addressing federal land management and activities inconsistent with State programs; and managing State nonpoint source management programs effectively.

In particular, EPA works with the States and Tribes to strengthen their nonpoint source pollution programs to address all significant nonpoint sources, including agricultural sources, through the CWA section 319 program. EPA is working with other government agencies, as well as with community groups, to effect voluntary changes regarding watershed protection and reduced nonpoint source pollution.

In addition, EPA and NOAA have published programmatic and technical guidance to address coastal nonpoint source pollution. Under Section 6217 of the CZARA, States are developing and implementing coastal nonpoint pollution control programs approved by EPA and NOAA.

6. Comply With Applicable Requirements as a Discharger

Today's final rule covers federally operated facilities in a variety of ways. These facilities are generally areas where people reside, such as a federal prison, hospital, or military base. It also includes federal parkways and road systems with separate storm sewer systems. Today's rule requires federal MS4s to comply with the same application deadlines that apply to regulated small MS4s generally. EPA believes that all federal MS4s serve populations of less than 100,000.

EPA received several comments that asked if individual buildings like post offices are considered to be small MS4s and thereby regulated in today's rule if they are in an urbanized area. Most of these buildings have at most a parking lot with runoff or a storm sewer that connects with a municipality's MS4. EPA does not intend that individual federal buildings be considered to be small MS4s. This is discussed in section II.H.2.b. of today's preamble.

Federal facilities can also be included under requirements addressing storm water discharges associated with small construction activities. In any case, discharges from these facilities will need to comply with all applicable NPDES requirements and any additional water quality-related requirements imposed by a State, Tribal, or local government. Failure to comply can result in enforcement actions. Federal facilities can act as models for municipal and private sector facilities and implement or test state-of-the-art management practices and control measures.

E. State Role

Today's final rule sets forth an NPDES approach for implementing the extension of the existing storm water discharge control program under CWA section 402(p)(6). State assumption of the NPDES program is voluntary, consistent with the principles of federalism. Because most States are approved to implement the NPDES program, they will tailor their storm water discharge control programs to address their water quality needs and objectives. While today's rule establishes the basic framework for the section 402(p)(6) program, States as well as Tribes (see discussion in section II.F) have an important role in fine-tuning the program to address the water quality issues within their jurisdictions. The basic framework allows for adjustments based on factors that vary geographically, including climate patterns and terrain.

Where States do not have NPDES authority, they are not required to implement the storm water discharge control program, but they may still participate in water quality protection through participation in the CWA section 401 certification process (for any permits) and through development of water quality standards and TMDLs.

1. Develop the Program

In expanding the existing NPDES program for storm water discharges, States must evaluate whether revisions to their NPDES programs are necessary. If so, modifications must be made in accordance with § 123.62. Under § 123.62, States must revise their NPDES programs within 1 year, or within 2 years if statutory changes are necessary.

Some States and departments of transportation (DOTs) commented that this timeframe is too short, anticipating that the State legislative process and the modification of regulations combined would take beyond 2 years. The deadline language in § 123.62 is not new language for the storm water discharge control program; it applies to all NPDES programs. EPA believes the vast majority of States will meet the deadline and will work with States in those cases where there may be difficulty meeting this deadline due to the timing of legislative sessions and the regulatory development process.

An authorized State NPDES program must meet the requirements of CWA section 402(b) and conform to the guidelines issued under CWA section 304(i)(2). Today's final rule under § 123.25 adds specific cross references to the storm water discharge control program components to ensure that States adequately address these requirements.

2. Comply With Applicable Requirements as a Discharger

Today's final rule covers State operated separate storm sewer systems in a variety of ways. These systems generally drain areas where people reside, such as a prison, hospital, or other populated facility. These systems are included under the definition of a regulated small MS4, which specifically identifies systems operated by State departments of transportation. Alternatively, storm water discharges from State activities may be regulated under the section addressing storm water discharges associated with small construction activities. In any case, discharges from these facilities must comply with all applicable NPDES requirements. Failure to comply can result in enforcement actions. State facilities can act as models for

municipal and private sector facilities and implement or test state-of-the-art management practices and control measures.

3. Communicate With EPA

Under approved NPDES programs, States have an ongoing obligation to share information with EPA. This dialogue is particularly important in the CWA section 402(p)(6) storm water program where these governments continue to develop a great deal of the guidance and outreach related to water quality.

F. Tribal Role

The proposal to today's final rule provides background information on EPA's 1984 Indian Policy and the criteria for treatment of an Indian Tribe in the same manner as a State. Today's final rule extends the existing NPDES program for storm water discharges to two types of dischargers located in Indian country. First, the final rule designates storm water discharges from any regulated small MS4, including Tribal systems. Second, the final rule regulates discharges associated with construction activity disturbing between one and five acres of land, including sites located in Indian country. Operators in each of these categories of regulated activity must apply for coverage under an NPDES permit by 3 years and 90 days from the date of publication of today's final rule. Under existing regulations, however, EPA or an authorized NPDES Tribe may require a specified storm water discharger to apply for NPDES permit coverage before this deadline based on a determination that the discharge is contributing to a violation of a water quality standard (including designated uses) or is a significant contributor of pollutants.

Under today's rule, a Tribal governmental entity may regulate storm water discharges on its reservation in two ways—as either an NPDES-authorized Tribe or as a regulated MS4. If a Tribe is authorized to operate the NPDES program, the Tribe must implement today's final rule for the NPDES program for storm water for covered dischargers located within the EPA recognized boundaries. Otherwise, EPA is generally the permitting/program authority within Indian country. Discussions about the State Role in the preceding section also apply to NPDES authorized Tribes. For additional information on the role and responsibilities of the permitting authority in the NPDES storm water program, see § 123.35 (and Section II.G. of today's preamble) and § 123.25(a).

Under today's final rule, if the Indian reservation is located entirely or partially within an "urbanized area," as defined in § 122.32(a)(1), the Tribe must obtain an NPDES permit if it operates a small MS4 within the urbanized area portion. Tribal MS4s located outside an urbanized area are not automatically covered, but may be designated by EPA pursuant to § 122.32(a)(2) of today's rule or may request designation as a regulated small MS4 from EPA. A Tribe that is a regulated MS4 for NPDES program purposes is required to implement the six minimum control measures to the extent allowable under Federal law.

The Tribal representative on the Storm Water Phase II FACA Subcommittee asked EPA to provide a list of the Tribes located in urbanized areas that would fall within the NPDES storm water program under today's final rule. In December 1996, EPA developed a list of federally recognized American Indian Areas located wholly or partially in Bureau of the Census-designated urbanized areas (see Appendix 1). Appendix 1 not only provides a listing of reservations and individual Tribes, but also the name of the particular urbanized area in which the reservation is located and an indication of whether the urbanized area contains a medium or large MS4 that is already covered by the existing Phase I regulations.

Some of the Tribes listed in Appendix 1 are only partially located in an urbanized area. If the Tribe's MS4 serves less than 1,000 people within an urbanized area, the permitting authority may waive the Tribe's MS4 storm water requirements if it meets the conditions of § 122.32(c). EPA does not have information on the Tribal populations within the urbanized areas, so it can not identify the Tribes that are eligible for a waiver. Therefore, a Tribe that believes it qualifies for a waiver should contact its permitting authority.

G. NPDES Permitting Authority's Role for the NPDES Storm Water Small MS4 Program

As noted previously, the NPDES permitting authority can be EPA or an authorized State or an authorized Tribe. The following discussion describes the role of the NPDES permitting authority under today's final rule.

1. Comply With Implementation Requirements

NPDES permitting authorities must perform certain duties to implement the NPDES storm water municipal program. Section 123.35(a) of today's final rule emphasizes that permitting authorities have existing obligations under the

NPDES program. Section 123.35 focuses on specific issues related to the role of the NPDES authority to support administration and implementation of the municipal storm water program under CWA section 402(p)(6).

2. Designate Sources

Section 123.35(b) of today's final rule addresses the requirements for the NPDES permitting authority to designate sources of storm water discharges to be regulated under §§ 122.32 through 122.36. NPDES permitting authorities must develop a process, as well as criteria, to designate small MS4s. They must also have the authority to designate a small MS4 if and when circumstances that support a waiver under § 122.32(c) change. EPA may make designations if an NPDES-approved State or Tribe fails to do so.

NPDES permitting authorities must examine geographic jurisdictions that they believe should be included in the storm water discharge control program but are not located in an "urbanized area". Small MS4s in these areas are not designated automatically. Discharges from such areas should be brought into the program if found to have actual or potential exceedances of water quality standards, including impairment of designated uses, or other adverse impacts on water quality, as determined by local conditions or watershed and TMDL assessments. EPA's aim is to address discharges to impaired waters and to protect waters with the potential for problems. EPA encourages NPDES permitting authorities, local governments, and the interested public to work together in the context of a watershed plan to address water quality issues, including those associated with municipal storm water runoff.

EPA received comments stating that the process of developing criteria and applying it to all MS4s outside an urbanized area serving a population of 10,000 or greater and with a density of 1,000 people per square mile is too time-consuming and resource-intensive. These commenters believe that the permitting authority should decide which MS4s must be brought into the storm water discharge control program and that population and density should not be an overriding criteria. One suggested way of doing so was to only designate MS4s with demonstrated contributions to the impairment of water quality uses as shown by a TMDL. EPA disagrees with this suggestion. The TMDL process is time-consuming. MS4s outside of urbanized areas may cause water quality problems long before a TMDL is completed.

EPA believes that permitting authorities should consider the potential water quality impacts of storm water from all jurisdictions with a population of 10,000 or greater and a density of 1,000 people per square mile. EPA is using data summarized in the NURP study and in the CWA section 305(b) reports to support this approach for targeted designation outside of urbanized areas. EPA is not mandating which criteria are to be used, but has provided examples of criteria that may be useful in evaluating potential water quality impacts. EPA believes that the flexibility provided in this section of today's final rule allows the permitting authority to develop criteria and a designation process that is easy to use and protects water quality. Therefore, the provisions of § 123.35(b) remain as proposed.

a. Develop Designation Criteria

Under § 123.35(b), the NPDES permitting authority must establish designation criteria to evaluate whether a storm water discharge results in or has the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including adverse habitat and biological impacts.

EPA recommends that NPDES permitting authorities consider, in a balanced manner, certain locally-focused criteria for designating any MS4 located outside of an urbanized area on the basis of significant water quality impacts. EPA recommends consideration of criteria such as discharge to sensitive waters, high growth or growth potential, high population density, contiguity to an urbanized area, significant contribution of pollutants to waters of the United States, and ineffective control of water quality concerns by other programs. These suggested designation criteria are intended to help encourage the permitting authority to use an objective method for identifying and designating, on a local basis, sources that adversely impact water quality. More information about these criteria and the reasons why they are suggested by EPA is included in the January 9, 1998, proposal (63 FR 1561) for today's final rule.

The suggested criteria are meant to be taken in the aggregate, with a great deal of flexibility as to how each should be weighed in order to best account for watershed and other local conditions and to allow for a more tailored case-by-case analysis. The application of criteria is meant to be geographically specific. Furthermore, each criterion does not have to be met in order for a small MS4

to qualify for designation, nor should an MS4 necessarily be designated on the basis of one or two criteria alone.

EPA believes that the application of the recommended designation criteria provides an objective indicator of real and potential water quality impacts from urban runoff on both the local and watershed levels. EPA encourages the application of the recommended criteria in a watershed context, thereby allowing for the evaluation of the water quality impacts of the portions of a watershed outside of an urbanized area. For example, situations exist where the urbanized area represents a small portion of a degraded watershed, and the adjacent nonurbanized areas of the watershed have significant cumulative effects on the quality of the receiving waters.

EPA received numerous suggestions of additional criteria that should be added and reasons why some of the criteria in the proposal to today's final rule were not appropriate. EPA developed its suggested designation criteria based on findings of the NURP study and other studies that indicate pollutants of concern, including total suspended solids, chemical oxygen demand, and temperature. These criteria were the subject of considerable discussion by the Storm Water Phase II FACA Subcommittee. EPA developed them in response to recommendations from the subcommittee during development of the proposed rule. The listed criteria are only suggestions. Permitting authorities are required to develop their own criteria. EPA has not found any reason to change its suggested list of criteria and the suggestions remain as proposed.

b. Apply Designation Criteria

After customizing the designation criteria for local conditions, the permitting authority must apply such criteria, at a minimum, to any MS4 located outside of an urbanized area serving a jurisdiction with a population of at least 10,000 and a population density of 1,000 people per square mile or greater (see § 123.35(b)(2)). If the NPDES permitting authority determines that an MS4 meets the criteria, the permitting authority must designate it as a regulated small MS4. This designation must occur within 3 years of publication of today's final rule. Alternatively, the NPDES authority can designate within 5 years from the date of final regulation if the designation criteria are applied on a watershed basis where a comprehensive watershed plan exists (a comprehensive watershed plan is one that includes the equivalents of TMDLs) (see § 123.35(b)(3)). The extended 5 year

deadline is intended to provide incentives for watershed-based designations. If an NPDES-authorized State or Tribe does not develop and apply designation criteria within this timeframe, then EPA has the opportunity to do so in lieu of the authorized State or Tribe.

NPDES permitting authorities can designate any small MS4, including one below 10,000 in population and 1,000 in density. EPA established the 10,000/1,000 threshold based on the likelihood of adverse water quality impacts at these population and density levels. In addition, the 1,000 persons per square mile threshold is consistent with both the Bureau of the Census definition of an "urbanized area" (see Section II.H.2. below) and stakeholder discussions concerning the definition of a regulated small MS4.

One commenter requested that EPA develop interim deadlines for development of designation criteria. EPA believes that the designation deadline identified in today's final rule at § 123.35(b)(3) provides States and Tribes with a flexibility that allows them to develop and apply the criteria locally in a timely fashion, while at the same time establishing an expeditious deadline.

c. Designate Physically Interconnected Small MS4s

In addition to applying criteria on a local basis for potential designation, the NPDES permitting authority must designate any MS4 that contributes substantially to the pollutant loadings of a physically interconnected municipal separate storm sewer that is regulated by the NPDES program for storm water discharges (see § 123.35(b)(4)). To be "physically interconnected," the MS4 of one entity, including roads with drainage systems and municipal streets, is physically connected directly to the municipal separate storm sewer of another entity. This provision applies to all MS4s located outside of an urbanized area. EPA added this section in recognition of the concerns of local government stakeholders that a local government should not have to shoulder total responsibility for a storm water program when storm water discharges from another MS4 are also contributing pollutants or adversely affecting water quality. This provision also helps to provide some consistency among MS4 programs and to facilitate watershed planning in the implementation of the NPDES storm water program. EPA recommended physical interconnectedness in the existing NPDES storm water regulations as a

factor for consideration in the designation of additional sources.

Today's final rule does not include interim deadlines for identifying physically interconnected MS4s. However, consistent with the deadlines identified in § 123.35(b)(3) of today's final rule, EPA encourages the permitting authority to make these determinations within 3 years from the date of publication of the final rule or within 5 years if the permitting authority is implementing a comprehensive watershed plan. Alternatively, the affected jurisdiction could use the petition process under 40 CFR 122.26(f) in seeking to have the permitting authority designate the contributing jurisdiction.

Several commenters expressed concerns about who could be designated under this provision (§ 123.35(b)(4)). One commenter requested that the word "substantially" be deleted from the rule because they believe any MS4 that contributes at all to a physically interconnected municipal separate storm sewer should be regulated. EPA believes that the word "substantially" provides necessary flexibility to the permitting authorities. The permitting authority can decide if an MS4 is contributing discharges to another municipal separate storm sewer in a manner that requires regulation. If the operator of a regulated municipal separate storm sewer believes that some of its pollutant loadings are coming from an unregulated MS4, it can petition the permitting authority to designate the unregulated MS4 for regulation.

d. Respond to Public Petitions for Designation

Today's final rule reiterates the existing opportunity for the public to petition the permitting authority for designation of a point source to be regulated to protect water quality. The petition opportunity also appears in existing NPDES regulations at 40 CFR 122.26(f). Any person may petition the permitting authority to require an NPDES permit for a discharge composed entirely of storm water that contributes to a violation of a water quality standard or is a significant contributor of pollutants to the waters of the United States (see § 123.32(b)). The NPDES permitting authority must make a final determination on any petition within 180 days after receiving the petition (see § 123.35(c)). EPA believes that a 180 day limit balances the public's need for a timely final determination with the NPDES permitting authority's need to prioritize its workload. If an NPDES-approved State or Tribe fails to act

within the 180-day timeframe, EPA may make a determination on the petition. EPA believes that public involvement is an important component of the NPDES program for storm water and feels that this provision encourages public participation. Section II.K, Public Involvement/Public Role, further discusses this topic.

3. Provide Waivers

Today's rule provides two opportunities for the NPDES permitting authority to exempt certain small MS4s from the need for a permit based on water quality considerations. See §§ 122.32(d) and (e). The two waiver opportunities have different size thresholds and take different approaches to considering the water quality impacts of discharges from the MS4.

In the proposal, EPA requested comment on the option of waiving coverage for all MS4s with less than 1,000 people unless the permitting authority determined that the small MS4 should be regulated based on significant adverse water quality impacts. A number of commenters supported this option. They expressed concern that compliance with the rule requirements and certification of one of the waiver provisions were both costly for very small communities. They stated that the permitting authority should identify a water quality problem before requiring compliance. Today's rule essentially adopts this alternative approach for MS4s serving a population under 1,000.

The final rule has expanded the waiver provision that EPA proposed for small MS4s with a population less than 1,000. The proposed rule would have required a small MS4 operator to certify that storm water controls are not needed based on either wasteload allocations that are part of TMDLs that address the pollutants of concern, or a comprehensive watershed plan implemented for the waterbody that includes the equivalents of TMDLs and addresses the pollutant(s) of concern. Commenters noted that the proposed waivers would be unattainable if a TMDL or equivalent analysis was required for every pollutant that could possibly be present in any amount in discharges from an MS4 regardless of whether the pollutant is causing water quality impairment. Commenters asked that EPA identify what constitutes the "pollutant(s) of concern" for which a TMDL or its equivalent must be developed. For example, § 122.30(c) indicates that the MS4 program is intended to control "sediment, suspended solids, nutrients, heavy

metals, pathogens, toxins, oxygen-demanding substances, and floatables." Commenters asked whether TMDLs or equivalent analyses have to address all of these.

EPA has revised the proposed waiver in response to these concerns. Under today's rule, NPDES permitting authorities may waive the requirements of today's rule for any small MS4 with a population less than 1,000 that does not contribute substantially to the pollutant loadings of a physically interconnected MS4, unless the small MS4 discharges pollutants that have been identified as a cause of impairment of the waters to which the small MS4 discharges. If the small MS4 does discharge pollutants that have been identified as impairing the water body into which the small MS4 discharges, the NPDES permitting authority may grant a waiver only if it determines that storm water controls are not needed based on an EPA approved or established TMDL that addresses the pollutant(s) of concern.

Unlike the proposed rule, § 122.32(d) does not allow the waiver for MS4s serving a population under 1,000 to be based on "the equivalent of a TMDL." Because § 122.32(d) requires a pollutant specific analysis only for a pollutant that has been identified as a cause of impairment, a TMDL is required for such pollutant before the waiver may be granted. Once a pollutant has been identified as the cause of impairment of a water body, the State should develop a TMDL for that pollutant for that water body. Thus, § 122.32(d) takes a different approach than that taken for the waiver in § 122.32(e) for MS4s serving a population under 10,000, which can be based upon an analysis that is "the equivalent of a TMDL." This is because § 122.32(d) requires an analysis to support the waiver for MS4s under 1,000 only if a waterbody to which the MS4 discharges has been identified as impaired. The § 122.32(e) waiver, on the other hand, would be available for larger MS4s but only after the State affirmatively establishes lack of impairment based upon a comprehensive analysis of smaller urban waters that might not otherwise be evaluated for the purposes of CWA section 303. Since § 122.32(e) requires the analysis of waters that have not been identified as impaired, an actual TMDL is not required and an analysis that is the equivalent of a TMDL can suffice to support the waiver.

Where a State is the NPDES permitting authority, the permitting authority is responsible for the development of the TMDLs as well as the assessment of the extent to which a

small MS4's discharge contributes pollutants to a neighboring regulated system. In States where EPA is the permitting authority, EPA will use a State's TMDLs to determine whether storm water controls are required for the small MS4s.

The proposed rule would have required the operator of the small MS4 serving a population under 1,000 to certify that its discharge was covered under a TMDL that indicated that discharges from its particular system were not having an adverse impact on water quality (*i.e.*, it was either not assigned wasteload allocations under TMDLs or its discharge is within an assigned allocation). Many commenters expressed concerns that MS4 operators serving less than 1,000 persons may lack the technical capacity to certify that their discharges are not contributing to adverse water quality impacts. These commenters thought that the permitting authority should make such a certification. Today's rule provides flexibility as to how the waiver is administered. Permitting authorities are ultimately responsible for granting the waiver, but are free to determine whether or not to require small MS4 operators that are seeking waivers to submit information or a written certification.

Under § 122.32(e) a State may grant a waiver to an MS4 serving a population between 1,000 and 10,000 only if the State has made a comprehensive effort to ensure that the MS4 will not cause or contribute to water quality impairment. To grant a § 122.32(e) waiver, the NPDES permitting authority must evaluate all waters of the U.S. that receive a discharge from the MS4 and determine that storm water controls are not needed. The permitting authority's evaluation must be based on wasteload allocations that are part of an EPA approved or established TMDL or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern. The pollutants of concern that the permitting authority must evaluate include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the MS4. Finally, the permitting authority must have determined that future discharges from the MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant

water quality impacts, including habitat and biological impacts.

Although EPA did not propose this specific approach, the Agency did request comment on whether to increase the proposed 1,000 population threshold for a waiver. The § 122.32(e) waiver was developed in response to comments, including States' concerns that they needed greater flexibility to focus their efforts on MS4s that were causing water quality impairment. Several commenters thought that the threshold should be increased from 1,000 to 5,000 or 10,000. Others suggested additional ways of qualifying for a waiver for MS4s that discharge to waters that are not covered by a TMDL or watershed plan. EPA carefully considered all the options for expanding the waiver provisions and has decided to expand the waiver only in the very narrow circumstances described above where a comprehensive analysis has been undertaken to demonstrate that the MS4 is not causing water quality impairment.

The NPDES permitting authority can, at any time, mandate compliance with program requirements from a previously waived small MS4 if circumstances change. For example, a waiver can be withdrawn in circumstances where the permitting authority later determines that a waived small MS4's storm water discharge to a small stream will cause adverse impacts to water quality or significantly interfere with attainment of water quality standards. A "change in circumstances" could involve receipt of new information. Changed circumstances can also allow a regulated small MS4 operator to request a waiver at any time.

Some commenters expressed concerns about allowing any small MS4 waivers. One commenter stated that storm water pollution prevention plans are necessary to control storm water pollution and should be required from all regulated small MS4s. For the reasons stated in the Background section above, EPA agrees that the discharges from most MS4s in urbanized areas should be addressed by a storm water management program outlined in today's rule. For MS4s serving very small areas, however, the TMDL development process provides an opportunity to determine whether an MS4 serving a population less than 1,000 is having a negative impact on any receiving water that is impaired by a pollutant that the MS4 discharges. MS4s serving populations up to 10,000 may receive a waiver only if a comprehensive analysis of its impact on receiving water has been performed.

Other commenters said that waivers should not be allowed for small MS4s that discharge into another regulated MS4. These commenters stated that the word "substantially" should be removed from § 122.32(d)(i) so that a waiver would not be allowed for any system "contributing to the storm water pollutant loadings of a physically interconnected regulated MS4." As previously mentioned under the designation discussion of section II.G.2.c, EPA believes that the word "substantially" provides needed flexibility to the permitting authorities. It is important to note that this is only one aspect that the permitting authority must consider when deciding on the appropriateness of a waiver.

4. Issue Permits

NPDES permitting authorities have a number of responsibilities regarding the permit process. Sections 123.35(d) through (g) ensure a certain level of consistency for permits, yet provide numerous opportunities for flexibility. NPDES permitting authorities must issue NPDES permits to cover municipal sources to be regulated under § 122.32, unless waived under § 122.32(c). EPA encourages permitting authorities to use general permits as the vehicle for permitting and regulating small MS4s. The Agency notes, however, that some operators may wish to take advantage of the option to join as a co-permittee with an MS4 regulated under the existing NPDES storm water program.

Today's final rule includes a provision, § 123.35(f), that requires NPDES permitting authorities to either include the requirements in § 122.34 for NPDES permits issued for regulated small MS4s or to develop permit limits based on a permit application submitted by a small MS4. See Section II.H.3.a, Minimum Control Measures, for more details on the actual § 122.34 requirements. See Section II.H.3.c for alternative and joint permitting options.

In an attempt to avoid duplication of effort, § 122.34(c) allows NPDES permitting authorities to include permit conditions that direct an MS4 to meet the requirements of a qualifying local, Tribal, or State municipal storm water management program. For a local, Tribal, or State program to "qualify," it must impose, at a minimum, the relevant requirements of § 122.34(b). A regulated small MS4 must still follow the procedural requirements for an NPDES permit (*i.e.*, submit an application, either an individual application or an NOI under a general permit) but will instead follow the substantive pollutant control

requirements of the qualifying local, Tribal, or State program.

Under § 122.35(b), NPDES permitting authorities may also recognize existing responsibilities among governmental entities for the minimum control measures in an NPDES small MS4 storm water permit. For example, the permit might acknowledge the existence of a State administered program that addresses construction site runoff and require that the municipalities only develop substantive controls for the remaining minimum control measures. By acknowledging existing programs, this provision is meant to reduce the duplication of efforts and to increase the flexibility of the NPDES storm water program.

Section 123.35(e) of today's final rule requires permitting authorities to specify a time period of up to 5 years from the issuance date of an NPDES permit for regulated small MS4 operators to fully develop and implement their storm water programs. As discussed more fully below, permitting authorities should be providing extensive support to the local governments to assist them in developing and implementing their programs.

In the proposed rule, EPA stated that the permitting authority would develop the menu of BMPs and if they failed to do so, EPA would develop the menu. Commenters felt that EPA should develop a menu of BMPs, rather than just providing guidance. In the settlement agreement for seeking an extension to the deadline for issuing today's rule, EPA committed to developing a menu of BMPs by October 27, 2000. Permitting authorities can adopt EPA's menu or develop their own. The menu itself is not intended to replace more comprehensive BMP guidance materials. As part of the tool box efforts, EPA will provide separate guidance documents that discuss the results from EPA-sponsored nationwide studies on the design, operation and maintenance of BMPs. Additionally, EPA expects that the new rulemaking on construction BMPs may provide more specific design, operation and maintenance criteria.

5. Support and Oversee the Local Programs

NPDES permitting authorities are responsible for supporting and overseeing the local municipal programs. Section 123.35(h) of today's final rule highlights issues associated with these responsibilities.

To the extent possible, NPDES permitting authorities should provide financial assistance to MS4s, which

often have limited resources, for the development and implementation of local programs. EPA recognizes that funding for programs at the State and Tribal levels may also be limited, but strongly encourages States and Tribes to provide whatever assistance is possible. In lieu of actual dollars, NPDES permitting authorities can provide cost-cutting assistance in a number of ways. For example, NPDES permitting authorities can develop outreach materials for MS4s to distribute or the NPDES permitting authority can actually distribute the materials. Another option is to implement an erosion and sediment control program across an entire State (or Tribal land), thus alleviating the need for the MS4 to implement its own program. The NPDES permitting authority must balance the need for site-specific controls, which are best handled by a local MS4, with its ability to offer financial assistance. EPA, States, Tribes, and MS4s should work as a team in making these kinds of decisions.

NPDES permitting authorities are responsible for overseeing the local programs. Permitting authorities should work with the regulated community and other stakeholders to assist in local program development and implementation. This might include sharing information, analyzing reports, and taking enforcement actions, as necessary. NPDES permitting authorities play a vital role in supporting local programs by providing technical and programmatic assistance, conducting research projects, and monitoring watersheds. The NPDES permitting authority can also assist the MS4 permittee in obtaining adequate legal authority at the local level in order to implement the local component of the CWA section 402(p)(6) program.

NPDES permitting authorities are encouraged to coordinate and utilize the data collected under several programs. States and Tribes address point and nonpoint source storm water discharges through a variety of programs. In developing programs to carry out CWA section 402(p)(6), EPA recommends that States and Tribes coordinate all of their water pollution evaluation and control programs, including the continuing planning process under CWA section 303(e), the existing NPDES program, the CZARA program, and nonpoint source pollution control programs.

In addition, NPDES permitting authorities are encouraged to provide a brief (e.g., two-page) reporting format to facilitate compilation and analysis of data from reports submitted under § 122.34(g)(3). EPA intends to develop a model form for this purpose.

H. Municipal Role

1. Scope of Today's Rule

Today's final rule attempts to establish an equitable and comprehensive four-pronged approach for the designation of municipal sources. First, the approach defines for automatic coverage the municipal systems believed to be of highest threat to water quality. Second, the approach designates municipal systems that meet a set of objective criteria used to measure the potential for water quality impacts. Third, the approach designates on a case-by-case basis municipal systems that "contribute substantially to the pollutant loadings of a physically-interconnected [regulated] MS4." Finally, the approach designates on a case-by-case basis, upon petition, municipal systems that "contribute to a violation of a water quality standard or are a significant contributor of pollutants."

Today's final rule automatically designates for regulation small MS4s located in urbanized areas, and requires that NPDES permitting authorities examine for potential designation, at a minimum, a particular subset of small MS4s located outside of urbanized areas. Today's rule also includes provisions that allow for waivers from the otherwise applicable requirements for the smallest MS4s that are not causing impairment of a receiving water body. Qualifications for the waivers vary depending on whether the MS4 serves a population under 1,000 or a population under 10,000. See §§ 122.32(d) and (e). These waivers are discussed further in section II.G.3. Any small MS4 automatically designated by the final rule or designated by the permitting authority under today's final rule is defined as a "regulated" small MS4 unless it receives a waiver.

In today's final rule, all regulated small MS4s must establish a storm water discharge control program that meets the requirements of six minimum control measures. These minimum control measures are public education and outreach on storm water impacts, public involvement participation, illicit discharge detection and elimination, construction site storm water runoff control, post-construction storm water management in new development and redevelopment, and pollution prevention/good housekeeping for municipal operations.

Today's rule allows for a great deal of flexibility in how an operator of a regulated small MS4 is authorized to discharge under an NPDES permit, by providing various options for obtaining permit coverage and satisfying the

required minimum control measures. For example, the NPDES permitting authority can incorporate by reference qualifying State, Tribal, or local programs in an NPDES general permit and can recognize existing responsibilities among different governmental entities for the implementation of minimum control measures. In addition, a regulated small MS4 can participate in the storm water management program of an adjoining regulated MS4 and can arrange to have another governmental entity implement a minimum control measure on their behalf.

2. Municipal Definitions

a. Municipal Separate Storm Sewer Systems (MS4s)

The CWA does not define the term "municipal separate storm sewer." EPA defined municipal separate storm sewer in the existing storm water permit application regulations to mean, in part, a conveyance or system of conveyances (including roads with drainage systems and municipal streets) that is "owned or operated by a State, city, town borough, county, parish, district, association, or other public body * * * designed or used for collecting or conveying storm water which is not a combined sewer and which is not part of a Publicly Owned Treatment Works as defined at 40 CFR 122.2" (see § 122.26(b)(8)(i)). Section 122.26 contains definitions of medium and large municipal separate storm sewer systems but no definition of a municipal separate storm sewer system, even though the term MS4 is commonly used. In today's rule, EPA is adding a definition of municipal separate storm sewer system and small municipal separate storm sewer system along with the abbreviations MS4 and small MS4.

The existing municipal permit application regulations define "medium" and "large" MS4s as those located in an incorporated place or county with a population of at least 100,000 (medium) or 250,000 (large) as determined by the latest Decennial Census (see §§ 122.26(b)(4) and 122.26(b)(7)). In today's final rule, these regulations have been revised to define all medium and large MS4s as those meeting the above population thresholds according to the 1990 Decennial Census.

Today's rule also corrects the titles and contents of Appendices F, G, H, & I to Part 122. EPA is adding those incorporated places and counties whose 1990 population caused them to be defined as a "medium" or "large" MS4. All of these MS4s have applied for

permit coverage so the effect of this change to the appendices is simply to make them more accurate. They will not need to be revised again because today's rule "freezes" the definition of "medium" and "large" MS4s at those that qualify based on the 1990 census.

EPA received several comments supporting and opposing the proposal to "freeze" the definitions based on the 1990 census. Commenters who disagreed with EPA's position cited the unfairness of municipalities that reach the medium or large threshold at a later date having fewer permitting requirements compared to those that were already at the population thresholds when the existing storm water regulations took effect. EPA recognizes this disparity but does not believe it is unfair, as explained in the proposed rule. The decision was based on the fact that the deadlines from the existing regulations have lapsed, and because the permitting authority can always require more from operators of MS4s serving "newly over 100,000" populations.

b. Small Municipal Separate Storm Sewer Systems

The proposal to today's final rule added "the United States" as a potential owner or operator of a municipal separate storm sewer. This addition was intended to address an omission from existing regulations and to clarify that federal facilities are, in fact, covered by the NPDES program for municipal storm water discharges when the federal facility is like other regulated MS4s. EPA received a comment that this change would cause federal facilities located in Phase 1 areas to be considered Phase 1 dischargers due to the definition of medium and large MS4s. All MS4s located in Phase 1 cities or counties are defined as Phase 1 medium or large MS4s. EPA believes that all federal facilities serve a population of under 100,000 and should be regulated as small MS4s. Therefore, in § 122.26(a)(16) of today's final rule, EPA is adding federal facilities to the NPDES storm water discharge control program by changing the proposed definition of small municipal separate storm sewer system. Paragraph (i) of this section restates the definition of municipal separate storm sewer with the addition of "the United States" as a owner or operator of a small municipal separate storm sewer. Paragraph (ii) repeats the proposed language that states that a small MS4 is a municipal separate storm sewer that is not medium or large.

Most commenters agreed that federal facilities should be covered in the same

way as other similar MS4s. However, EPA received several comments asking whether individual federal buildings such as post offices or urban offices of the U.S. Park Service must apply for coverage as regulated small MS4s. Most of these buildings have, at most, a parking lot with runoff or a storm sewer that connects with a municipality's MS4. In § 122.26(a)(16)(iii), EPA clarifies that the definition of small MS4 does not include individual buildings. These buildings may have a municipal separate storm sewer but they do not have a "system" of conveyances. The minimum measures for small MS4s were written to apply to storm sewer "systems" providing storm water drainage service to human populations and not to individual buildings. This is true of municipal separate storm sewers from State buildings as well as from federal buildings.

There will likely be situations where the permitting authority must decide if a federal or State complex should be regulated as a small MS4. A federal complex of two or three buildings could be treated as a single building and not be required to apply for coverage. In these situations, permitting authorities will have to use their best judgment as to the nature of the complex and its storm water conveyance system. Permitting authorities should also consider whether the federal or State complex cooperates with its municipality's efforts to implement their storm water management program.

Along with the questions about individual buildings, EPA received many questions about how various provisions of the rule should be interpreted for federal and State facilities. EPA acknowledges that federal and State facilities are different from municipalities. EPA believes, however, that the minimum measures are flexible enough that they can be implemented by these facilities. As an example, DOD commenters asked about how to interpret the term "public" for military installations when implementing the public education measure. EPA agrees with the suggested interpretation of "public" for DOD facilities as "the resident and employee population within the fence line of the facility."

EPA also received many comments from State departments of transportation (DOTs) that suggested the ways in which they are different from municipalities and should therefore be regulated differently. Storm water discharges from State DOTs in Phase 1 areas should already be regulated under Phase I. The preamble to Phase 1 clearly states that "all systems within a

geographical area including highways and flood control districts will be covered." Many permitting authorities regulated State DOTs as co-permittees with the Phase 1 municipality in which the highway is located. State DOTs that are already regulated under Phase I are not required to comply with Phase II. State DOTs that are not already regulated have various options for meeting the requirements of today's rule. These options are discussed in Section II.H.3.c.iv below. Several DOTs commented that some of the minimum measures are outside the scope of their mission or that they do not have the legal authority required for implementation. EPA believes that the flexibility of the minimum measures allows them to be implemented by most MS4s, including DOTs. When a DOT does not have the necessary legal authority, EPA encourages the DOT to coordinate their storm water management efforts with the surrounding municipalities and other State agencies. Under today's rule, DOTs can use any of the options of § 122.35 to share their storm water management responsibilities. DOTs may also want to work with their permitting authority to develop a State-wide DOT storm water permit.

There are many storm water discharges from State DOTs and other State MS4s located in Phase 1 areas that were not regulated under Phase 1. Today's rule adds many more State facilities as well as all federal facilities located in urbanized areas. All of these State and federal facilities that fit the definition of a small MS4 must be covered by a storm water management program. The individual permitting authorities must decide what type of permit is most applicable.

The existing NPDES storm water program already regulates storm water from federally or State-operated industrial sources. Federal or State facilities that are currently regulated due to their industrial discharges may already be implementing some of today's rule requirements.

EPA received comments that questioned the apparent inconsistency between regulating a federal facility such as a hospital and not regulating a similar private facility. Normally, this type of private facility is regulated by the MS4. EPA believes that federal facilities are subject to local water quality regulations, including storm water requirements, by virtue of the waiver of sovereign immunity in CWA section 313. However, there are special problems faced by MS4s in their efforts to regulate federal facilities that have not been encountered in regulating

similar private facilities. To ensure comprehensive coverage, today's rule merely clarifies the need for permit coverage for these federal facilities.

i. Combined Sewer Systems (CSS).

The definition of small MS4s does not include combined sewer systems. A combined sewer system is a wastewater collection system that conveys sanitary wastewater and storm water through a single set of pipes to a publicly-owned treatment works (POTW) for treatment before discharging to a receiving waterbody. During wet weather events when the capacity of the combined sewer system is exceeded, the system is designed to discharge prior to the POTW treatment plant directly into a receiving waterbody. Such an overflow is a combined sewer overflow or CSO. Combined sewer systems are not subject to existing regulations for municipal storm water discharges, nor will they be subject to today's regulations. EPA addresses combined sewer systems and CSOs in the National Combined Sewer Overflow (CSO) Control Policy issued on April 19, 1994 (59 FR 18688). The CSO Control Policy contains provisions for developing appropriate, site-specific NPDES permit requirements for combined sewer systems. CSO discharges are subject to limitations based on the best available technology economically achievable for toxic pollutants and based on the best conventional pollutant control technology for conventional pollutants. MS4s are subject to a different technology standard for all pollutants, specifically to reduce pollutants to the maximum extent practicable.

Some municipalities are served by both separate storm sewer systems and combined sewer systems. If such a municipality is located within an urbanized area, only the separate storm sewer systems within that municipality is included in the NPDES storm water program and subject to today's final rule. If the municipality is not located in an urbanized area, then the NPDES permitting authority has discretion as to whether the discharges from the separate storm sewer system is subject to today's final rule. The NPDES permitting authority will use the same process to designate discharges from portions of an MS4 for permit coverage where the municipality is also served by a combined sewer system.

EPA recognizes that municipalities that have both combined and separate storm sewer systems may wish to find ways to develop a unified program to meet all wet weather water pollution control requirements more efficiently. In the proposal to today's final rule, EPA sought comment on ways to achieve

such a unified program. Many municipalities that are served by CSSs and MS4s commented that it is inequitable to force them to comply with Phase II at this time because implementation of the CSO Control Policy through their NPDES permits already imposes a significant financial burden. They requested an extension of the implementation time frame. They did not provide ideas on how to unify the two programs. EPA encourages permitting authorities to work with these municipalities as they develop and begin implementation of their CSO and storm water management programs. If both sets of requirements are carefully coordinated early, a cost-effective wet weather program can be developed that will address both CSO and storm water requirements.

ii. Owners/Operators. Several commenters mentioned the difference between the existing storm water application requirement for municipal operators and the proposed municipal requirement for owners or operators to apply. They felt that this inconsistency is confusing. The preamble to the existing regulations makes numerous references to owner/operator so there was no intent to make a clear distinction between Phase I and Phase II. Section 122.21(b) states that when the owner and operator are different, the operator must obtain the permit. MS4s often have several operators. The owner may be responsible for one part of the system and a regional authority may be responsible for other aspects. EPA proposed the "owner or operator" language to convey this dual responsibility. However, when the owner is responsible for some part of a storm water management plan, it is also an operator.

EPA has revised the regulation language to clarify that "an operator" must apply for a permit. When responsibilities for the MS4 are shared, all operators must apply.

c. Regulated Small MS4s

In today's final rule, all small MS4s located in an urbanized area are automatically designated as "regulated" small MS4s provided that they were not previously designated into the existing storm water program. Unlike medium and large MS4s under the existing storm water regulations, not all small MS4s are designated under today's final rule. Therefore, today's rule distinguishes between "small" MS4s and "regulated small" MS4s.

EPA's definition of "regulated small MS4s" in the proposal to today's rule included mention of incorporated places and counties. Along with the

definition, EPA included Appendices 6 and 7 to assist in the identification of areas that would probably require coverage as "automatically designated" (Appendix 6) or "potentially designated" (Appendix 7). The definition and the appendices raised many questions about exactly who was required to comply with the proposed requirements. Commenters raised issues about the definition of "incorporated place" and the status of towns, townships, and other places that are not considered incorporated by the Special Bureau. They also asked about special districts, regional authorities, MS4s already regulated, and other questions in order to clarify the rule's coverage.

EPA has revised § 122.32(a) to clarify that discharges are regulated under today's rule if they are from a small MS4 that is in an urbanized area and has not received a waiver or they are designated by the permitting authority. Today's rule does not regulate the county, city, or town. Today's rule regulates the MS4. Therefore, even though a county may be listed in Appendix 6, if that county does not own or operate the municipal storm sewer systems, the county does not have to submit an application or develop a storm water management program. If another entity does own or operate an MS4 within the county, for example, a regional utility district, that other entity needs to submit the application and develop the program.

Some commenters suggested that EPA should change the rule language to specifically allow regional authorities to be the permitted entity and to allow small MS4s to apply as co-permittees. EPA believes that the best way to clarify that regional authorities can be the primary permitted entity is the change to § 122.32(a) and the explanation above. Because EPA assumes that today's regulation will be implemented through general permits, MS4s will not be co-permittees under a general permit in the same manner as under individual permits. EPA has added § 122.33(a)(4) and made a minor change to § 122.35(a) to clarify that small MS4s can work together to share the responsibilities of a storm water management program. This is discussed further in Section II.H.3.c.iv below.

The proposed rule stated that when a county or Federal Indian reservation is only partially included in an urbanized area, only MS4s in the urbanized portion of the county or Federal Indian reservation would be regulated. In the rare cases when an incorporated place is only partially included in the urbanized area, the entire incorporated place would be regulated. EPA received comments asking about towns and

townships, because they were not considered to be incorporated areas according to the Census Bureau's definition. Would the whole town/ township be covered or only the part of the town/township in the urbanized area? States use many different types of systems in their geographical divisions. Some towns are similar to incorporated cities and others are large areas that are more similar to counties. Some commenters thought that the urbanized area boundary was arbitrary, and if part of a town or county was covered, it all should be covered. Other commenters noted that some townships and counties encompass very large areas of which only a small portion is urbanized. Due to the great variety of situations, EPA has decided that for all geographical entities, only MS4s in the urbanized area are automatically designated. The population densities associated with the Census Bureau's designation of urbanized areas provide the basis for designation of these areas to protect water quality. This focused designation provides for consistency and allows for flexibility on the part of the MS4 and the permitting authority. In those situations where an incorporated place or a town is not all in an "urbanized area", there is a good possibility that it is served by more than one MS4. In those cases where the area is served by the same MS4, it makes sense to develop a storm water program for the whole area. Permitting authorities may also decide to designate all MS4s within a county or township, if they believe it is necessary to protect water quality.

Most operators of MS4s will not need to independently determine the status of coverage under today's rule. EPA has revised the proposed Appendices 6 and 7 to include towns and townships. Therefore, these appendices will alert most MS4s as to whether they are likely to be covered under today's rule. However, each permitting authority must make the decision as to who requires coverage. Most likely, an illustrative list of the regulated areas will be published with the general permit. If not, the operator can contact its permitting authority or the Bureau of the Census to find out if their separate storm sewer systems are within an urbanized area.

i. Urbanized Area Description. Under the Bureau of the Census definition of "urbanized area," adopted by EPA for the purposes of today's final rule, "an urbanized area (UA) comprises a place and the adjacent densely settled surrounding territory that together have a minimum population of 50,000 people." The proposal to today's rule provided the full definition and case

studies to help explain the census category of "urbanized area." Appendix 2 is a simplified urbanized area illustration to help demonstrate the concept of urbanized areas in relation to today's final rule. The "urbanized area" is the shaded area that includes within its boundaries incorporated places, a portion of a Federal Indian reservation, portions of two counties, an entire town, and portions of another town. All small MS4s located in the shaded area are covered by the rule, unless and until waived by the permitting authority. Any small MS4s located outside of the shaded area are subject to potential designation by the permitting authority.

There are 405 urbanized areas in the United States that cover 2 percent of total U.S. land area and contain approximately 63 percent of the nation's population (see Appendix 3 for a listing of urbanized areas of the United States and Puerto Rico). These numbers include U.S. Territories, although Puerto Rico is the only territory to have Census-designated urbanized areas. Urbanized areas constitute the largest and most dense areas of settlement. The purpose of determining an "urbanized area" is to delineate the boundaries of development and map the actual built-up urban area. The Bureau of the Census geographers liken it to flying over an urban area and drawing a line around the boundary of the built-up area as seen from the air.

Using data from the latest decennial census, the Census Bureau applies the urbanized area definition nationwide (including U.S. Tribes and Territories) and determines which places and counties are included within each urbanized area. For each urbanized area, the Bureau provides full listings of who is included, as well as detailed maps and special CD-ROM files for use with computerized mapping systems (such as GIS). Each State's data center receives a copy of the list, and some maps, automatically. The States also have the CD-ROM files and a variety of publications available to them for reference from the Bureau of the Census. In addition, local or regional planning agencies may have urbanized area files already. New listings for urbanized areas based on the 2000 Census will be available by July/August 2001, but the more comprehensive computer files will not be available until late 2001/early 2002.

Additional designations based on subsequent census years will be governed by the Bureau of the Census' definition of an urbanized area in effect for that year. Based on historical trends, EPA expects that any area determined by the Bureau of the Census to be

included within an urbanized area as of the 1990 Census will not later be excluded from the urbanized area as of the 2000 Census. However, it is important to note that even if this situation were to occur, for example, due to a possible change in the Bureau of the Census' urbanized area definition, a small MS4 that is automatically designated into the NPDES program for storm water under an urbanized area calculation for any given Census year will remain regulated regardless of the results of subsequent urbanized area calculations.

ii. Rationale for Using Urbanized Areas. EPA is using urbanized areas to automatically designate regulated small MS4s on a nationwide basis for several reasons: (1) studies and data show a high correlation between degree of development/ urbanization and adverse impacts on receiving waters due to storm water (U.S. EPA, 1983; Driver et al., 1985; Pitt, R.E. 1991. "Biological Effects of Urban Runoff Discharges." Presented at the Engineering Foundation Conference: *Urban Runoff and Receiving Systems; An Interdisciplinary Analysis of Impact, Monitoring and Management*, August 1991. Mt. Crested Butte, CO. American Society of Civil Engineers, New York. 1992.; Pitt, R.E. 1995. "Biological Effects of Urban Runoff Discharges," in *Storm water Runoff and Receiving Systems: Impact, Monitoring, and Assessment*. Lewis Publishers, New York.; Galli, J. 1990. *Thermal Impacts Associated with Urbanization and Storm water Management Best Management Practices*. Prepared for the Sediment and Storm water Administration of the Maryland Department of the Environment.; Klein, 1979), (2) the blanket coverage within the urbanized area encourages the watershed approach and addresses the problem of "donut-holes," where unregulated areas are surrounded by areas currently regulated (storm water discharges from donut hole areas present a problem due to their contributing uncontrolled adverse impacts on local waters, as well as by frustrating the attainment of water quality goals of neighboring regulated communities), (3) this approach targets present and future growth areas as a preventative measure to help ensure water quality protection, and (4) the determination of urbanized areas by the Bureau of the Census allows operators of small MS4s to quickly determine whether they are included in the NPDES storm water program as a regulated small MS4.

Urbanized areas have experienced significant growth over the past 50 years. According to EPA calculations

based on Census data from 1980 to 1990, the national average rate of growth in the United States during that 10-year period was more than 4 percent. For the same period, the average growth within urbanized areas was 15.7 percent and the average for outside of urbanized areas was just more than 1 percent. The new development occurring in these growing areas can provide some of the best opportunities for implementing cost-effective storm water management controls.

EPA received many comments on the proposal to designate discharges based on location within urbanized areas. EPA considered numerous other approaches, several of which are discussed in the proposal to today's final rule. Several commenters wanted designation to be based on proven water quality problems rather than inclusion in an urbanized area. One commenter proposed an approach based on the CWA 303(d) listing of impaired waters and the wasteload allocation conducted under the TMDL process. (See section II.L. on the section 303(d) and TMDL process). The commenter's proposal would designate small MS4s on a case-by-case basis, covering only those discharges where receiving streams are shown to have water quality problems, particularly a failure to meet water quality standards, including designated uses. The commenter further described a non-NPDES approach where a State would require cost-effective measures based on a proportionate share under a waste load allocation, equitably allocated among all pollutant contributors. These waste load allocations would be developed with input from all stakeholders, and remedial measures would be implemented in a phased manner based on the probability of results and/or economic feasibility. The States would then periodically reassess the receiving streams to determine whether the remedial measures are working, and if not, require additional control measures using the same procedure used to establish the initial measures. What the commenter describes is almost a TMDL.

EPA considered a remedial approach based on water quality impairment and rejected it for failure to prevent almost certain degradation caused by urban storm water. EPA's main concern in opting not to take a case-by-case approach to designation was that this approach would not provide controls for storm water discharges in receiving streams until after a site-specific demonstration of adverse water quality impact. The commenter's suggestion would do nothing to prevent pollution in waters that may be meeting water

quality standards, including supporting designated uses. The approach would also rely on identifying storm water management programs following comprehensive watershed plans and TMDL development. In most States, water quality assessments have traditionally been conducted for principal mainstream rivers and their major tributaries, not all surface waters. The establishment of TMDLs nationwide will take many years, and many States will conduct additional monitoring to determine water quality conditions prior to establishing TMDLs. In addition, a case-by-case approach would not address the problem of "donut holes" within urbanized areas and a lack of consistency among similarly situated municipal systems would remain commonplace. After careful consideration of all comments, EPA still believes that the approach in today's rule is the most appropriate to protect water quality. Protection includes prevention as well as remediation.

d. Municipal Designation by the Permitting Authority

Today's final rule also allows NPDES permitting authorities to designate MS4s that should be included in the storm water program as regulated small MS4s but are not located within urbanized areas. The final rule requires, at a minimum, that a set of designation criteria be applied to all small MS4s within a jurisdiction that serves a population of at least 10,000 and has a population density of at least 1,000. Appendix 7 to this preamble provides an illustrative list of places that the Agency anticipates meet this criteria. In addition, any small MS4 may be the subject of a petition to the NPDES permitting authority for designation. See Section II.G, NPDES Permitting Authority's Role for more details on the designation and petition processes. EPA believes that the approach of combining nationwide and local designation to determine municipal coverage balances the potential for significant adverse impacts on water quality with local watershed protection and planning efforts.

e. Waiving the Requirements for Small MS4s

Today's final rule includes some flexibility in the nationwide coverage of all small MS4s located in urbanized areas by providing the NPDES permitting authority with the discretion to waive the otherwise applicable requirements of the smallest MS4s that are not causing the impairment of a receiving water body. Qualifications for

the waiver vary depending on whether the MS4 serves a population under 1,000 or a population between 1,000 and 10,000. Note that even if a small MS4 has requirements waived, it can subsequently be brought back into the program if circumstances change. See Section II.G, NPDES Permitting Authority's Role, for more details on this process.

3. Municipal Permit Requirements

a. Overview

i. Summary of Permitting Options. Today's rule outlines six minimum control measures that constitute the framework for a storm water discharge control program for regulated small MS4s that, when properly implemented, will reduce pollutants to the maximum extent practicable (MEP). These six minimum control measures are specified in § 122.34(b) and are discussed below in section "II.H.3.b, Program Requirements-Minimum Control Measures." All operators of regulated small MS4s are required to obtain coverage under an NPDES permit, unless the requirement is waived by the permitting authority in accordance with today's rule. Implementation of § 122.34(b) may be required either through an individual permit or, if the State or EPA makes one available to the facility, through a general permit. The process for issuing and obtaining these permits is discussed below in section "II.H.3.c, Application Requirements."

As an alternative to implementing a program that complies with the requirements of § 122.34, today's rule provides operators of regulated small MS4s with the option of applying for an individual permit under § 122.26(d). The permit application requirements in § 122.26 were originally drafted to apply to medium and large MS4s. Although EPA believes that the requirements of § 122.34 provide a regulatory option that is appropriate for most small MS4s, the operators of some small MS4s may prefer more individualized requirements. This alternative permitting option for regulated small MS4s that wish to develop their own program is discussed below in section "II.H.3.c.iii. Alternative Permit Option." The second alternative permitting option for regulated small MS4s is to become co-permittees with a medium or large MS4 regulated under § 122.26(d), as discussed below in section "II.H.3.c.v. Joint Permit Programs."

ii. Water Quality-Based Requirements. Any NPDES permit issued under today's rule must, at a minimum, require the operator to develop, implement, and

enforce a storm water management program designed to reduce the discharge of pollutants from a regulated system to the MEP, to protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act (see MEP discussion in the following section). Absent evidence to the contrary, EPA presumes that a small MS4 program that implements the six minimum measures in today's rule does not require more stringent limitations to meet water quality standards. Proper implementation of the measures will significantly improve water quality. As discussed further below, however, small MS4 permittees should modify their programs if and when available information indicates that water quality considerations warrant greater attention or prescriptiveness in specific components of the municipal program. If the program is inadequate to protect water quality, including water quality standards, then the permit will need to be modified to include any more stringent limitations necessary to protect water quality.

Regardless of the basis for the development of the effluent limitations (whether designed to implement the six minimum measures or more stringent or prescriptive limitations to protect water quality), EPA considers narrative effluent limitations requiring implementation of BMPs to be the most appropriate form of effluent limitations for MS4s. CWA section 402(p)(3)(b)(iii) expresses a preference for narrative rather than numeric effluent limits, for example, by reference to "management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." 33 U.S.C. 1342(p)(3)(B)(iii). EPA determines that pollutants from wet weather discharges are most appropriately controlled through management measures rather than end-of-pipe numeric effluent limitations. As explained in the Interim Permitting Policy for Water Quality-Based Effluent Limitations in Storm Water Permits, issued on August 1, 1996 [61 FR 43761 (November 26, 1996)], EPA believes that the currently available methodology for derivation of numeric water quality-based effluent limitations is significantly complicated when applied to wet weather discharges from MS4s (compared to continuous or periodic batch discharges from most other types of discharge). Wet weather discharges from MS4s introduce a high degree of variability in the inputs to the models currently available for

derivation of water quality based effluent limitations, including assumptions about instream and discharge flow rates, as well as effluent characterization. In addition, EPA anticipates that determining compliance with any such numeric limitations may be confounded by practical limitations in sample collection.

In the first two to three rounds of permit issuance, EPA envisions that a BMP-based storm water management program that implements the six minimum measures will be the extent of the NPDES permit requirements for the large majority of regulated small MS4s. Because the six measures represent a significant level of control if properly implemented, EPA anticipates that a permit for a regulated small MS4 operator implementing BMPs to satisfy the six minimum control measures will be sufficiently stringent to protect water quality, including water quality standards, so that additional, more stringent and/or more prescriptive water quality based effluent limitations will be unnecessary.

If a small MS4 operator implements the six minimum control measures in § 122.34(b) and the discharges are determined to cause or contribute to non-attainment of an applicable water quality standard, the operator needs to expand or better tailor its BMPs within the scope of the six minimum control measures. EPA envisions that this process will occur during the first two to three permit terms. After that period, EPA will revisit today's regulations for the municipal separate storm sewer program.

If the permitting authority (rather than the regulated small MS4 operator) needs to impose additional or more specific measures to protect water quality, then that action will most likely be the result of an assessment based on a TMDL or equivalent analysis that determines sources and allocations of pollutant(s) of concern. EPA believes that the small MS4's additional requirements, if any, should be guided by its equitable share based on a variety of considerations, such as cost effectiveness, proportionate contribution of pollutants, and ability to reasonably achieve wasteload reductions. Narrative effluent limitations in the form of BMPs may still be the best means of achieving those reductions.

See Section II.L, Water Quality Issues, for further discussion of this approach to permitting, consistent with EPA's interim permitting guidance. Pursuant to CWA section 510, States implementing their own NPDES programs may develop more stringent or

more prescriptive requirements than those in today's rule.

EPA's interpretation of CWA section 402(p)(3)(B)(iii) was recently reviewed by the Ninth Circuit in *Defenders of Wildlife, et al v. Browner*, No. 98-71080 (September 15, 1999). The Court upheld the Agency's action in issuing five MS4 permits that included water quality-based effluent limitations. The Court did, however, disagree with EPA's interpretation of the relationship between CWA sections 301 and 402(p). The Court reasoned that MS4s are not compelled by section 301(b)(1)(C) to meet all State water quality standards, but rather that the Administrator or the State may rely on section 402(p)(3)(B)(iii) to require such controls. Accordingly, the *Defenders of Wildlife* decision is consistent with the Agency's 1996 "Interim Permitting Policy for Water Quality-Based Effluent Limitations in Storm Water Permits."

As noted, the 1996 Policy describes how permits would implement an iterative process using BMPs, assessment, and refocused BMPs, leading toward attainment of water quality standards. The ultimate goal of the iteration would be for water bodies to support their designated uses. EPA believes this iterative approach is consistent with and implements section 301(b)(1)(C), notwithstanding the Ninth Circuit's interpretation. As an alternative to basing these water quality-based requirements on section 301(b)(1)(C), however, EPA also believes the iterative approach toward attainment of water quality standards represents a reasonable interpretation of CWA section 402(p)(3)(B)(iii). For this reason, today's rule specifies that the "compliance target" for the design and implementation of municipal storm water control programs is "to reduce pollutants to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the CWA." The first component, reductions to the MEP, would be realized through implementation of the six minimum measures. The second component, to protect water quality, reflects the overall design objective for municipal programs based on CWA section 402(p)(6). The third component, to implement other applicable water quality requirements of the CWA, recognizes the Agency's specific determination under CWA section 402(p)(3)(B)(iii) of the need to achieve reasonable further progress toward attainment of water quality standards according to the iterative BMP process, as well as the determination that State or EPA officials who establish TMDLs could allocate waste loads to

MS4s, as they would to other point sources.

EPA does not presume that water quality will be protected if a small MS4 elects not to implement all of the six minimum measures and instead applies for alternative permit limits under § 122.26(d). Operators of such small MS4s that apply for alternative permit limits under § 122.26(d) must supply additional information through individual permit applications so that the permit writer can determine whether the proposed program reduces pollutants to the MEP and whether any other provisions are appropriate to protect water quality and satisfy the appropriate water quality requirements of the Clean Water Act.

iii. *Maximum Extent Practicable.* Maximum extent practicable (MEP) is the statutory standard that establishes the level of pollutant reductions that operators of regulated MS4s must achieve. The CWA requires that NPDES permits for discharges from MS4s "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods." CWA Section 402(p)(3)(B)(iii). This section also calls for "such other provisions as the [EPA] Administrator or the State determines appropriate for the control of such pollutants." EPA interprets this standard to apply to all MS4s, including both existing regulated (large and medium) MS4s, as well as the small MS4s regulated under today's rule.

For regulated small MS4s under today's rule, authorization to discharge may be under either a general permit or individual permit, but EPA anticipates and expects that general permits will be the most common permit mechanism. The general permit will explain the steps necessary to obtain permit authorization. Compliance with the conditions of the general permit and the series of steps associated with identification and implementation of the minimum control measures will satisfy the MEP standard. Implementation of the MEP standard under today's rule will typically require the permittee to develop and implement appropriate BMPs to satisfy each of the required six minimum control measures.

In issuing the general permit, the NPDES permitting authority will establish requirements for each of the minimum control measures. Permits typically will require small MS4 permittees to identify in their NOI the BMPs to be performed and to develop the measurable goals by which

implementation of the BMPs can be assessed. Upon receipt of the NOI from a small MS4 operator, the NPDES permitting authority will have the opportunity to review the NOI to verify that the identified BMPs and measurable goals are consistent with the requirement to reduce pollutants under the MEP standard, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. If necessary, the NPDES permitting authority may ask the permittee to revise their mix of BMPs, for example, to better reflect the MEP pollution reduction requirement. Where the NPDES permit is not written to implement the minimum control measures specified under § 122.34(b), for example in the case of an individual permit under § 122.33(b)(2)(ii), the MEP standard will be applied based on the best professional judgment of the permit writer.

Commenters argued that MEP is, as yet, an undefined term and that EPA needs to further clarify the MEP standards by providing a regulatory definition that includes recognition of cost considerations and technical feasibility. Commenters argued that, without a definition, the regulatory community is not adequately on notice regarding the standard with which they need to comply. EPA disagrees that affected MS4 permittees will lack notice of the applicable standard. The framework for the small MS4 permits described in this notice provides EPA's interpretation of the standard and how it should be applied.

EPA has intentionally not provided a precise definition of MEP to allow maximum flexibility in MS4 permitting. MS4s need the flexibility to optimize reductions in storm water pollutants on a location-by-location basis. EPA envisions that this evaluative process will consider such factors as conditions of receiving waters, specific local concerns, and other aspects included in a comprehensive watershed plan. Other factors may include MS4 size, climate, implementation schedules, current ability to finance the program, beneficial uses of receiving water, hydrology, geology, and capacity to perform operation and maintenance.

The pollutant reductions that represent MEP may be different for each small MS4, given the unique local hydrologic and geologic concerns that may exist and the differing possible pollutant control strategies. Therefore, each permittee will determine appropriate BMPs to satisfy each of the six minimum control measures through an evaluative process. Permit writers may evaluate small MS4 operator's

proposed storm water management controls to determine whether reduction of pollutants to the MEP can be achieved with the identified BMPs.

EPA envisions application of the MEP standard as an iterative process. MEP should continually adapt to current conditions and BMP effectiveness and should strive to attain water quality standards. Successive iterations of the mix of BMPs and measurable goals will be driven by the objective of assuring maintenance of water quality standards. If, after implementing the six minimum control measures there is still water quality impairment associated with discharges from the MS4, after successive permit terms the permittee will need to expand or better tailor its BMPs within the scope of the six minimum control measures for each subsequent permit. EPA envisions that this process may take two to three permit terms.

One commenter observed that MEP is not static and that if the six minimum control measures are not achieving the necessary water quality improvements, then an MS4 should be expected to revise and, if necessary, expand its program. This concept, it is argued, must be clearly part of the definition of MEP and thus incorporated into the binding and operative aspects of the rule. As is explained above, EPA believes that it is. The iterative process described above is intended to be sensitive to water quality concerns. EPA believes that today's rule contains provisions to implement an approach that is consistent with this comment.

b. Program Requirements' Minimum Control Measures

A regulated small MS4 operator must develop and implement a storm water management program designed to reduce the discharge of pollutants from their MS4 to protect water quality. The storm water management program must include the following six minimum measures.

i. *Public Education and Outreach on Storm Water Impacts.* Under today's final rule, operators of small MS4s must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps to reduce storm water pollution. The public education program should inform individuals and households about the problem and the steps they can take to reduce or prevent storm water pollution.

EPA believes that as the public gains a greater understanding of the storm water program, the MS4 is likely to gain

more support for the program (including funding initiatives). In addition, compliance with the program will probably be greater if the public understands the personal responsibilities expected of them. Well-informed citizens can act as formal or informal educators to further disseminate information and gather support for the program, thus easing the burden on the municipalities to perform all educational activities.

MS4s are encouraged to enter into partnerships with their States in fulfilling the public education requirement. It may be more cost-effective to utilize a State education program instead of numerous MS4s developing their own programs. MS4 operators are also encouraged to work with other organizations (e.g., environmental, nonprofit and industry organizations) that might be able to assist in fulfilling this requirement.

The public education program should be tailored, using a mix of locally appropriate strategies, to target specific audiences and communities (particularly minority and disadvantaged communities). Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school age children, and conducting community-based projects such as storm drain stenciling, and watershed and beach cleanups. Operators of MS4s may use storm water educational information provided by the State, Tribe, EPA, or environmental, public interest, trade organizations, or other MS4s. Examples of successful public education efforts concerning polluted runoff can be found in many State nonpoint source pollution control programs under CWA section 319.

The public education program should inform individuals and households about steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil or household hazardous wastes. Additionally, the program could inform individuals and groups on how to become involved in local stream and beach restoration activities as well as activities coordinated by youth service and conservation corps and other citizen groups. Finally, materials or outreach programs should be directed toward targeted groups of commercial,

industrial, and institutional entities likely to have significant storm water impacts. For example, MS4 operators should provide information to restaurants on the impact of grease clogging storm drains and to auto garages on the impacts of used oil discharges.

EPA received comments from representatives of State DOTs and U.S. Department of Defense (DOD) installations seeking exemption from the public education requirement. While today's rule does not exempt DOTs and military bases from the user education requirement, the Agency believes the flexibility inherent in the Rule addresses many of the concerns expressed by these commenters.

Certain DOT representatives commented that if their agencies were not exempt from the user education measure's requirements, they should at least be allowed to count DOT employee education as an adequate substitute. EPA supports the use of existing materials and programs, granted such materials and programs meet the rule's requirement that the MS4 user community (*i.e.*, the public) is also educated concerning the impacts of storm water discharges on water bodies and the steps to reduce storm water pollution.

Finally, certain DOD representatives requested that "public," as applied to their installations, be defined as the resident and employee populations within the fence line of the facility. EPA agrees that the education effort should be directed toward those individuals who frequent the federally owned land (*i.e.*, residents and individuals who come there to work and use the MS4 facilities).

EPA also received a number of comments from municipalities stating that education would be more thorough and cost effective if accomplished by EPA on the national level. EPA believes that a collaborative State and local approach, in conjunction with significant EPA technical support, will best meet the goal of targeting, and reaching, specific local audiences. EPA technical support will include a tool box which will contain fact sheets, guidance documents, an information clearinghouse, and training and outreach efforts.

Finally, EPA received comments expressing concern that the public education program simply encourages the distribution of printed material. EPA is sensitive to this concern. Upon evaluation, the Agency made changes to the proposal's language for today's rule. The language has been changed to reflect EPA's belief that a successful

program is one that includes a variety of strategies locally designed to reach specific audiences.

ii. Public Involvement/Participation. Public involvement is an integral part of the small MS4 storm water program. Accordingly, today's final rule requires that the municipal storm water management program must comply with applicable State and local public notice requirements. Section 122.34(b)(2) recommends a public participation process with efforts to reach out and engage all economic and ethnic groups. EPA believes there are two important reasons why the public should be allowed and encouraged to provide valuable input and assistance to the MS4's program.

First, early and frequent public involvement can shorten implementation schedules and broaden public support for a program. Opportunities for members of the public to participate in program development and implementation could include serving as citizen representatives on a local storm water management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts. Moreover, members of the public may be less likely to raise legal challenges to a MS4's storm water program if they have been involved in the decision making process and program development and, therefore, internalize personal responsibility for the program themselves.

Second, public participation is likely to ensure a more successful storm water program by providing valuable expertise and a conduit to other programs and governments. This is particularly important if the MS4's storm water program is to be implemented on a watershed basis. Interested stakeholders may offer to volunteer in the implementation of all aspects of the program, thus conserving limited municipal resources.

EPA recognizes that there are a number of challenges associated with public involvement. One challenge is in engaging people in the public meeting and program design process. Another challenge is addressing conflicting viewpoints. Nevertheless, EPA strongly believes that these challenges can be addressed by use of an aggressive and inclusive program. Section II.K. provides further discussion on public involvement.

A number of municipalities sought clarification from EPA concerning what the public participation program must

actually include. In response, the actual requirements are minimal, but the Agency's recommendations are more comprehensive. The public participation program must only comply with applicable State and local public notice requirements. The remainder of the preamble, as well as the Explanatory Note accompanying the regulatory text, provide guidance to the MS4s concerning what elements a successful and inclusive program should include. EPA will provide technical support as part of the tool box (*i.e.*, providing model public involvement programs, conducting public workshops, *etc.*) to assist MS4 operators meet the intent of this measure.

Finally, the Agency encourages MS4s to seek public participation prior to submitting an NOI. For example, public participation at this stage will allow the MS4 to involve the public in developing the BMPs and measurable goals for their NOI.

iii. Illicit Discharge Detection and Elimination. Discharges from small MS4s often include wastes and wastewater from non-storm water "illicit" discharges. Illicit discharge is defined at 40 CFR 122.26(b)(2) as any discharge to a municipal separate storm sewer that is not composed entirely of storm water, except discharges pursuant to an NPDES permit and discharges resulting from fire fighting activities. As detailed below, other sources of non-storm water, that would otherwise be considered illicit discharges, do not need to be addressed unless the operator of the MS4 identifies one or more of them as a significant source of pollutants into the system. EPA's Nationwide Urban Runoff Program (NURP) indicated that many storm water outfalls still discharge during substantial dry periods. Pollutant levels in these dry weather flows were shown to be high enough to significantly degrade receiving water quality. Results from a 1987 study conducted in Sacramento, California, revealed that slightly less than one-half of the water discharged from a municipal separate storm sewer system was not directly attributable to precipitation runoff (U.S. Environmental Protection Agency, Office of Research and Development, 1993. *Investigation of Inappropriate Pollutant Entries Into Storm Drainage Systems—A User's Guide*. Washington, DC EPA 600/R-92/238.) A significant portion of these dry weather flows results from illicit and/or inappropriate discharges and connections to the municipal separate storm sewer system. Illicit discharges enter the system through either direct connections (*e.g.*, wastewater piping either mistakenly or

deliberately connected to the storm drains) or indirect connections (*e.g.*, infiltration into the storm drain system or spills collected by drain inlets).

Under the existing NPDES program for storm water, permit applications for large and medium MS4s are to include a program description for effective prohibition against non-storm water discharges into their storm sewers (see 40 CFR 122.26 (d)(1)(v)(B) and (d)(1)(iv)(B)). Further, EPA believes that in implementing municipal storm water management plans under these permits, large and medium MS4 operators generally found their illicit discharge detection and elimination programs to be cost-effective. Properly implemented programs also significantly improved water quality.

In today's rule, any NPDES permit issued to an operator of a regulated small MS4 must, at a minimum, require the operator to develop, implement and enforce an illicit discharge detection and elimination program. Inclusion of this measure for regulated small MS4s is consistent with the "effective prohibition" requirement for large and medium MS4s. Under today's rule, the NPDES permit will require the operator of a regulated small MS4 to: (1) Develop (if not already completed) a storm sewer system map showing the location of all outfalls, and names and location of all waters of the United States that receive discharges from those outfalls; (2) to the extent allowable under State, Tribal, or local law, effectively prohibit through ordinance, or other regulatory mechanism, illicit discharges into the separate storm sewer system and implement appropriate enforcement procedures and actions as needed; (3) develop and implement a plan to detect and address illicit discharges, including illegal dumping, to the system; and (4) inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

The illicit discharge and elimination program need only address the following categories of non-storm water discharges if the operator of the small MS4 identifies them as significant contributors of pollutants to its small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and

wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the definition of illicit discharge and only need to be addressed where they are identified as significant sources of pollutants to waters of the United States). If the operator of the MS4 identifies one or more of these categories of sources to be a significant contributor of pollutants to the system, it could require specific controls for that category of discharge or prohibit the discharges completely.

Several comments were received on the mapping requirements of the proposal. Most comments said that more flexibility should be given to the MS4s to determine their mapping needs, and that resources could be better spent in addressing problems once the illicit discharges are detected. EPA reviewed the mapping requirements in the proposed rule and agrees that some of the information is not necessary in order to begin an illicit discharge detection and elimination program. Today's rule requires a map or set of maps that show the locations of all outfalls and names and locations of receiving waters. Knowing the locations of outfalls and receiving waters are necessary to be able to conduct dry weather field screening for non-storm water flows and to respond to illicit discharge reports from the public. EPA recommends that the operator collect any existing information on outfall locations (*e.g.*, review city records, drainage maps, storm drain maps), and then conduct field surveys to verify the locations. It will probably be necessary to "walk" (*i.e.* wade small receiving waters or use a boat for larger receiving waters) the streambanks and shorelines, and it may take more than one trip to locate all outfalls. A coding system should be used to mark and identify each outfall. MS4 operators have the flexibility to determine the type (*e.g.* topographic, GIS, hand or computer drafted) and size of maps which best meet their needs. The map scale should be such that the outfalls can be accurately located. Once an illicit discharge is detected at an outfall, it may be necessary to map that portion of the storm sewer system leading to the outfall in order to locate the source of the discharge.

Several comments requested clarification of the requirement to develop and implement a plan to detect and eliminate illicit discharges. EPA recommends that plans include procedures for the following: locating priority areas; tracing the source of an illicit discharge; removing the source of the discharge; and program evaluation

and assessment. EPA recommends that MS4 operators identify priority areas (*i.e.*, problem areas) for more detailed screening of their system based on higher likelihood of illicit connections (*e.g.*, areas with older sanitary sewer lines), or by conducting ambient sampling to locate impacted reaches. Once priority areas are identified, EPA recommends visually screening outfalls during dry weather and conducting field tests, where flow is occurring, of selected chemical parameters as indicators of the discharge source. EPA's manual for investigation of inappropriate pollutant entries into the storm drainage system (EPA, 1993) suggests the following parameter list: specific conductivity, fluoride and/or hardness concentration, ammonia and/or potassium concentration, surfactant and/or fluorescence concentration, chlorine concentration, pH and other chemicals indicative of industrial sources. The manual explains why each parameter is a good indicator and how the information can be used to determine the type of source flow. The Agency is not recommending that fluoride and chlorine, generally used to locate potable water discharges, be addressed under this program, therefore a short list of parameters may include conductivity, ammonia, surfactant and pH. Some MS4s have found it useful to measure for fecal coliform or *E. coli* in their testing program. Observations of physical characteristics of the discharge are also helpful such as flow rate, temperature, odor, color, turbidity, floatable matter, deposits and stains, and vegetation.

The implementation plan should also include procedures for tracing the source of an illicit discharge. Once an illicit discharge is detected and field tests provide source characteristics, the next step is to determine the actual location of the source. Techniques for tracing the discharge to its place of origin may include: following the flow up the storm drainage system via observations and/or chemical testing in manholes or in open channels; televising storm sewers; using infrared and thermal photography; conducting smoke or dye tests.

The implementation plan should also include procedures for removing the source of the illicit discharge. The first step may be to notify the property owner and specify a length of time for eliminating the discharge. Additional notifications and escalating legal actions should also be described in this part of the plan.

Finally, the implementation plan should include procedures for program evaluation and assessment. Procedures

could include documentation of actions taken to locate and eliminate illicit discharges such as: number of outfalls screened, complaints received and corrected, feet of storm sewers televised, numbers of discharges and quantities of flow eliminated, number of dye or smoke tests conducted. Appropriate records of such actions should be kept and should be submitted as part of the annual reports for the first permit term, as specified by the permitting authority (reports only need to be submitted in years 2 and 4 in later permits). For more on reporting requirements, see § 122.34(g).

EPA received comments regarding an MS4's legal authority beyond its jurisdictional boundaries to inspect or take enforcement against illicit discharges. EPA recognizes that illicit flows may originate in one jurisdiction and cross into one or more jurisdictions before being discharged at an outfall. In such instances, EPA expects the MS4 that detects the illicit flow to trace it to the point where it leaves their jurisdiction and notify the adjoining MS4 of the flow, and any other physical or chemical information. The adjoining MS4 should then trace it to the source or to the location where it enters their jurisdiction. The process of notifying the adjoining MS4 should continue until the source is located and eliminated. In addition, because any non-storm water discharge to waters of the U.S. through an MS4 is subject to the prohibition against unpermitted discharges pursuant to CWA section 301 (a), remedies are available under the federal enforcement provisions of CWA sections 309 and 505.

EPA requested and received comments regarding the prohibition and enforcement provision for this minimum measure. Commenters specifically questioned the proposal that the operator only has to implement the appropriate prohibition and enforcement procedures "to the extent allowable under State or Tribal law." They raised concerns that by qualifying prohibition and enforcement procedures in this manner, the operator could altogether ignore this minimum measure where affirmative legal authority did not exist. Comments suggested that EPA require States to grant authority to those municipalities where it did not exist. Other comments, however, stated that municipalities cannot exercise legal authority not granted to them under State law, which varies considerably from one State to another. EPA has no intention of directing State legislatures on how to allocate authority and responsibility under State law. As noted above, there is at least one remedy (the

federal CWA) to control non-storm water discharges through MS4s. If State law prevents political subdivisions from controlling discharges through storm sewers, EPA anticipates common sense will prevail to provide those MS4 operators with the ability to meet the requirements applicable for their discharges.

One comment reinforced the importance of public information and education to the success of this measure. EPA agrees and suggests that MS4 operators consider a variety of ways to inform and educate the public which could include storm drain stenciling; a program to promote, publicize, and facilitate public reporting of illicit connections or discharges; and distribution of visual and/or printed outreach materials. Recycling and other public outreach programs could be developed to address potential sources of illicit discharges, including used motor oil, antifreeze, pesticides, herbicides, and fertilizers.

EPA received comments that State DOT's lack authority to implement this measure. EPA believes that most DOTs can implement most parts of this measure. If a DOT does not have the necessary legal authority to implement any part of this measure, EPA encourages them to coordinate their storm water management efforts with the surrounding MS4s and other State agencies. Many DOTs that are regulated under Phase I of this program are co-permittees with the local regulated MS4. Under today's rule, DOTs can use any of the options of § 122.35 to share their storm water management responsibilities.

EPA received comments requesting clarification of various terms such as "outfall" and "illicit discharge." One comment asked EPA to reinforce the point that a "ditch" could be considered an outfall. The term "outfall" is defined at 40 CFR 122.26(b)(9) as "a point source at the point where a municipal separate storm sewer discharges to waters of the United States * * *". The term municipal separate storm sewer is defined at 40 CFR § 122.26(b)(8) as "a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) * * *". Following the logic of these definitions, a "ditch" may be part of the municipal separate storm sewer, and at the point where the ditch discharges to waters of the United States, it would be an outfall. As with any determination about jurisdictional provisions of the CWA, however, final decisions require case specific evaluations of fact.

One commenter specifically requested clarification on the relationship between the term "illicit discharge" and non-storm water discharges from fire fighting. The comment suggested that it would be impractical to attempt to determine whether the flow from a specific fire (*i.e.*, during a fire) is a significant source of pollution. EPA intends that MS4s will address all allowable non-storm water flows categorically rather than individually. If an MS4 is concerned that flows from fire fighting are, as a category, contributing substantial amounts of pollutants to their system, they could develop a program to address those flows prospectively. The program may include an analysis of the flow from several sources, steps to minimize the pollutant contribution, and a plan to work with the sources of the discharge to minimize any adverse impact on water quality. During the development of such a program, the MS4 may determine that only certain types of flows within a particular category are a concern, for example, fire fighting flows at industrial sites where large quantities of chemicals are present. In this example, a review of existing procedures with the fire department and/or hazardous materials team may reveal weaknesses or strengths previously unknown to the MS4 operator.

EPA received comments requesting modifications to the rule to include on-site sewage disposal systems (*i.e.*, septic systems) in the scope of the illicit discharge program. On-site sewage disposal systems that flow into storm drainage systems are within the definition of illicit discharge as defined by the regulations. Where they are found to be the source of an illicit discharge, they need to be eliminated similar to any other illicit discharge source. Today's rule was not modified to include discharges from on-site sewage disposal systems specifically because those sources are already within the scope of the existing definition of illicit discharge.

iv. Construction Site Storm Water Runoff Control. Over a short period of time, storm water runoff from construction site activity can contribute more pollutants, including sediment, to a receiving stream than had been deposited over several decades (see section I.B.3). Storm water runoff from construction sites can include pollutants other than sediment, such as phosphorus and nitrogen, pesticides, petroleum derivatives, construction chemicals, and solid wastes that may become mobilized when land surfaces are disturbed. Generally, properly

implemented and enforced construction site ordinances effectively reduce these pollutants. In many areas, however, the effectiveness of ordinances in reducing pollutants is limited due to inadequate enforcement or incomplete compliance with such local ordinances by construction site operators (Paterson, R.G. 1994. "Construction Practices: The Good, the Bad, and the Ugly." *Watershed Protection Techniques* 1(2)).

Today's rule requires operators of regulated small MS4s to develop, implement, and enforce a pollutant control program to reduce pollutants in any storm water runoff from construction activities that result in land disturbance of 1 or more acres (see § 122.34(b)(4)). Construction activity on sites disturbing less than one acre must be included in the program if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more.

The construction runoff control program of the regulated small MS4 must include an ordinance or other regulatory mechanism to require erosion and sediment controls to the extent practicable and allowable under State, Tribal or local law. The program also must include sanctions to ensure compliance (for example, non-monetary penalties, fines, bonding requirements, and/or permit denials for non-compliance). The program must also include, at a minimum: requirements for construction site operators to implement appropriate erosion and sediment control BMPs, such as silt fences, temporary detention ponds and diversions; procedures for site plan review by the small MS4 which incorporate consideration of potential water quality impacts; requirements to control other waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may adversely impact water quality; procedures for receipt and consideration of information submitted by the public to the MS4; and procedures for site inspection and enforcement of control measures by the small MS4.

Today's rule provides flexibility for regulated small MS4s by allowing them to exclude from their construction pollutant control program runoff from those construction sites for which the NPDES permitting authority has waived NPDES storm water small construction permit requirements. For example, if the NPDES permitting authority waives permit coverage for storm water discharges from construction sites less than 5 acres in areas where the rainfall erosivity factor is less than 5, then the regulated small MS4 does not have to

include these sites in its storm water management program. Even if requirements for a discharge from a given construction site are waived by the NPDES permitting authority, however, the regulated small MS4 may still choose to control those discharges under the MS4's construction pollutant control program, particularly where such discharges may cause siltation problems in storm sewers. See Section II.I.1.b for more information on construction waivers by the permitting authority.

Some commenters suggested that the proposed construction minimum measure requirements went beyond the permit application requirements concerning construction for medium and large MS4s. In response, EPA has made changes to the proposed measure so that it more closely resembles the MS4 permit application requirements in existing regulations. For example, as described below, the Agency revised the proposed requirements for "pre-construction review of site management plans" to require "procedures for site plan review."

One commenter expressed concerns that addressing runoff from construction sites within urbanized areas (through the small MS4 program) differently from construction sites outside urbanized areas (which will not be covered by the small MS4 program) will encourage urban sprawl. Today's rule, together with the existing requirements, requires all construction greater than or equal to 1 acre, unless waived, to be covered by an NPDES permit whether it is located inside or outside of an urbanized area (see § 122.26(b)(15)). Today's rule does not require small MS4s to control runoff from construction sites more stringently or prescriptively than is required for construction site runoff outside urbanized areas. Therefore, today's rule imposes no substantively different onsite controls on runoff of storm water from construction sites in urbanized areas than from construction sites outside of urbanized areas.

One commenter recommended that the small MS4 construction site storm water runoff control program address all storm water runoff from construction sites, not just the runoff into the MS4. The commenter also believed that MS4s should provide clear, objective standards for all construction sites. EPA agrees. Because today's rule only regulates discharges from the MS4, the construction pollutant control measure only requires small MS4 operators to control runoff into its system. As a practical matter, however, EPA anticipates that MS4 operators will find that regulation of all construction site

runoff, whether they runoff into the MS4 or not, will prove to be the most simple and efficient program. The Agency may provide more specific criteria for construction site BMPs in the forthcoming rule being developed under CWA section 402(m). See section II.D.1 of today's rule.

One commenter stated that there is no need for penalties at the local level by the small MS4 because the CWA already imposes sufficient penalties to ensure compliance. EPA disagrees and believes that enforcement and compliance at the local level is both necessary and preferable. Examples of sanctions, some not available under the CWA, include non-monetary penalties, monetary fines, bonding requirements, and denial of future or other local permits.

One commenter recommended that EPA should not include the requirement to control pollutants other than sediment from construction sites in this measure. EPA disagrees with this comment. The requirement is to control waste that "may cause adverse impacts on water quality." Such wastes may include discarded building materials, concrete truck washout, chemicals, pesticides, herbicides, litter, and sanitary waste. These wastes, when exposed to and mobilized by storm water, can contribute to water quality impairment.

The proposed rule required "procedures for pre-construction review of site management plans." EPA requested comment on expanding this provision to require both review and approval of construction site storm water plans. Many commenters expressed the concern that review and approval of site plans is not only costly and time intensive, but may unnecessarily delay construction projects and unduly burden staff who administer the local program. In addition, some commenters expressed confusion whether EPA proposed pre-construction review for all site management plans or only higher priority sites. To address these comments, and be consistent with the permit application requirements for larger MS4s, EPA changed "procedures for pre-construction review of site management plans" to "procedures for site plan review." Today's rule requires the small MS4 to develop procedures for site plan review so as to incorporate consideration of adverse potential water quality impacts. Procedures should include review of site erosion and sediment control plans, preferably before construction activity begins on a site. The objective is for the small MS4 operator and the construction site operator to address storm water runoff

from construction activity early in the project design process so that potential consequences to the aquatic environment can be assessed and adverse water quality impacts can be minimized or eliminated.

One commenter requested that EPA delete the requirement for "procedures for receipt and consideration of information submitted by the public" because it went beyond existing storm water requirements. Another commenter stated that establishing a separate process to respond to public inquiries on a project is a burden to small communities, especially if the project has gone through an environmental review. One commenter requested clarification of this provision. EPA has retained this requirement in today's final rule to require some formality in the process for addressing public inquiries regarding storm water runoff from construction activities. EPA does not intend that small MS4s develop a separate, burdensome process to respond to every public inquiry. A small MS4 could, for example, simply log public complaints on existing storm water runoff problems from construction sites and pass that information on to local inspectors. The inspectors could then investigate complaints based on the severity of the violation and/or priority area.

One commenter believed that the proposed requirement of "regular inspections during construction" would require every construction project to be inspected more than once by the small MS4 during the term of a construction project. EPA has deleted the reference to "regular inspections." Instead, the small MS4 will be required to "develop procedures for site inspection and enforcement of control measures." Procedures could include steps to identify priority sites for inspection and enforcement based on the nature and extent of the construction activity, topography, and the characteristics of soils and receiving water quality.

In order to avoid duplication of small MS4 construction requirements with NPDES construction permit requirements, today's rule adds § 122.44(s) to recognize that the NPDES permitting authority can incorporate qualifying State, Tribal, or local erosion and sediment control requirements in NPDES permits for construction site discharges. For example, a construction site operator who complies with MS4 construction pollutant control programs that are referenced in the NPDES construction permit would satisfy the requirements of the NPDES permit. See section II.I.1.d for more information on incorporating qualifying programs by

reference into NPDES construction permits. This provision has no impact on, or direct relation to, the small MS4 operator's responsibilities under the construction site storm water runoff control minimum measure. Conversely, under § 122.35(b), the permitting authority may recognize in the MS4's permit that another governmental entity, or the permitting authority itself, is responsible for implementing one or more of the minimum measures (including construction site storm water runoff control), and not include this measure in the small MS4's permit. In this case, the other governmental entity's program must satisfy all of the requirements of the omitted measure.

v. Post-Construction Storm Water Management in New Development and Redevelopment. The NURP study and more recent investigations indicate that prior planning and designing for the minimization of pollutants in storm water discharges is the most cost-effective approach to storm water quality management. Reducing pollutant concentrations in storm water after the discharge enters a storm sewer system is often more expensive and less efficient than preventing or reducing pollutants at the source. Increased human activity associated with development often results in increased pollutant loading from storm water discharges. If potential adverse water quality impacts are considered from the beginning stages of a project, new development and redevelopment provides more opportunities for water quality protection. For example, minimization of impervious areas, maintenance or restoration of natural infiltration, wetland protection, use of vegetated drainage ways, and use of riparian buffers have been shown to reduce pollutant loadings in storm water runoff from developed areas. EPA encourages operators of regulated small MS4s to identify specific problem areas within their jurisdictions and initiate innovative solutions and designs to focus attention on those areas through local planning.

In today's rule at § 122.34(b)(5), NPDES permits issued to an operator of a regulated small MS4 will require the operator to develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that result in land disturbance of greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the MS4. Specifically, the NPDES permit will require the operator of a regulated small MS4 to: (1) Develop and implement

strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for the community; (2) use an ordinance, or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law; (3) ensure adequate long-term operation and maintenance of BMPs; and (4) ensure that controls are in place that would minimize water quality impacts. EPA intends the term "redevelopment" to refer to alterations of a property that change the "footprint" of a site or building in such a way that results in the disturbance of equal to or greater than 1 acre of land. The term is not intended to include such activities as exterior remodeling, which would not be expected to cause adverse storm water quality impacts and offer no new opportunity for storm water controls.

EPA received comments requesting guidance and clarification of the rule requirements. The scope of the comments ranged from general requests for more details on how MS4 operators should accomplish the four requirements listed above, to specific requests for information regarding transfer of ownership for structural controls, as well as ongoing responsibility for operation and maintenance. By the term "combination" of BMPs, EPA intends a combination of structural and/or non-structural BMPs. For this requirement, the term "combination" is meant to emphasize that multiple BMPs should be considered and adopted for use in the community. A single BMP generally cannot significantly reduce pollutant loads because pollutants come from many sources within a community. The BMPs chosen should: (1) Be appropriate for the local community; (2) minimize water quality impacts; and (3) attempt to maintain pre-development runoff conditions. In choosing appropriate BMPs, EPA encourages small MS4 operators to participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders. Each new development and redevelopment project should have a BMP component. If an approach is chosen that primarily focuses on regional or non-structural BMPs, however, then the BMPs may be located away from the actual development site (e.g., a regional water quality pond).

Non-structural BMPs are preventative actions that involve management and source controls such as: (1) Policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas

such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; (2) policies or ordinances that encourage infill development in higher density urban areas, and areas with existing storm sewer infrastructure; (3) education programs for developers and the public about project designs that minimize water quality impacts; and (4) other measures such as minimization of the percentage of impervious area after development, use of measures to minimize directly connected impervious areas, and source control measures often thought of as good housekeeping, preventive maintenance and spill prevention. Detailed examples of non-structural BMPs follow.

Preserving open space may help to protect water quality as well as provide other benefits such as recharging groundwater supplies, detaining storm water, supporting wildlife and providing recreational opportunities. Although securing funding for open space acquisition may be difficult, various funding mechanisms have been used. New Jersey uses a portion of their State sales tax (voter approved for a ten year period) as a stable source of funding to finance the preservation of historic sites, open space and farmland. Colorado uses part of the proceeds from the State lottery to acquire and manage open space. Some local municipalities use a percentage of the local sales tax revenue to pay for open space acquisition (e.g., Jefferson County, CO has had an open space program in place since 1977 funded by a 0.50 percent sales tax). Open space can be acquired in the form of: fee simple purchase; easements; development rights; purchase and sellback or leaseback arrangements; purchase options; private land trusts; impact fees; and land dedication requirements. Generally, fee simple purchases provide the highest level of development control and certainty of preservation, whereas the other forms of acquisition may provide less control, though they would also generally be less costly.

Cluster development, while allowing housing densities comparable to conventional zoning practice, concentrates housing units in a portion of the total site area which provides for greater open space, recreation, stream protection and storm water control. This type of development, by reducing lot sizes, can protect sensitive areas and result in less impervious surface, as well

as reduce the cost for roads and other infrastructure.

Minimizing directly connected impervious areas (DCIAs) is a drainage strategy that seeks to reduce paved areas and directs storm water runoff to landscaped areas or to structural controls such as grass swales or buffer strips. This strategy can slow the rate of runoff, reduce runoff volumes, attenuate peak flows, and encourage filtering and infiltration of storm water. It can be made an integral part of drainage planning for any development (Urban Drainage and Flood Control District, Denver, CO. 1992. *Urban Storm Drainage Criteria Manual, Volume 3—Best Management Practices*). The Urban Drainage and Flood Control District manual describes three levels for minimizing DCIAs. At Level 1 all impervious surfaces are made to drain over grass-covered areas before reaching a storm water conveyance system. Level 2 adds to Level 1 and replaces street curb and gutter systems with low-velocity grass-lined swales and pervious street shoulders. In addition to Levels 1 and 2, Level 3 over-sizes swales and configures driveway and street crossing culverts to use grass-lined swales as elongated detention basins.

Structural BMPs include: (1) Storage practices such as wet ponds and extended-detention outlet structures; (2) filtration practices such as grassed swales, sand filters and filter strips; and (3) infiltration practices such as infiltration basins and infiltration trenches.

EPA recommends that small MS4 operators ensure the appropriate implementation of the structural BMPs by considering some or all of the following: (1) Pre-construction review of BMP designs; (2) inspections during construction to verify BMPs are built as designed; (3) post-construction inspection and maintenance of BMPs; and (4) sanctions to ensure compliance with design, construction or operation and maintenance (O&M) requirements of the program.

EPA cautions that certain infiltration systems such as dry wells, bored wells or tile drainage fields may be subject to Underground Injection Control (UIC) program requirements (see 40 CFR Part 144.12.). To find out more about these requirements, contact your state UIC Program, or call EPA's Safe Drinking Water Hotline at 1-800-426-4791.

In order to meet the third post-construction requirement (ensuring adequate long-term O&M of BMPs), EPA recommends that small MS4 operators evaluate various O&M management agreement options. The most common options are agreements between the

MS4 operator and another party such as post-development landowners (e.g., homeowners' associations, office park owners, other government departments or entities), or regional authorities (e.g., flood control districts, councils of government). These agreements typically require the post-construction property owner to be responsible for the O&M and may include conditions which: allow the MS4 operator to be reimbursed for O&M performed by the MS4 operator that is the responsibility of the property owner but is not performed; allow the MS4 operator to enter the property for inspection purposes; and in some cases specify that the property owner submit periodic reports.

In providing the guidance above, EPA intends the requirements in today's rule to be consistent with the permit application requirements for large MS4s for post-construction controls for new development and redevelopment. MS4 operators have significant flexibility both to develop this measure as appropriate to address local concerns, and to apply new control technologies as they become available. Storm water pollution control technologies are constantly being improved. EPA recommends that MS4s be responsive to these changes, developments or improvements in control technologies. EPA will provide more detailed guidance addressing the responsibility for long-term O&M of storm water controls in guidance materials. The guidance will also provide information on appropriate planning considerations, structural controls and non-structural controls. EPA also intends to develop a broad menu of BMPs as guidance to ensure flexibility to accommodate local conditions.

EPA received comments suggesting that requirements for new development be treated separately from redevelopment in the rule. The comment stressed that new development on raw land presents fewer obstacles and more opportunities to incorporate elements for preventing water quality impacts, whereas redevelopment projects are constrained by space limitations and existing infrastructure. Another comment suggested allowing waivers from the redevelopment requirements if the redevelopment does not result in additional adverse water quality impacts, and where BMPs are not technologically or economically feasible. EPA recognizes that redevelopment projects may have more site constraints which narrow the range of appropriate BMPs. Today's rule provides small MS4 operators with the

flexibility to develop requirements that may be different for redevelopment projects, and may also include allowances for alternate or off-site BMPs at certain redevelopment projects. Non-structural BMPs may be the most appropriate approach for smaller redevelopment projects.

EPA received comments requesting clarification on what is meant by "pre-development" conditions within the context of redevelopment. Pre-development refers to runoff conditions that exist onsite immediately before the planned development activities occur. Pre-development is not intended to be interpreted as that period before any human-induced land disturbance activity has occurred.

EPA received comments on the guidance language in the proposed rule and preamble which suggest that implementation of this measure should "attempt to maintain pre-development runoff conditions" and that "post-development conditions should not be different than pre-development conditions in a way that adversely affects water quality." Many comments expressed concern that maintaining pre-development runoff conditions is impossible and cost-prohibitive, and objected to any reference to "flow" or increase in volume of runoff. Other comments support the inclusion of this language in the final rule. Similar references in today's rule relating to pre-development runoff conditions are intended as *recommendations to attempt to maintain pre-development runoff conditions*. With these recommendations, EPA intends to prevent water quality impacts resulting from increased discharges of pollutants, which may result from increased volume of runoff. In many cases, consideration of the increased flow rate, velocity and energy of storm water discharges following development unavoidably must be taken into consideration in order to reduce the discharge of pollutants, to meet water quality standards and to prevent degradation of receiving streams. EPA recommends that municipalities consider these factors when developing their post-construction storm water management program.

Some comments said that the quoted phrases in the paragraph above are directives that imply federal land use control, which they argue is beyond the authority of the CWA. EPA recognizes that land use planning is within the authority of local governments.

EPA disagrees, however, with the implication that today's rule dictates any such land use decisions. The requirement for small MS4 operators to

develop a program to address discharges resulting from new development and redevelopment is essentially a pollution prevention measure. The Rule provides the MS4 operator with flexibility to determine the appropriate BMPs to address local water quality concerns. EPA recognizes that these program goals may not be applied to every site, and expects that MS4s will develop an appropriate combination of BMPs to be applied on a site-by-site, regional or watershed basis.

vi. Pollution Prevention/Good Housekeeping for Municipal Operations. Under today's final rule, operators of MS4s must develop and implement an operation and maintenance program ("program") that includes a training component and has the ultimate goal of preventing or reducing storm water from municipal operations (in addition to those that constitute storm water discharges associated with industrial activity). This measure's emphasis on proper O&M of MS4s and employee training, as opposed to requiring the MS4 to undertake major new activities, is meant to ensure that municipal activities are performed in the most efficient way to minimize contamination of storm water discharges.

The program must include government employee training that addresses prevention measures pertaining to municipal operations such as: parks, golf courses and open space maintenance; fleet maintenance; new construction or land disturbance; building oversight; planning; and storm water system maintenance. The program can use existing storm water pollution prevention training materials provided by the State, Tribe, EPA, or environmental, public interest, or trade organizations.

EPA also encourages operators of MS4s to consider the following in developing a program: (1) Implement maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from the separate storm sewers; (2) implement controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations and snow disposal areas operated by the MS4; (3) adopt procedures for the proper disposal of waste removed from the separate storm sewer systems and areas listed above in (2), including dredge

spoil, accumulated sediments, floatables, and other debris; and (4) adopt procedures to ensure that new flood management projects are assessed for impacts on water quality and existing projects are assessed for incorporation of additional water quality protection devices or practices. Ultimately, the effective performance of the program measure depends on the proper maintenance of the BMPs, both structural and non-structural. Without proper maintenance, BMP performance declines significantly over time. Additionally, BMP neglect may produce health and safety threats, such as structural failure leading to flooding, undesirable animal and insect breeding, and odors. Maintenance of structural BMPs could include: replacing upper levels of gravel; dredging of detention ponds; and repairing of retention basin outlet structure integrity. Maintenance of non-structural BMPs could include updating educational materials periodically.

EPA emphasizes that programs should identify and incorporate existing storm water practices and training, as well as non-storm water practices or programs that have storm water pollution prevention benefits, as a means to avoid duplication of efforts and reduce overall costs. EPA recommends that MS4s incorporate these new obligations into their existing programs to the greatest extent feasible and urges States to evaluate MS4 programs with programmatic efficiency in mind. EPA designed this minimum control measure as a modified version of the permit application requirements for medium and large MS4s described at 40 CFR 122.26(d)(2)(iv), in order to provide more flexibility for these smaller MS4s. Today's requirements provide for a consistent approach to control pollutants from O&M among medium, large, and regulated small MS4s.

By properly implementing a program, operators of MS4s serve as a model for the rest of the regulated community. Furthermore, the establishment of a long-term program could result in cost savings by minimizing possible damage to the system from floatables and other debris and, consequently, reducing the need for repairs.

EPA received comments requesting clarification of what this measure requires. Certain municipalities expressed concern that the measure has the potential to impose significant costs associated with EPA's requirement that operators of MS4s consider implementing controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, and salt/sand storage

locations and snow disposal areas operated by the municipality. EPA disagrees that a requirement to *consider* such controls will impose considerable costs.

One commenter objected to the preamble language from the proposal suggesting that EPA does not expect the MS4 to undertake new activity. While it remains the Agency's expectation that major new activity will not be required, the MEP process should drive MS4s to incorporate the measure's obligations into their existing programs to achieve the pollutant reductions to the maximum extent practicable.

Certain commenters requested a definition for "municipal operations." EPA has revised the language to more clearly define municipal operations. Questions may remain concerning whether discharges from specific municipal activities constitute discharges associated with industrial activities (requiring NPDES permit authorization according to the requirements for industrial storm water that apply in that State) or from municipal operations (subject only to the controls developed in the MS4 control program). Even though there may be different substantive requirements that apply depending on the source of the discharge, EPA has modified the deadlines for permit coverage so that all the regulated municipally owned and operated sources become subject to permit requirements on the same date. The deadline is the same for permit coverage for this minimum measure as for permit coverage for municipally owned/operated industrial sources.

c. Application Requirements

An NPDES permit that authorizes the discharge from a regulated small MS4 may take the form of either an individual permit issued to one or more facilities as co-permittees or a general permit that applies to a group of MS4s. For reasons of administrative efficiency and to reduce the paperwork burden on permittees, EPA expects that most discharges from regulated small MS4s will be authorized under general permits. These NPDES general permits will provide specific instructions on how to obtain coverage, including application requirements. Typically, such application requirements will be satisfied by the submission of a Notice of Intent (NOI) to be covered by the general permit. In this section, EPA explains the small MS4 operator's application requirements for obtaining coverage under a NPDES permit for storm water.

i. Best Management Practices and Measurable Goals, Section 122.34(d) of today's rule requires the operator of a regulated small MS4 that wishes to implement a program under § 122.34 to identify and submit to the NPDES permitting authority a list of the best management practices ("BMPs") that will be implemented for each minimum control measure in their storm water management program. They also must submit measurable goals for the development and implementation of each BMP. The BMPs and the measurable goals must be included either in an NOI to be covered under a general permit or in an individual permit application.

The operator's submission must identify, as appropriate, the months and years in which the operator will undertake actions required to implement each of the minimum control measures, including interim milestones and the frequency of periodic actions. The Agency revised references to "starting and completing" actions from the proposed rule because many actions will be repetitive or ongoing. The submission also must identify the person or persons responsible for implementing or coordinating the small MS4 storm water program. See § 122.34(d). The submitted BMPs and measurable goals become enforceable according to the terms of the permit. The first permit can allow the permittee up to five years to fully implement the storm water management program.

Several commenters opposed making the measurable goals enforceable permit conditions. Some suggested that a permittee should be able to change its goals so that BMPs that are not functioning as intended can be replaced. EPA agrees that a permittee should be free to switch its BMPs and corresponding goals to others that accomplish the minimum measure or measures. The permittee is required to implement BMPs that address the minimum measures in § 122.34(b). If the permittee determines that its original combination of BMPs are not adequate to achieve the objectives of the municipal program, the MS4 should revise its program to implement BMPs that are adequate and submit to the permitting authority a revised list of BMPs and measurable goals. EPA suggests that permits describe the process for revising BMPs and measurable goals, such as whether the permittee should follow the same procedures as were required for the submission of the original NOI and whether the permitting authority's approval is necessary prior to the permittee implementing the revised

BMPs. The permittee should indicate on its periodic report whether any BMPs and measurable goals have been revised since the last periodic report.

Some commenters expressed concern that making the measurable goals enforceable would encourage the development of easily attained goals and, conversely, discourage the setting of ambitious goals. Others noted that it is often difficult to determine the pollutant reduction that can be achieved by BMPs until several years after implementation. Much of the opposition to the enforceability of measurable goals appears to have been based on a mistaken understanding that measurable goals must consist of pollutant reduction targets to be achieved by the corresponding BMPs.

Today's rule requires the operator to submit either measurable goals that serve as BMP design objectives or goals that quantify the progress of implementation of the actions or performance of the permittee's BMPs. At a minimum, the required measurable goals should describe specific actions taken by the permittee to implement each BMP and the frequency and the dates for such actions. Although the operator may choose to do so, it is not required to submit goals that measure whether a BMP or combination of BMPs is effective in achieving a specific result in terms of storm water discharge quality. For example, a measurable goal might involve a commitment to inspect a given number of drainage areas of the collection system for illicit connections by a certain date. The measurable goal need not commit to achieving a specific amount of pollutant reduction through the elimination of illicit connections. Other measurable goals could include the date by which public education materials would be developed, a certain percentage of the community participating in a clean-up campaign, the development of a mechanism to address construction site runoff, and a reduction in the percentage of imperviousness associated with new development projects.

To reduce the risk that permittees will develop inadequate BMPs, EPA intends to develop a menu of BMPs to assist the operators of regulated small MS4s with the development of municipal programs. States may also develop a menu of BMPs. Today's rule provides that the measurable goals that demonstrate compliance with the minimum control measures in §§ 122.34(b)(3) through (b)(6) do not have to be met if the State or EPA has not issued a menu of BMPs at the time the MS4 submits its NOI. Commenters pointed out that the proposed rule would have

made the measurable goals unenforceable if the menu of BMPs was not available, but the proposal was silent as to the enforceability of the implementation of BMPs. Today's rule clarifies that the operators are not free to do nothing prior to the issuance of a menu of BMPs; they still must make a good faith effort to implement the BMPs designed to comply with each measure. See § 122.34(d)(2). The operators would not, however, be liable for failure to meet its measurable goals if a menu of BMPs was not available at the time they submit their NOI.

The proposed rule provision in § 123.35 stated that the "[f]ailure to issue the menu of BMPs would not affect the legal status of the general permit." This concept is included in the final rule in § 122.34(d)(2)'s clarification that the permittee still must comply with other requirements of the general permit.

Unlike the proposed rule, today's rule does not require that each BMP in the menu developed by the State or EPA be regionally appropriate, cost-effective and field-tested. Various commenters criticized those criteria as unworkable, and one described them as "ripe for ambiguity and abuse." Other commenters feared that the operators of regulated small MS4s would never be required to achieve their goals until menus were developed that were cost-effective, field-tested and appropriate for every conceivable subregion.

While some municipal commenters supported the requirement that a menu of BMPs be made available that included BMPs that had been determined to be regionally appropriate, field-tested and cost-effective, others raised concerns that they would be restricted to a limited menu. Some commenters supported such a detailed menu because they thought they would only be able to select BMPs that were on the menu, while others thought that it was the permitting authority's responsibility to develop BMPs narrowly tailored to their situation. In response, EPA notes that the operators will not be restricted to implementing only, or all of, the BMPs included on the menu. Since the menu does not require permittees to implement the BMPs included on the menu, it is also not necessary to apply the public notice and other procedures that some commenters thought should be applied to the development of the menu of BMPs.

The purpose of the BMP menu is to provide guidance to assist the operators of regulated small MS4s with the development and refinement of their local program, not to limit their options. Permittees may implement BMPs other

than those on the menu unless a State restricts its permittees to specific BMPs. To the extent possible, EPA will develop a menu of BMPs that describes the appropriateness of BMPs to specific regions, whether the BMPs have been field-tested, and their approximate costs. The menu, however, is not intended to relieve permittees of the need to implement BMPs that are appropriate for their specific circumstances.

If there are no known relevant BMPs for a specific circumstance, a permittee has the option of developing and implementing pilot BMPs that may be better suited to their circumstances. Where BMPs are experimental, the permittee should consider committing to measurable goals that address its schedule for implementing its selected BMPs rather than goals of achieving specific pollutant reductions. If the BMPs implemented by the permittee do not achieve the desired objective, the permittee may be required to commit to different or revised BMPs.

As stated in § 123.35(g), EPA is committed to issuing a menu of BMPs prior to the deadline for the issuance of permits. This menu would serve as guidance for all operators of regulated small MS4s nationwide. After developing the initial menu of BMPs, EPA intends to periodically modify, update, and supplement the menu of BMPs based on the assessments of the MS4 storm water program and research. States may rely on EPA's menu of BMPs or issue their own. If States develop their own menus, they would constitute additional guidance (or perhaps requirements in some States) for the operators to follow. Several commenters were confused by the proposed rule language that stated that States must provide or issue a menu of BMPs and, if they fail to do so, EPA "may" do so. Some read this language as not requiring either EPA or the State to develop the menu. EPA had intended that it would develop a menu and that States could either provide the EPA developed menu or one developed by the State.

EPA has dropped the proposed language that States "must" develop the menu of BMPs. Some commenters thought that it was inappropriate to require States to issue guidance. A menu of BMPs issued by either EPA or a permittee's State will satisfy the condition in § 122.34(d) that a regulatory authority provide a menu of BMPs. A State could require its permittees to follow its menu of BMPs provided that they are adequate to implement § 122.34(b).

Several commenters raised concerns that operators of small MS4s could be

required to submit their BMPs and measurable goals before EPA or the State has issued a menu of BMPs. EPA has assumed primary responsibility for developing a menu of BMPs to minimize the possibility of this occurring. Should a general permit be issued before a menu of BMPs is available, the permit writer would have the option of delaying the date by which the identification of the BMPs and measurable goals must be submitted to the permitting authority until some time after a menu of BMPs is available.

Several municipal commenters raised concerns that they would begin to develop a program only to be later told by the permitting authority or challenged in a citizen suit that their BMPs were inadequate. They expressed a need for certainty regarding what their permit required. Several commenters suggested that EPA require permitting authorities to approve or disapprove the submitted BMPs and measurable goals. EPA disagrees that formal approval or disapproval by the permitting authority is needed.

EPA acknowledges that the lack of a formal approval process does place on the permittee some responsibility for designing and determining the adequacy of its BMPs. Once the permittee has submitted its BMPs to the permitting authority as part of its NOI, it must implement them in order to achieve the corresponding measurable goals. EPA does not believe that this results in the uncertainty to the extent expressed by some commenters or unduly expose the permittee to the risk of citizen suit. If the permit is very specific regarding what the permittee must do, then the uncertainty is eliminated. If the permit is less prescriptive, the permittee has greater latitude in determining for itself what constitutes an adequate program. A citizen suit could impose liability on the permittee only if the program that it develops and implements clearly does not satisfy the requirements of the general permit. EPA believes today's approach strikes a balance between the competing goals of providing certainty as to what constitutes an adequate program and providing flexibility to the permittees.

Commenters were divided on whether five years was a reasonable and expeditious schedule for a MS4 to implement its program. Some thought that it was an appropriate amount of time to allow for the development and implementation of adequate programs. One questioned whether the permittee had to be implementing all of its program within that time, and suggested that there may be cases where a permitting authority would need

flexibility to allow more time. One commenter suggested that five years is too long and would amount to a relaxation of implementation in their area. EPA believes it will take considerable time to complete the tasks of initially developing a program, commencing to implement it, and achieving results. EPA notes, however, that full implementation of an appropriate program must occur as expeditiously as possible, and not later than five years.

EPA solicited comment on how an NOI form might best be formatted to allow for measurable goal information (e.g., through the use of check boxes or narrative descriptions) while taking into account the Agency's intention to facilitate computer tracking. All commenters supported the development of a checklist NOI, but most noted that there would need to be room for additional information to cover unusual situations. One noted that, while a summary of measurable goals might be reduced to one sheet, attachments that more fully described the program and the planned BMPs would be necessary. EPA agrees that in most cases a "checklist" will not be able to capture the information on what BMPs a permittee intends to implement and its measurable goals for their implementation. EPA will continue to consider whether to develop a model NOI form and make it available for permitting authorities that choose to use it. What will be required on an MS4's NOI, however, is more extensive than what is usually required on an NOI, so a "form" NOI for MS4s may be impractical.

ii. Individual Permit Application for a § 122.34(b) program. In some cases, an operator of a regulated small MS4s may seek coverage under an individual NPDES permit, either because it chooses to do so or because the NPDES permitting authority has not made the general permit option available to that source. For small MS4s that are to implement a § 122.34(b) program in today's rule, EPA is promulgating simplified individual permit application requirements at § 122.33(b)(2)(i). Under the simplified individual permit application requirements, the operator submits an application to the NPDES permitting authority that includes the information required under § 122.21(f) and an estimate of square mileage served by the small MS4. They are also required to supply the BMP and measurable goal information required under § 122.34(d). Consistent with CWA section 308 and analogous State law, the permitting authority could request any additional information to gain a better

understanding of the system and the areas draining into the system.

Commenters suggested that the requirements of § 122.21(f) are not necessarily applicable to a small MS4. One suggested that it was not appropriate to require the following information: a description of the activities conducted by the applicant which require it to obtain an NPDES permit; the name, mailing address, and location of the facility; and up to four Standard Industrial Classification ("SIC") codes which best reflect the principal products or services provided by the facility. In response, EPA notes that the requirements in § 122.21(f) are generic application requirements applicable to NPDES applicants. With the exception of the SIC code requirement, EPA believes that they are applicable to MS4s. In the SIC code portion of the standard application, the applicant may simply put "not applicable."

One commenter asked that EPA clarify whether § 122.21(f)(5)'s requirement to indicate "whether the facility is located on Indian lands," referred to tribal lands, Indian country, or Indian reservations. For some local governments this is a complex issue with no easy "yes" or "no" answer. See the discussion in the Section II.F in the proposal to today's rule regarding what tribal lands are subject to the federal trust responsibility for purposes of the NPDES program.

One commenter suggested that the application should not have to list the permits and approvals required under § 122.21(f)(6). EPA notes that the applicant must only list the environmental permits that the applicant has received that cover the small MS4. The applicant is not required to list permits for other operations conducted by the small MS4 operator (e.g., for an operation of an airport or landfill). Again, in most cases the applicant could respond "not applicable" to this portion of the application.

One commenter suggested that the topographic map requirement of § 122.21(f)(7) was completely different from, and significantly more onerous than, the mapping requirement outlined in the proposed rule at § 122.34(b)(3)(i). EPA agrees and has modified the final rule to clarify that a map that satisfies the requirements of § 122.34(b)(3)(i) also satisfies the map requirements for MS4 applicants seeking individual permits under § 122.33(b)(2)(i).

EPA is adding a new paragraph to § 122.44(k) to clarify that requirements to implement BMPs developed pursuant to CWA 402(p) are appropriate permit

conditions. While such conditions could be included under the existing provision in § 122.44(k)(3) for “practices reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA,” EPA believes it is clearer to specifically list in § 122.44(k) BMPs that implement storm water programs in light of the frequency with which they are used as effluent limitations.

iii. Alternative Permit Options/Tenth Amendment. As an alternative to implementing a program that addresses each of the six minimum measures according to the requirements of § 122.34(b), today’s rule provides the operators of regulated small MS4s with the option of applying for an individual permit under existing § 122.26(d). See § 122.33(b)(2)(ii). If a system operator does not want to be held accountable for implementation of each of the minimum measures, an individual permit option under § 122.33(b)(2)(ii) remains available. (As explained in the next section of this preamble, § 122.35(b) also provides an opportunity for relief from permit obligations for some of the minimum measures, but that relief exists within the framework of the minimum measures.)

EPA originally drafted the individual permit application requirements in § 122.26(d) to apply to medium and large MS4s. Today’s rule abbreviates the individual permit application requirements for small MS4s. Although EPA believes that the storm water management program requirements of § 122.34, including the minimum measures, provide the most appropriate means to control pollutants from most small MS4s, the Agency does recognize that the operators of some small MS4s may prefer more individualized permit requirements. Among other possible reasons, an operator may seek to avoid having to “regulate” third parties discharging into the separate storm sewer system. Alternatively, an operator may determine that structural controls, such as constructed wetlands, are more appropriate or effective to address the discharges that would otherwise be addressed under the construction and/or development/redevelopment measures.

Some MS4s commenters alleged that an absolute requirement to implement the minimum measures violates the Tenth Amendment to the U.S. Constitution. While EPA disagrees that requiring MS4s to implement the minimum measures would violate the Constitution, today’s rule does provide small MS4s with the option of developing more individualized measures to reduce the pollutants and

pollution associated with urban storm water that will be regulated under today’s rule.

Some commenters specifically objected that § 122.34’s minimum measures for small MS4s violate the Tenth Amendment insofar as they require the operators of MS4s to regulate third parties. The minimum measures include requirements for small MS4 operators to prohibit certain non-storm water discharges, control storm water discharges from construction greater than one acre, and take other actions to control third party sources of storm water discharges into their MS4s. Commenters also argued that it was inappropriate for EPA to require local governments to enact ordinances that will consume local revenues and put local governments in the position of bearing the political responsibility for implementing the program. One commenter argued that EPA was prohibited from conditioning the issuance of an NPDES permit upon the small MS4 operators waiving their constitutional right to be free from such requirements to regulate third parties. The Agency replies to each comment in turn.

Because the rule does rely on local governments—who operate municipal separate storm sewer systems—to regulate discharges from third parties into storm sewers, EPA acknowledges that the rule implicates the Tenth Amendment and constitutional principles of federalism. EPA disagrees, however, that today’s rule is inconsistent with federalism principles. [As political subdivisions of States, municipalities enjoy the same protections as States under the Tenth Amendment.]

The Supreme Court has interpreted the Tenth Amendment to preclude federal actions that compel States or their political subdivisions to enact or administer a federal regulatory program. See *New York v. United States*, 505 U.S. 144 (1992); *Printz v. United States*, 117 S.Ct. 2365 (1997). The *Printz* case, however, did acknowledge that the restriction does not apply when federal requirements of general applicability—requirements that regulate all parties engaging in a particular activity—do not excessively interfere with the functioning of State governments when those requirements are applied to States (or their political subdivisions). See *Printz*, 117 S.Ct. at 2383.

Today’s rule imposes a federal requirement of general applicability, namely, the requirement to obtain and comply with an NPDES permit, on municipalities that operate a municipal separate storm sewer system. By virtue

of this rule, the permit will require the municipality/storm sewer operator to develop a storm water control program. The rule specifies the components of the control program, which are primarily “management”-type controls, for example, municipal regulation of third party storm water discharges associated with construction, as well as development and redevelopment, when those discharges would enter the municipal system.

Unlike the circumstances reviewed in the *New York* and *Printz* cases, today’s rule merely applies a generally applicable requirement (the CWA permit requirement) to municipal point sources. The CWA establishes a generally applicable requirement to obtain an NPDES permit to authorize point source discharge to waters of the United States. Because municipalities own and operate separate storm sewers, including storm sewers into which third parties may discharge pollutants, NPDES permits may require municipalities to control the discharge of pollutants into the storm sewers in the first instance. Because NPDES permits can impose end-of-pipe numeric effluent limits, narrative effluent limits in the form of “management” program requirements are also within the scope of Clean Water Act authority. As noted above, however, EPA believes that such narrative limitations are the most appropriate form of effluent limitation for these types of permits. For municipal separate storm sewer permits, CWA section 402(p)(3)(B)(iii) specifically authorizes “controls to reduce pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.”

The Agency did not design the minimum measures in § 122.34 to “commandeer” state regulatory mechanisms, but rather to reduce pollutant discharges from small MS4s. The permit requirement in CWA section 402 is a requirement of general applicability. The operator of a small MS4 that does not prohibit and/or control discharges into its system essentially accepts “title” for those discharges. At a minimum, by providing free and open access to the MS4s that convey discharges to the waters of the United States, the municipal storm sewer system enables water quality impairment by third parties. Section 122.34 requires the operator of a regulated small MS4 to control a third

party only to the extent that the MS4 collection system receives pollutants from that third party and discharges it to the waters of the United States. The operators of regulated small MS4s cannot passively receive and discharge pollutants from third parties. The Agency concedes that administration of a municipal program will consume limited local revenues for implementation; but those consequences stem from the municipal operator's identity as a permitted sewer system operator. The Tenth Amendment does not create a blanket municipal immunity from generally applicable requirements. Development of a program based on the minimum measures and implementation of that program should not "excessively interfere" with the functioning of municipal government, especially given the "practicability" threshold under CWA section 402(p)(3)(B)(iii).

As noted above, today's rule also allows regulated small MS4s to opt out of the minimum measures approach. The individual permit option provides for greater flexibility in program implementation and also responds to the comment about requiring a municipal permit applicant's waiver of any arguable constitutional rights. The individual permit option responds to questions about the rule's alleged unconstitutionality by more specifically focusing on the pollutants discharged from municipal point sources. Today's rule gives operators of MS4s the option to seek an individual permit that varies from the minimum measures/management approach that is otherwise specified in today's rule. Even if the minimum measures approach was constitutionally suspect, a requirement that standing alone would violate constitutional principles of federalism does not raise concerns if the entity subject to the requirement may opt for an alternative action that does not raise a federalism issue.

For municipal system operators who seek to avoid third party regulation according to all or some of the minimum measures, § 122.26(d) requires the operator to submit a narrative description of its storm water sewer system and any existing storm water control program, as well as the monitoring data to enable the permit writer to develop appropriate permit conditions. The permit writer can then develop permit conditions and limitations that vary from the six minimum measures prescribed in today's rule. The information will enable the permit writer to develop an NPDES permit that will result in pollutant reduction to the maximum

extent practicable. See *NRDC v. EPA*, 966 F.2d at 1308, n17. If determined appropriate under CWA section 402(p)(3)(B)(iii), for example BMPs to meet water quality standards, the permit could also incorporate any more stringent or prescriptive effluent limits based on the individual permit application information.

For small MS4 operators seeking an individual permit, both Part 1 and Part 2 of the application requirements in § 122.26(d)(1) and (2) are required to be submitted within 3 years and 90 days of the date of publication of this **Federal Register** notice. Some of the information required in Part 1 will necessarily have to be developed by the permit applicant prior to the development of Part 2 of the application. The permit applicant should coordinate with its permitting authority regarding the timing of review of the information.

The operators of regulated small MS4s that apply under § 122.26(d) may apply to implement certain of the § 122.34(b) minimum control measures, and thereby focus the necessary evaluation for additional limitations on alternative controls to the § 122.34(b) measures that the small MS4 will not implement. The permit writer may determine "equivalency" for some or all of the minimum measures by developing a rough estimate of the pollutant reduction that would be achieved if the MS4 implemented the § 122.34 minimum measure and to incorporate that pollutant reduction estimate in the small MS4's individual permit as an effluent limitation. The Agency recognizes that, based on current information, any such estimates will probably have a wide range. Anticipation of this wide range is one of the reasons EPA believes MS4 operators need flexibility in determining the mix of BMPs (under the minimum measures) to achieve water quality objectives. Therefore, for example, if a system operator seeks to employ an alternative that involves structural controls, wide ranges will probably be associated with gross pollutant reduction estimates. Permit writers will undoubtedly develop other ways to ensure that permit limits ensure reduction of pollutants to the maximum extent practicable.

Small MS4 operators that pursue this individual permit option do not need to submit details about their future program requirements (e.g., the MS4's future plans to obtain legal authority required by §§ 122.26(d)(1)(ii) and (d)(2)). A small MS4 operator might elect to supply such information if it intends for the permit writer to take those plans into account when

developing the small MS4's permit conditions.

Several operators of small MS4s commented that they currently lacked the authority they would need to implement one or more of the minimum measures in § 122.34(b). Today's rule recognizes that the operators of some small MS4s might not have the authority under State law to implement one or more of the measures using, for example, an ordinance or other regulatory mechanism. To address these situations, each minimum measure in § 122.34(b) that would require the small MS4 operator to develop an ordinance or other regulatory mechanism states that the operator is only required to implement that requirement to "the extent allowable under State, Tribal or local law." See § 122.34(b)(3)(ii) (illicit discharge elimination), § 122.34(b)(4)(ii) (construction runoff control) and § 122.34(b)(5)(ii) (post-construction storm water management). This regulatory language does not mean that a operator of a small MS4 with ordinance making authority can simply fail to pass an ordinance necessary for a § 122.34(b) program. The reference to "the extent allowable under * * * local law" refers to the local laws of *other* political subdivisions to which the MS4 operator is subject. Rather, a small MS4 operator that seeks to implement a program under section § 122.34(b) may omit a requirement to develop an ordinance or other regulatory mechanism only to the extent its municipal charter, State constitution or other legal authority prevents the operator from exercising the necessary authority. Where the operator cannot obtain the authority to implement any activity that is only required to "the extent allowable under State, Tribal or local law," the operator may satisfy today's rule by administering the remaining § 122.34(b) requirements.

Finally, although today's rule provides operators of small MS4s with an option of applying for a permit under § 122.26(d), States authorized to administer the NPDES program are not required to provide this option. NPDES-authorized States could require all regulated small MS4s to be permitted under the minimum measures management approach in § 122.34 as a matter of State law. Such an approach would be deemed to be equally or more stringent than what is required by today's rule. See 40 CFR 123.2(i). The federalism concerns discussed above do not apply to requirements imposed by a State on its political subdivisions.

iv. Satisfaction of Minimum Measure Obligations by Another Entity. An operator of a regulated small MS4 may

satisfy the requirement to implement one or more of the six minimum measures in § 122.34(b) by having a third party implement the measure or measures. Today's rule provides a variety of means for small MS4 operators to share responsibility for different aspects of their storm water management program. The means by which the operators of various MS4s share responsibility may affect who is ultimately responsible for performance of the minimum measure and who files the periodic reports on the implementation of the minimum measure. Section 122.35 addresses these issues. The rule describes two different variants on third party implementation with different consequences if the third party fails to implement the measure.

If the permit covering the discharge from a regulated small MS4 identifies the operator as the entity responsible for a particular minimum control measure, then the operator-permittee remains responsible for the implementation of that measure even if another entity has agreed to implement the control measure. Section 122.35(a). Another party may satisfy the operator-permittee's responsibility by implementing the minimum control measure in a manner at least as stringent or prescriptive as the corresponding NPDES permit requirement. If the third party fails to do so, the operator-permittee remains responsible for its performance. The operator of the MS4 should consider entering into an agreement with the third party that acknowledges the responsibility to implement the minimum measure. The operator-permittee's NOI and its annual § 122.34(f)(3) reports submitted to the NPDES permitting authority must identify the third party that is satisfying one or more of the permit obligations. This requirement ensures that the permitting authority is aware which entity is supposed to implement which minimum measures.

If, on the other hand, the regulated small MS4's permit recognizes that an NPDES permittee other than the operator-permittee is responsible for a particular minimum control measure, then the operator-permittee is relieved from the responsibility for implementing that measure. The operator-permittee is also relieved from the responsibility for implementing any measure that the operator's permit indicates will be performed by the NPDES permitting authority. Section 122.35(b). The MS4 operator-permittee would be responsible for implementing the remaining minimum measures.

Today's final rule differs from the proposed version of § 122.35(b), which

stated that, even if the third party's responsibility is recognized in the permit, the MS4 operator-permittee remained responsible for performance if the third party failed to perform the measure consistent with § 122.34(b). Under today's rule, the operator-permittee is relieved from responsibility for performance of a measure if the third party is an NPDES permittee whose permit makes it responsible for performance of the measure (including, for example, a State agency other than the State agency that issues NPDES permits) or if the third party is the NPDES permitting authority itself. Because the permitting authority is acknowledging the third party's responsibility in the permit, commenters thought that the MS4 operator-permittee should not be responsible for ensuring that the other entity is implementing the control measure properly. EPA agrees that the operator-permittee should not be conditionally responsible when the requirements are enforceable against some other NPDES permittee. If the third party fails to perform the minimum measure, the requirements will be enforceable against the third party. In addition, the NPDES permitting authority could reopen the operator-permittee's permit under § 122.62 and modify the permit to make the operator responsible for implementing the measure. A new paragraph has been added to § 122.62 to clarify that the permit may be reopened in such circumstances.

Today's rule also provides that the operator-permittee is not conditionally responsible where it is the State NPDES permitting authority itself that fails to implement the measure. The permitting authority does not need to issue a permit to itself (i.e., to the same State agency that issues the permit) for the sole purpose of relieving the small MS4 from responsibility in the event the State agency does not satisfy its obligation to implement a measure. EPA does not believe that the small MS4 should be responsible in the situation where the NPDES permit issued to the small MS4 operator recognizes that the State agency that issues the permit is responsible for implementing a measure. If the State does fail to implement the measure, the State agency could be held accountable for its commitment in the permit to implement the measure. Where the State does not fulfill its responsibility to implement a measure, a citizen also could petition for withdrawal of the State's NPDES program or it could petition to have the MS4's permit reopened to require the

MS4 operator to implement the measure.

EPA notes that not every State program that addresses erosion and sediment control from construction sites will be adequate to satisfy the requirement that each regulated small MS4 have a program to the extent required by § 122.34(b)(4). For example, although all NPDES States are required to issue NPDES permits for construction activity that disturbs greater than one acre, the State's NPDES permit program will not necessarily be extensive enough to satisfy a regulated small MS4's obligation under § 122.34(b)(4). NPDES States will not necessarily be implementing all of the required elements of that minimum measure, such as procedures for site plan review in each jurisdiction required to develop a program and procedures for receipt and consideration of information submitted by the public on individual construction sites. In order for a State erosion and sediment control program to satisfy a small MS4 operator's obligation to implement § 122.34(b)(4), the State program would have to include all of the elements of that minimum measure.

Where the operator-permittee is itself performing one or more of the minimum measures, the operator-permittee remains responsible for all of the reporting requirements under § 122.34(f)(3). The operator-permittee's reports should identify each entity that is performing the control measures within the geographic jurisdiction of the regulated small MS4. If the other entity also operates a regulated MS4 and files reports on the progress of implementation of the measures within the geographic jurisdiction of the MS4, then the operator-permittee need not include that same information in its own reports.

If the other entity operates a regulated MS4 and is performing all of the minimum measures for the permittee, the permittee is not required to file the reports required by § 122.34(f)(3). This relief from reporting is specified in § 122.35(a).

Section 122.35 addresses the concerns of some commenters who sought relief for governmental facilities that are classified as small MS4s under today's rule. These facilities frequently discharge storm water through another regulated MS4 and could be regulated by that MS4's program. For example, a State owned office complex that operates its storm sewer system in an urbanized area will be regulated as an MS4 under today's rule even though its system may be subject to the storm water controls of the municipality in

which it is located. Today's rule specifically revised the definition of MS4 to recognize that different levels of government often operate MS4s and that each such separate entity (including the federal government) should be responsible for its discharges. If both MS4s agree, the downstream MS4 can develop a storm water management program that regulates the discharge from both MS4s. The upstream small MS4 operator still must submit an NOI that identifies the entity on which the upstream small MS4 operator is relying to satisfy its permit obligations. No reports are required from the upstream small MS4 operator, but the upstream operator must remain in compliance with the downstream MS4 operator's storm water management program. This option allows small MS4s to work together to develop one storm water management program that satisfies the permit obligations of both. If they cannot agree, the upstream small MS4 operator must develop its own program.

As mentioned previously, comments from federal facilities and State organizations that operate MS4s requested that their permit requirements differ from those of MS4s that are political subdivisions of States (cities, towns, counties, etc.). EPA acknowledges that there are differences; e.g., many federal and State facilities do not serve a resident population and thus might require a different approach to public education. EPA believes, however, that MS4s owned by State and federal governments can develop storm water management plans that address the minimum measures. Federal and State owned small MS4s may choose to work with adjacent municipally owned MS4s to develop a unified plan that addresses all of the required measures within the jurisdiction of all of the contiguous MS4s. The options in § 122.35 minimize the burden on small MS4s that are covered by another MS4's program.

One commenter recommended that if one MS4 discharges into a second MS4, the operator of the upstream MS4 should have to provide a copy of its NOI or permit application to the operator of the receiving MS4. EPA did not adopt this recommendation because the NOI and permit application will be publicly available; but EPA does recommend that NPDES permitting authorities consider it as a possible permit requirement. The commenter also suggested that monitoring data should be collected by the upstream MS4 and provided to the downstream MS4. EPA is not adopting such a uniform monitoring requirement because EPA believes it is more appropriate to let the MS4 operators

work out the need for such data. If necessary, the downstream MS4s might want to make such data a condition to allowing the upstream MS4 to connect to its system.

v. Joint Permit Programs. Many commenters supported allowing the operators of small MS4s to apply as co-permittees so they each would not have to develop their own storm water management program. Today's rule specifically allows regulated small MS4s to join with either other small MS4s regulated under § 122.34(d) or with medium and large MS4s regulated under § 122.26(d).

As is discussed in the previous section, regulated small MS4s may indicate in their NOIs that another entity is performing one or more of its required minimum control measures. Today's rule under § 122.33(b)(1) also specifically allows the operators of regulated small MS4s to jointly submit an NOI. The joint NOI must clearly indicate which entity is required to implement which control measure in each geographic jurisdiction within the service area of the entire small MS4. The operator of each regulated small MS4 remains responsible for the implementation of each minimum measure for its MS4 (unless, as is discussed in the previous section above, the permit recognizes that another entity is responsible for completing the measure.) The joint NOI, therefore, is legally equivalent to each entity submitting its own NOI. EPA is, however, revising the rule language to specifically authorize the joint submission of NOIs in response to comments that suggested that such explicit authorization might encourage programs to be coordinated on a watershed basis.

Section 122.33(b)(2)(iii) authorizes regulated small MS4s to jointly apply for an individual permit to implement today's rule, where allowed by an NPDES permitting authority. The permit application should contain sufficient information to allow the permitting authority to allocate responsibility among the parties under one of the two permitting options in §§ 122.33(b)(2)(i) and (ii).

Section 122.33(b)(3) of today's rule also allows an operator of a regulated small MS4 to join as a co-permittee in an existing NPDES permit issued to an adjoining medium or large MS4 or source designated under the existing storm water program. This co-permittee option applies only with the agreement of all co-permittees. Under this co-permittee arrangement, the operator of the regulated small MS4 must comply with the terms and conditions of the

applicable permit rather than the permit condition requirements of § 122.34 of today's rule. The regulated small MS4 that wishes to be a co-permittee must comply with the applicable requirements of § 122.26(d), but would not be required to fulfill all the permit application requirements applicable to medium and large MS4s. Specifically, the regulated small MS4 is not required to comply with the application requirements of § 122.26(d)(1)(iii) (Part 1 source identification), § 122.26(d)(1)(iv) (Part 1 discharge characterization), and § 122.26(d)(2)(iii) (Part 2 discharge characterization data). Furthermore, the regulated small MS4 operator could satisfy the requirements in § 122.26(d)(1)(v) (Part 1 management programs) and § 122.26(d)(2)(iv) (Part 2 proposed management program) by referring to the adjoining MS4 operator's existing plan. An operator pursuing this option must describe in the permit modification request how the adjoining MS4's storm water program addresses or needs to be supplemented in order to adequately address discharges from the MS4. The request must also explain the role of the small MS4 operator in coordinating local storm water activities and describe the resources available to accomplish the storm water management plan.

EPA sought comments regarding the appropriateness of the application requirements in these subsections of § 122.26(d). One commenter stated that newly regulated smaller MS4s should not be required to meet the existing regulations' Part II application requirements under § 122.26(d) regarding the control of storm water discharges from industrial activity. EPA disagrees. The smaller MS4 operators designated for regulation in today's rule may satisfy this requirement by referencing the legal authority of the already regulated MS4 program to the extent the newly regulated MS4 will rely on such legal authority to satisfy its permit requirements. If the smaller MS4 operator plans to rely on its own legal authorities, it must identify it in the application. If the smaller MS4 operator does not elect to use its own legal authority, they may file an individual permit application for an alternate program under § 122.33(b)(2)(ii).

The explanatory language in § 122.33(b)(3) recommends that the smaller MS4s designated under today's rule identify how an existing plan "would need to be supplemented in order to adequately address your discharges." One commenter suggested that this must be regulatory language and not guidance. EPA disagrees that this needs to be mandatory language.

Since many of the smaller MS4s designated today are “donut holes” within the geographic jurisdiction of an already regulated MS4, the larger MS4’s program generally will be adequate to address the newly regulated MS4’s discharges. The small MS4 applicant should consider the adequacy of the existing MS4’s program to address the smaller MS4’s water quality needs, but EPA is not imposing specific requirements. Where circumstances suggest that the existing program is inadequate with respect to the newly designated MS4 and the applicant does not address the issue, the NPDES permitting authority must require that the existing program be supplemented.

Commenters recommended that the application deadline for smaller MS4s designated today be extended so that existing regulated MS4s would not have to modify their permit in the middle of their permit term, provided that permit renewal would occur within a reasonable time (12 to 18 months) of the deadline. In response, EPA notes that today’s rule allows operators of newly designated small MS4s up to three years and 90 days from the promulgation of today’s rule to submit an application to be covered under the permit issued to an already regulated MS4. The permitting authority has a reasonable time after receipt of the application to modify the existing permit to include the newly designated source. If an existing MS4’s permit is up for renewal in the near future, the operator of a newly designated small MS4 may take that into account when timing its application and the NPDES permitting authority may take that into account when processing the application.

Another commenter suggested that the rule should include a provision to allow permit application requirements for smaller MS4s designated today to be determined by the permitting authority to account for the particular needs/wants of an already regulated MS4 operator. EPA does not believe that the regulations should specifically require this approach. When negotiating whether to include a newly designated MS4 in its program, the already regulated MS4 operator may require the newly designated MS4’s operator to provide any information that is necessary.

The co-permitting approach allows small MS4s to take advantage of existing programs to ease the burden of creating their own programs. The operators of regulated small MS4s, however, may find it simpler to apply for a program under today’s rule, and to identify the medium or large MS4 operator that is

implementing portions of its § 122.34(b) minimum measures.

d. Evaluation and Assessment

Under today’s rule, operators of regulated small MS4s are required to evaluate the appropriateness of their identified BMPs and progress toward achieving their identified measurable goals. The purpose of this evaluation is to determine whether or not the MS4 is meeting the requirements of the minimum control measures. The NPDES permitting authority is responsible for determining whether and what types of monitoring needs to be conducted and may require monitoring in accordance with State/Tribe monitoring plans appropriate to the watershed. EPA does not encourage requirements for “end-of-pipe” monitoring for regulated small MS4s. Rather, EPA encourages permitting authorities to carefully examine existing ambient water quality and assess data needs. Permitting authorities should consider a combination of physical, chemical, and biological monitoring or the use of other environmental indicators such as exceedance frequencies of water quality standards, impacted dry weather flows, and increased flooding frequency. (Claytor, R. and W. Brown. 1996. *Environmental Indicators to Assess Storm Water Control Programs and Practices*. Center for Watershed Protection, Silver Spring, MD.) Section II.L., Water Quality Issues, discusses monitoring in greater detail.

As recommended by the Intergovernmental Task Force on Monitoring Water Quality (ITFM), the NPDES permitting authority is encouraged to consider the following watershed objectives in determining monitoring requirements: (1) To characterize water quality and ecosystem health in a watershed over time, (2) to determine causes of existing and future water quality and ecosystem health problems in a watershed and develop a watershed management program, (3) to assess progress of watershed management program or effectiveness of pollution prevention and control practices, and (4) to support documentation of compliance with permit conditions and/or water quality standards. With these objectives in mind, the Agency encourages participation in group monitoring programs that can take advantage of existing monitoring programs undertaken by a variety of governmental and nongovernmental entities. Many States may already have a monitoring program in effect on a watershed basis. The ITFM report is included in the docket for today’s rule

(Intergovernmental Task Force on Monitoring Water Quality. 1995. *The Strategy for Improving Water-Quality Monitoring in the United States: Final Report of the Intergovernmental Task Force on Monitoring Water Quality*. Copies can be obtained from: U.S. Geological Survey, Reston, VA.).

EPA expects that many types of entities will have a role in supporting group monitoring activities—including federal agencies, State agencies, the public, and various classes or categories of point source dischargers. Some regulated small MS4s might be required to contribute to such monitoring efforts. EPA expects, however, that their participation in monitoring activities will be relatively limited. For purposes of today’s rule, EPA recommends that, in general, NPDES permits for small MS4s should not require the conduct of any additional monitoring beyond monitoring that the small MS4 may be already performing. In the second and subsequent permit terms, EPA expects that some limited ambient monitoring might be appropriately required for perhaps half of the regulated small MS4s. EPA expects that such monitoring will only be done in identified locations for relatively few pollutants of concern. EPA does not anticipate “end-of-pipe” monitoring requirements for regulated small MS4s.

EPA received a wide range of comments on this section of the rule. Some commenters believe that EPA should require monitoring; others want a strong statement that the newly regulated small MS4s should not be required to monitor. Many commenters raised questions about exactly what EPA expects MS4s to do to evaluate and assess their BMPs. EPA has intentionally written today’s rule to provide flexibility to both MS4s and permitting authorities regarding appropriate evaluation and assessment. Permitting authorities can specify monitoring or other means of evaluation when writing permits. If additional requirements are not specified, MS4s can decide what they believe is the most appropriate way to evaluate their storm water management program. As mentioned above, EPA expects that the necessity for monitoring and its extent may change from permit cycle to permit cycle. This is another reason for making the evaluation and assessment rule requirements very flexible.

i. Recordkeeping. The NPDES permitting authority is required to include at least the minimum appropriate recordkeeping conditions in each permit. Additionally, the NPDES permitting authority can specify that permittees develop, maintain, and/or

submit other records to determine compliance with permit conditions. The MS4 operator must keep these records for at least 3 years but is not required to submit records to the NPDES permitting authority unless specifically directed to do so. The MS4 operator must make the records, including the storm water management program, available to the public at reasonable times during regular business hours (see 40 CFR 122.7 for confidentiality provision). The MS4 operator is also able to assess a reasonable charge for copying and to establish advance notice requirements for members of the public.

EPA received a comment that questioned EPA's authority to require MS4s to make their records available to the public. EPA disagrees with the commenter and believes that the CWA does give EPA the authority to require that MS4 records be available. It is also more practical for the public to request records directly from the MS4 than to request them from EPA who would then make the request to the MS4. Based on comments, EPA revised the proposed rule so as not to limit the time for advance notice requirements to 2 business days.

ii. Reporting. Under today's rule, the operator of a regulated small MS4 is required to submit annual reports to the NPDES permitting authority for the first permit term. For subsequent permit terms, the MS4 operator must submit reports in years 2 and 4 unless the NPDES permitting authority requires more frequent reports. EPA received several comments supporting this timing for report submittal. Other commenters suggested that annual reports during the first permit cycle are too burdensome and not necessary. EPA believes that annual reports are needed during the first 5-year permit term to help permitting authorities track and assess the development of MS4 programs, which should be established by the end of the initial term. Information contained in these reports can also be used to respond to public inquiries.

The report must include (1) the status of compliance with permit conditions, an assessment of the appropriateness of identified BMPs and progress toward achieving measurable goals for each of the minimum control measures, (2) results of information collected and analyzed, including monitoring data, if any, during the reporting period, (3) a summary of what storm water activities the permittee plans to undertake during the next reporting cycle, and (4) a change in any identified measurable goal(s) that apply to the program elements.

The NPDES permitting authority is encouraged to provide a brief two-page reporting format to facilitate compiling and analyzing the data from submitted reports. EPA does not believe that submittal of a brief annual report of this nature is overly burdensome, and has not changed the required reporting time frame from the proposal. The permitting authority will use the reports in evaluating compliance with permit conditions and, where necessary, will modify the permit conditions to address changed conditions.

iii. Permit-As-A-Shield. Section 122.36 describes the scope of authorization (i.e. "permit-as-a-shield") under an NPDES permit as provided by section 402(k) of the CWA. Section 402(k) provides that compliance with an NPDES permit is deemed compliance, for purposes of enforcement under CWA sections 309 and 505, with CWA sections 301, 302, 306, 307, and 403, except for any standard imposed under section 307 for toxic pollutants injurious to human health.

EPA's Policy Statement on Scope of Discharge Authorization and Shield Associated with NPDES Permits, originally issued on July 1, 1994, and revised on April 11, 1995, provides additional information on this matter.

e. Other Applicable NPDES Requirements

Any NPDES permit issued to an operator of a regulated small MS4 must also include other applicable NPDES permit requirements and standard conditions, specifically the applicable requirements and conditions at 40 CFR 122.41 through 122.49. Reporting requirements for regulated small MS4s are governed by § 122.34 and not the existing requirements for medium and large MS4s at § 122.42(c). In addition, the NPDES permitting authority is encouraged to consult the Interim Permitting Approach, issued on August 1, 1996. The discussion on the Interim Permitting Approach in Section II.L.1, Water Quality Based Effluent Limits, provides more information. The provisions of §§ 122.41 through 122.49 establish permit conditions and limitations that are broadly applicable to the entire range of NPDES permits. These provisions should be interpreted in a manner that is consistent with provisions that address specific classes or categories of discharges. For example, § 122.44(d) is a general requirement that each NPDES permit shall include conditions to meet water quality standards. This requirement will be met by the specific approach outlined in today's rule for the implementation of BMPs. BMPs are the most appropriate

form of effluent limitations to satisfy technology requirements and water quality-based requirements in MS4 permits (see the introduction to Section II.H.3, Municipal Permit Requirements, Section II.H.3.h, Reevaluation of Rule, and the discussion of the Interim Permitting Policy in Section II.L.1. below).

f. Enforceability

NPDES permits are federally enforceable. Violators may be subject to the enforcement actions and penalties described in CWA sections 309, 504, and 505 or under similar water pollution enforcement provisions of State, tribal or local law. Compliance with a permit issued pursuant to section 402 of the Clean Water Act is deemed compliance, for purposes of sections 309 and 505, with sections 301, 302, 306, 307, and 403 (except any standard imposed under section 307 for toxic pollutants injurious to human health).

g. Deadlines

Today's final rule includes "expeditious deadlines" as directed by CWA section 402(p)(6). In proposed § 122.26(e), the permit application for the "ISTEA" facilities was maintained as August 7, 2001 and the permit application deadline for storm water discharges associated with other construction activity was established as 3 years and 90 days from the final rule date. In proposed § 122.33(c)(1), operators of regulated small MS4s were required to seek permit coverage within 3 years and 90 days from the date of publication of the final rule. In proposed § 122.33(c)(2), operators of regulated small MS4s designated by the NPDES permitting authority on a local basis under § 122.32(a)(2) must seek coverage under an NPDES permit within 60 days of notice, unless the NPDES permitting authority specifies a later date.

In order to increase the clarity of today's final rule, EPA has changed the location of some of the above requirements. All application deadlines for both Phase I and Phase II are now listed or referenced in § 122.26(e). Section 122.26(e)(1) contains the deadlines for storm water associated with industrial activity. Paragraph (i) has been changed to correct a typographical error. Paragraph (ii) has been revised to reflect the changed application date for "ISTEA" facilities. (See discussion in section I.3, ISTEA Sources). The application deadline for storm water discharges associated with other construction activity is now in a new § 122.26(e)(8). The application deadline for regulated small MS4s

remains in § 122.33(c) because this section is written in “readable regulation” format, but it is also described in a new § 122.26(e)(9).

Under today’s rule, permitting authorities are allowed up to 3 years to issue a general permit and MS4s designated under § 122.32(a)(1) are allowed up to 3 years and 90 days to submit a permit application. Operators of regulated small MS4s that choose to be a co-permittee with an adjoining MS4 with an existing NPDES storm water permit must apply for a modification of that permit within the same time frame. Several commenters stated that 90 days was not adequate time to submit an NOI. This might be true if facilities did not start developing their storm water program until publication of their general permit. In fact, municipalities should start developing their storm water program upon publication of today’s final rule, if they have not already done so. Municipalities that are uncertain if they fall within the urbanized area should ask their permitting authority. EPA believes that municipalities should not automatically take three years and 90 days to develop a program and submit their NOI. Three years is the maximum amount of time to issue a general permit. MS4s that are automatically designated under today’s rule may have less than 3 years and 90 days if the permitting authority issues a permit that requires submission of NOIs before that time. EPA encourages States to modify their NPDES program to include storm water and issue their permits as soon as possible. It is important for permitting authorities to keep their municipalities informed of their progress in developing or modifying their NPDES storm water requirements.

EPA recognizes that MS4s brought into the program due to the 2000 Census calculations do not have as much time to develop a program as those already designated from the 1990 Census. However, the official Bureau of the Census urbanized area calculation for the 2000 Census is expected to be published in the **Federal Register** in the spring of 2002, which should give the potentially affected MS4s adequate time to prepare for compliance under the applicable permit. However, if the publication of this information is delayed, MS4s in newly designated urbanized areas will have 180 days from the time the new designations are published to submit an NOI, consistent with the time frame for other regulated MS4s that are designated after promulgation of the rule.

The proposed application deadline for MS4s designated under § 122.32(a)(2)

was within 60 days of notice. Many commenters stated that 60 days does not provide adequate time for the preparation of an NOI or permit application. EPA agrees that newly designated MS4s may not be aware that they might be designated since the permitting authority could take several years to develop designation criteria. EPA has decided that the application time frame for these facilities should be consistent with the 180 days allowed for facilities designated under §§ 122.26(a)(9)(i)(C) and (D). Section 122.33(c)(2) of today’s final rule contains the modified time frame of 180 days to apply for coverage.

h. Reevaluation of Rule

The municipal caucus of the Storm Water Phase II FACA Subcommittee asked EPA to demonstrate its commitment to revisit the municipal requirements of today’s rule and make changes where necessary after evaluating the storm water program and researching the effectiveness of municipal BMPs. In § 122.37 of today’s final rule, EPA commits to revisiting the regulations for the municipal storm water discharge control program after completion of the first two permit terms. EPA intends to use this time to work closely with stakeholders on research efforts. Gathering and analyzing data related to the storm water program, including data regarding the effectiveness of BMPs, is critical to EPA’s storm water program evaluation. EPA does not intend to change today’s NPDES municipal storm water program until the end of this period, except under the following circumstances: a court decision requires changes; a technical change is necessary for implementation; or the CWA is modified, thereby requiring changes. After careful analysis, EPA might also consider changes from consensus-based stakeholder requests regarding requirements applicable to newly regulated MS4s. EPA will apply the August 1, 1996, Interim Permitting Approach to today’s program during this interim period and encourages all permitting authorities to use this approach in municipal storm water permits for newly regulated MS4s and in determining MS4 permit requirements under a TMDL approach. After careful consideration of the data, EPA will make modifications as necessary.

EPA received comments that supported waiting two permit cycles before re-evaluating the rule and other comments that requested re-evaluation much sooner. EPA anticipates two full permit cycles are necessary to obtain

enough data to significantly evaluate the rule. The re-evaluation time frame of 13 years from today remains as proposed.

I. Other Designated Storm Water Discharges

1. Discharges Associated with Small Construction Activity

Section 122.26(b)(15) of today’s rule designates certain construction activities for regulation as “storm water discharges associated with small construction activity.” Specifically, storm water discharges from construction activity equal to or greater than 1 acre and less than 5 acres are automatically designated except in those circumstances where the operator (i.e., person responsible for discharges that might occur) certifies to the permitting authority that one of two specific waiver circumstances (described in section b. below) applies. Sites below one acre may be designated under § 122.26(b)(15)(ii) where necessary to protect water quality.

Today’s rule regulates these construction-related storm water sources under CWA section 402(p)(6) to protect water quality rather than under CWA section 402(p)(2). Designation under 402(p)(6) gives States and EPA the flexibility to waive the permit requirement for construction activity that is not likely to impair water quality, and to designate additional sources below one acre that are likely to cause water quality impairment. Thus, the one acre threshold of today’s rule is not an absolute threshold like the five acre threshold that applies under the existing storm water rule.

Today’s rule regulating certain storm water discharges from construction activity disturbing less than 5 acres is consistent with the 9th Circuit remand in *NRDC v. EPA*, 966 F.2d 1292 (9th Cir. 1992). In that case, the court remanded portions of the existing storm water regulations related to discharges from construction sites. The existing Phase I regulations define “storm water discharges associated with industrial activity” to include storm water discharges from construction sites disturbing 5 acres or more of total land area (see 40 CFR 122.26(b)(14)(x)). In its decision, the court concluded that the 5-acre threshold was improper because the Agency had failed to identify information “to support its perception that construction activities on less than 5 acres are non-industrial in nature” (966 F.2d at 1306). The court remanded the exemption to EPA for further proceedings (966 F.2d at 1310). EPA’s objectives in today’s action include an effort to (1) address the 9th Circuit

remand to reconsider regulation of storm water discharges from construction activities that disturb less than 5 acres of land, (2) address water quality concerns associated with such activities, and (3) balance conflicting recommendations and concerns of stakeholders in the regulation of additional construction activity.

EPA responded to the Ninth Circuit's decision by designating discharges from construction activities that disturb between 1 and 5 acres as "discharges associated with small construction activity" under CWA section 402(p)(6), rather than as "discharges associated with industrial activity" under CWA section 402(p)(2)(B). Although a size criterion alone may be an indicator of whether runoff from construction sites between 1 and 5 acres is "associated with industrial activity," the Agency is instead relying on a size threshold in tandem with provisions that allow for designations and waivers based on potential for "predicted water quality impairments" to regulate construction sites between 1 and 5 acres under CWA section 402(p)(6). This approach was chosen by the Agency for the sake of simplicity and certainty and, most importantly, to protect water quality consistent with the mandate of CWA section 402(p)(6). Today's rule also includes extended application deadlines for this new category of dischargers under the authority of CWA section 402(p)(6) (see § 122.26(e)(8) of today's rule).

In today's rule, EPA is regulating storm water discharges from additional construction sites to better protect the Nation's waters, while remaining sensitive to a concern that the Agency should not regulate discharges from construction sites that might not or do not have adverse water quality impacts. EPA believes that today's rule will successfully accomplish this objective by establishing a 1-acre threshold nationwide that includes the flexibility to allow the permitting authority to both waive requirements for discharges from sites that are not expected to cause adverse water quality impacts and to designate discharges from sites below 1-acre based on adverse water quality impacts.

In addition to the diminishing water quality benefits of regulating all sites below one acre, the Agency relied on practical considerations in establishing a one acre threshold and not setting a lower threshold. Regardless of the threshold established by EPA, a NPDES permit can only be required if a construction site has a point source discharge. A point source discharge means that pollutants are added to

waters of the United States through a discernible, confined, discrete conveyance. "Sheet flow" runoff from a small construction site would not result in a point source discharge unless and until it channelized. As the amount of disturbed land surface decreases, precipitation is less likely to channelize and create a "point source" discharge (assuming the absence of steep slopes or other factors that lead to increased channelization). Categorical designation of very small sites may create confusion about applicability of the NPDES permitting program to those sites. EPA's one acre threshold reflects, in part, the need to recognize that smaller sites are less likely to result in point source discharges. Of course, the NPDES permitting authority could designate smaller sites (below one acre, assuming point source discharges occur from the smaller designated sites) for regulation if a watershed or other local assessment indicated the need to do so. The Phase II rule includes this designation authority at 40 CFR 122.26(a)(9)(i)(D) and (b)(15)(ii).

The one acre threshold also provides an administrative tool for more easily identifying those sites that are identified for coverage by the rule (but may receive a waiver) and those that are not automatically covered (but may be designated for inclusion). Although all construction sites less than five acres could have a significant water quality impact cumulatively, EPA is automatically designating for permit coverage only those storm water discharges from construction sites that disturb land equal to or greater than one acre. Categorical regulation of discharges from construction below this one acre threshold would overwhelm the resources of permitting authorities and might not yield corresponding water quality benefits. Construction activities that disturb less than one acre make up, in total, a very small percentage of the total land disturbance from construction nationwide. The one acre threshold is reasonable for accomplishing the water quality goals of CWA section 402(p)(6) because it results in 97.5% of the total acreage disturbed by construction being designated for coverage by the NPDES storm water program, while excluding from automatic coverage the numerous smaller sites that represent 24.7% of the total number of construction sites.

Some commenters believed that EPA has not adequately identified water quality problems associated with storm water discharges from construction activity disturbing less than five acres. Other commenters believed that storm water discharges from small

construction activity is a significant water quality problem nationwide. Section I.B.3, Construction Site Runoff, provides a detailed discussion of adverse water quality impacts resulting from construction site storm water discharges. EPA is regulating storm water discharges from construction activity disturbing between 1 and 5 acres because the cumulative impact of many sources, and not just a single identified source, is typically the cause for water quality impairments, particularly for sediment-related water quality standards.

Several commenters requested that EPA regulate discharges from small construction activity as "discharges associated with industrial activity" under CWA 402(p)(4) and not, as proposed, as "storm water discharges associated with other activity" under CWA 402(p)(6). EPA is regulating discharges from small construction sites as "small construction activity" under the authority of CWA section 402(p)(6), rather than section 402(p)(4), to ensure that regulation of these sources is water quality-sensitive. CWA section 402(p)(6) affords the opportunity for designations and waivers of sources based on potential for "predicted water quality impairments." Regulation of storm water "associated with industrial activity" does not necessarily focus regulation to protect water quality.

a. Scope

The definition of "storm water discharges associated with small construction activity" includes discharges from construction activities, such as clearing, grading, and excavating activities, that result in the disturbance of equal to or greater than 1 acre and less than 5 acres (see § 122.26(b)(15)(i)). Such activities could include: road building; construction of residential houses, office buildings, or industrial buildings; or demolition activity. The definition of "storm water discharges associated with small construction activity" also includes any other construction activity, regardless of size, designated based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the United States (§ 122.26(b)(15)(ii)). This designation is made by the Director, or in States with approved NPDES programs, either the Director or the EPA Regional Administrator.

For the purposes of today's rule, the definition of "storm water discharges associated with small construction activity" includes discharges from activities disturbing less than 1 acre if that construction activity is part of a

“larger common plan of development or sale” with a planned disturbance of equal to or greater than 1 acre of land. A “larger common plan of development or sale” means a contiguous area where multiple separate and distinct construction activities are planned to occur at different times on different schedules under one plan, e.g., a housing development of five ¼ acre lots (§ 122.26(b)(15)(i)).

In addition to the regulatory text for smaller construction, the Agency is also revising the existing text of § 122.26(b)(14)(x) to clarify EPA’s intention regarding construction projects involving a larger common plan of development or sale ultimately disturbing 5 or more acres. Operators of such sites are required to seek coverage under an NPDES permit regardless of the number of lots in the larger plan because designation for permit coverage is based on the total amount of land area to be disturbed under the common plan. This designation attempts to address the potential cumulative effects of numerous construction activities concentrated in a given area.

Several commenters asked that EPA allow the permitting authority to set the appropriate size threshold based on water quality studies. While EPA agrees that location-specific water quality studies provide an ideal information base from which to make regulatory decisions, today’s rule establishes a default standard for regulation in the absence of location-specific studies. The rule does allow for deviation from the default standard through additional designations and waivers, however, when supported by location-specific water quality information. The rule codifies the ability of permitting authorities to provide waivers for sites greater than or equal to one acre (the default standard) and designate additional discharges from small sites below one acre when location-specific information suggests that the default 1 acre standard is either unnecessary (waivers) or too limited (designations) to protect water quality.

Some commenters wanted EPA to base the regulation of storm water discharges from construction sites not only on size, but also on the duration and intensity of activity occurring on the site. EPA believes that a national 1-acre threshold, in combination with waivers and additional designations, is the most effective and simplest way to address adverse water quality impacts from storm water from small construction sites. Moreover, as discussed below, the waiver for rainfall erosivity does account for projects of limited duration. EPA believes,

however, that the intensity of activity occurring on-site would be a very difficult condition to quantify.

Many commenters requested that EPA maintain the 5 acre threshold from the existing regulations, which include opportunities for site-specific designation, as the regulatory scope for regulating storm water from construction sites, i.e., that the Agency not automatically regulate storm water discharges from sites less than 5 acres. Several commenters wanted construction requirements to be applied to sites smaller than 1 acre, while some commenters suggested alternative thresholds of 2 or 3 acres. The rest of the commenters supported the 1 acre threshold. None of the commenters presented any data or rationales to support a specific size threshold.

EPA examined alternative size thresholds, including 0.5 acre, 1 acre, 2 acres and 5 acres. EPA had difficulty evaluating the alternative size thresholds because, while directly proportional to the size of the disturbed site, the water quality threat posed by discharges from construction sites of differing sizes varies nationwide, depending on the local climatological, geological, geographical, and hydrological influences. In order to ensure improvements in water quality nationwide, however, today’s rule does not allow various permitting authorities to establish different size thresholds except based on the waiver and designation provisions of the rule. EPA believes that the water quality impact from small construction sites is as high as or higher than the impact from larger sites on a per acre basis. By selecting the 1 acre size threshold and coupling it with waivers and additional designations, EPA is seeking to standardize improvement of water quality on a national basis while providing permitting authorities with the opportunity to designate those unregulated activities causing water quality impairments regardless of site size, as well as to waive requirements when information demonstrates that regulation is unnecessary.

EPA recognizes that the size criterion alone may not be the most ideal predictor of the need for regulation, but effective protection of water quality depends as much on simplicity in implementation as it does on the scientific information underlying the regulatory criteria. The default size criterion of 1 acre will ensure protection against adverse water quality impacts from storm water from small construction sites while not overburdening the resources of permitting authorities and the

construction industry to implement the program to protect water quality in the first place.

One commenter stated a need to clarify whether routine road maintenance is considered construction activity for the purpose of today’s rule. The NPDES general permit for discharges from construction sites larger than 5 acres defined “commencement of construction” as the *initial* disturbance of soils associated with clearing, grading, or excavating activities or other construction activities (63 FR 7913). For construction sites disturbing less than 5 acres, EPA does not consider construction activity to include *routine* maintenance performed to maintain the *original* line and grade, hydraulic capacity, or original purpose of the facility.

Two commenters believed that the Multi-Sector General Permit for storm water discharges from industrial activities (MSGP) (60 FR 50804) already applies to storm water discharges from construction activities at oil and gas exploration and production sites and asked for a clarification on this issue. Commenters also requested a single general permit to authorize both industrial storm water discharges and construction site discharges which occur at the same industrial site.

Currently, when construction activity disturbing more than 5 acres occurs on an industrial site covered by the MSGP, authorization under a separate NPDES construction permit is needed because the MSGP does not include the “construction” industrial sector. While the MSGP does address sediment and erosion control, it is not as specific as the NPDES general permit for storm water discharges from construction activities disturbing more than 5 acres. Though permitting authorities could conceivably develop a single general permit to authorize storm water discharges associated with construction activity at these industrial facilities, the commenter’s request is not addressed by today’s rulemaking. When today’s rule is implemented through general permits (to be issued later), the permitting authority will have discretion whether or not to incorporate the permit requirements for both the industrial storm water discharges and construction site storm water discharges into a single general permit. This type of request should be addressed to the permitting authority.

One commenter suggested that discharges from small construction sites should be regulated through a “self-implementing rule” approach. While today’s rule is not a self-implementing rule, it does add § 122.28(b)(2)(v), which

gives the permitting authority the discretion to authorize a construction general permit for sites less than 5 acres without submitting a notice of intent. Such non-registration general permits function similarly to self-implementing rules, but are, in fact, permits. Today's rule will be implemented through NPDES permits rather than self-implementing regulations to capitalize on the compliance, tracking, enforcement, and public participation associated with NPDES permits (see discussion in section II.C).

Other commenters believed that only the permitting authority should regulate construction site storm water discharges (under a NPDES permit) and that a small MS4 operator's regulation of storm water discharges associated with construction (under the small MS4 NPDES storm water program) is redundant. EPA disagrees that control measure implementation by the NPDES authority and the small MS4 operator is redundant. To the extent the two efforts overlap, today's rule provides for consolidation and coordination of substantive requirements via incorporation by reference permitting. Small MS4s operators may choose to impose more prescriptive requirements than an NPDES permitting authority based on localized water quality needs. In those cases, EPA intends that the substantive requirements from the small MS4 program should apply as the NPDES permit requirements for the construction site discharger. In cases where a small MS4 program does not prioritize and focus on storm water from construction sites (beyond the small MS4 minimum control measure in today's rule, which does not require the small MS4 operator to control construction site discharges in a manner as prescriptive as is expected for discharges regulated under NPDES permits), the Agency intends that the NPDES general permit will provide the substantive standards applicable to the construction site discharge. EPA does anticipate, however, that implementation of MS4 programs to address construction site runoff within their jurisdiction will enhance overall NPDES compliance by construction site dischargers. EPA also notes that under § 122.35(b), the permitting authority may recognize its own program to control storm water discharges from construction sites in lieu of requiring such a program in an MS4's NPDES permit, provided that the permitting authority's program satisfies the requirements of § 122.34(b)(4), including, for example, procedures for site plan reviews and consideration of

information submitted by the public on individual construction sites in each jurisdiction required to be covered by the program.

b. Waivers

Under § 122.26(b)(15)(i) of today's rule, NPDES permitting authorities may waive today's requirement for construction site operators to obtain a permit in two circumstances. The first waiver is intended to apply where little or no rainfall is expected during the period of construction. The second waiver may be granted when a TMDL or equivalent analysis indicates that controls on construction site discharges are not needed to protect water quality.

The first waiver is based on "low predicted rainfall erosivity" which can be found using tables of rainfall-runoff erosivity (R) values published for each region in the U.S. R factors are published in the U.S. Department of Agriculture (USDA) Agricultural Handbook 703 (Renard, K.G., Foster, G.R., Weesies, G.A., McCool, D.K., and D.C. Yoder. 1997. *Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE)*. U.S. Department of Agriculture Handbook 703). The R factor varies based on the time during the year when construction activity occurs, where in the country it occurs, and how long the construction activity lasts. The permitting authority may determine, using Handbook 703, which times of year, if any, the waiver opportunity is available for construction activity. EPA will provide assistance either through computer programs or the World Wide Web on how to determine whether this waiver applies for a particular geographic area and time period. Application of this waiver for regulatory purposes will be determined by the authorized NPDES authority. This waiver is discussed further in the following section titled Rainfall-Erosivity Waiver.

The second waiver is based on a consideration of ambient water quality. This waiver is available after a State or EPA develops and implements TMDLs for the pollutant(s) of concern from storm water discharges associated with construction activity. This waiver is also available for sites discharging to non-impaired waters that do not require TMDLs, when an equivalent analysis has determined allocations for small construction sites for the pollutant(s) of concern or determined that such allocations are not needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant

contributions from all sources, and a margin of safety. The Agency envisions an equivalent analysis that would demonstrate that water quality is *not* threatened by storm water discharges from small construction activity. This waiver is discussed further below in the sections titled TMDL Waiver and Water Quality Issues.

The proposed rule included a waiver based on "low predicted soil loss." This waiver provision would have been applicable on a case-by-case basis where the annual soil loss rate for the period of construction for a site, using the Revised Universal Soil Loss Equation (RUSLE), would be less than 2 tons/acre/year. The annual soil loss rate of less than 2 tons/acre/year would be calculated through the use of the RUSLE equation, assuming the constants of no ground cover and no runoff controls in place.

Several commenters found the low soil loss waiver too complex and impractical, and stated that expertise is not available at the local level to prepare and evaluate eligibility for the waiver. Another commenter questioned whether two tons/acre/year was an appropriate threshold for predicting adverse water quality impacts. Two other commenters said that RUSLE was never intended to predict off-site impacts and is not an indicator of potential harm to water quality. EPA agrees with the commenters on the difficulty associated with determining and implementing this waiver. Most construction site operators are not familiar with the RUSLE program, and the potential burden on the permitting authority, construction industry, USDA's Natural Resources Conservation Service and conservation districts probably would have been significant. The Agency has not included this waiver in the final rule.

Two commenters asked that EPA allow States the flexibility to develop their own waiver criteria but did not suggest how the Agency (or affected stakeholders) could evaluate the acceptability of alternative State waiver criteria. Therefore, the final rule does not provide for any such alternative waivers. If a State does seek to develop alternate waiver criteria, then EPA procedures afford the opportunity for subsequent actions, for example, under the Project XL Program in EPA's Office of Reinvention, which seeks cleaner, smarter, and cheaper solutions to environmental problems. Many commenters suggested that EPA extend these waivers to existing industrial storm water regulations for construction activity greater than 5 acres. These construction site discharges are

regulated as industrial storm water discharges under CWA 402(p)(2) and are not eligible for such water quality-based waivers.

Two commenters were concerned that waivers would create a potential for significant degradation of small streams. EPA disagrees. If small streams are threatened, the permitting authority would choose not to provide any waivers. In addition, permitting authorities may protect small streams by designating discharges from small construction activity based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the U.S.

Two commenters asked that the waiver options be eliminated. They felt it would create a gross inequity within the construction community if some projects will not be subject to the requirements of today's rule. While the comments may be valid, EPA disagrees that waivers should be disallowed on this basis. Construction site discharges that qualify for a waiver from permitting requirements are not expected to present a threat to water quality, which is the basis for designation and regulation under today's rule.

A number of commenters suggested additional waivers in cases where new development will result in no additional adverse impacts to water quality as compared to the existing development it replaces. EPA believes these waivers are either unworkable or unnecessary. It would be very difficult for most construction operators to determine, as well as for other stakeholders to verify, on a site-by-site basis, that there is no potential for adverse impact to water quality compared to the replaced development.

Other commenters proposed waivers in cases where a local erosion and sediment control program covers the project or a separate waiver for small linear utility projects. Instead of waivers, today's rule addresses the first suggestion through the qualifying program provision described in the section titled Cross-Referencing State/Local Erosion and Sediment Control Programs below. Today's rule provides waivers for small linear projects in so far as they satisfy conditions for low rainfall erosivity. (See § 122.26(b)(15)(i)(A).)

Other commenters suggested waivers based on distance to water body, existence of vegetated buffer around water body, slope of disturbed land, or if discharging to very large bodies of water. As a result of public outreach, EPA believes that these proposed waivers would be generally unworkable

for construction site dischargers and permitting authorities because of the difficulty in applying them to all small sites.

One commenter mentioned that waivers for the R factor (rainfall-erosivity) and soil loss are effluent standards that have not been developed in accordance with sections 301 and 304 of the CWA. EPA disagrees that these sections are relevant to the designation of sources in today's rule. The waiver provisions in this section of the rule are jurisdictional because they affect the scope of the universe of entities subject to the NPDES program. Therefore, the waiver provisions are not themselves substantive control standards implemented through NPDES permits, and thus, not subject to the statutory criteria in sections 301 and 304.

Another commenter stated that waivers would allow exemptions to the technology based requirements and would thus be inconsistent with the two-fold approach of the CWA (a technology based minimum and a water quality based overlay). EPA acknowledges that the CWA does not generally provide for waivers for the Act's technology-based requirements. The waiver provisions do not create exemptions from technology-based standards that apply to NPDES dischargers; they provide exemption from the underlying requirement for an NPDES permit in the first place. Protection of water quality is the reason these smaller sites are designated for regulation under NPDES. The Act's two fold approach imposes more stringent water quality based effluent limitations when technology-based limitations applicable to regulated dischargers are insufficient to meet water quality standards. Under today's rule, water quality protection is the basis for determining which of the unregulated sources should be regulated at all. Thus, today's rule is entirely consistent with the Act's two fold approach.

i. Rainfall-Erosivity Waiver. The rainfall-erosivity waiver under § 122.26(b)(15)(i)(A) is intended to exempt the requirements for a permit when and where negligible rainfall/runoff-erosivity is expected. In the development of the Universal Soil Loss Equation, analysis of data indicated that when factors other than rainfall are held constant, soil loss is directly proportional to a rainfall factor composed of total storm kinetic energy times the maximum 30 minute intensity. The average annual sum of the storm energy and intensity values for an area comprise the R factor—the rainfall erosivity index. A detailed explanation of the R factor can be found in

Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE) (USDA, 1997).

This waiver is time-sensitive and is dependent on when during the year a construction activity takes place, how long it lasts, and the expected rainfall and intensity during that time. R factors vary based on location. EPA anticipates that this waiver opportunity responds to concerns about the requirement for a permit when it is not expected to rain, especially in the arid areas of the U.S. Under today's rule, the permitting authority could waive the requirements for a permit for time periods when the rainfall-erosivity factor ("R" in RUSLE) is less than five during the period of construction. For the purposes of calculating this waiver, the period of construction activity starts at the time of initial disturbance and ends with the time of final stabilization. The operator must submit a written certification to the Director in order to apply for such a waiver. EPA believes that those areas receiving negligible rainfall during certain times of the year are unlikely to have storm events causing discharges that could adversely impact receiving streams. Consequently, BMPs would not be necessary on those smaller sites. This waiver is most applicable to projects of short duration and to the arid regions of the country where the occurrence of rainfall follows a cyclic pattern—between no rain and extremely heavy rain. EPA review of rainfall records for these areas indicates that, during periods of the year when the number of events and quantity of rain are low, storm water discharges from the smaller construction sites regulated under today's rule should be minimal.

Some commenters supported the use of the R factor as a waiver, while others felt that a waiver based on rainfall statistics ignores the fact that it may rain on any given day and it is the cumulative effect of wet weather discharges which cause water quality impairments. A commenter also asked what happens in "El Nino" years when significantly more rainfall than normal occurs. Another commenter also expressed concern that this waiver was not based on a measured water quality impact, but instead on an indicator of potential impact. In response to the previous comments, EPA notes that, under CWA 402(p)(6), sources are designated on their *potential* for adverse impact. Designation under the section is prospective, not retrospective or remedial only. For that reason, the waivers under today's rule also operate prospectively. EPA wanted to waive requirements for sites with little

potential to impair water quality, and the R factor is the most straightforward way to do this. The permitting authority, if electing to use waivers, could always suspend the use of waivers in certain areas or during certain times. In addition, the permitting authority may choose to use a lower R factor threshold than the one set by EPA. Application of this waiver is at the discretion of the permitting authority, subject only to the limitation that R factors cannot exceed 5.

One commenter expressed the need for EPA to provide a justification for the threshold value used for the R factor. None of the commenters included any data to show that EPA's proposed R factor of 2 was either too high or too low. EPA is using the R factor as an indicator of the potential to impact water quality. In an effort to determine which R threshold should be used, EPA conducted additional analysis of the rainfall/runoff erosivity factor for 134 sites across the country. For an R factor threshold of 5, approximately 12% of sites would be waived if the project period lasted 6 months, 27% for 3 months, 47% for 1 month, and 60% of sites would be waived if the project lasted for only 15 days. None of the 134 sites would be waived if the project lasted an entire year. For an R factor threshold of 2, approximately 9% of sites would be waived if the project period lasted 6 months, 15% for 3 months, 31% for 1 month, and 43% for 15 days. For an R factor threshold of 10, approximately 22% of sites would be waived if the project period lasted 6 months, 37% for 3 months, 60% for 1 month, and 78% for 15 days. EPA believes that an R factor of 5 is an adequate threshold to waive requirements for sites because they would not reasonably be expected to impair water quality.

EPA will develop, as part of the tool box described in section II.A.5, guidance materials and computer or web-accessible programs to assist permitting authorities and construction site discharges in determining if any resulting storm water discharges from specific projects are eligible for this waiver.

ii. Water Quality Waiver. The water quality waiver under § 122.26(b)(15)(i)(B) is available where storm water controls are not needed based on a comprehensive, location-specific evaluation of water quality needs. The waiver is available based on either an EPA-approved "total maximum daily load" (TMDL) under section 303(d) of the CWA that addresses the pollutant(s) of concern or, for sites discharging to non-impaired

waters that do not require TMDLs, an equivalent analysis that has either determined allocations for small construction sites for the pollutant(s) of concern or determined that such allocations are not needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety. The pollutants of concern that must be addressed include sediment or a parameter that addresses sediment (such as total suspended solids (TSS), turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. The operator must certify to the NPDES permitting authority that the construction activity will take place, and storm water discharges will occur, within the applicable drainage area evaluated in the TMDLs or equivalent analyses.

Today's rule modifies the approach in the proposed rule. EPA proposed to allow a waiver of permit requirements for small construction if storm water controls were determined to be unnecessary based on "wasteload allocations that are part of 'total maximum daily loads' (TMDLs) that address the pollutants of concern," or "a comprehensive watershed plan, implemented for the water body, that includes the equivalents of TMDLs, and addresses the pollutants of concern."

Commenters asked for clarification of the terms "comprehensive watershed plans" and "equivalent of TMDLs." EPA intended that both terms would include a comprehensive analysis that determines that controls on small construction sites are not needed based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety. Today's rule makes this clarification.

One commenter pointed out that there are no water quality standards for suspended solids, the major pollutant expected in discharges from construction activity. The commenter asserted that no waiver would ever be available. Another commenter noted that there are no sediment criteria developed for streams, also making this waiver useless. EPA notes that a number of States and Tribes have water quality standards that address TSS, which are narrative in form, and that may serve as a basis for water quality-based effluent limits. As efforts to identify impairments and improve water quality progress, some States may yet develop water quality standards for suspended

solids. Although several TMDLs for sediment and related parameters have been established, EPA does recognize that currently it is extremely difficult to develop TMDLs for sediment. EPA is partially addressing this concern by clarifying in today's rule that the waivers may be based on a TMDL or equivalent analyses for sediment or one of the various pollutant parameters that are a proxy for sediment. These include TSS, turbidity and siltation.

Other commenters noted that this waiver was unattainable if a TMDL or equivalent analysis must be available for every pollutant that could possibly be present in any amount in discharges from small construction sites regardless of whether the pollutant is causing water quality impairment. Commenters asked that EPA identify what constitutes the "pollutants of concern" for which a TMDL or its equivalent must be developed. EPA has revised the proposed rule in response to these concerns.

In order for discharges from construction sites under five acres to qualify for the water quality waiver of today's rule, the construction site operator must demonstrate that storm water controls are not necessary for sediment or a parameter that addresses sediment (such as TSS, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Even if the water body is not currently impaired for sediment, today's rule requires an analysis of the potential impacts of sediment because the storm water discharges from the construction activity will be a new source of loading to the water body that could constitute a new impairment. Because the water body will not necessarily have been included on a "303(d) list" and a TMDL will not necessarily be required, the rule continues to allow an analysis that is the equivalent of a TMDL. The designation of storm water discharges from small construction activity for regulation in today's rule is intended to control pollutants other than sediment. This waiver provision requires a TMDL or equivalent analysis for a pollutant other than gross particulates (*i.e.*, sediment and other particulate-focused pollutant parameters) only if the receiving water is currently impaired for that pollutant.

One commenter expressed the concern that construction operators will not know if they are in a watershed covered by a TMDL. To the extent this is an operator's concern, he or she could contact their NPDES permitting

authority before applying for permit coverage to determine if receiving water is subject to a TMDL. Alternatively, the permitting authority could identify the TMDL (or equivalent analysis) areas in the general permit or another operator-accessible information source.

Another commenter expressed the concern that a TMDL waiver is likely to be ineffective because the TMDL list is submitted only once every 2 years. By the time a water is listed, the activity may have been completed and stabilized. The commenter argued that, if a watershed is impaired due to sediment from construction, then storm water controls will still be needed, because small construction can only be waived when it is not identified as a source of impairment. In response, EPA notes that an analysis that is the equivalent of a TMDL (specifically, equivalent to the component of a TMDL that comprehensively analyses existing ambient conditions against the applicable water quality standards) may also provide a basis for waiver from the default 1 acre designation. Also, even if a water has been identified as impaired for sediment, it is possible that a site or category of sites may receive an allocation that is sufficiently high enough to allow discharges without storm water controls.

c. Permit Process and Administration

The operator of the construction site, as with any operator of a point source discharge, is responsible for obtaining coverage under a NPDES permit as required by § 122.21(b). The “operator” of the construction site, as explained in the current NPDES construction general permit, is typically the party or parties that either individually or collectively meet the following two criteria: (1) Operational control over the site specifications, including the ability to make modifications in the specifications; and (2) day-to-day operational control of those activities at the site necessary to ensure compliance with permit conditions (63 FR 7859). If more than one party meets these criteria, then each party involved would typically be a co-permittee with any other operators. The operator could be the owner, the developer, the general contractor, or individual contractor. When responsibility for operational control is shared, all operators must apply.

In today’s rule, EPA is not requiring an NOI for NPDES general permits for storm water discharges from construction activities regulated by § 122.26(b)(15) if the NPDES permitting authority finds that the use of NOIs would be inappropriate (see

§ 122.28(b)(2)(v)). Under this approach, the NPDES permitting authority will have the discretion to decide whether or not to require NOIs for discharges from construction activity less than 5 acres. Compared to the existing storm water regulation, the permitting authority thus has increased flexibility in program implementation. EPA does recommend the use of NOIs, however because NOIs track permit coverage and provide a useful information source to prioritize inspections or enforcement. Requiring an NOI allows for greater accountability by, and tracking of, dischargers. This simple permit application and reporting mechanism also allows for better outreach to the regulated community, uses an existing and familiar mechanism, and is consistent with the existing requirements for storm water discharges from larger construction activities. Today’s rule does not amend the requirement for NOIs in general permits for storm water discharges from construction activity disturbing 5 acres or more. See § 122.28(b)(2)(v).

EPA expects that the vast majority of discharges of storm water associated with small construction activity identified in § 122.26(b)(15) will be regulated through general permits. In the event that an NPDES permitting authority decides to issue an individual construction permit, however, individual application requirements for these construction site discharges are found at § 122.26(c)(1)(ii). For any discharges of storm water associated with small construction activity identified in § 122.26(b)(15) that are not authorized by a general permit, a permit application made pursuant to § 122.26(c) must be submitted to the Director by 3 years and 90 days after publication of the final rule.

Some commenters expressed concern that linear construction projects (*e.g.*, roads, highways, pipelines) that cross several jurisdictions will have to comply with multiple sets of requirements from various jurisdictions, including multiple local governments and States. EPA is limited in its options to address these concerns because the Agency cannot issue NPDES permits in States authorized to implement the NPDES program nor preempt other more stringent local and State requirements. EPA believes, however, that the option for incorporating by reference the State, Tribal or local requirements (see discussion in Section II.I.2.d., Cross-Referencing State/Local Erosion and Sediment Control Programs) should limit the administrative burden on the operator responsible for discharges from linear construction projects. If the operator were to implement the most

comprehensive of the various requirements for the whole project, it could avoid confusion due to differing requirements for different sections of the project. In addition, linear utility projects, which usually have a shorter project period, are more likely to be eligible for the rainfall erosivity waiver.

One commenter stated there was no reason to delay the application period for regulated storm water discharges from small construction activities. The commenter requested that the newly regulated construction site discharges should be required to seek permit coverage within 90 days, as opposed to 3 years, of the effective date of the rule. The Agency does not accept this request. EPA anticipates that NPDES permitting authorities will need one to two years to develop adequate legal authority to implement a program to address this new category of discharges, as well as to develop and issue general permits. Moreover, to ensure effective implementation to protect water quality, regulatory authorities will need additional time to inform small construction site operators of requirements and provide guidance and training on these requirements.

Finally, EPA received a comment requesting that the three year file retention requirement be deleted for discharges from small construction sites. While EPA recognizes that the three year record retention schedule may be unnecessary for certain construction projects, the Agency has determined it is necessary to retain files after the completion of the project to ensure permit compliance, including applicable construction site stabilization enabling permit termination for such sites.

d. Cross-Referencing State, Tribal or Local Erosion and Sediment Control Programs

In developing the NPDES permit requirements for construction sites less than 5 acres, members of the Storm Water Phase II FACA Subcommittee asked EPA to try to minimize redundancy in the construction permit requirements. In response, today’s rule at § 122.44(s) provides for incorporation of qualifying State, Tribal or local erosion and sediment control program requirements by reference into the NPDES permit authorizing storm water discharges from construction sites (described under §§ 122.26(b)(15) and (b)(14)(x)). The incorporation by reference approach applies not only to the newly regulated storm water discharges (from construction activity disturbing between 1 and 5 acres, including designated sites, but

excluding waived sites) but also to discharges from construction activity disturbing 5 or more acres already covered by the existing storm water regulations. For this latter category of discharges from construction activity disturbing 5 or more acres, the incorporation by reference approach requires that the pollutant control requirements from the incorporated program also satisfy the statutory standard for limitations representing application of the best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT).

For permits issued for discharges from small construction activity defined under § 122.26(b)(15), a qualifying State, Tribal, or local erosion and sediment control program is one that includes the program elements described under § 122.44(s)(1). These elements include requirements for construction site operators to implement appropriate erosion and sediment control BMPs, requirements to control waste, a requirement to develop a storm water pollution prevention plan, and requirements to submit a site plan for review. A storm water pollution prevention plan includes site descriptions, descriptions of appropriate control measures, copies of approved State, Tribal or local requirements, maintenance procedures, inspection procedures, and identification of non-storm water discharges. The construction site's permit would require it to follow the requirements of the qualifying local program rather than require it to follow two different sets of requirements. If a partially-qualifying program does not have all of the elements described under § 122.44(s)(1), then the NPDES permitting authority may still incorporate language in the small construction site discharge's permit that requires the construction site operator to follow the program, but the construction site discharge permit also must incorporate the missing required elements in order to satisfy CWA requirements.

The term "local" refers to the geographic area of applicability, not the form of government that develops and administers the program. Thus, a qualifying federal erosion and control program, such as certain programs developed and administered by the federal Bureau of Land Management, could be a qualifying local program.

As a result of this provision, local requirements will, in effect, provide the substantive construction site erosion and sediment control requirements for the NPDES permit authorization. Therefore, by following one set of

erosion and sediment control requirements, construction site operators satisfy both local and NPDES permit requirements without duplicative effort. At the same time, noncompliance with the referenced local requirements will be considered noncompliance with the NPDES permit which is federally enforceable. The NPDES permitting authority will, of course, retain the discretion to decide whether to include the alternative requirements in the general permit. EPA believes that this approach will best balance the need for consideration of specific local requirements and local implementation with the need for federal and citizen oversight, and will extend supplemental NPDES requirements to control storm water discharges from construction sites.

EPA developed the "incorporation by reference" approach based on implementation efforts designed by the State of Michigan. Michigan relies on localities to develop substantive controls for storm water discharges associated with construction activities on a localized basis. Localities, however, are not required to do so. In areas where the local authority does not choose to participate, the State administers the sedimentation and erosion control requirements. The State agency, as the NPDES permitting authority, receives an NOI (termed "notice of coverage" by Michigan) under the general permit and tracks and exercises oversight, as appropriate, over the activity causing the storm water discharge. Michigan's goal under these procedures is to utilize the existing erosion and sediment control program infrastructure authorized under State law for storm water discharge regulation. (See U.S. Environmental Protection Agency, Office of Water, January 7, 1994, Memo: From Michael B. Cook, Director OWEC, to Water Management Division Directors, Regarding the "Approach Taken by Michigan to Regulate Storm Water Discharges from Construction Activities.")

Most commenters supported the general concept of incorporating by reference qualifying programs. Two commenters expressed concern that different local construction requirements will create an impossible regulatory scheme for builders who work in different localities. EPA believes that allowing States to incorporate qualifying programs by reference will minimize the differences for builders who work in different areas of the State. These differences already exist, however, not only for erosion and sediment controls, but also other aspects

of construction. In any event, the criteria for qualification for localized programs should provide a certain degree of standardization for various localities' requirements. EPA expects that the new rule for construction and post-construction BMPs being developed under CWA section 304(m) will also encourage standardization of local requirements. (See discussion of this new rulemaking in section II.D.1, Federal Role of this preamble).

Two commenters requested that an "incorporation by reference" should include permission, in writing, from the qualifying local program administrator because of a perceived extra burden on the referenced program. Any program requirements incorporated by reference in NPDES permits should already apply to construction site dischargers in the applicable area and therefore should not add any additional burden to the referenced program. EPA has left to the discretion of the permitting authority the decision on whether to seek permission from the qualifying program before cross-referencing it in an NPDES permit.

One commenter stated that a qualifying local program should require a SWPPP. The proposed rule defined the qualifying local program as a program that meets the minimum program requirements established in the proposed construction minimum control measure for small MS4s. To ensure consistency in the controls for storm water discharges between the larger, already regulated construction sites and the discharges from smaller sites that will be regulated as a result of today's rule, EPA has made a change to define a qualifying local program as one that includes the elements described in § 122.44(s)(1). Section 122.44(s)(1) requires the development and implementation of a storm water pollution prevention plan as a criterion for qualification of local programs for incorporation by reference. As noted above, if a qualifying program does not include all the elements in § 122.44(s)(1) then the permitting authority will need to specify the missing elements in order to rely on the incorporation by reference approach.

One commenter asked what happens in regard to the use of qualifying programs when a construction site operator is also the qualifying local program operator. The provision for incorporation by reference applies in this situation also. The local program operator will be required to comply with requirements it has established for others.

e. Alternative Approaches

EPA received a number of comments on alternative permitting approaches. Several commenters supported regulating discharges only from those construction sites within urbanized areas. Other commenters opposed this approach. EPA chose to address storm water discharges from construction sites located both within and outside urbanized areas because of the potential for adverse water quality impact from storm water discharges from smaller sites in all areas. Regulating only those sites within urbanized areas would have excluded a large number of potential contributors to water quality impairment and would not address large areas of new development occurring on the outer fringes of urbanized areas. In fact, designating only small construction discharges within urbanized areas might create a perverse incentive for building only outside urbanized areas. Such an incentive would be inconsistent with the Agency's intention behind designating to protect water quality. The Agency intends that designation to protect water quality in today's rule should be both remedial and preventive.

A number of commenters encouraged EPA to cover municipal construction activities under the small MS4 general permit, instead of issuing a separate NPDES construction permit to these municipal construction projects. Similarly, a number of commenters supported EPA giving industrial facilities the option of having storm water from construction activities on the site covered by the industrial storm water permit. Several other commenters found that combining multiple permit types under one general permit introduced a degree of complexity which was confusing to permittees. Permitting authorities have the option of combining MS4 and construction permits or industrial and construction permits, however, specific requirements for each would still need to be included in the permit issued. EPA agrees that this would probably result in a more complex and confusing permit compared to the existing component permits.

Several commenters supported an alternative for regulated small MS4s where a local qualified program alone, without an NPDES permit, is sufficient to enforce compliance with construction site discharge requirements. On the other hand, one commenter stated that linking the local construction erosion and sediment control program to the existing NPDES program for storm water from larger construction has driven improvements in many local programs.

Another commenter stated that the potential fines under the NPDES program will encourage compliance and will be much stronger than any fines a local program may have. EPA agrees that the NPDES program is the best approach to address water quality impacts from construction sites and provides benefits such as accountability and federal enforcement.

A number of commenters supported issuing one permit for each construction company, instead of a permit for each individual construction activity (also requested for storm water discharges from the larger, already regulated construction sites). Other commenters found that a 'licensing' program for construction site operators would have many problems, including identifying who to permit and tracking information on active sites. EPA is regulating only the storm water discharges associated with construction activity from small sites, not the construction activity itself. Separate NPDES permits (either individual or general permit coverage) for construction site discharges avoid potential problems in tracking sites and operator accountability. Section 122.28(b)(2)(v) gives permitting authorities the option to issue a general permit without requiring an NOI. If an NOI is not required for each activity, permitting authorities could pursue other options such as a company-wide NOI, license instead of an NOI, or another mechanism.

2. Other Sources

In the *Storm Water Discharges Potentially Addressed by Phase II of the National Pollutant Discharge Elimination System Storm Water Program*, Report to Congress, March 1995, ("Report") submitted by EPA pursuant to CWA section 402(p)(5), EPA examined the remaining unregulated point sources of storm water for the potential to adversely affect water quality. Due to very limited national data on which to estimate pollutant loadings on the basis of discharge categories, the discussion of the extent of unregulated storm water discharges is limited to an analysis of the number and geographic distribution of the unregulated storm water discharges. Therefore, EPA is not designating any additional unregulated point sources of storm water on a nationwide, categorical basis. Instead, the remainder of the sources will be regulated based on case-by-case post-promulgation designations by the NPDES permitting authority.

EPA did, however, evaluate a variety of categories of discharges for potential designation in the Report. EPA's efforts to identify sources and categories of

unregulated storm water discharges for potential designation for regulation in today's rule started with an examination of approximately 7.7 million commercial, retail, industrial, and institutional facilities identified as "unregulated." In general, the distribution of these facilities follows the distribution of population, with a large percentage of facilities concentrated within urbanized areas (see page 4-35 of the Report). This examination resulted in identification of two general classes of facilities with the potential for discharging pollutants to waters of the United States through storm water point sources.

The first group (Group A) included sources that are very similar, or identical, to regulated "storm water discharges associated with industrial activity" but that were not included in the existing storm water regulations because EPA used SIC codes in defining the universe of regulated industrial activities. By relying on SIC codes, a classification system created to identify industries rather than environmental impacts from these industries discharges, some types of storm water discharges that might otherwise be considered "industrial" were not included in the existing NPDES storm water program. The second general class of facilities (Group B) was identified on the basis of potential for activities and pollutants that could contribute to storm water contamination.

EPA estimates that Group A has approximately 100,000 facilities. Discharges from facilities in this group, which may be of high priority due to their similarity to regulated storm water discharges from industrial facilities, include, for example, auxiliary facilities or secondary activities (e.g., maintenance of construction equipment and vehicles, local trucking for an unregulated facility such as a grocery store) and facilities intentionally omitted from existing storm water regulations (e.g., publicly owned treatment works with a design flow of less than 1 million gallons per day, landfills that have not received industrial waste).

Group B consists of nearly one million facilities. EPA organized Group B sources into 18 sectors for the purposes of the Report. The automobile service sector (e.g., gas/service stations, general automobile repair, new and used car dealerships, car and truck rental) makes up more than one-third of the total number of facilities identified in all 18 sectors.

EPA conducted a geographical analysis of the industrial and commercial facilities in Groups A and

B. The geographical analysis shows that the majority are located in urbanized areas (see Section 4.2.2, Geographic Extent of Facilities, in the Report). In general, about 61 percent of Group A facilities and 56 percent of Group B facilities are located in urbanized areas. The analysis also showed that nearly twice as many industrial facilities are found in all urbanized areas as are found in large and medium municipalities alone. Notable exceptions to this generalization included lawn/garden establishments, small unregulated animal feedlots, wholesale livestock, farm and garden machinery repair, bulk petroleum wholesale, farm supplies, lumber and building materials, agricultural chemical dealers, and petroleum pipelines, which can frequently be located in smaller municipalities or rural areas.

In identifying potential categories of sources for designation in today's notice, EPA considered designation of discharges from Group A and Group B facilities. EPA applied three criteria to each potential category in both groups to determine the need for designation: (1) The likelihood for exposure of pollutant sources included in that category, (2) whether such sources were adequately addressed by other environmental programs, and (3) whether sufficient data were available at this time on which to make a determination of potential adverse water quality impacts for the category of sources. As discussed previously, EPA searched for applicable nationwide data on the water quality impacts of such categories of facilities.

By application of the first criterion, the likelihood for exposure, EPA considered the nature of potential pollutant sources in exposed portions of such sites. As precipitation contacts industrial materials or activities, the resultant runoff is likely to mobilize and become contaminated by pollutants. As the size of these exposed areas increases, EPA expects a proportional increase in the pollutant loadings leaving the site. If EPA concluded that a category of sources has a high potential for exposure of raw materials, intermediate products, final products, waste materials, byproducts, industrial machinery, or industrial activity to rainfall, the Agency rated that category of sources as having "high" potential for adverse water quality impact. EPA's application of the first criterion showed that a number of Group A and B sources have a high likelihood of exposure of pollutants.

Through application of the second criterion, EPA assessed the likelihood

that pollutant sources are regulated in a comprehensive fashion under other environmental protection programs, such as programs under the Resource Conservation and Recovery Act (RCRA) or the Occupational Health and Safety Act (OSHA). If EPA concluded that the category of sources was sufficiently addressed under another program, the Agency rated that source category as having "low" potential for adverse water quality impact. Application of the second criterion showed that some categories were likely to be adequately addressed by other programs.

After application of the third criterion, availability of nationwide data on the various storm water discharge categories, EPA concluded that available data would not support any such nationwide designations. While such data could exist on a regional or local basis, EPA believes that permitting authorities should have flexibility to regulate only those categories of sources contributing to localized water quality impairments.

EPA received comments requesting designation of additional industrial, commercial and retail sources (*e.g.*, industrial activity "look-alikes", roads, commercial facilities and institutions, and vehicle maintenance facilities) in the final rule, because the commenters believe that the data exist to support national designation of some of these sources. Other comments were received opposing designation of any additional sources. Today's rule does not designate any additional industrial or commercial category of sources either because EPA currently lacks information indicating a consistent potential for adverse water quality impact or because of EPA's belief that the likelihood of adverse impacts on water quality is low, with some possible exceptions on a more local basis. Since the time the Agency submitted the Report, EPA has continued to seek additional data and has requested available data from the FACA members. If sufficient regional or nationwide data become available in the future, the permitting authority could at that time designate a category of sources or individual sources on a case-by-case basis. Therefore, today's rule encourages control of storm water discharges from Groups A and B through self-initiated, voluntary BMPs, unless the discharge (or category of discharges) is designated for permitting by the permitting authority. See discussion in section I.D., EPA's Reports to Congress.

3. ISTEA Sources

Provisions within the Intermodal Surface Transportation and Efficiency Act (ISTEA) of 1991 temporarily

exempted storm water discharges associated with industrial activity that are owned or operated by municipalities serving populations less than 100,000 people (except for airports, power plants, and uncontrolled sanitary landfills) from the need to apply for or obtain a storm water discharge permit (section 1068(c) of ISTEA). Congress extended the NPDES permitting moratorium for these facilities to allow small municipalities additional time to comply with NPDES requirements for certain sources of industrial storm water. The August 7, 1995 storm water final rule (60 FR 40230) further extended this moratorium until August 7, 2001. However, today's rule changes this deadline so that previously exempted industrial facilities owned or operated by municipalities serving populations less than 100,000 people, must now submit an application for a permit within 3 years and 90 days from date of publication of today's rule.

EPA received comments recommending that permit requirements for municipally owned or operated industrial storm water discharges, including those previously exempt under ISTEA, be included in a single NPDES permit for all MS4 storm water discharges. The existing NPDES regulations already provide permitting authorities the ability to issue a single "combination" permit for MS4 discharges. However, if the permitting authorities chose to issue this type of permit, they must make sure that in doing so, they are not creating a double standard for industrial facilities covered under the combination permit versus those covered under separate general or individual permits. In order to avoid this double standard, combination permits would have to contain requirements that are the same or very similar to the requirements found in separate MS4 and industrial permits, *i.e.*, the minimum measures and other necessary requirements of an MS4 permit, and the SWPPP, monitoring and reporting requirements, and other necessary requirements of an industrial permit. If such a combined MS4 general permit were issued, the regulations require that each discharger submit NOIs for their respective discharges, except for discharges from small construction activities. Flexibility exists in developing a combination NOI which could reduce the need to submit duplicative information, *e.g.* owner/operator name and address. The combination NOI would still need to require specific information for each separate municipally owned or operated industrial location, including

construction projects disturbing 5 or more acres. The regulations at § 122.28(b)(2)(ii) list the necessary contents of an NOI, which require: the facility name, facility address, type of facility or discharge and receiving stream for each industrial discharge location. When viewed in its entirety, a combination permit, which by necessity would need to contain all elements of otherwise separate industrial and MS4 permit requirements, and require NOI information for each separate industrial activity, may have few advantages when compared to obtaining separate MS4 and industrial general permit coverage.

In order to allow the permitting authority to issue a single storm water permit for the MS4 and all municipally owned or operated industrial facilities, including those previously exempt under ISTEA, today's rule requires applications for ISTEA sources within 3 yrs and 90 days from date of publication of today's rule. The permitting authority has the ultimate decision to determine whether or not a single all-encompassing MS4 permit is appropriate.

4. Residual Designation Authority

The NPDES permitting authority's existing designation authority, as well as the petition provisions are being retained. Today's rule contains two provisions related to designation authority at §§ 122.26(a)(9)(i)(C) and (D). Subsection (C) adds designation authority where storm water controls are needed for the discharge based upon wasteload allocations that are part of TMDLs that address the pollutant(s) of concern. EPA intends that the NPDES permitting authority have discretion in the matter of designations based on TMDLs under subsection (C). Subsection (D) carries forward residual designation authority under former § 122.26(g), and has been modified to provide clarification on categorical designation. Under today's rule, EPA and authorized States continue to exercise the authority to designate remaining unregulated discharges composed entirely of storm water for regulation on a case-by-case basis (including § 123.35). Individual sources are subject to regulation if EPA or the State, as the case may be, determines that the storm water discharge from the source contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States. This standard is based on the text of section CWA 402(p). In today's rule, EPA believes, as Congress did in drafting section CWA 402(p)(2)(E), that individual instances of storm water discharge might warrant

special regulatory attention, but do not fall neatly into a discrete, predetermined category. Today's rule preserves the regulatory authority to subsequently address a source (or category of sources) of storm water discharges of concern on a localized or regional basis. For example, as States and EPA implement TMDLs, permitting authorities may need to designate some point source discharges of storm water on a categorical basis either locally or regionally in order to assure progress toward compliance with water quality standards in the watershed.

EPA received comments asking that § 122.26(a)(9)(i)(D) as proposed be modified to include specific language clarifying the permitting authority's ability to designate additional sources on a categorical basis as explained in the preamble to the proposed rule. One comment requested that the designation language include "categories of sources on a Statewide basis." EPA agrees that the intent of the language may not have been clear regarding categorical designation. Today's rule modifies subsection (D) to clarify that the designation authority can be applied within different geographic areas to any single discharge (i.e., a specific facility), or category of discharges that are contributing to a violation of a water quality standard or are significant contributors of pollutants to waters of the United States. The added term "within a geographic area" allows "State-wide" or "watershed-wide" designation within the meaning of the terms.

One commenter questioned the Agency's legal authority to provide for such residual designation authority. The stakeholder argued that the lapse of the October 1, 1994, permitting moratorium under CWA section 402(p)(1) eliminated the significance of the CWA section 402(p)(2) exceptions to the moratorium, including the exception for discharges of storm water determined to be contributing to a violation of a water quality standard or a significant contributor of pollutants under CWA section 402(p)(2)(E). The stakeholder further argued that EPA's authority to designate sources for regulation under CWA section 402(p)(6) is limited to storm water discharges other than those described under CWA section 402(p)(2). Because CWA section 402(p)(2)(E) describes individually designated discharges, the stakeholder concluded that regulations under CWA section 402(p)(6) cannot provide for post-promulgation designation of individual sources. EPA disagrees.

First, as explained previously, EPA anticipates that NPDES permitting

authorities may yet determine that individual unregulated point sources of storm water discharges require regulation on a case-by-case basis. This conclusion is consistent with the Congress' recognition of the potential need for such designation under the first phase of storm water regulation as described in CWA section 402(p)(2)(E). Under CWA section 402(p)(2)(E), Congress recognized the need for both EPA and the State to retain authority to regulate unregulated point sources of storm water under the NPDES permit program. Second, to the extent that CWA section 402(p)(6) requires designation of a "category" of sources, the permitting authority may designate such (as yet unidentified) sources as a category that should be regulated to protect water quality. Though such sources may exist and discharge today, if neither EPA nor the State/Tribal NPDES permitting authority has designated the source for regulation under CWA section 402(p)(2)(E) to date, then CWA section 402(p)(6) provides the authority to designate such sources.

The Agency can designate a category of "not yet identified" sources to be regulated, based on local concerns, even if data do not exist to support nationwide regulation of such sources. EPA does not interpret the language in CWA section 402(p) to preclude States from exercising designation authority under these provisions because such designation (and subsequent regulation of designated sources) is within the "scope" of the NPDES program.

EPA also believes that sources regulated pursuant to a State designation are part of (and regulated under) a federally approved State NPDES program, and thus subject to enforcement under CWA sections 309 and 505. Under existing NPDES State program regulations, State programs that are "greater in scope of coverage" are not part of the federally-approved program. By contrast, any such State regulation of sources in this "reserved category" will be within the scope of the federal program because today's rule recognizes the need for such post promulgation designations of unregulated point sources of storm water. Such regulation will be "more stringent" than the federal program rather than "greater in scope of coverage" (40 CFR 123.1(h)).

EPA does not interpret the congressional direction in CWA section 402(p)(6) to preclude regulation of point sources of storm water that should be regulated to protect water quality. Under CWA section 510, Congress expressly recognized and preserved the authority of States to adopt and enforce

more stringent regulation of point sources, as well as any requirement respecting the control or abatement of pollution. Section 510 applies, "except as expressly provided" in the CWA. CWA section 502(14) does expressly provide affirmative limitations on the regulation of certain pollutant sources through the point source control program, the NPDES permitting program. Section 502(14) excludes agricultural storm water and return flows from irrigated agriculture from the definition of point source, and section 402(l) limits applicability of the section 402 permit program for return flows from irrigated agriculture, as well as for storm water runoff from certain oil, gas, and mining operations. Unlike sections 502(14) and 402(l), EPA does not interpret CWA section 402(p)(6) as an express provision limiting the authority to designate point sources of storm water for regulation on a case-by-case basis after the promulgation of final regulations. Any source of storm water discharge is encouraged to assess its potential for storm water contamination and take preventive measures against contamination. Such proactive actions could result in the avoidance of future regulation.

One comment was received requesting clarification of the term "non-municipal" in § 122.26(a)(9)(ii). The commenter is concerned that the term "non-municipal," in this context, implies that municipally owned or operated facilities cannot be designated. The term "non-municipal" in this context refers to the universe of unregulated industrial and commercial facilities that could potentially be designated according to § 122.26(a)(9)(i) authority. There is no exemption for municipally owned or operated facilities under these designation provisions.

Finally, EPA received comments and evaluated the proposal under which operators of regulated small, medium, and large MS4s would be responsible for controlling discharges from industrial and other facilities into their systems in lieu of requiring NPDES permit coverage for such facilities. EPA did not adopt this framework due to concerns with administrative and technical burden on the MS4 operators, as well as concerns about such an intergovernmental mandate.

J. Conditional Exclusion for "No Exposure" of Industrial Activities and Materials to Storm Water

1. Background

In 1992, the Ninth Circuit court remanded to EPA for further

rulemaking, a portion of the definition of "storm water discharge associated with industrial activity" that excluded the category of industrial activity identified as "light industry" when industrial materials and/or activities were not exposed to storm water. See *NRDC v. EPA*, 966 F.2d 1292, 1305 (9th Cir. 1992). Today's final rule responds to that remand. In the 1990 storm water regulations, EPA excluded the light industry category from the requirement for an NPDES permit if the industrial materials and/or activities were not "exposed" to storm water (see § 122.26(b)(14)). The Agency had reasoned that most of the activity at these types of facilities takes place indoors and that emissions from stacks, use of unboxed manufacturing equipment, outside material storage or disposal, and generation of large amounts of dust or particles would be atypical (55 FR 48008, November 16, 1990).

The Ninth Circuit determined that the exemption was arbitrary and capricious for two reasons. First, the court found that EPA had not established a record to support its assumption that light industry that was not exposed to storm water was not "associated with industrial activity," particularly when other types of industrial activity not exposed to storm water remained "associated with industrial activity." The court specifically found that "[t]o exempt these industries from the normal permitting process based on an unsubstantiated assumption about this group of facilities is arbitrary and capricious." Second, the court concluded that the exemption impermissibly "altered the statutory scheme" for permitting because the exemption relied on the unverified judgment of the light industrial facility operator to determine non-applicability of the permit application requirements. In other words, the court was critical that the operator would determine for itself that there was "no exposure" and then simply not apply for a permit without any further action. Without a basis for ensuring the effective operation of the permitting scheme—either that facilities would self-report actual exposure or that EPA would be required to inspect and monitor such facilities—the court vacated and remanded the rule to EPA for further rulemaking.

One of the major concerns expressed by the FACA Committee, was that EPA streamline and reinvent certain troublesome or problematic aspects of the existing permitting program for storm water discharges. One area identified was the mandatory applicability of the permitting program

to all industrial facilities, even those "light industrial" activities that are of very low risk or of no risk to storm water contamination. Such dischargers may not have any industrial sources of storm water contamination on the plant site, yet they are still required to apply for an NPDES storm water permit and meet all permitting requirements. Examples of such facilities are a soap manufacturing plant (SIC Code 28) or hazardous waste treatment and disposal facility, where all industrial activities, even loading docks, are inside a building or under a roof.

Although they did not provide a written report, the FACA Committee members advised EPA that the existing storm water program should be revised to allow such facilities to seek an exclusion from the NPDES storm water permitting requirements. The Committee agreed that such an exclusion should also provide a strong incentive for other industrial facilities that conduct industrial activities outdoors to move the activities under cover or into buildings to prevent contamination of rainfall and storm water runoff. The committee believed that such a "no exposure" permit exclusion could be a valuable incentive for storm water pollution prevention.

In today's final rule, the Agency responds to both of the bases for the court's remand. The exclusion from permitting based on "no exposure" applies to all industrial categories listed in the existing storm water regulations except construction. The court's opinion rejected EPA's distinction between light industry and other industry, but it did not preclude an interpretation that treats all "non-exposed" industrial facilities in the same fashion. Presuming that an industrial facility adequately prevents exposure of industrial materials and activities to storm water, today's rule treats discharges from "non-exposed" industrial facilities in a manner similar to the way Congress intended for discharges from administrative buildings and parking lots. Specifically, permits will not be required for storm water discharges from these facilities on a categorical basis.

To assure that discharges from industrial facilities really are similar to discharges from administrative buildings and parking lots, and to respond to the second basis for the court's remand, the permitting exclusion is "conditional". The person responsible for a point source discharge from a "no exposure" industrial source must meet the conditions of the exclusion, and complete, sign and submit the certification to the permitting authority for tracking and

accountability purposes. EPA believes today's rule, therefore, is fully consistent with the direction provided by the court.

EPA relied upon the "no exposure" concept discussed by the FACA Committee in developing the "no exposure" provisions of today's rule. EPA is deleting the sentence regarding "no exposure" for the facilities in § 122.26(b)(14)(xi) and adding a new § 122.26(g) titled "Conditional Exclusion for No Exposure of Industrial Activities to Storm Water." The "no exposure" provision will make storm water discharges from all classes of industrial facilities eligible for exclusion, except storm water discharges from regulated construction activities. Regulated construction activities cannot claim "no exposure" because the main pollutants of concern (e.g., sediment) generally cannot entirely be sheltered from storm water.

Today's rule represents a significant expansion in the scope of the "no exposure" provision originally promulgated in the 1990 rule, which was only for storm water discharges from light industry. The intent of today's "no exposure" provision is to provide a simplified method for complying with the CWA to all industrial facilities that are entirely indoors. This includes facilities that are located within a large office building, or at which the only items permanently exposed to precipitation are roofs, parking lots, vegetated areas, and other non-industrial areas or activities.

EPA received several comments related to storm water runoff from parking lots, roof tops, lawns, and other non-industrial areas of an industrial facility. Storm water discharges from these areas, which may contain pollutants or which may result in additional storm water flows, are not directly regulated under the existing storm water permitting program because they are not "storm water discharges associated with industrial activity". Many comments on this issue supported maintaining the exclusion from the existing regulations for storm water permitting for discharges from administrative buildings, parking lots, and other non-industrial areas. Other comments opposed allowing the continued exclusion for discharges from non-industrial areas of the site because discharges from these areas are potentially a significant cause of receiving water impairment. These comments urged that such discharges should not be excluded from NPDES permit coverage. Today's rule does not require permit coverage for discharges from a facility's exposed areas that are

separate from industrial activities such as runoff from office buildings and accompanying parking lots, lawns and other non-industrial areas. This approach is consistent with the existing storm water rules which were based on Congress's intent to exclude non-industrial areas such as "parking lots and administrative and employee buildings." 133 Cong. Rec. 985 (1987). EPA also lacks data indicating that discharges from these areas at an industrial facility cause significant receiving water impairments. Therefore, the non-industrial areas at a facility do not need to be assessed as part of the "no exposure" certification.

EPA received comments related to industrial facilities that achieve "no exposure" by constructing large amounts of impervious surfaces, such as roofs, where previously there were pervious or porous surfaces into which storm water could infiltrate. Some commenters made the point that large amounts of impervious area may cause a significant increase in storm water volume flowing off the industrial facility, and thus may cause adverse receiving water impacts simply due to the increased quantity of storm water flow. Some commenters said that storm water discharges from impervious areas at an industrial facility are generally more frequent, and often larger, than discharges from the pre-existing natural surfaces. They believe that these discharges will contain pollutants typical of commercial areas and roads and are an equal threat to direct human uses of the water and can cause equal damage to aquatic life and its habitat. Other commenters believe that if Congress or EPA addresses the issue of flow, it should be addressed on a broader scale than merely through the "no exposure" exclusion, and that EPA has no authority under any existing legal framework to regulate flow directly. Some commenters stated that developing federal parameters for the control of water quantity, *i.e.* flow, would result in federal intrusion into land use planning, an authority that they claim is solely within the purview of State governments and their political subdivisions.

EPA is not attempting to regulate flow via the "no exposure" provisions. EPA does agree, however, that increases in impervious surfaces can result in increased runoff volumes from the site which in turn may increase pollutant loading. In addition, the Agency notes that in some States water quality standards include water quality criteria for flow or turbidity. Therefore, in order to provide a minimal amount of information on possible impacts from

increased pollutant loading and runoff volume, EPA's "no exposure" certification form (see Appendix 4) asks the discharger to indicate if they have paved or roofed over a formerly exposed, pervious area in order to qualify for the "no exposure" exclusion. If the answer is yes, the discharger must indicate, by choosing from three possible responses, approximately how much impervious area was created to achieve "no exposure". The choices are: (1) less than 1 acre, (2) 1 to 5 acres, and (3) more than 5 acres. This requirement provides additional information that will aid in determining if discharges from the facility are causing adverse receiving water impacts. EPA intends to prevent water quality impacts resulting from increased discharges of pollutants, which may result from increased volume of runoff. In many cases, consideration of the increased flow rate, velocity and energy of storm water discharges, following construction of large amounts of impervious surfaces, must be taken into consideration in order to reduce the discharge of pollutants, to meet water quality standards and to prevent degradation of receiving streams. EPA recommends that dischargers consider these factors when making modifications to their site in order to qualify for the "no exposure" exclusion.

2. Today's Rule

In order to claim relief under the "no exposure" provision, the discharger of an otherwise regulated facility must submit a no exposure certification that incorporates the questions of § 122.26(g)(4)(iii) to the NPDES permitting authority once every 5 years. This provision applies across all categories of industrial activity covered by the existing program, except discharges from construction activities.

In addition to submitting a "no exposure" certification every 5 years, the facility must allow the NPDES permitting authority or operator of an MS4 (where there is a storm water discharge to the MS4) to inspect the facility and to make such inspection reports publicly available upon request. Also, upon request, the facility must submit a copy of the "no exposure" certification to the operator of the MS4 into which the facility discharges (if applicable). All "no exposure" certifications must be signed in accordance with the signatory requirements of § 122.22. The "no exposure" certification is non-transferable. In the event that the facility operator changes, the new discharger must submit a new "no exposure" certification.

Members of the FACA Committee urged that EPA not allow dischargers certifying “no exposure” to take actions to qualify for this provision that result in a net environmental detriment. In developing a regulatory implementation mechanism, however, EPA found that the phrase “no net environmental detriment,” was too imprecise to use within this context. Therefore, today’s rule addresses this issue by requiring information that should help the permitting authority to determine whether actions taken to qualify for the exclusion interfere with the attainment or maintenance of water quality standards, including designated uses. Permitting authorities will be able, where necessary, to make a determination by evaluating the activities that changed at the industrial site to achieve “no exposure”, and assess whether these changes cause an adverse impact on, or have the reasonable potential to cause an instream excursion of, water quality standards, including designated uses. EPA anticipates that many efforts to achieve “no exposure” will employ simple good housekeeping and contaminant cleanup activities. Other efforts may involve moving materials and industrial activities indoors into existing buildings or structures.

In very limited cases, industrial operators may make major changes at a site to achieve “no exposure”. These efforts may include constructing a new building or cover to eliminate exposure or constructing structures to prevent run-on and storm water contact with industrial materials or activities. Where major changes to achieve “no exposure” increase the impervious area of the site, the facility operator must provide this information on the “no exposure” certification form as discussed above. Using this and other available data and information, permitting authorities should be able to assess whether any major change has resulted in increased pollutant concentrations or loadings, toxicity of the storm water runoff, or a change in natural hydrological patterns that would interfere with the attainment and maintenance of water quality standards, including designated uses or appropriate narrative, chemical, biological, or habitat criteria where such State or Tribal water quality standards exist. In these instances, the facility operator and their NPDES permitting authority should take appropriate actions to ensure that attainment or maintenance of water quality standards can be achieved. The NPDES permitting authority should decide if the facility must obtain coverage under an

individual or general permit to ensure that appropriate actions are taken to address adverse water quality impacts.

While the intent of today’s “no exposure” provision is to reduce the regulatory burdens on industrial facilities and government agencies, the FACA Committee suggested that the NPDES permitting authority consider a compliance assessment program to ensure that facilities that have availed themselves of this “no exposure” option meet the applicable requirements. Inspections could be conducted at the discretion of the NPDES authority and be coordinated with other facility inspections. EPA expects, however, that the permitting authority will conduct inspections when it becomes aware of potential water quality impacts possibly caused by the facility’s storm water discharges or when requested to do so by adversely affected members of the public. The intent of this provision is that the 5 year “no exposure” certification be fully available to, and enforceable by, appropriate federal and State authorities under the CWA. Private citizens can enforce against facilities for discharges of storm water that are inconsistent with a “no exposure” certification if storm water discharges from such facilities are not otherwise permitted and in compliance with applicable requirements.

EPA received comments from owners, operators and representatives of Phase I facilities classified as “light industry” as defined by the regulations at § 122.26(b)(14)(xi). The comments recommended maintaining the approach of the existing regulations which does not require the discharger to submit any supporting documentation to the permitting authority in order to claim the “no exposure” exclusion from permitting. As discussed previously, the “no exposure” concept was developed in response to the Ninth Circuit court’s remand of part of the existing rules back to EPA. The court found that EPA cannot rely on the “unverified judgment” of the facility. The comments opposing documentation did not address the “unverified judgment” concern.

Today’s rule is a “conditional” exclusion from permitting which requires all categories, including the “light industrial” facilities that have no exposure of materials to storm water, to submit a certification to the permitting authority. Upon receipt of a complete certification, the permitting authority can review the information, or call, or inspect the facility if there are doubts about the facility’s “no exposure” claim. Also, if the facility discharges into an MS4, the operator of the MS4 can

request a copy of the certification, and can inspect the facility. The public can request a copy of the certification and/or inspection reports. In adopting these conditional “no exposure” provisions, the Agency addressed the Ninth Circuit court’s ruling regarding the discharger’s unverified judgment.

EPA received one comment requesting clarification on whether the anti-backsliding provisions in the regulations at § 122.44(l) apply to industrial facilities that are currently covered under an NPDES storm water permit, and whether such facilities could qualify for the “no exposure” exclusion under today’s rule. The anti-backsliding provisions will not prevent most industrial facilities that can certify “no exposure” under today’s rule from qualifying for an exclusion from permitting. The anti-backsliding provisions contain 5 exceptions that allow permits to be renewed, reissued or modified with less stringent conditions. One exception at § 122.44(l)(2)(A) allows less stringent conditions if “material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation.” Section 122.44(l)(B)(1) also allows less stringent requirements if “information is available which was not available at the time of permit issuance and which would have justified the application of less stringent effluent limitations at the time of permit issuance.” Facility’s operators who certify “no exposure” and submit the required information once every 5 years will have provided the permitting authority “information that was not available at the time of permit issuance.” Also, some facilities may, in order to achieve “no exposure”, make “material and substantial alterations or additions to the permitted facility.” Therefore, most facilities covered under existing NPDES general permits for storm water (e.g., EPA’s Multi-Sector General Permit) will be eligible for the conditional “no exposure” exclusion from permitting without concern about the anti-backsliding provisions. Such dischargers will have met one or both of the anti-backsliding exceptions detailed above. Facilities that are covered under individual permits containing numeric limitations for storm water should consult with their permitting authority to determine whether the anti-backsliding provisions will prevent them from qualifying for the exclusion from permitting (for that discharge point) based on a certification of “no exposure”.

EPA received several comments regarding the timing of when the “no exposure” certification should be submitted. The proposed rule said that the “no exposure” certification notice must be submitted “at the beginning of each permit term or prior to commencing discharges during a permit term.” Some commenters interpreted this statement to mean that existing facilities can only submit the certification at the time a permit is being issued or renewed. EPA intended the phrase “at the beginning of each permit term” to mean “once every 5 years” and today’s rule reflects this clarification. EPA envisions that the NPDES storm water program will be implemented primarily through general permits which are issued for a 5 year term. Likewise the “no exposure” certification term is 5 years. The NPDES permitting authority will maintain a simple registration list that should impose only a minor administrative burden on the permitting authority. The registration list will allow for tracking of industrial facilities claiming the exclusion. This change allows a facility to submit a “no exposure” certification at any time during the term of the permit, provided that a new certification is submitted every 5 years from the time it is first submitted (assuming that the facility maintains a “no exposure” status). Once a discharger has established that the facility meets the definition of “no exposure”, and submits the necessary “no exposure” certification, the discharger must maintain their “no exposure” status. Failure to maintain “no exposure” at their facility could result in the unauthorized discharge of pollutants to waters of the United States and enforcement for violation of the CWA. Where a discharger believes that exposure could occur in the future due to some anticipated change at the facility, the discharger should submit an application and obtain coverage under an NPDES permit prior to such discharge to avoid penalties.

Where EPA is the permitting authority, dischargers may submit a “no exposure” certification at any time after the effective date of today’s rule. Where EPA is not the permitting authority, dischargers may not be able to submit the certification until the non-federal permitting authority completes any necessary statutory or regulatory changes to adopt this “no exposure” provision. EPA recommends that the discharger contact the permitting authority for guidance on when the “no exposure” certification should be submitted.

EPA received comments on the proposed rule requirement that the

discharger “must comply immediately with all the requirements of the storm water program including applying for and obtaining coverage under an NPDES permit,” if changes occur at the facility which cause exposure of industrial activities or materials to storm water. The comments expressed the difficulty of immediate compliance. EPA expects that most facility changes can be anticipated, therefore dischargers should apply for and obtain NPDES permit coverage in advance of changes that result in exposure to industrial activities or materials. Permitting authorities may grant additional time, on a case-by-case basis, for preparation and implementation of a storm water pollution prevention plan.

Finally, today’s rule at § 122.26(g)(4) includes the information which must be included on the “no exposure” certification. Authorized States, Tribes or U.S. Territories may develop their own form which includes this required information, at a minimum. EPA adopted the requirements (with modification) from the draft “No Exposure Certification Form” published as an appendix to the proposed rule. Modifications were made to the draft form to address comments received and to streamline the required information. EPA included these certification requirements in today’s rule in order to preserve its integrity. Dischargers in areas where EPA is the permitting authority should use the “No Exposure Certification” form included in Appendix 4.

3. Definition of “No Exposure”

For purposes of this section, “no exposure” means that all industrial materials or activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. However, storm resistant shelter is not required for: (1) Drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak; (2) adequately maintained vehicles used in material handling; and (3) final products, other than products that would be mobilized in storm water discharge (e.g., rock salt). Each of these three exceptions to the no exposure

definition are discussed in more detail below.

EPA intends the term “storm resistant shelter” to include completely roofed and walled buildings or structures, as well as structures with only a top cover but no side coverings, provided material under the structure is not otherwise subject to any run-on and subsequent runoff of storm water. While the Agency intends that this provision promote permanent “no exposure”, EPA understands that certain vehicles could pass between buildings and, during passage, be exposed to rain and snow. Adequately maintained vehicles such as trucks, automobiles, forklifts, or other such general purpose vehicles at the industrial site that are not industrial machinery, and that are not leaking contaminants or are not otherwise a source of industrial pollutants, could be exposed to precipitation or runoff. Such activities alone does not prevent a discharger from being able to certify no exposure under this provision. Similarly, trucks or other vehicles awaiting maintenance at vehicle maintenance facilities, as defined at § 122.26(b)(14)(viii), that are not leaking contaminants or are not otherwise a source of industrial pollutants, are not considered exposed.

In addition, EPA recognizes that there are circumstances where permanent “no exposure” of industrial activities or materials is not possible. Under such conditions, materials and activities may be sheltered with temporary covers, such as tarps, between periods of permanent enclosure. The final rule does not specify every such situation. EPA intends that permitting authorities will address this issue on a case-by-case basis. Permitting authorities can determine the circumstances under which temporary structures will or will not meet the requirements of this section. Until permitting authorities specifically determine otherwise, EPA recommends application of the “no exposure” exclusion for temporary sheltering of industrial materials or activities only during facility renovation or construction, provided that the temporary shelter achieves the intent of this section. Moreover, “exposure” that results from a leak in protective covering would only be considered “exposure” if not corrected prior to the next storm water discharge event. EPA received one comment requesting that this allowance for temporary shelter be limited to facility renovation or construction directly related to the industrial activity requiring temporary shelter, and be scheduled to minimize the use of temporary shelter. Another comment suggested placing time limits

on the use of temporary shelter. The commenter did not recommend a specific time period, rather the comment said that renovation in some instances may take years, and that EPA should not allow temporary shelter over prolonged periods. EPA agrees that the use of temporary shelter must be related to the renovation or construction at the site, and be scheduled or designed to minimize the use of temporary shelter. Further, EPA agrees that the use of temporary shelter should be limited in duration, but does not intend to define "temporary" or "prolonged period".

Many final products are intended for outdoor use and pose little risk of storm water contamination, such as new cars. Therefore, final products, except those that can be mobilized in storm water discharge, can be "exposed" and still allow the discharge to certify "no exposure". EPA intends the term "final products" to mean those products that are not used in producing another product. Any product that can be used to make another product is considered an "intermediate product." For example, a facility that makes horse trailers can store the finished trailers outdoors as a final product. The storage of those final products does not prevent eligibility to claim "no exposure". However, any facility that makes parts for the horse trailers (e.g., metal tubing, sheet metal, paint) is not eligible for the "no exposure" exclusion from permitting if those "intermediate products" are stored outdoors (i.e., "exposed").

EPA received comments related to materials in drums, barrels, tanks and similar containers. Some comments objected to the language in the preamble to the proposed rule that would have recommended that the "exposure" determination for drums and barrels be based on the "potential to leak." Those comments said that all drums and barrels have the potential to leak, thereby making certification impossible. They recommended allowing outdoor storage of drums and barrels except for those that "are leaking" at the time of certification. Other comments suggested allowing drums and barrels to be stored outside only if the drums and barrels: are empty; have secondary containment; or there is a spill contingency plan in place. Opposing comments suggested that allowing outdoor exposure of drums and barrels, based on existing integrity and condition, is inconsistent with the "however packaged" proposed rule language, and also would not satisfy the Ninth Circuit remand. The comments point out that the former rule was invalidated by the court in part because it relied on the "unverified

judgment" of the light industrial facility operator to determine the non-applicability of the permit requirements, and that allowing the facility operator to determine the condition of their drums and barrels would result in the same flaw.

In response, EPA believes that drums and barrels that are stored outdoors pose little risk of storm water contamination unless they are open, deteriorated or leaking. The Agency has modified today's rule accordingly. EPA intends the term "open" to mean any container that is not tightly sealed and "sealed" to mean banded or otherwise secured and without operational taps or valves. Drums, barrels, tanks, and similar containers may only be stored outdoors under this conditional exclusion. The addition of material to or withdrawing of material from these containers while outside is deemed "exposure". Moving the containers while outside does not create "exposure" provided that the containers are not open, deteriorated or leaking. In order to complete the "no exposure" certification, a facility operator must inspect all drums, barrels, tanks or other containers stored outside to ensure that they are not open, deteriorated, or leaking. EPA recommends that the discharger designate someone at the facility to conduct frequent inspections to verify that the drums, barrels, tanks or other containers remain in a condition such that they are not open, deteriorated or leaking. Drums, barrels, tanks or other containers stored outside that have valves which are used to put material in or take material out of the container, and that have dripped or may drip, are considered to be "leaking" and must be under a storm resistant shelter in order to qualify for the no exposure exclusion. Likewise, leaking pipes containing contaminants exposed to storm water are deemed "exposed." If at any time drums, barrels, tanks or similar containers are opened, deteriorated or leaking, the discharger should take immediate actions to close or replace the container. Any resulting unpermitted discharge would violate the CWA. The Director, the operator of the MS4, or the municipality may inspect the facility to verify that all of the applicable areas meet the "no exposure" conditions as specified in the rule language. In requiring submission of the conditional "no exposure" certification and allowing the permitting authority and the operator of the MS4 to inspect the facility, today's rule does not rely on the unverified judgment of the facility to determine that the no exposure provision is being met.

EPA received several comments related to trash dumpsters that are located outside. The preamble to the proposed rule listed dumpsters in the same grouping as drums and barrels, which based exposure on the "potential to leak". Today's rule distinguishes between dumpsters and drums/barrels. In the Phase I Question and Answer document (volume 1, question 52) the Agency noted that a covered dumpster containing waste material that is kept outside is not considered "exposed" as long as "the container is completely covered and nothing can drain out holes in the bottom, or is lost in loading onto a garbage truck." EPA affirms this approach today. Industrial refuse and industrial trash that is left uncovered is deemed "exposed."

For purposes of this provision, particulate matter emissions from roof stacks/vents that are regulated and in compliance under other environmental protection programs, such as air quality control programs, and that do not cause storm water contamination, are considered "not exposed." EPA received comments on the phrase in the draft "no exposure" certification form that asked whether "particulate emissions from roof stacks/vents not otherwise regulated, and in quantities detectable in the storm water outflow," are exposed to precipitation. One comment expressed concern that the phrase "in quantities detectable in the storm water outflow" implies that the facility must conduct monitoring prior to completing the checklist, and must continue to monitor after receiving the no exposure exclusion, in order to be able to verify compliance with the no exposure provision. Another comment said that current measurement technology allows detection of pollutants at levels that may not cause environmental harm. EPA does not intend to require monitoring of runoff from facilities with roof stacks/vents prior to or after completing and submitting the no exposure certification. EPA has thus replaced the phrase "in quantities detectable" with "evident" to convey the message that emissions from some roof stacks/vents have the potential to contaminate storm water discharges in quantities that are considered significant or that cause or contribute to a water quality standards violation. In those instances where the permitting authority determines that particulate emissions from facility roof stacks/vents are a significant contributor of pollutants or contributing to water quality violations, the permitting authority may require the discharger to apply for and obtain coverage under a

permit. Visible deposits of residuals (e.g., particulate matter) near roof or side vents are considered "exposed". Likewise, visible "track out" (i.e., pollutants carried on the tires of vehicles) or windblown raw materials are deemed "exposed."

EPA received a comment requesting an allowance under the "no exposure" provision for industrial facilities with several outfalls at a site where some, but not all of the outfalls drain non-exposed areas. The commenter provided an example of an industrial facility that has 5 outfalls draining different areas of the site, where two of those outfalls drain areas where industrial activities or materials are not exposed to storm water. The comment requested that the facility in this example be allowed to submit a "no exposure" certification in order to be relieved of permitting obligations for discharges from those two outfalls.

EPA agrees, but the comment would be implemented on an outfall-by-outfall basis in the permitting process, not through the "no exposure" exclusion. The "no exposure" provision was developed to allow exclusion from permitting of discharges from entire industrial facilities (except construction), based on a claim of "no exposure" for all areas of the facility where industrial materials or activities occur. Where exposure to industrial materials or activities exist at some but not all areas of the facility, the "no exposure" exclusion from permitting is not allowed because permit coverage is still required for storm water discharges from the exposed areas. Relief from permit requirements for outfalls draining non-exposed areas should be addressed through the permit process, in coordination with the permitting authority. Most NPDES general permits for storm water discharge provide enough flexibility to allow minimal or no requirements for non-exposed areas at industrial facilities. If the permitting authority determines that additional flexibility is needed for this scenario, the permits could be modified as necessary.

K. Public Involvement/Public Role

The Phase II FACA Subcommittee discussed the appropriate role of the public in successful implementation of a municipal storm water program. EPA believes that an educated and actively involved public is essential to a successful municipal storm water program. An educated public increases program compliance from residents and businesses as they realize their individual and collective responsibility for protecting water resources (e.g., the

residents and businesses could be subject to a local ordinance that prohibits dumping used oil down storm sewers). Finally, the program is also more likely to receive public support and participation when the public is actively involved from the program's inception and allowed to participate in the decision making process.

In a time of limited staff and financial resources, public volunteers offer diverse backgrounds and expertise that may be used to plan, develop, and implement a program that is tailored to local needs (e.g., participate in public meetings and other opportunities for input, perform lawful volunteer monitoring, assist in program coordination with other preexisting and related programs, aid in the development and distribution of educational materials, and provide public training activities). The public's participation is also useful in the areas of information dissemination/education and reporting of violators, where large numbers of community members can be more effective than a few regulators.

The public can also petition the NPDES permitting authority to require an NPDES permit for a discharge composed entirely of storm water that contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States. In evaluating such a petition, the NPDES permitting authority is encouraged to consider the set of designation criteria developed for the evaluation of small MS4s located outside of an urbanized area in places with a population of at least 10,000 and a population density of 1,000 or more. Furthermore, any person can protect water bodies by taking civil action under section 505 of the CWA against any person who is alleged to be in violation of an effluent standard or permit condition. If civil action is taken, EPA encourages citizen plaintiffs to resolve any disagreements or concerns directly with the parties involved, either informally or through any available alternative dispute resolution process.

EPA recognizes that public involvement and participation pose challenges. It requires a substantial initial investment of staff and financial resources, which could be very limited. Even with this investment, the public might not be interested in participating. In addition, public participation could slow down the decision making process. However, the benefits are numerous.

EPA encourages members of the public to contact the NPDES permitting authority or local MS4s operator for information on the municipal storm water program and ways to participate.

Such information may also be available from local environmental, nonprofit and industry groups.

Some commenters stressed the need to suggest to the public that they have a responsibility to fund the municipal storm water program. While EPA believes it is important that the program be adequately funded, today's rule does not address appropriate mechanisms or levels for such funding.

EPA received comments expressing concern that considerable public involvement requirements could result in increased litigation. EPA is not convinced there is a correlation between meaningful public education programs and any increased probability of litigation.

Finally, EPA received comments stating that the Agency should not encourage volunteer monitoring unless proper procedures are followed. EPA agrees. EPA encourages only lawful monitoring, i.e., obtaining the necessary approval if there is any question about lawful access to sites. Moreover, as a matter of good practice and to enhance the validity and usefulness of the results, any party, public or private, conducting water quality monitoring is encouraged to use appropriate quality control procedures and approved sampling and analytic methods.

L. Water Quality Issues

1. Water Quality Based Effluent Limits

In addition to technology based requirements, all point source discharges of industrial storm water are subject to more stringent NPDES permitting requirements when necessary to meet water quality standards. CWA sections 402(p)(3)(A) and 301(b)(1)(C). For municipal separate storm sewers, EPA or the State may determine that other permit provisions (e.g. one of the minimum measures) are appropriate to protect water quality and, for discharges to impaired waters, to achieve reasonable further progress toward attainment of water quality standards pending implementation of a TMDL. CWA section 402(p)(3)(B)(iii). See *Defenders of Wildlife, et al. Browner*, No. 98-71080 (9th cir., August 11, 1999). Discharges of storm water also must comply with applicable antidegradation policies and implementation methods to maintain and protect water quality. 40 CFR 131.12. Section 122.34(a) emphasizes this point by specifically noting that a storm water management program designed to reduce the discharge of pollutants from the storm sewer system "to the maximum extent practicable" is also designed to protect water quality.

Permits issued to non-municipal sources of storm water must include water quality-based effluent limits where necessary to meet water quality standards.

Commenters challenged EPA's interpretation of the CWA as requiring water quality-based effluent limits for MS4s when necessary to protect water quality. Commenters asserted that CWA 402(p)(3)(B), which addresses permit requirements for municipal discharges, limits the scope of municipal program requirements to an effective prohibition on non-storm water discharges to a separate storm sewer and to controls which reduce pollutants to the "maximum extent practicable, including management practices, control techniques and system design and engineering methods." They asserted that the final rule should clarify that neither numeric nor narrative water quality-based limits are appropriate or authorized for MS4s.

EPA disagrees that section 402(p)(3) divests permitting authorities of the tools necessary to issue permits to meet water quality standards. Section 402(p)(3)(B)(iii) specifically preserves the authority for EPA or the State to include other provisions determined appropriate to reduce pollutants in order to protect water quality. *Defenders of Wildlife*, slip op. at 11688. Small MS4s regulated under today's rule are designated under CWA 402(p)(6) "to protect water quality."

Commenters argued that water quality standards, particularly numeric criteria, were not designed to address storm water discharges. The episodic nature and magnitude of storm water events, they argue, make it impossible to apply the "end of pipe" compliance assessment approach, for example, in the development of water quality based effluent limits.

EPA's disagrees with the commenters arguments about the inability of water quality criteria to address high flow conditions. Today's final rule does, however, address the concern that numeric effluent limits will necessitate end of pipe treatment and the need to provide a workable alternative.

Today's rule was developed under the approach outlined in the Interim Permitting Policy for Water Quality-Based Effluent Limitations in Storm Water Permits, issued on August 1, 1996. 61 FR 43761 (November 26, 1996) (the "Interim Permitting Policy"). EPA intends to issue NPDES permits consistent with the Interim Permitting Policy, which provides as follows:

In response to recent questions regarding the type of water quality-based effluent limitations that are most

appropriate for NPDES storm water permits, EPA is adopting an interim permitting approach for regulating wet weather storm water discharges. Due to the nature of storm water discharges, and the typical lack of information on which to base numeric water quality-based effluent limitations (expressed as concentration and mass), EPA will use an interim permitting approach for NPDES storm water permits.

"The interim permitting approach uses best management practices (BMPs) in first-round storm water permits, and expanded or better-tailored BMPs in subsequent permits, where necessary, to provide for the attainment of water quality standards. In cases where adequate information exists to develop more specific conditions or limitations to meet water quality standards, these conditions or limitations are to be incorporated into storm water permits, as necessary and appropriate. This interim permitting approach is not intended to affect those storm water permits that already include appropriately derived numeric water quality-based effluent limitations. Since the interim permitting approach only addresses water quality-based effluent limitations, it also does not affect technology-based effluent limitations, such as those based on effluent limitations guidelines or developed using best professional judgment, that are incorporated into storm water permits.

"Each storm water permit should include a coordinated and cost-effective monitoring program to gather necessary information to determine the extent to which the permit provides for attainment of applicable water quality standards and to determine the appropriate conditions or limitations of subsequent permits. Such a monitoring program may include ambient monitoring, receiving water assessment, discharge monitoring (as needed), or a combination of monitoring procedures designed to gather necessary information.

"This interim permitting approach applies only to EPA; however, EPA also encourages authorized States and Tribes to adopt similar policies for storm water permits. This interim permitting approach provides time, where necessary, to more fully assess the range of issues and possible options for the control of storm water discharges for the protection of water quality. This interim permitting approach may be modified as a result of the ongoing Urban Wet Weather Flows Federal Advisory Committee policy dialogue on this subject."

One commenter challenged the Interim Permitting Policy on a procedural basis, arguing that it was published without opportunity for public notice and comment. In response, EPA notes that the Policy was included verbatim and made available for public comment in the proposal to today's final rule. Prior to that proposal, the Agency defended the application of the Policy on a case-by-case basis in individual permit proceedings. Moreover, the essential elements of the Policy—that narrative effluent limitations are the most appropriate form of effluent limitations for storm water dischargers from municipal sources—was inherent in § 122.34(a) of the proposed rule, and was the subject of extensive public comment. In any event, the Policy does not constitute a binding obligation. It is policy, not regulation.

Consistent with the recognition of data needs underlying the Policy, EPA will evaluate the small MS4 storm water regulations after the second round of permit issuance. Section 122.34(e)(2) of today's rule expressly provides that for the interim ten-year period, "EPA strongly recommends that until the evaluation of the storm water program in § 122.37, no additional requirements beyond the minimum control measures be imposed on regulated small MS4s without the agreement of the operator of the affected small MS4, except where an approved TMDL or equivalent analysis provides adequate information to develop more specific measures to protect water quality." This approach addresses the concern for protecting water resources from the threat posed by storm water discharges with the important qualification that there must be adequate information on the watershed or a specific site as a basis for requiring tailored storm water controls beyond the minimum control measures. As indicated, the Interim Permitting Policy has several important limitations—it does not apply to technology-based controls or to sources that already have numeric end of pipe effluent limitations. EPA encourages authorized States and Tribes to adopt policies similar to the Interim Permitting Policy when developing storm water discharge programs. For a discussion of appropriate monitoring activities, see Section H.3.d., Evaluation and Assessment.

Where a water quality analysis indicates there is a need and basis for deriving water quality-based effluent limits in NPDES permits for storm water discharges regulated under today's rule, EPA believes that most of these cases would be satisfied by narrative effluent

limitations that require the implementation of BMPs. NPDES permit limits will in most cases continue to be based on the specific approach outlined in today's rule for the implementation of BMPs as the most appropriate form of effluent limitation to satisfy technology and water quality-based requirements. See § 122.34(a). For storm water management plans with existing BMPs, this may require further tailoring of BMPs to address the pollutant(s) of concern, the nature of the discharge and the receiving water. If the permitting authority determines that, through implementation of appropriate BMPs required by the NPDES storm water permit, the discharge has the necessary controls to provide for attainment of water quality standards, additional controls are not needed in the permit. Conversely, if a discharger (MS4, industrial or construction) fails to adopt and implement adequate BMPs, the permittee and/or the permitting authority should consider a different mix of BMPs or more specific conditions to ensure water quality protection.

Some commenters observed that there was no evidence from the experience of storm water dischargers regulated under the existing NPDES storm water program, or from studies or reports that allegedly support EPA's position, that implementation of BMPs to satisfy the six minimum control measures would meet applicable water quality standards for a regulated small MS4. In response, EPA acknowledges that the six minimum measures are intended to implement the statutory requirement to control discharges to the maximum extent practicable, and they may not result in the attainment of water quality standards in all cases. The control measures do, however, focus on and address well-documented threats to water quality associated with storm water discharges. Based on the collective expertise of the FACA Subcommittee, EPA believes that implementation of the six minimum measures will, for most regulated small MS4s, be adequate to protect water quality, and for other regulated small MS4s will substantially reduce the adverse impacts of their discharges on water quality.

Some commenters asserted that analyses of existing water quality criteria suggest that numeric criteria for aquatic life may be overprotective if applied to storm water discharges. These comments maintained that an approach that prohibits exceedance of applicable water quality criteria is unworkable. Various commenters recommended wet weather specific

criteria, variances to the criteria during wet weather events, and seasonal designated uses. Other commenters noted that water quality-based effluent limits in NPDES permits have traditionally been developed based on dry weather flow conditions (e.g., assuming critical low-flow conditions in the receiving water to ensure protection of aquatic life and human health). Wet weather discharges, however, typically occur under high-flow conditions in the receiving water. Assumptions regarding mass balance equations and size of mixing zones may also not be pertinent during wet weather.

EPA acknowledges the need to devise a regulatory program that is both flexible enough to accommodate the episodic nature, variability and volume of wet weather discharges and prescriptive enough to ensure protection of the water resource. EPA believes that wet weather discharges can be adequately addressed in the existing regulations through refining designated uses and assigning criteria that are tailored to the level of water quality protection described by the refined designated use.

EPA believes that lack of precision in assigning designated uses and corresponding criteria by States and Tribes, in many cases may result in application of water quality criteria that may not appropriately match the intended condition of the water body. States and Tribes have frequently designated uses without regard to site-specific wet weather conditions. Because certain uses (swimming, for example) might not exist during high-intensity storm events or in the winter, States may factor such climatic conditions and seasonal uses into their use designations with appropriate analyses. This would acknowledge that a lower level of control, at lower compliance cost, would be appropriate to protect that use. Before modifying any designated use, however, States would need to evaluate the effect of less stringent water quality criteria on protecting other uses, including any threatened or endangered species, drinking water supplies and downstream uses. EPA will further evaluate these issues in the context of the Water Quality Standards Regulation, Advance Notice of Proposed Rule Making (ANPRM), 63 FR, 36742, July 7, 1998.

One of the major themes presented by EPA in the ANPRM is that refinement in use designations and tailoring of water quality criteria to match refined use designations is an important future direction of the water quality standards program. In assigning criteria to protect

general use classifications, a State or Tribe must ensure that the criteria are sufficiently protective to safeguard the full range of waters of the State, i.e., criteria would be based on the most sensitive use. This approach has been disputed, especially for aquatic life uses, where evidence suggests that the general use criteria will require controls more stringent than needed to protect the existing or potential aquatic life community for a specific water body. EPA recognizes that there is a growing need to more precisely tailor use descriptions and criteria to match site-specific conditions, ensuring that uses and criteria provide an appropriate level of protection, which, to the extent possible, are not overprotective. EPA is engaged in an ongoing evaluation of its regulations in this area through the ANPRM effort. At the same time, EPA continues to encourage States and Tribes to review the applicability of the designated uses and associated criteria using existing provisions in the water quality standards regulation.

2. Total Maximum Daily Loads and Analysis To Determine the Need for Water Quality-Based Limitations

The development and implementation of total maximum daily loads (TMDLs) provide a link between water quality standards and effluent limitations. CWA section 303(d) requires States to develop TMDLs to provide more stringent water quality-based controls when technology-based controls are inadequate to achieve applicable water quality standards. A TMDL is the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources, with consideration for natural background conditions. A TMDL quantifies the maximum allowable loading of a pollutant to a water body and allocates this maximum load to contributing point and nonpoint sources so that water quality criteria will not be exceeded and designated uses will be protected. A TMDL also includes a margin of safety to account for uncertainty about the relationship between pollutant loads and water quality.

Today's final rule refers to TMDLs in several provisions. For the purpose of today's rule, EPA relies on the component of the TMDL that evaluates existing conditions and allocates loads. For discharges to waters that are not impaired and for which a TMDL has not been developed, today's rule also refers to an "equivalent analysis." The discussion that follows uses the term "TMDL" for both.

Under revised § 122.26(a)(9)(i)(C), the permitting authority may designate

storm water discharges that require NPDES permits based on TMDLs that address the pollutants of concern. For storm water discharges associated with small construction activity, § 122.26(b)(15)(i)(B) provides a waiver provision where it may be determined that storm water controls are not needed based on TMDLs that address sediment and any other pollutants of concern. The NPDES permitting authority may waive requirements under the program for certain small MS4s within urbanized areas serving less than 1,000 persons provided that, if the small MS4 discharges any pollutant that has been identified as a cause of impairment of a water body into which it discharges, the discharge is in compliance with a wasteload allocation in a TMDL for the pollutant of concern. The permitting authority may also waive requirements for MS4s in urbanized areas serving between 1,000 and 10,000 persons, if the permitting authority determines that storm water controls are not needed, as provided in § 123.35(d)(2). See § 122.32(c).

Under CWA section 303(d), States identify which of their water bodies need TMDLs and rank them in order of priority. Generally, once a TMDL has been completed for one or more pollutants in a water body, a wasteload allocation for each point source discharging the pollutant(s) is implemented as an enforceable condition in the NPDES permit. Regulated small MS4s are essentially like other point source discharges for purposes of the TMDL process.

A TMDL and the resulting wasteload allocations for pollutant(s) of concern in a water body may not be available because the water body is not on the State's 303(d) list, the TMDL has not yet been completed, or the TMDL did not include specific pollutants of concern. In these cases, the permitting authority must determine whether point sources discharge pollutant(s) in amounts that cause, have the reasonable potential to cause, or contribute to excursions above State water quality standards, including narrative water quality criteria. This so-called "reasonable potential" analysis is intended to determine whether and for what pollutants water quality based effluent limits are required. The analysis is, in effect, a substitute for a similar determination that would be made as part of a TMDL, where necessary. When "reasonable potential" exists, regulations at § 122.44(d) require a water quality-based effluent limit for the pollutant(s) of concern in NPDES permits. The water quality-based effluent limits may be narrative requirements to implement BMPs or,

where necessary, may be numeric pollutant effluent limitations.

Commenters, generally from the regulated community, objected that, due to references to the need to develop a program "to protect water quality" and to additional NPDES permit requirements beyond the minimum control measures based on TMDLs or their equivalent, regulated small MS4s will be subject to uncertain permit limitations beyond the six minimum control measures. Commenters also asserted that through the imposition of a wasteload allocation under a TMDL in impaired water bodies, there is a likelihood that unattainable, yet enforceable narrative and numeric standards will be imposed on regulated small MS4s.

As is discussed in the preceding section, NPDES permits must include any more stringent limitations when necessary to meet water quality standards. However, even if a regulated small MS4 is subject to water quality based effluent limits, such limits may be in the form of narrative effluent limitations that require the implementation of BMPs. As discussed earlier, EPA has adopted the Interim Permitting Policy and incorporated it in the development of today's rule to recognize the appropriateness of BMP-based limits developed on a case-by-case basis.

EPA formed a Federal Advisory Committee to provide advice to EPA on identifying water quality-limited water bodies, establishing TMDLs for them as appropriate, and developing appropriate watershed protection programs for these impaired waters in accordance with CWA section 303(d). Operating under the auspices of the National Advisory Council for Environmental Policy and Technology (NACEPT), the committee produced its *Report of the Federal Advisory Committee on the Total Maximum Daily Load (TMDL) Program* (July 1998). EPA recently published a proposed rule to implement the Report's recommendations (64 FR 46012, August 23, 1999).

3. Anti-Backsliding

In general, the term "anti-backsliding" refers to statutory provisions at CWA sections 303(d)(4) and 402(o) and regulatory provisions at 40 CFR 122.44(l). These provisions prohibit the renewal, reissuance, or modification of an existing NPDES permit that contain effluent limits, permit terms, limitations and conditions, or standards that are less stringent than those established in the previous permit. There are also

exceptions to this prohibition known as "antibacksliding exceptions."

The issue of backsliding from prior permit limits, standards, or conditions is not expected to initially apply to most storm water dischargers designated under today's proposal because they generally have not been previously authorized by an NPDES permit. However, the backsliding prohibition would apply if a storm water discharge was previously covered under another NPDES permit. Also, the backsliding prohibition could apply when an NPDES storm water permit is reissued, renewed, or modified. In most cases, however, EPA does not believe that these provisions would restrict revisions to storm water NPDES permits.

One commenter questioned whether, if BMPs implemented by a regulated small MS4 operator fail to produce results in removal of pollutants and the permittee attempts to substitute a more effective BMP, the small MS4 operator could be accused of violating the anti-backsliding provisions and also be exposed to citizen lawsuits. In response, EPA notes that in such circumstances the MS4's permit has not changed and, therefore, the prohibition against backsliding is not applicable. Further, any change in the mix of BMPs that was intended to be more effective at controlling pollutants would not be considered backsliding, even if it did not include all of the previously implemented BMPs.

4. Water Quality-Based Waivers and Designations

Several sections of today's final rule refer to water quality standards in identifying those storm water discharges that are and are not required to be permitted under today's rule. As noted in § 122.30 of today's rule, CWA section 402(p)(6) requires the designation of municipal storm water sources that need to be regulated to protect water quality and the establishment of a comprehensive storm water program to regulate these sources. Requirements applicable to certain municipal sources may be waived based on the absence of demonstrable water quality impacts. Section 122.32(c). The section 402(p)(6) mandate to protect water quality also provides the basis for regulating discharges associated with small construction. See also § 122.26(b)(15)(i). Further, today's rule carries forward the existing authority for the permitting authority to designate sources of storm water discharges based upon water quality considerations. Section 122.26(a)(9)(i)(C) and (D).

As is discussed above in sections II.H.2.e (for small MS4s) and II.I.1.b.ii

(for small construction), the requirements of today's rule may be waived based on wasteload allocations that are part of "total maximum daily loads" (TMDLs) that address the pollutants of concern or, in the case of small construction and municipalities serving between 1,000 and 10,000 persons, the equivalents of TMDLs. One commenter stated that waivers would allow exemptions to the technology based requirements and would thus be inconsistent with the two-fold approach of the CWA (a technology based minimum and a water quality based overlay). EPA acknowledges that waivers are not allowed for other technology-based requirements under the CWA. A more flexible approach is allowed, however, for sources designated for regulation under 402(p)(6) to protect water quality. For such sources EPA may allow a waiver where it is demonstrated that an individual source does not present the

threat to water quality that was the basis for EPA's designation.

III. Cost-Benefit Analysis

EPA has determined that the range of the rule's benefits exceeds the range of regulatory costs. The estimated rule costs range from \$847.6 million to \$981.3 million annually with corresponding estimated monetized annual benefits which range from \$671.5 million to \$1.628 billion, expected to exceed costs.

The rule's cost and benefit estimates are based on an annual comparison of costs and benefits for a representative year (1998) in which the rule is implemented. This differs from the approach used for the proposed rule which projected cost and benefits over three permit terms. EPA has chosen to use the current approach because it determined that the ratio of annual benefits and costs would not change significantly over time. Moreover,

because there is not an initial outlay of capital costs with benefits accruing in the future (i.e., benefits and costs are almost immediately at a steady state), it is not necessary to discount costs in order to account for a time differential.

EPA developed detailed estimates of the costs and benefits of complying with each of the incremental requirements imposed by the rule. The Agency used two approaches, a national water quality model and national water quality assessment, to estimate the potential benefits of the rule. Both approaches show that the benefits are likely to exceed costs.

These estimates, including descriptions of the methodology and assumptions used, are described in detail in the *Economic Analysis of the Final Phase II Rule*, which is included in the record of this rule making. Exhibit 3 summarizes costs and benefits associated with the basic elements of today's rule.

EXHIBIT 3.—COMPARISON OF ANNUAL COMPLIANCE COST AND BENEFIT ESTIMATES ¹

Monetized benefits	National water quality model (millions of 1998 dollars)	National water quality assessment (millions of 1998 dollars)
Municipal Minimum Measures .....	.....	\$131.0–\$410.2
Controls for Construction Sites .....	.....	\$540.5–\$686.0
Total Annual Benefits	\$1,628.5	\$671.5–\$1,096.2
Costs	Millions of 1998 dollars ²	
Municipal Minimum Measures	\$297.3	
Controls/Waivers for Construction Sites	\$545.0–\$678.7	
Federal/State Administrative Costs	\$5.3	
Total Annual Costs	\$847.6–\$981.31	

¹ National level benefits are not inclusive of all categories of benefits that can be expected to result from the regulation.

² Total may not add due to rounding.

A. Costs

1. Municipal Costs

Initially, to determine municipal costs for the proposed rule, EPA used anticipated expenditure data included in permit applications from a sample of 21 Phase I MS4s. Certain commenters criticized the Agency for using anticipated expenditures because they could be significantly different from the actual expenditures. These commenters suggested that the Agency use the actual cost incurred by the Phase I MS4s. Other comments stated that because the Phase I MS4s, in general, are large municipalities, they may not be representative of the Phase II MS4s for estimating regulatory costs. Finally, one commenter noted that the sample of 21 municipalities used to project cost was relatively small.

To address the concerns of the commenters, EPA utilized a National Association of Flood and Stormwater Management Agencies (NAFSMA) survey of the Phase II community to obtain incremental cost estimates for Phase II municipalities. Using the list of potential Phase II designees published in the **Federal Register** (63 FR 1616), NAFSMA contacted more than 1,600 jurisdictions. The goal of the survey was to solicit information from those communities about the proposed Phase II NPDES storm water program. Several of the survey questions corresponded directly to the minimum measures required by the Phase II rule. One hundred twenty-one surveys were returned to NAFSMA and were used to develop municipal costs.

Using the NAFSMA information, EPA estimated average annual per household

program costs for automatically designated municipalities. EPA also estimated an average annual per household administrative cost for municipalities to address application, record keeping, and reporting requirements of the Rule. The total average per household cost of the rule is expected to \$9.16 per household.

To determine potential national level costs for municipalities, EPA multiplied the number of households (32.5 million) by the per household cost (\$9.16). EPA estimates the annual cost of the Phase II municipal program at \$298 million.

As an alternative method, and point of comparison, to the NAFSMA-based approach, EPA reviewed actual expenditures reported from 35 Phase I MS4s. The Agency targeted these 35 Phase I MS4s because they had participated in the NPDES program for

nearly one permit term, were smaller in size and had detailed data reflecting their actual program implementation costs. Of the 35 MS4s, appropriate cost data was only available for 26 of those MS4s. EPA analyzed the expenditure data and identified the relevant expenditures, excluding costs presented in the annual reports unrelated to the requirements of the Rule. The cost range and annual per household program costs of \$9.08 are similar to those found using the NAFSMA survey data.

2. Construction Costs

In order to estimate the rule's construction-related cost on a national level (the soil and erosion controls (SEC) requirements of the rule and the potential impacts of the post-construction municipal measure on construction), EPA estimated a per site cost for sites of one, three, and five acres and multiplied these costs by the total number of estimated Phase II construction starts across these size categories.

To estimate the percentage of starts subject to the soil and erosion control requirements between 1 and 5 acres, with respect to each category of building permits (residential, commercial, *etc.*), EPA initially used data from Prince George's County (PGC), Maryland, and applied these percentages to national totals. In the proposal, EPA recognized that the PGC data may not be representative of the entire country and requested data that could be used to develop better estimates of the number of construction sites between 1 and 5 acres. EPA did not receive any substantiated national data from commenters.

In view of the unavailability of national data from commenters, EPA made extensive efforts to collect construction site data around the country. The Agency contacted more than 75 municipalities. EPA determined that 14 of the contacted municipalities had useable construction site data. Using data from these 14 municipalities, EPA developed an estimate of the percentage of construction starts on one to five acres. EPA then multiplied this percentage by the number of building permits issued nationwide to determine the total number of construction starts occurring on one to five acres. Finally, to isolate the number of construction starts incrementally regulated by Phase II, EPA subtracted the number of activities regulated under equivalent programs (*e.g.*, areas covered by the Coastal Zone Act Reauthorization Amendments of 1990, and areas covered by equivalent State level soil and erosion control requirements).

Ultimately, EPA estimated that 110,223 construction starts would be incrementally covered by the rule annually.

EPA then used standard cost estimates from *Building Construction Cost Data* and *Site Work Landscape Cost Data* (R.S. Means, 1997a and 1997b) to estimate construction BMP costs for 27 model sites in a variety of typical site conditions across the United States. The model sites included three different site sizes (one, three and five acres), three slope variations (3%, 7%, and 12%), and three soil erosivity conditions (low, medium, and high). EPA chose BMP combinations appropriate to the model site conditions. Based on the assumption that any combination of site factors is equally likely to occur in a given site, EPA developed average cost of sediment and erosion control for all model sites. EPA estimated that, on average, BMPs for a 1 acre site will cost \$1,206, for a 3 acre site \$4,598 and for a 5 acre site \$8,709.

EPA then estimated administrative costs per construction site for the following elements required under the rule: Submittal of a notice of intent for permit coverage; notification to municipalities; development of a storm water pollution prevention plan; record retention; and submittal of a notice of termination. EPA estimated the average total administrative cost per site to be \$937.

EPA also considered the cost implications of NPDES permit authorities waiving the applicability of requirements to storm water discharges from small construction sites based on two different criteria involving water quality impact and low rainfall. EPA received comments stating that a waiver would require a significant investment in training or acquisition of a consultant. Based on comments received, EPA eliminated one of the waiver conditions involving low soil loss threshold because it necessitated use of the Revised Universal Soil Loss Equation which could require extensive technical expertise.

Based on the opinions of construction industry experts, EPA estimates that 15 percent of the construction sites that would otherwise be covered by today's rule will be eligible to receive waivers. Therefore, the Agency has excluded 15 percent of the construction sites when deriving costs of sediment and erosion control. The average cost for sites to qualify for the waiver is expected to be \$34 per site. The construction cost analysis for the proposed rule did not include any costs for the preparation and submission of waiver applications

because EPA believed those costs would be negligible. However, in response to public comments, EPA has estimated these potential costs.

EPA has also estimated the potential costs for construction site operators to implement the post-construction minimum measure. These are costs that may be incurred by construction site operators if the MS4 chooses to meet the post-construction minimum measure by requiring on-site structural, site-by-site control of post-construction runoff. Municipalities may select from an array of structural and non-structural options in implementing this measure, so the potential costs to construction operators is uncertain. Nonetheless, EPA developed average annual BMP costs for sites of one, three, five and seven acres. EPA's analysis accounted for varying levels of imperviousness that characterize residential, commercial, and institutional land uses. Nationwide, these costs are expected to range from \$44 million to \$178 million annually.

Finally, to establish national incremental annual costs for Phase II construction starts, EPA multiplied the total costs of compliance for the chosen site size categories by the total number of Phase II construction starts and added post-construction costs. EPA estimates the annual compliance cost to range from \$545 million to \$678.7 million.

B. Quantitative Benefits

In the Economic Analysis for the proposed rule, a "top-down" approach was used to estimate economic benefits. Under this approach, the combined economic benefits for wet weather programs were estimated first, and then were divided among various water programs on the basis of expert opinion. As a result, the benefits estimates for an individual program were rather uncertain. Moreover, this approach was inconsistent with the approach used to estimate the cost of the proposed storm water rule, which was developed using municipal-based and cost-based data to develop "bottom-up" costs. Therefore, EPA decided to use a "bottom-up" approach for estimating benefits of the Phase II rule. To adequately reflect the quantifiable benefits of the rule, EPA used two different methods: (1) National Water Quality Model and (2) National Water Quality Assessment.

To monetize benefits in both approaches, the Agency applied Carson and Mitchell's (1993) estimates of household willingness-to-pay (WTP) for water quality improvement to estimates of waters impaired by storm water discharges. Carson and Mitchell's 1993 study reports the results of their 1983 national survey of WTP for incremental

improvements in fresh water quality. Carson and Mitchell estimate the WTP for three minimum levels of fresh water quality: boatable, fishable, and sizable. EPA adjusted the WTP amounts to account for inflation, growth in real per capita income, and increased attitudes towards pollution control. The adjusted WTP amounts for improvements in fresh water quality are \$210 for boatable, \$158 for fishable, and \$177 for sizable. A brief summary of the national water quality model and national water quality assessment approaches follow.

1. National Water Quality Model

One approach EPA used to estimate the benefits of the Phase II municipal and construction site controls was the National Water Pollution Control Assessment Model (NWPCAM). NWPCAM estimates benefits of the storm water program at the national level, including the impact on small streams. This model estimates water quality and the resultant use support for the 632,000 miles of rivers and streams in the USEPA Reach File Version 1 (RF1), which covers the continental

United States. The model analyzes water quality changes by stream reach. The parameters modeled in the NWPCAM are biological oxygen demand (BOD), total suspended solids (TSS), dissolved oxygen (DO), and fecal coliforms (FC).

The model projects changes in water quality due to the Phase II municipal and construction site controls. To calculate the economic benefits of change in water quality, the number of households in the proximity of the stream reach are determined, by overlaying the model results on the 1990 Census of Populated Places and Minor Civil Divisions, and updating the population to 1998. Economic benefits are calculated using the Carson and Mitchell WTP values. The benefits are separately estimated for local and non-local waters on the basis of WTP values and proximity to water quality changes.

The value of the change in use support for local waters is greater than the value of the non-local waters because of the opportunity to use local waters by the local population. This model assumes that if improvement

occurs in waters that are not close to population centers the economic value is lower. Therefore, benefits are estimated for local and non-local waters separately. This assumption is based on Carson and Mitchell's survey which asked respondents to apportion each of their stated WTP values between achieving the water quality goals in their own State and achieving those goals in the nation as a whole. On average, respondents allocated 67% of their values to achieving in-State water quality goals and the remainder to the nation as a whole. Carson and Mitchell argue that for valuing local water quality changes 67% is a reasonable upper bound for the local multiplier and 33% for the non-local water quality changes. For the purposes of this analysis, the locality is defined as urban sites and associated populations linked into the NWPCAM framework. Using this methodology, the total monetized benefits of Phase II control of urban and construction site runoff is estimated to be \$1.628 billion per year. The local and non-local benefits due to Phase II controls are presented in Exhibit 4.

EXHIBIT 4.—LOCAL AND NON-LOCAL BENEFITS ESTIMATES DUE TO PHASE II CONTROLS NATIONAL WATER QUALITY MODEL ESTIMATE

Use support	Local benefits (\$million/yr)	Non-local benefits ¹ (\$million/yr)	Total benefits (\$million/yr)
Swimming, Fishing, and Boating	306.20	60.60	366.80
Fishing and Boating	395.10	51.90	447.00
Boating	700.10	114.60	814.70
Total	1401.40	227.10	1628.50

¹ To estimate non-local willingness to pay per household, the 33% of willingness is multiplied by the fraction of previously impaired national waters (in each use category) that attain the beneficial use as a result of the Phase II rule. To estimate the aggregate non-local benefits, non-local willingness to pay is multiplied with the total number of households in the US.

While the numbers of miles that are estimated to change their use support are small, the benefits estimates are quite significant. This is because urban runoff and, to a large extent, construction activity occurs where the people actually reside and the water quality changes mostly occur close to these population centers. NWPCAM indicates that changes in pollution loads have the most effect immediately downstream of pollution changes. As a result, the aggregate WTP is large because large numbers of households in these population centers are associated with the local waters that reflect improvement in designated use support.

2. National Water Quality Assessment

EPA also estimated benefits of the Phase II Storm Water program using the 1998 National Water Quality Inventory (305(b)) Report to Congress, rather than

the NWPCAM as a basis for estimating impairment addressed by the rule. The Water Quality Assessment method separately estimates benefits associated with improvements to fresh water, marine water and construction site controls, and then aggregates these separate categories into an estimate of total annual benefits.

a. Municipal Measures

i. Fresh Waters Benefits

In order to develop estimates for the potential value of the municipal measures (except storm water runoff controls for construction sites), EPA applied Carson & Mitchell WTP values to estimated existing and projected future fresh water impairment. Carson & Mitchell did not evaluate marine waters, so only fresh water values were available from their research. Even

though the Carson and Mitchell estimates apply to all fresh water, it is not clear how these values would be apportioned among rivers, lakes, and the Great Lakes. The 305(b) data indicate that lakes are the most impaired by urban runoff/storm sewers, followed closely by the Great Lakes, and then rivers. Therefore, EPA applied the WTP values to the categories separately and assumed that the higher resulting value for lakes represents the high end of the range (i.e., assuming that lake impairment is more indicative of national fresh water impairment) and that the lower resulting value for impaired rivers represents the low end of a value range for all fresh waters (i.e., assuming that river impairment is more indicative of national fresh water impairment). In addition, EPA estimated that the post-construction runoff

requirements of the municipal program might result in benefits of at least \$16.8 million annually from avoided future runoff. The post-construction estimate significantly underestimates potential program benefits because it does not account for avoided hydrologic changes and resulting water quality impairment associated with increases in imperviousness from development and redevelopment. Summing the benefits across the water quality use support levels yields an estimate of benefits ranging from approximately \$121.9 million to \$378.2 million per year.

ii. Marine Waters Benefits

In addition to the fresh water benefits captured by the Carson and Mitchell study, EPA anticipates benefits as a result of improvements to marine waters. Sufficient methods have not been developed to quantify national-level benefits for commercial or recreational fishing. EPA used beach closure data and visitation estimates from its Beach Watch Program to estimate potential reductions in marine swimming visits due to storm water runoff contamination events in 1997. The estimated 86,100 trips that did not occur because of beach closures in coastal Phase II communities is a lower bound because it represents only those beaches that report both closures and visitation data. EPA estimates potential swimming benefits from the rule to be at least \$2.1 million annually.

EPA developed an analysis of potential benefits associated with avoided health impacts from exposure to contaminants in storm sewer effluent. Based on a study of incremental illnesses found among people who swam within one yard of storm drains in Santa Monica Bay, EPA estimated a range of incremental illnesses (Haile *et al.*, 1996). Depending on assumptions made about number of exposures to contaminants and contaminant concentrations, benefits ranged from \$7.0 million to \$29.9 million annually.

b. Construction Benefits

The major pollutant resulting from construction activities is sediment. However, in addition to sediment, construction activities also yield pollutants such as pesticides, petroleum products, and solvents. Because circumstances will vary considerably from site to site, data is not available with which to develop estimates of benefits for each site and aggregate to obtain a national-level estimate.

In the proposed rule, EPA estimated the combined benefits of all wet weather programs, and then used expert opinions to allocate them to different individual programs. To eliminate the possible overlap between the benefits of the soil and erosion control requirements, municipal measures, and other wet weather storm water programs, EPA chose to use an approach in today's final rule that directly

estimates the benefits of soil and erosion requirements.

A survey of North Carolina residents (Paterson *et al.*, 1993) indicated that households are willing to pay for erosion and sediment controls similar to those in today's rule. Based on income and other indicators, the values derived from the study are expected to be similar to values held in the rest of the country. Using the mean value of the willingness to pay of \$25 per household, EPA projects annual benefits of the soil and erosion requirements to range from \$540.5–\$686 million.

c. Summary of Benefits From the National Water Quality Assessment

Total benefits from municipal measures and construction site controls are expected to range from \$671.5 million to \$1.1 billion per year, including benefits of approximately \$13.7 million per year associated with small stream improvements. A summary of the potential benefits is presented in Exhibit 5.

As shown in Exhibit 5, it was not possible to monetize all categories of benefits using the WTP estimates. In particular, benefits for improving marine water quality such as fishing and passive use benefits are not included in the values used to estimate the potential benefits of the municipal minimum measures (excluding construction sites controls), and they are not estimated separately, because information is not currently available.

EXHIBIT 5.—POTENTIAL ANNUAL BENEFITS OF THE PHASE II STORM WATER RULE NATIONAL WATER QUALITY ASSESSMENT ESTIMATE

Benefit category	Annual WTP
Municipal Minimum Measures ¹	
Fresh Water Use and Passive Use ²	\$121.9–\$378.2
Marine Recreational Swimming	\$2.1
Human Health (Marine Waters)	\$7.0–\$29.9
Other Marine Use and Passive Use	(+)
Erosion and Sediment Controls for Construction Sites	
Fresh Water and Marine Use and Passive Use ³	\$540.5–\$686
Total Phase II Program	
Total Use & Passive Use (Fresh Water and Marine)	>\$671.5–>\$1,096.2

+ = positive benefits expected but not monetized.

¹ Includes water quality benefit of municipal programs, based on 80% effectiveness of municipal programs.

² Based on research by Carson and Mitchell (1993). Fresh water value only. Does not include commercial fishery, navigation, or diversionary (e.g. municipal drinking water cost savings or risk reductions) benefits. May not fully capture human health risk reduction or ecological values.

³ Based on research by Paterson *et al.* (1993). Although the survey's description of the benefits of reducing soil erosion from construction sites included reduced dredging, avoided flooding, and water storage capacity benefits, these benefit categories may not be fully incorporated in the WTP values. Small streams may account for over 2% of total benefits.

C. Qualitative Benefits

There are additional benefits to storm water control that cannot be quantified

or monetized. Thus, the current estimate of monetized benefits may understate the true value of storm water controls

because it omits many ways in which society is likely to benefit from reduced storm water pollution, such as improved

aesthetic quality of waters, benefits to wildlife and to threatened and endangered species, cultural values, and biodiversity benefits.

A benefit that EPA did not monetize completely is the flood control benefits attributable to municipal storm water controls reducing downstream flooding, although flood control benefits associated with sediment and erosion control are already reflected to some extent in the construction benefits. Similarly, the Agency could not value the benefits from increased property value due to storm water controls reflected in the rule, even though a commenter suggested inclusion of these benefits in the estimates.

Moreover, while a number of commenters requested that EPA include ecological benefits, the Agency was not able to fully monetize these benefits. Urbanization usually increases the amount of sediment, nutrients, metals and other pollutants associated with land disturbance and development. Development usually not only results in a dramatic increase in the volume of water runoff, but also in a substantial decrease in that water's quality due to stream scour, runoff and dispersion of toxic pollutants, and oversiltation. These kinds of secondary benefits could not be fully reflected in the monetized benefits. EPA was able to only monetize the aquatic life support benefits for waters assumed to be impaired. Thus, only the aquatic life support benefits attributable to municipal controls, reflected through human satisfaction, are taken into account.

Reduced nutrient level is another benefit of the storm water control which is not fully captured by the economic analysis. High nutrient levels often lead to eutrophication of the aquatic system. The quality change in ecological sources as the result of storm water controls to reduce pollutants is not fully reflected in the present benefits.

D. National Economic Impact

Finally, the Agency determined that the rule will have minimal impacts on

the economy or employment. This is because the final rule regulates small MS4s and construction sites under 5 acres, not the typical industrial plants or other non-construction activities that could directly impact production and thus those sectors of the economy.

Discussions with representatives within the construction industry indicate that construction costs will likely be passed on to buyers, thus not seriously affecting the housing industry directly. One commenter argued that the rule will have a negative employment effect because the builders will build fewer homes requiring less building materials as a result of the declining demand induced by the cost of the soil and erosion controls. EPA disagrees with this argument because the cost of the controls, as the percentage of the price of a median home, is negligible and will be passed on to final buyers.

Flexibility within the rule allows MS4s to tailor the storm water program requirements to their needs and financial position, minimizing impacts. For sedimentation and erosion controls on construction sites, the rule contemplates application of commonly used BMPs to reduce costs for the construction industry. Thus, the rule attempts to use existing practices to prevent pollution, which should minimize impacts on States, Tribes, municipalities and the construction industry.

Thus, EPA concludes that the effect of the rule, if any, on the national economy will be minimal. The benefits of today's rule more than offset any cost impacts on the national economy.

IV. Regulatory Requirements

A. Paperwork Reduction Act

The Office of Management and Budget (OMB) has approved some of the information collection requirements contained in this final rule (*i.e.* those found in 40 CFR 122.26(g) and 123.35(b)) under the provisions of the *Paperwork Reduction Act*, 44 U.S.C. 3501 *et seq.* and has assigned OMB control number 2040-0211.

The burden and costs described below are for the information collection, reporting, and record keeping requirements for the three year period beginning with the effective date of today's rule. Additional information collection requirements for regulated small MS4s and small construction sites will occur after this initial three year period and will be counted in a subsequent information collection requirement. The total burden of the information collection requirements for the first three years of this rule is estimated at 56,369 hours with a corresponding cost of \$2,151,305 million annually. This burden and cost is for industrial facilities to complete and submit the no exposure certification, for NPDES-authorized States to process and review the no exposure certification, and for the NPDES-authorized States to develop designation criteria and assess additional MS4s outside of urbanized areas. Compliance with the applicable information collection requirements imposed under this rule are mandatory, pursuant to CWA section 402.

Exhibit 6 presents average annual burden and cost estimates for Phase II respondents for the first three years. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust existing ways for complying with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

EXHIBIT 6.—AVERAGE ANNUAL BURDEN AND COST ESTIMATES FOR PHASE II RESPONDENTS

Information collection activity	A Respondents per year (projected) ¹	B Burden hours per respondent per year (predicted)	(A)×(B)=C Annual re- spondent bur- den hours (projected)	D Respondent labor cost (\$/ hr) (1998 \$)	(C)×(D)=E Annual Cost (\$ (projected)
Ind. No Expos. Facilities: ² No Expos. Certification	36,377	1.0	36,377	44.35	1,613,320
Annual Subtotal			36,377		1,613,320
NPDES-Authorized States: ³ Designation of Addit. MS4s ⁴	15	332.8	4,892	26.91	131,644

EXHIBIT 6.—AVERAGE ANNUAL BURDEN AND COST ESTIMATES FOR PHASE II RESPONDENTS—Continued

Information collection activity	A Respondents per year (projected) ¹	B Burden hours per respond- ent per year (predicted)	(A)×(B)=C Annual re- spondent bur- den hours (projected)	D Respondent labor cost (\$/ hr) (1998 \$)	(C)×(D)=E Annual Cost (\$) (projected)
No Exp. Cert. Proc. & Rev	30,200	0.5	15,100	26.91	406,341
Annual Subtotal			19,992		537,985
Annual Totals			56,369		2,151,305

Notes:

¹Source: U.S. EPA, Office of Wastewater Management. Economic Analysis for the Storm Water Phase II Rule.

²The total number of potential no exposure respondents was divided by 5 to estimate an annual total. It was assumed that the annual number of respondents for the no exposure certification would be spread over the five year period the exclusion applies.

³The number of respondents in each category represents only those respondents located within the 44 NPDES-authorized States and Territories. The burden and cost estimates provided in this section are for the NPDES-authorized States in their role as the permitting authority for municipal designations and industrial no exposure.

⁴The number of respondents for this activity, 15, represents the number of NPDES-authorized States and Territories that must develop designation criteria and assess small MS4s located outside of an urbanized area for possible Phase II coverage divided by the three year ICR period.

Given the requirements of today's regulation, EPA believes there will be no capital startup and no operation and maintenance costs associated with information collection requirements of the rule.

The government burden associated with today's rule will impact State, Tribal, and Territorial governments (NPDES-authorized governmental entities) that have storm water program authority, as well as the federal government (*i.e.*, EPA), where it is the NPDES permitting authority. As of March 1999, 43 States and the Virgin Islands had NPDES authority.

The annual burden imposed upon authorized governmental entities (delegated States and the Virgin Islands) and the federal government for the next three years is estimated to be 19,992 hours (\$537,985) and 4,087 hours (\$115,948) respectively, for a total of 24,079 hours (\$653,933). This estimate is based on the average time that governments will expend to carry out the following activities: designate additional MS4s (332.8 hours) and process and review "no exposure" certificates from industrial dischargers (0.5 hour).

Under the existing rule, storm water discharges from light industrial activities identified under § 122.26(b)(14)(xi) were exempted from the permit application requirements if they were not exposed to storm water. Today's rule expands the applicability of the "no exposure" exclusion to include all industrial activity regulated under § 122.26(b)(14) (except category (x), construction). The "no exposure" provision is applied through the use of a written certification process, thus representing a slight reporting burden increase for "light" industries with "no exposure".

In addition to the information collection, reporting, and record keeping burden for the next three years, today's rule contains information collection requirements that will not begin until three years or more from the effective date of today's rule. These information collection requirements were not included in the information collection request approved by OMB. EPA will submit these burden estimates for OMB approval when it submits ICR 2040-0211 to OMB for renewal in three years. The rule burdens for regulated small MS4s and small construction sites that will be included in the ICR renewal fall into three areas: application for an NPDES permit or submittal of waiver information, record keeping of storm water management activities, and submittal of reports to the permitting authority. There will also be an additional burden for the permitting authority to review this information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15. EPA is amending the table in 40 CFR Part 9 of currently approved ICR control numbers issued by OMB for various regulations to list the first three years of information requirements contained in this final rule.

B. Executive Order 12866

Under Executive Order 12866, [58 FR 51,735 (October 4, 1993)] the Agency must determine whether the regulatory action is "significant" and therefore subject to OMB review and the requirements of the Executive Order. The Order defines "significant

regulatory action" as one that is likely to result in a rule that may:

(1) have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

Pursuant to the terms of Executive Order 12866, it has been determined that this rule is a "significant regulatory action". As such, this action was submitted to OMB for review. Changes made in response to OMB suggestions or recommendations will be documented in the public record.

C. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a

written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted.

EPA has determined that today's rule contains a Federal mandate that may result in expenditures of \$100 million or more in any one year for both State, local, and tribal governments, in the aggregate, and the private sector. Accordingly, EPA has prepared under section 202 of the UMRA a written statement which is summarized below.

1. Summary of UMRA Section 202 Written Statement

EPA promulgates today's storm water regulation pursuant to the specific mandate of Clean Water Act section 402(p)(6), as well as sections 301, 308, 402, and 501. (33 U.S.C. sections 1342(p)(6), 1311, 1318, 1342, 1361.) Section 402(p)(6) of the CWA requires that EPA designate sources to be regulated to protect water quality and establish a comprehensive program to regulate those sources.

In the *Economic Analysis of the Final Phase II Rule* (EA), EPA describes the qualitative and monetized benefits associated with today's rule and then compares the monetized benefits with the estimated costs for the rule. EPA developed detailed estimates of the costs and benefits of complying with each of the incremental requirements imposed by the rule. These estimates, including descriptions of the methodology and assumptions used, are described in detail in the EA. The Agency used two approaches, a national water quality model and national water quality assessment, to estimate the potential benefits of the rule. Both approaches show that the benefits are likely to exceed costs. Exhibit 3 in section III of this preamble summarizes the costs and benefits associated with the basic elements of today's rule.

There are additional benefits to storm water control that cannot be quantified or monetized. Thus, the current estimate of monetized benefits may understate the true value of storm water controls because it omits many ways by which society is likely to benefit from reduced storm water pollution, such as improved

aesthetic quality of waters, benefits to wildlife and to threatened and endangered species, cultural values, and biodiversity benefits.

Several commenters asserted that today's rule is an unfunded mandate and that, without funding, the monitoring of the already existing pollution control programs would suffer. In section II.D.3 of the preamble, EPA lists some of the programs that EPA anticipates may provide funds to help develop and, in limited circumstances, implement storm water management programs.

In the EA, EPA reviewed the expected effect of today's rule on the national economy. The Agency determined that the rule will have minimal impacts on the economy or employment. This is because the final rule regulates small MS4s and construction sites under 5 acres, not the typical industrial plants or other non-construction activities that could directly impact production and thus those sectors of the economy.

Discussions with representatives within the construction industry indicate that construction costs will likely be passed on to buyers, thus not seriously affecting the housing industry directly. Flexibility within the rule allows MS4s to tailor the storm water program requirements to their needs and financial position, minimizing impacts. For sedimentation and erosion controls on construction sites, the rule contemplates application of commonly used BMPs to reduce costs for the construction industry. Thus, the rule attempts to use existing practices to prevent pollution, which should minimize impacts on States, Tribes, municipalities and the construction industry.

Thus, EPA concludes that the effect of the rule, if any, on the national economy would be minimal. The benefits of today's rule more than offset any cost impacts on the national economy.

Consistent with the intergovernmental consultation provisions of section 204 of the UMRA and Executive Order 12875, "Enhancing the Intergovernmental Partnership," EPA consulted with the governmental entities affected by this rule.

First, EPA provided States, Tribal and local governments with the opportunity to comment on draft alternative approaches for the proposed rule through publishing a notice requesting information and public comment in the **Federal Register** on September 9, 1992 (57 FR 41344). This notice presented a full range of regulatory alternatives. At that time, EPA received more than 130 comments, including approximately 43 percent from municipalities and 24

percent from State or Federal agencies. These comments were the genesis of many of the provisions in the today's rule, including reliance on the NPDES program framework (including general permits), providing State and local governments flexibility in selecting additional sources requiring regulation, and focusing on high priority polluters. These comments helped to focus on pollution prevention, watershed-based concerns and BMPs. They also led to certain exemptions for facilities that do not pollute national waters.

In early 1993, EPA, in conjunction with the Rensselaerville Institute, held public and expert meetings to assist in developing and analyzing options for identifying unregulated storm water sources and possible controls. These meetings provided participants an additional opportunity to provide input into the CWA section 402(p)(6) program development process. The final rule addresses several of the key concerns identified in these groups, including provisions that provide flexibility to the States to select sources to be controlled and types of permits to be issued, and flexibility to MS4s in selecting BMPs.

EPA also conducted outreach with representatives of small entities, including small government representatives, in conjunction with the convening of a Small Business Advocacy Review Panel under SBREFA which is discussed in section IV.E. of the preamble.

In addition, EPA established the Urban Wet Weather Flows Advisory Committee under the Federal Advisory Committee Act (FACA). The Urban Wet Weather Flows Advisory Committee, in turn established the Storm Water Phase II Subcommittee. Consistent with FACA, the membership of the Committee and the Storm Water Phase II Subcommittee was balanced among EPA's various outside stakeholder interests, including representatives from State governments, municipal governments (both elected officials and appointed officials) and Tribal governments, as well as industrial and commercial sectors, agriculture, environmental and public interest groups.

In general, municipal and Tribal government representatives supported the NPDES approach in today's rule for the following reasons: It will be uniformly applied on a nationwide basis; it provides flexibility to allow incorporation of State and local programs; it resolves the problem of donut holes that cause water quality impacts in urbanized areas; and it allows co-permitting of small regulated

MS4s with those regulated under the existing storm water program.

In contrast, State representatives sought alternative approaches for State implementation of the storm water program for Phase II sources. State representatives asserted that a non-NPDES alternative approach best facilitated watershed management and avoided duplication and overlapping regulations. These representatives pointed out that there are a variety of State programs—not based on the CWA—implementing effective storm water controls, and that EPA should provide incentives for their implementation and improvement in performance. EPA continues to believe that an NPDES approach is the best approach in order to adequately protect water quality. However, EPA has worked with States on an alternative approach that provides flexibility within the NPDES framework. The final rule allows States with a watershed permitting approach to phase in permit coverage for MS4s in jurisdictions with a population less than 10,000 and provides two waivers from coverage for small MS4s. This issue is discussed in section II.C of the preamble, Program Framework: NPDES Approach.

Some municipal governments objected that the rule's minimum measures for small MS4s violate the Tenth Amendment insofar as they require the operators of MS4s to regulate third parties according to the "minimum measures" for municipal storm water management programs. EPA disagrees that today's rule is inconsistent with Tenth Amendment principles. Permits issued under today's rule will not compel political subdivisions of States to regulate in their sovereign capacities, but rather to effectively control discharges out of their storm sewer systems in their owner/operator capacities. For MS4s that do not accept this "default" minimum measures-based approach (to control discharges out of the storm sewer system by exercising local powers to control discharges into the storm sewer system), today's rule allows for alternative permits through individual permit applications. EPA made revisions to the rule to allow regulated small MS4s to opt out of the minimum measures approach and instead apply for an individual permit. This issue is discussed in section II.H.3.c.iii of the preamble, Alternative Permit Option/Tenth Amendment.

2. Selection of the Least Costly, Most Cost-Effective or Least Burdensome Alternative That Achieves the Objectives of the Statute

Today's rule evolved over time and incorporated aspects of alternatives that responded to concerns presented by the various stakeholders. A primary characteristic of today's rule is the flexibility it offers both the permitting authority and the regulated sources (small MS4s and small construction sites), by the use of general permits, implementation of BMPs suited to specific locations, and allowing MS4s to develop their own program goals.

In the administrative record supporting the proposed rule, EPA estimated ranges of costs associated with six different options, including a no action option, the proposed option, and four other options that considered various combinations of the following: Covering all the unregulated construction sites below 5 acres, all small MS4s, certain industrial and commercial activities, and all point sources. EPA developed detailed cost estimates for the incremental requirements imposed under the final regulation, and for each of the alternatives, and applied these estimates to the remaining unregulated point sources of storm water. The Agency compared the estimated annual range of costs imposed under today's rule and other major options considered. The range of values for each option included the costs for compliance, including paperwork requirements for the operators of small construction sites, industrial facilities, and MS4s and administrative costs for State and Federal NPDES permitting authorities.

Today's rule reflects the least costly option that achieves the objectives of the statute, thus meeting the requirements of section 205. EPA did not consider "no regulation" to be an "option" because it would not achieve the objectives of CWA section 402(p)(6). A portion of currently unregulated point sources of storm water need to reduce pollutants to protect water quality.

Today's rule is estimated to range in cost from \$847.6 million to \$981.3 million annually, although the cost estimate for the proposed rule was reported as a range of \$138 to \$869 million annually. That range reflected a unit cost range for the municipal minimum measures and a cost range per construction site for soil erosion control. EPA has since revised its cost analysis to allow it to report the current estimate, which is toward the high end of the original cost range. The four other regulatory options considered at

proposal involved higher regulatory costs and, therefore, were not selected. These four options and their estimated costs are as follows:

(1) An option based on the August 7, 1995 direct final rule was estimated to cost between \$2.2 billion and \$78.9 billion per year.

(2) A "Plan B" option was estimated to cost between \$0.6 billion and \$3.2 billion per year.

(3) An option based on the September 30, 1996 draft proposed rule was estimated to cost between \$0.2 billion and \$3.7 billion per year.

(4) An option based on the February 13, 1997 draft proposed rule, was estimated to cost between \$0.2 billion and \$3.5 billion.

There are three reasons why the costs for these four options exceeded the estimated cost range for the proposed rule. The first two options regulated substantially more municipal governments. The first, third, and fourth options required industrial facilities to apply for permits. Finally, the first three options applied permit requirements to construction sites below 1 acre. Consequently, these options would be more costly than today's rule even with the revised analysis methods used to estimate costs.

3. Effects on Small Governments

Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements. EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments. Although today's rule expands the NPDES program (with modifications) to certain MS4s serving populations below 100,000 and although many MS4s are owned by small governments, EPA does not believe today's rule significantly or uniquely affects small governments. As explained in section IV.E. of the preamble, EPA today certifies that the rule will not have a significant impact on small governmental jurisdictions. In addition, the rule will not have a unique impact on small governments because the rule will affect small governments in

to the same extent as (or to a lesser extent than) larger governments that are already covered by the existing storm water rules. Thus, today's rule is not subject to the requirements of section 203 of UMRA.

Notwithstanding this finding, in developing today's rule, EPA provided notice of the requirements to potentially affected small governments; enabled officials of affected small governments to provide meaningful and timely input in the development of regulatory proposals; and informed, educated and advised small governments on compliance with the requirements.

Concerning notice, EPA provided States, local, and Tribal governments with the opportunity to comment on alternative approaches for an early draft of the proposed rule by publishing a notice requesting information and public comment in the **Federal Register** on September 9, 1992 (57 FR 41344). This notice presented a full range of regulatory alternatives. At that time, EPA received more than 130 comments, including approximately 43 percent from municipalities and 24 percent from State or Federal agencies.

The Agency also provided, through the SBREFA panel process and the FACA process, the opportunity for elected officials of small governments (and their representatives) to meaningfully participate in the development of the rule. Through such participation and exchange, EPA not only notified potentially affected small governments of requirements of the developing rule, but also allowed officials of affected small governments to have meaningful and timely input into the development of regulatory proposals.

In addition to involving municipalities in the development of the rule, EPA also continues to inform, educate, and advise small governments on compliance with the requirements of today's rule. For example, EPA supported 10 workshops, presented by the American Public Works Association from September 1998 through May 1999, designed to educate local governments on the implementation of the rule. The workshop curriculum included information on a variety of key issues such as anticipated regulatory requirements, agency reporting, best management practices, construction site controls, post construction management for new and redeveloped sites, public education and public involvement strategies, detection and control of illicit discharges, and good housekeeping practices. Moreover, EPA has prepared a series of fact sheets, available on the

EPA website at www.epa.gov/owm/sw/toolbox, that explains the rule in detail.

Finally, to assist small governments in implementing the Phase II program, EPA is committed to the following: (1) developing a tool box of implementation strategies; (2) providing written technical assistance, including guidance on developing BMPs and measurable goals; and (3) compiling a comprehensive evaluation of the NPDES municipal storm water Phase II program over the next 13 years.

D. Executive Order 13132

Executive Order 13132, entitled "Federalism" (64 FR 43255, August 10, 1999), requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government." Under Executive Order 13132, EPA may not issue a regulation that has federalism implications, that imposes substantial direct compliance costs, and that is not required by statute, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by State and local governments, or EPA consults with State and local officials early in the process of developing the proposed regulation. EPA also may not issue a regulation that has federalism implications and that preempts State law unless the Agency consults with State and local officials early in the process of developing the proposed regulation.

If EPA complies by consulting, Executive Order 13132 requires EPA to provide to the Office of Management and Budget (OMB), in a separately identified section of the preamble to the rule, a federalism summary impact statement (FSIS). The FSIS must include a description of the extent of EPA's prior consultation with State and local officials, a summary of the nature of their concerns and the agency's position supporting the need to issue the regulation, and a statement of the extent to which the concerns of State and local officials have been met. For final rules subject to Executive Order 13132, EPA also must submit to OMB a statement from the agency's Federalism Official certifying that EPA has fulfilled the Executive Order's requirements.

EPA has concluded that this final rule may have federalism implications. As discussed above in section IV.C., the rule contains a Federal mandate that may result in the expenditure by State, local and tribal governments, in the aggregate, of \$100 million or more in any one year. Accordingly, the rule may have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. Moreover, the rule will impose substantial direct compliance costs on State or local governments. Accordingly, EPA provides the following FSIS under section 6(b) of Executive Order 13132.

1. Description of the Extent of the Agency's Prior Consultation with State and Local Governments

Although this rule was proposed long before the November 2, 1999 effective date of Executive Order 13132, EPA consulted extensively with affected State and local governments pursuant to the intergovernmental consultation provisions of Executive Order 12875, "Enhancing the Intergovernmental Partnership" (now revoked by Executive Order 13132) and section 204 of UMRA.

First, EPA provided State and local governments the opportunity to comment on draft alternative approaches for the proposed rule through publishing a notice requesting information and public comment in the **Federal Register** on September 9, 1992 (57 FR 41344). This notice presented a full range of regulatory alternatives. At that time, EPA received more than 130 comments, including approximately 43 percent from municipalities and 24 percent from State or Federal agencies. These comments were the genesis of many of the provisions in the today's rule, including reliance on the NPDES program framework (including general permits), providing State and local governments flexibility in selecting additional sources requiring regulation, and focusing on high priority polluters. These comments helped to focus on pollution prevention, watershed-based concerns and BMPs. They also led to certain exemptions for facilities that do not pollute national waters.

In early 1993, EPA, in conjunction with the Rensselaerville Institute, held public and expert meetings to assist in developing and analyzing options for identifying unregulated storm water sources and possible controls. These meetings provided participants an additional opportunity to provide input into the CWA section 402(p)(6) program

development process. The final rule addresses several of the key concerns identified in these groups, including provisions that provide flexibility to the States to select sources to be controlled and types of permits to be issued, and flexibility to MS4s in selecting BMPs.

EPA also conducted outreach with representatives of small entities, including small governments, in conjunction with the convening of a Small Business Advocacy Review Panel under SBREFA which is discussed in section III.F. of the preamble.

In addition, EPA established the Urban Wet Weather Flows Advisory Committee (FACA), which in turn established the Storm Water Phase II Subcommittee. Consistent with the Federal Advisory Committee Act, the membership of the Committee and the Storm Water Phase II Subcommittee was balanced among EPA's various outside stakeholder interests, including representatives from State governments, municipal governments (both elected officials and appointed officials) and Tribal governments, as well as industrial and commercial sectors, agriculture, environmental and public interest groups.

2. Summary of Nature of State and Local Government Concerns, and Statement of the Extent to Which Those Concerns Have Been Met

In general, municipal government representatives supported the NPDES approach in today's rule for the following reasons: it will be uniformly applied on a nationwide basis; it provides flexibility to allow incorporation of State and local programs; it resolves the problem of donut holes that cause water quality impacts in urbanized areas; and it allows co-permitting of small regulated MS4s with those regulated under the existing storm water program.

In contrast, State representatives sought alternative approaches for State implementation of the storm water program for Phase II sources. State representatives asserted that a non-NPDES alternative approach best facilitated watershed management and avoided duplication and overlapping regulations. These representatives pointed out that there are a variety of State programs—not based on the CWA—implementing effective storm water controls, and that EPA should provide incentives for their implementation and improvement in performance. EPA continues to believe that an NPDES approach is the best approach in order to adequately protect water quality. However, EPA has worked with States on an alternative

approach that provides flexibility within the NPDES framework. The final rule allows States with a watershed permitting approach to phase in permit coverage for MS4s in jurisdictions with a population less than 10,000 and provides two waivers from coverage for small MS4s. This issue is discussed in section II.C of the preamble, Program Framework: NPDES Approach.

Some municipal governments objected that the rule's minimum measures for small MS4s violate the Tenth Amendment insofar as they require the operators of MS4s to regulate third parties according to the "minimum measures" for municipal storm water management programs. EPA disagrees that today's rule is inconsistent with Tenth Amendment principles. Permits issued under today's rule will not compel political subdivisions of States to regulate in their sovereign capacities, but rather to effectively control discharges out of their storm sewer systems in their owner/operator capacities. For MS4s that do not accept this "default" minimum measures-based approach (to control discharges out of the storm sewer system by exercising local powers to control discharges into the storm sewer system), today's rule allows for alternative permits through individual permit applications. EPA made revisions to the rule to allow regulated small MS4s to opt out of the minimum measures approach and instead apply for an individual permit. This issue is discussed in section II.H.3.c.iii of the preamble, Alternative Permit Option/Tenth Amendment.

3. Summary of the Agency's Position Supporting the Need To Issue the Regulation

As discussed more fully in section I.B. above, today's rule is needed because uncontrolled storm water discharges from areas of urban development and construction activity have been shown to have negative impacts on receiving waters by changing the physical, biological, and chemical composition of the water, resulting in an unhealthy environment for aquatic organisms, wildlife, and people. As discussed in section II.C., the NPDES approach in today's rule is needed to ensure uniform application on a nationwide basis, to provide flexibility to allow incorporation of State and local programs, to resolve the problem of donut holes that cause water quality impacts in urbanized areas, and to allow co-permitting of small regulated MS4s with those regulated under the existing storm water program.

The draft final rule was transmitted to OMB on July 6, 1999. Because transmittal occurred before the November 2, 1999 effective date of Executive Order 13132, certification under section 8 of the Executive Order is not required.

E. Regulatory Flexibility Act (RFA), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), 5 U.S.C. 601 et seq.

The RFA generally requires an Agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impact of today's rule on small entities, small entity is defined as: (1) a building contractor (SIC 15) with up to \$17.0 million in annual revenue; (2) a small governmental jurisdiction that is a government of a city, county, town, school district, or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities.

Although this final rule will not have a significant economic impact on a substantial number of small entities, EPA nonetheless has tried to reduce the impact of this rule on small entities.

For purposes of evaluating the economic impact of this rule on small governmental jurisdictions, EPA compared annual compliance costs with annual government revenues obtained from the 1992 Census of Governments, using state-specific estimates of annual revenue per capita for municipalities in three population size categories (fewer than 10,000, 10,000–25,000, and 25,000–50,000).

In order to estimate the annual compliance cost for small governmental jurisdictions, EPA used the mean variable municipal cost of \$8.93 per household as calculated in a 1998 study of 121 municipalities conducted by the national Association of Flood and Stormwater Management Agencies (NAFSMA). In addition, EPA used the estimated fixed administrative costs of \$1,545 per municipality for reporting,

recordkeeping, and application requirements for today's rule.

In evaluating the economic impact of this rule on small governmental jurisdictions, EPA determined that compliance costs represent more than 1 percent of estimated revenues for only 10 percent of small governments and more than 3 percent of the revenue for 0.7 percent of these entities. In both absolute and relative terms, EPA does not consider this a significant economic impact on a substantial number of small entities.

EPA normally uses the "sales test" for determining the economic impact on small businesses. Under a sales test, annual compliance costs are compared with the small business's total annual sales. However, the direct application of the sales test is not suitable in this case, because of the uncertainty associated with estimating the number of units an "average" developer/contractor develops or builds in a typical year. For this rule, EPA has approximated the sales test by estimating compliance costs for three sizes of construction sites and comparing them with a representative sale price for three building categories. Although EPA's analysis is not exactly a "sales test," it is similar to the sales test, producing comparable results.

For small building contractors, EPA estimated administrative compliance costs of \$870 per site for applying for coverage, reporting, record keeping, monitoring and preparing a storm water pollution prevention plan. EPA estimated compliance costs for installing soil and erosion controls as ranging from \$1,206 to \$8,709 per site. EPA compliance cost estimates are based on 27 theoretical model construction sites designed to mimic the mostly likely used best management practices around the country.

In evaluating the economic impact on small building contractors, EPA divided the revised compliance costs per construction start by the appropriate homes-to-site ratio for each of the three sizes of construction sites. The average compliance cost per home ranges from approximately \$450 to \$650. EPA concluded that compliance costs are roughly 0.22 to 0.43 percent of both the mean, \$181,300, and median, \$151,000, sale price of a home.

The absence of data to specifically assess annual compliance costs for building contractors as a percentage of annual sales (i.e., a very direct estimate of the impact on potentially affected small businesses) led EPA to perform additional market analysis to examine the ability of potentially affected firms to pass along regulatory costs to buyers

for single-family homes constructed subject to today's rule. If the small building contractors covered by the rule are able to pass on the costs of compliance, either completely or partially, to their purchasers, then the rule's impact on these small business entities is significantly reduced. The market analysis shows that demand for homes is not overly sensitive to small changes in price, therefore builders should be able to pass on at least a significant fraction of the compliance costs to buyers.

EPA also assessed the effect of the building contractors' costs on average monthly mortgage rates and on the demand for new homes. Based on that screening analysis, EPA concludes that the costs to building contractors, and the potential changes in housing prices and monthly mortgage payments for single-family home buyers, are not expected to have a significant impact on the market for single-family houses. In both absolute and relative terms, EPA does not consider this a significant economic impact on a substantial number of small entities.

EPA also certified this rule at proposal. Even though the Agency was not required to, we convened a Small Business Advocacy Review Panel ("Panel") in June 1997. A number of small entity representatives had already been actively involved with EPA through the FACA process, and were, therefore, broadly knowledgeable about the development of the proposed and final rules. Prior to convening the Panel, EPA consulted with the Small Business Administration to identify a group of small entity representatives to advise the Panel. The Agency distributed a briefing package describing its preliminary analysis under the RFA to the small entity representatives (as well as to representatives from OMB and SBA) and conducted two telephone conference calls and an all-day meeting at EPA Headquarters in May of 1997 with small entity representatives. With this preliminary work complete, in June 1997, EPA formally convened the SBREFA Panel, comprising representatives from OMB, SBA, EPA's Office of Water and EPA's Small Business Advocacy Chair. The Panel received written comments from small entity representatives based on their involvement in the earlier meetings, and invited additional comments.

Consistent with requirements of the RFA, the Panel evaluated the assembled materials and small-entity comments on issues related to: (1) a description and the number of small entities that would be regulated; (2) a description of the projected record keeping, reporting and

other compliance requirements applicable to small entities; (3) identification of other Federal rules that may duplicate, overlap, or conflict with the proposal to the final rule; and (4) regulatory alternatives that would minimize any significant economic impact of the rule on small entities while accomplishing the stated objectives of the CWA section 402(p)(6).

On August 7, 1997, the Panel provided a Final Report (hereinafter, "Report") to the EPA Administrator. A copy of the Report is included in the docket for the rule. The Panel acknowledged and commended EPA's efforts to work with stakeholders, including small entities, through the FACA process. The SBREFA Panel stated that, because of EPA's extensive outreach and responsiveness in addressing stakeholder concerns, commenters during the SBREFA process raised fewer concerns than might otherwise have been expected. Based on the advice and recommendations of the Panel, today's rule includes a number of provisions designed to minimize any significant impact on small entities. (See Appendix 5).

F. National Technology Transfer And Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 ("NTTAA"), Public Law 104-113, section 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standard bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This action does not mandate the use of any particular technical standards, although in designing appropriate BMPs regulated small MS4s and small construction sites are encouraged to use any voluntary consensus standards that may be applicable and appropriate. Because no specific technical standards are included in the rule, section 12(d) of the NTTAA is not applicable.

G. Executive Order 13045

Executive Order 13045: "Protection of Children from Environmental Health Risks and Safety Risks" (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be "economically

significant” as defined under E.O. 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children, and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This final rule is not subject to E.O. 13045 because it does not concern an environmental health or safety risk that may have a disproportionate effect on children. The rule expands the scope of the existing NPDES permitting program to require small municipalities and small construction sites to regulate their storm water discharges. The rule does not itself, however, establish standards or criteria that would be included in permits for those sources. Such standards or criteria will be developed through other actions, for example, in the establishment of water quality standards or subsequently in the issuance of permits themselves. As such, today’s action does not concern an environmental health or safety risk that may have a disproportionate effect on children. To the extent it does address a risk that may have a disproportionate effect on children, expanding the scope of the permitting program will have a corresponding disproportionate benefit to children to protect them from such risk.

H. Executive Order 13084

Under Executive Order 13084, EPA may not issue a regulation that is not required by statute, that significantly or uniquely affects the communities of Indian tribal governments, and that imposes substantial direct compliance costs on those communities, unless the Federal government provides the funds necessary to pay the direct compliance costs incurred by the Tribal

governments, or EPA consults with those governments. If EPA complies by consulting, Executive Order 13084 requires EPA to provide to the Office of Management and Budget, in a separately identified section of the preamble to the rule, a description of the extent of EPA’s prior consultation with representatives of affected Tribal governments, a summary of the nature of their concerns, and a statement supporting the need to issue the regulation. In addition, Executive Order 13084 requires EPA to develop an effective process permitting elected officials and other representatives of Indian Tribal governments “to provide meaningful and timely input in the development of regulatory policies on matters that significantly or uniquely affect their communities.”

Today’s rule does not significantly or uniquely affect the communities of Indian Tribal governments. Even though the Agency is not required to address Tribes under the Regulatory Flexibility Act, EPA used the same revenue test that was used for municipalities to assess the impact of the rule on communities of Tribal governments and determine that they will not be significantly affected. In addition, the rule will not have a unique impact on the communities of Tribal governments because small municipal governments are also covered by this rule and larger municipal governments are already covered by the existing storm water rules. Accordingly, the requirements of section 3(b) of Executive Order 13084 do not apply to this rule.

I. Congressional Review Act

The Congressional Review Act, 5 U.S.C. section 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress

and the Comptroller General of the United States. EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This rule is a “major rule” as defined by 5 U.S.C. 804(2). This rule will be effective on February 7, 2000.

List of Subjects

40 CFR Part 9

Environmental protection, Reporting and recordkeeping requirements.

40 CFR Part 122

Administrative practice and procedure, Confidential business information, Environmental protection, Hazardous substances, Incorporation by reference, Reporting and recordkeeping requirements, Sewage disposal, Waste treatment and disposal, Water pollution control.

40 CFR Part 123

Administrative practice and procedure, Confidential business information, Hazardous materials, Indians—lands, Intergovernmental relations, Penalties, Reporting and recordkeeping requirements, Sewage disposal, Waste treatment and disposal, Water pollution control, Penalties.

40 CFR Part 124

Administrative practice and procedure, Air pollution control, Hazardous waste, Indians—lands, Reporting and recordkeeping requirements, Water pollution control, Water supply.

Dated: October 29, 1999.

Carol M. Browner,
Administrator.

Appendices to the Preamble

APPENDIX 1 TO PREAMBLE—FEDERALLY-RECOGNIZED AMERICAN INDIAN AREAS LOCATED FULLY OR PARTIALLY IN BUREAU OF THE CENSUS URBANIZED AREAS
[Based on 1990 Census data]

State	American Indian Area	Urbanized Area
AZ	Pascua Yacqui Reservation (pt.): Pascua Yacqui Tribe of Arizona	Tucson, AZ (Phase I).
AZ	Salt River Reservation (pt.): Salt River Pima-Maricopa Indian Community of the Salt River Reservation, California.	Phoenix, AZ (Phase I).
AZ	San Xavier Reservation (pt.): Tohono O’odham Nation of Arizona (formerly known as the Papago Tribe of the Sells, Gila Bend & San Xavier Reservation).	Tucson, AZ (Phase I).
CA	Augustine Reservation: Augustine Band of Cahuilla Mission of Indians of the Augustine Reservation, CA.	Indio-Coachella, CA (Phase I).
CA	Cabazon Reservation: Cabazon Band of Cahuilla Mission Indians of the Cabazon Reservation, CA.	Indio-Coachella, CA (Phase I).

APPENDIX 1 TO PREAMBLE—FEDERALLY-RECOGNIZED AMERICAN INDIAN AREAS LOCATED FULLY OR PARTIALLY IN BUREAU OF THE CENSUS URBANIZED AREAS—Continued

[Based on 1990 Census data]

State	American Indian Area	Urbanized Area
CA	Fort Yuma (Quechan) (pt.): Quechan Tribe of the Fort Yuma Indian Reservation, California & Arizona.	Yuma, AZ-CA.
CA	Redding Rancheria: Redding Rancheria of California	Redding, CA.
FL	Hollywood Reservation: Seminole Tribe	Fort Lauderdale, FL (Phase I).
FL	Seminole Trust Lands: Seminole Tribe of Florida, Dania, Big Cypress & Brighton Reservations.	Fort Lauderdale, FL (Phase I).
ID	Fort Hall Reservation and Trust Lands: Shosone-Bannock Tribes of the Fort Hall Reservation of Idaho.	Pocatello, ID.
ME	Penobscot Reservation and Trust Lands (pt.): Penobscot Tribe of Maine	Bangor, ME.
MN	Shakopee Community: Shakopee Mdewakanton Sioux Community of Minnesota (Prior Lake).	Minneapolis-St. Paul, MN (Phase I).
NM	Sandia Pueblo (pt.): Pueblo of Sandia, New Mexico	Albuquerque, NM (Phase I).
NV	Las Vegas Colony: Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada.	Las Vegas, NV (Phase I).
NV	Reno-Sparks Colony: Reno-Sparks Indian Colony, Nevada	Reno, NV (Phase I).
OK	Osage Reservation (pt.): Osage Nation of Oklahoma	Tulsa, OK (Phase I).
OK	Absentee Shawnee-Citizens Band of Potawatomi TJSAs (pt.): Absentee-Shawnee Tribe of Indians of Oklahoma; Citizen Potawatomi Nation, Oklahoma.	Oklahoma City, OK (Phase I).
OK	Cherokee TJSAs (pt.): Cherokee Nation of Oklahoma; United Keetoowah Band of Cherokee Indians of Oklahoma.	Ft. Smith, AR-OK; Tulsa, OK (Phase I).
OK	Cheyenne-Arapaho TJSAs (pt.): Cheyenne-Arapaho Tribes of Oklahoma	Oklahoma City, OK (Phase I).
OK	Choctaw TJSAs (pt.): Choctaw Nation of Oklahoma	Ft. Smith, AR-OK (Phase I).
OK	Creek TJSAs (pt.): Alabama-Quassarte Tribal Town of the Creek Nation of Oklahoma; Kialegee Tribal Town of the Creek Indian Nation of Oklahoma; Muscogee (Creek) Nation of Oklahoma; Thlopthlocco Tribal Town of the Creek Nation of Oklahoma.	Tulsa, OK (Phase I).
OK	Kiowa-Comanche-Apache-Ft. Sill Apache: Apache Tribe of Oklahoma; Comanche Indian Tribe, Oklahoma; Fort Sill Apache Tribe of Oklahoma; Kiowa Indian Tribe of Oklahoma.	Lawton, OK.
TX	Ysleta del Sur Reservation: Ysleta Del Sur Pueblo of Texas	El Paso, TX-NM (Phase I).
WA	Muckleshoot Reservation and Trust Lands (pt.): Muckleshoot Indian Tribe of the Muckleshoot Reservation.	Seattle, WA (Phase I).
WA	Puyallup Reservation and Trust Lands (pt.): Puyallup Tribe of the Puyallup Reservation, WA.	Tacoma, WA (Phase I).
WA	Yakima Reservation (pt.): Confederated Tribes and Bands of the Yakama Indian Nation of the Yakama Reservation, WA.	Yakima, WA.
WI	Oneida (West) (pt.): Oneida Tribe of Wisconsin	Green Bay, WI.

Please Note

“(pt.)” indicates that the American Indian Area (AIA) listed is only partially located within the referenced urbanized area.

The first line under “American Indian Area” is the name of the federally-recognized reservation/colony/rancheria or trust land as it appears in the Bureau of the Census data. After this first line, the names of the tribes included in the AIA are listed as they appear in the Bureau of Indian Affairs’ list of Federally Recognized Indian Tribes. [Federal

Register: Nov. 13, 1996, Vol. 66, No. 220, pgs. 58211-58216]

“TJSAs” are Tribal Jurisdiction Statistical Areas in Oklahoma that are defined in conjunction with the federally-recognized tribes in Oklahoma who have definite land areas under their jurisdiction, but do not have reservation status.

“(Phase I)” indicates that the referenced urbanized area includes a medium or large MS4 currently regulated under the existing NPDES storm water program (i.e., Phase I). Any Tribally operated MS4 within these such

urban areas would not automatically have been covered under Phase I, however.

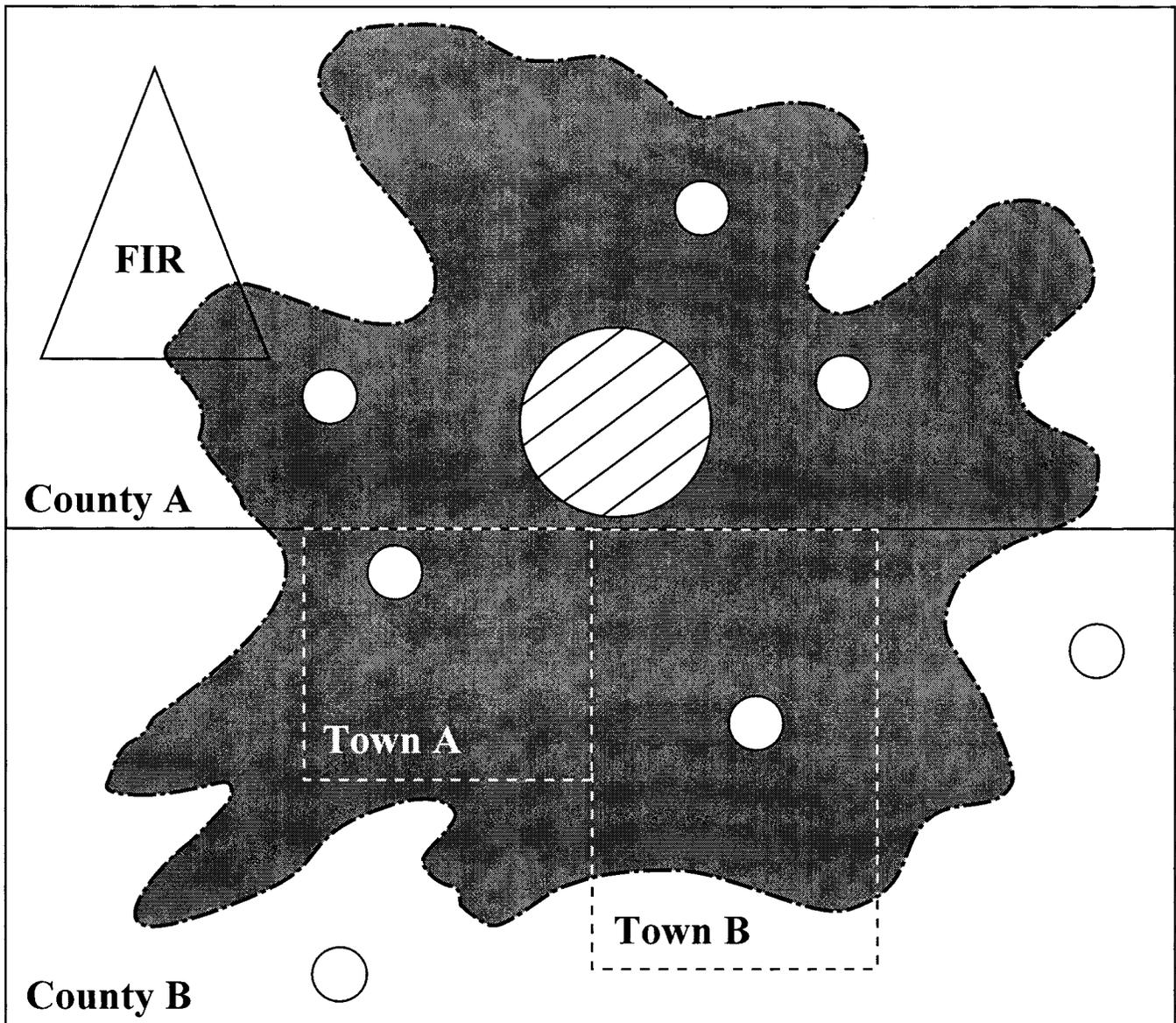
Sources

Michael Ratcliffe, Geographic Concepts Division, Bureau of the Census, U.S. Department of Commerce.

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BILLING CODE 6560-50-P

APPENDIX 2 TO PREAMBLE—URBANIZED AREA ILLUSTRATION



2111D

- | | | | |
|---|----------------------------------|---|--|
|  | Central Place |  | Unincorporated "Urbanized Area" Portion of a Town (MCD) or County |
|  | Incorporated Place |  | Urbanized Area |
|  | Federal Indian Reservation (FIR) |  | Town or Township as a functioning Minor Civil Division (MCD). An MCD is the primary subdivision of a County. |
| | |  | County |

**Appendix 3 to the Preamble—
Urbanized Areas of the United States
and Puerto Rico**

(Source: 1990 Census of Population and Housing, U.S. Bureau of the Census—This list is subject to change with the Decennial Census)

Alabama

Anniston
Auburn-Opelika
Birmingham
Columbus, GA-AL
Decatur
Dothan
Florence
Gadsden
Huntsville
Mobile
Montgomery
Tuscaloosa

Alaska

Anchorage

Arizona

Phoenix
Tucson
Yuma, AZ-CA

Arkansas

Fayetteville-Springdale
Fort Smith, AR-OK
Little Rock-North Little Rock
Memphis, TN-AR-MS
Pine Bluff
Texarkana, AR-TX

California

Antioch-Pittsburgh
Bakersfield
Chico
Davis
Fairfield
Fresno
Hemet-San Jacinto
Hesperia-Apple Valley-Victorville
Indio-Coachella
Lancaster-Palmdale
Lodi
Lompoc
Los Angeles
Merced
Modesto
Napa
Oxnard-Ventura
Palm Springs
Redding
Riverside-San Bernardino
Sacramento
Salinas
San Diego
San Francisco-Oakland
San Jose
San Luis Obispo
Santa Barbara
Santa Cruz
Santa Maria
Santa Rosa
Seaside-Monterey
Simi Valley
Stockton
Vacaville
Visalia
Watsonville

Yuba City
Yuma

Colorado

Boulder
Colorado Springs
Denver
Fort Collins
Grand Junction
Greeley
Longmont
Pueblo

Connecticut

Bridgeport-Milford
Bristol
Danbury, CT-NY
Hartford-Middletown
New Britain
New Haven-Meriden
New London-Norwich
Norwalk
Springfield, MA-CT
Stamford, CT-NY
Waterbury
Worcester, MA-CT

Delaware

Dover
Wilmington, DE-NJ-MD-PA

District of Columbia

Washington, DC-MD-VA

Florida

Daytona Beach
Deltona
Fort Lauderdale-Hollywood-Pompano Beach
Fort Myers-Cape Coral
Fort Pierce
Fort Walton Beach
Gainesville
Jacksonville
Kissimmee
Lakeland
Melbourne-Palm Bay
Miami-Hialeah
Naples
Ocala
Orlando
Panama City
Pensacola
Punta Gorda
Sarasota-Bradenton
Spring Hill
Stuart
Tallahassee
Tampa-St. Petersburg-Clearwater
Titusville
Vero Beach
West Palm Beach-Boca Raton-Delray Beach
Winter Haven

Georgia

Albany
Athens
Atlanta
Augusta
Brunswick
Chattanooga
Columbus
Macon
Rome
Savannah
Warner Robins

Hawaii

Honolulu

Kailua

Idaho

Boise City
Idaho Falls
Pocatello

Illinois

Alton
Aurora
Beloit, WI-IL
Bloomington-Normal
Champaign-Urbana
Chicago, IL-Northwestern IN
Crystal Lake
Davenport-Rock Island-Moline, IA-IL
Decatur
Dubuque
Elgin
Joliet
Kankakee
Peoria
Rockford
Round Lake Beach-McHenry, IL-WI
St. Louis, MO-IL
Springfield

Indiana

Anderson
Bloomington
Chicago, IL-Northwestern IN
Elkhart-Goshen
Evansville, IN-KY
Fort Wayne
Indianapolis
Kokomo
Lafayette-West Lafayette
Louisville, KY-IN
Muncie
South Bend-Mishawaka, IN-MI
Terre Haute

Iowa

Cedar Rapids
Davenport-Rock Island-Moline, IA-IL
Des Moines
Dubuque, IA-IL-WI
Iowa City
Omaha, NE-IA
Sioux City, IA-NE-SD
Waterloo-Cedar Falls

Kansas

Kansas City, MO-KS
Lawrence
St. Joseph, MO-KS
Topeka
Wichita

Kentucky

Cincinnati, OH-KY
Clarksville, TN-KY
Evansville, IN-KY
Huntington-Ashland, WV-KY-OH
Lexington-Fayette
Louisville, KY-IN
Owensboro

Louisiana

Alexandria
Baton Rouge
Houma
Lafayette
Lake Charles
Monroe
New Orleans
Shreveport

Slidell

Maine

Bangor
Lewiston-Auburn
Portland
Portsmouth-Dover-Rochester, NH-ME

Maryland

Annapolis
Baltimore
Cumberland
Frederick
Hagerstown, MD-PA-WV
Washington, DC-MD-VA
Wilmington, DE-NJ-MD-PA

Massachusetts

Boston
Brockton
Fall River, MA-RI
Fitchburg-Leominster
Hyannis
Lawrence-Haverhill, MA-NH
Lowell, MA-NH
New Bedford
Pittsfield
Providence-Pawtucket, RI-MA
Springfield, MA-CT
Taunton
Worcester, MA-CT

Michigan

Ann Arbor
Battle Creek
Bay City
Benton Harbor
Detroit
Flint
Grand Rapids
Holland
Jackson
Kalamazoo
Lansing-East Lansing
Muskegon
Port Huron
Saginaw
South Bend-Mishawaka, IN-MI
Toledo, OH-MI

Minnesota

Duluth, MN-WI
 Fargo-Moorhead, ND-MN
Grand Forks, ND-MN
La Crosse, WI-MN
Minneapolis-St.Paul
Rochester
St. Cloud

Mississippi

Biloxi-Gulfport
Hattiesburg
Jackson
Memphis, TN-AR-MS
Pascagoula

Missouri

Columbia
Joplin
Kansas City, MO-KS
St. Joseph, MO-KS
St. Louis, MO-IL
Springfield

Montana

Billings
Great Falls

Missoula

Nebraska

Lincoln
Omaha, NE-IA
Sioux City, IA-NE-SD

Nevada

Las Vegas
Reno

New Hampshire

Lawrence-Haverhill, MA-NH
Lowell, MA-NH
Manchester
Nashua
Portsmouth-Dover-Rochester, NH-ME

New Jersey

Allentown-Bethlehem-Easton, PA-NJ
Atlantic City
New York, NY-Northeastern NJ
Philadelphia, PA-NJ
Trenton, NJ-PA
Vineland-Millville
Wilmington, DE-NJ-MD-PA

New Mexico

Albuquerque
El Paso
Las Cruces
Santa Fe

New York

Albany-Schenectady-Troy
Binghamton
Buffalo-Niagara Falls
Danbury, CT-NY
Elmira
Glens Falls
Ithaca
Newburgh
New York, NY-Northeastern NJ
Poughkeepsie
Rochester
Stamford, CT-NY
Syracuse
Utica-Rome

North Carolina

Asheville
Burlington
Charlotte
Durham
Fayetteville
Gastonia
Greensboro
Greenville
Hickory
High Point
Jacksonville
Kannapolis
Raleigh
Rocky Mount
Wilmington
Winston-Salem

North Dakota

Bismark
 Fargo-Moorhead, ND-MN
Grand Forks, ND-MN

Ohio

Akron
Canton
Cincinnati, OH-KY

Cleveland

Columbus
Dayton
Hamilton
Huntington-Ashland, WV-KY-OH
Lima
Lorain-Elyria
Mansfield
Middletown
Newark
Parkersburg, WV-OH
Sharon, PA-OH
Springfield
Steubenville-Weirton, OH-WV-PA
Toledo, OH-MI
Wheeling, WV-OH
Youngstown-Warren

Oklahoma

Fort Smith, AR-OK
Lawton
Oklahoma City
Tulsa

Oregon

Eugene-Springfield
Longview
Medford
Portland-Vancouver, OR-WA
Salem

Pennsylvania

Allentown-Bethlehem-Easton, PA-NJ
Altoona
Erie
Hagerstown, MD-PA-WV
Harrisburg
Johnstown
Lancaster
Monessen
Philadelphia, PA-NJ
Pittsburgh
Pottstown
Reading
Scranton-Wilkes-Barre
Sharon, PA-OH
State College
Steubenville-Weirton, OH-WV-PA
Trenton, NJ-PA
Williamsport
Wilmington, DE-NJ-MD-PA
York

Rhode Island

Fall River, MA-RI
Newport
Providence-Pawtucket, RI-MA

South Carolina

Anderson
Augusta, GA-SC
Charleston
Columbia
Florence
Greenville
Myrtle Beach
Rock Hill
Spartanburg
Sumter

South Dakota

Rapid City
Sioux City, IA-NE-SD
Sioux Falls

Tennessee

Bristol, TN-Bristol, VA

Chattanooga, TN-GA
 Clarksville, TN-KY
 Jackson
 Johnson City
 Kingsport, TN-VA
 Knoxville
 Memphis, TN-AR-MS
 Nashville

Texas

Abilene
 Amarillo
 Austin
 Beaumont
 Brownsville
 Bryan-College Station
 Corpus Christi
 Dallas-Fort Worth
 Denton
 El Paso, TX-NM
 Galveston
 Harlingen
 Houston
 Killeen
 Laredo
 Lewisville
 Longview
 Lubbock
 McAllen-Edinburg-Mission
 Midland
 Odessa
 Port Arthur
 San Angelo
 San Antonio
 Sherman-Denison
 Temple
 Texarkana, TX-Texarkana, AR
 Texas City
 Tyler
 Victoria

Waco
 Wichita Falls

Utah

Logan
 Ogden
 Provo-Orem
 Salt Lake City

Vermont

Burlington

Virginia

Bristol, TN-Bristol, VA
 Charlottesville
 Danville
 Fredericksburg
 Kingsport, TN-VA
 Lynchburg
 Norfolk-Virginia Beach-Newport News
 Petersburg
 Richmond
 Roanoke
 Washington, DC-MD-VA

Washington

Bellingham
 Bremerton
 Longview, WA-OR
 Olympia
 Portland-Vancouver, OR-WA
 Richland-Kennewick-Pasco
 Seattle
 Spokane
 Tacoma
 Yakima

West Virginia

Charleston
 Cumberland, MD-WV

Hagerstown, MD-PA-WV
 Huntington-Ashland, WV-KY-OH
 Parkersburg, WV-OH
 Steubenville-Weirton, OH-WV-PA
 Wheeling, WV-OH

Wisconsin

Appleton-Neenah
 Beloit, WI-IL
 Duluth, MN-WI
 Eau Claire
 Green Bay
 Janesville
 Kenosha
 La Crosse, WI-MN
 Madison
 Milwaukee
 Oshkosh
 Racine
 Round Lake Beach-McHenry, IL-WI
 Sheboygan
 Wausau

Wyoming

Casper
 Cheyenne

Puerto Rico

Aquadilla
 Arecibo
 Caguas
 Cayey
 Humacao
 Mayaguez
 Ponce
 San Juan
 Vega Baja-Manati

BILLING CODE 6560-50-P

Appendix 4 to the Preamble—No Exposure Certification Form

<p>NPDES FORM 3510-11</p>		<p>United States Environmental Protection Agency Washington, DC 20460</p> <p>NO EXPOSURE CERTIFICATION for Exclusion from NPDES Storm Water Permitting</p>	<p>Form Approved OMB No. 2040-0211</p>
<p>Submission of this No Exposure Certification constitutes notice that the entity identified in Section A does not require permit authorization for its storm water discharges associated with industrial activity in the State identified in Section B under EPA's Storm Water Multi-Sector General Permit due to the existence of a condition of no exposure.</p> <p>A condition of no exposure exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:</p> <ul style="list-style-type: none"> - drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves; - adequately maintained vehicles used in material handling; and - final products, other than products that would be mobilized in storm water discharges (e.g., rock salt). <p>A No Exposure Certification must be provided for each facility qualifying for the no exposure exclusion. In addition, the exclusion from NPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the no exposure exclusion.</p> <p>By signing and submitting this No Exposure Certification form, the entity in Section A is certifying that a condition of no exposure exists at its facility or site, and is obligated to comply with the terms and conditions of 40 CFR 122.26(g).</p> <p>ALL INFORMATION MUST BE PROVIDED ON THIS FORM.</p> <p>Detailed instructions for completing this form and obtaining the no exposure exclusion are provided on pages 3 and 4.</p>			
<p>A. Facility Operator Information</p> <p>1. Name: _____ 2. Phone: _____</p> <p>3. Mailing Address: a. Street: _____</p> <p>b. City: _____ c. State: _____ d. Zip Code: _____</p>			
<p>B. Facility/Site Location Information</p> <p>1. Facility Name: _____</p> <p>2. a. Street Address: _____</p> <p>b. City: _____ c. County: _____</p> <p>d. State: _____ e. Zip Code: _____</p> <p>3. Is the facility located on Indian Lands? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>4. Is this a Federal facility? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>5. a. Latitude: _____° _____' _____" b. Longitude: _____° _____' _____"</p> <p>6. a. Was the facility or site previously covered under an NPDES storm water permit? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>b. If yes, enter NPDES permit number: _____</p> <p>7. SIC/Activity Codes: Primary: _____ Secondary (if applicable): _____</p> <p>8. Total size of site associated with industrial activity: _____ acres</p> <p>9. a. Have you paved or roofed over a formerly exposed, pervious area in order to qualify for the no exposure exclusion? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>b. If yes, please indicate approximately how much area was paved or roofed over. Completing this question does not disqualify you for the no exposure exclusion. However, your permitting authority may use this information in considering whether storm water discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.</p> <p style="text-align: center;">Less than one acre <input type="checkbox"/> One to five acres <input type="checkbox"/> More than five acres <input type="checkbox"/></p>			

NPDES
FORM
3510-11



**NO EXPOSURE CERTIFICATION for Exclusion from
NPDES Storm Water Permitting**

Form Approved
OMB No. 2040-0211

C. Exposure Checklist

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future?
(Please check either "Yes" or "No" in the appropriate box.) **If you answer "Yes" to any of these questions (1) through (11), you are not eligible for the no exposure exclusion.**

	Yes	No
1. Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water	<input type="checkbox"/>	<input type="checkbox"/>
2. Materials or residuals on the ground or in storm water inlets from spills/leaks	<input type="checkbox"/>	<input type="checkbox"/>
3. Materials or products from past industrial activity	<input type="checkbox"/>	<input type="checkbox"/>
4. Material handling equipment (except adequately maintained vehicles)	<input type="checkbox"/>	<input type="checkbox"/>
5. Materials or products during loading/unloading or transporting activities	<input type="checkbox"/>	<input type="checkbox"/>
6. Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to storm water does not result in the discharge of pollutants)	<input type="checkbox"/>	<input type="checkbox"/>
7. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers	<input type="checkbox"/>	<input type="checkbox"/>
8. Materials or products handled/stored on roads or railways owned or maintained by the discharger	<input type="checkbox"/>	<input type="checkbox"/>
9. Waste material (except waste in covered, non-leaking containers [e.g., dumpsters])	<input type="checkbox"/>	<input type="checkbox"/>
10. Application or disposal of process wastewater (unless otherwise permitted)	<input type="checkbox"/>	<input type="checkbox"/>
11. Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow	<input type="checkbox"/>	<input type="checkbox"/>

D. Certification Statement

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from NPDES storm water permitting.

I certify under penalty of law that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility or site identified in this document (except as allowed under 40 CFR 122.26(g)(2)).

I understand that I am obligated to submit a no exposure certification form once every five years to the NPDES permitting authority and, if requested, to the operator of the local municipal separate storm sewer system (MS4) into which the facility discharges (where applicable). I understand that I must allow the NPDES permitting authority, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an NPDES permit prior to any point source discharge of storm water from the facility.

Additionally, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: _____

Print Title: _____

Signature: _____

Date: _____

NPDES
FORM
3510-11

Instructions for the NO EXPOSURE CERTIFICATION for Exclusion from NPDES Storm Water Permitting

Form Approved
OMB No. 2040-0211

Who May File a No Exposure Certification

Federal law at 40 CFR Part 122.26 prohibits point source discharges of storm water associated with industrial activity to waters of the U.S. without a National Pollutant Discharge Elimination System (NPDES) permit. However, NPDES permit coverage is not required for discharges of storm water associated with industrial activities identified at 40 CFR 122.26(b)(14)(i)-(ix) and (xi) if the discharger can certify that a condition of "no exposure" exists at the industrial facility or site.

Storm water discharges from construction activities identified in 40 CFR 122.26(b)(14)(x) and (b)(15) are not eligible for the no exposure exclusion.

Obtaining and Maintaining the No Exposure Exclusion

This form is used to certify that a condition of no exposure exists at the industrial facility or site described herein. This certification is only applicable in jurisdictions where EPA is the NPDES permitting authority and must be re-submitted at least once every five years.

The industrial facility operator must maintain a condition of no exposure at its facility or site in order for the no exposure exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to storm water, the facility operator must obtain coverage under an NPDES storm water permit immediately.

Where to File the No Exposure Certification Form

Mail the completed no exposure certification form to:

Storm Water No Exposure Certification (4203)
USEPA
401 M Street, SW
Washington, D.C. 20460

Completing the Form

You must type or print, using uppercase letters, in appropriate areas only. Enter only one character per space (i.e., between the marks). Abbreviate if necessary to stay within the number of characters allowed for each item. Use one space for breaks between words. One form must be completed for each facility or site for which you are seeking to certify a condition of no exposure. Additional guidance on completing this form can be accessed through EPA's web site at www.epa.gov/owm/sw. Please make sure you have addressed all applicable questions and have made a photocopy for your records before sending the completed form to the above address.

Section A. Facility Operator Information

1. Provide the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this certification. The name of the operator may or may not be the same as the name of the facility. The operator is the legal entity that controls the facility's operation, rather than the plant or site manager.
2. Provide the telephone number of the facility operator.
3. Provide the mailing address of the operator (P.O. Box numbers may be used). Include the city, state, and zip code. All correspondence will be sent to this address.

Section B. Facility/Site Location Information

1. Enter the official or legal name of the facility or site.
2. Enter the complete street address (if no street address exists, provide a geographic description [e.g., Intersection of Routes 9 and 55]), city, county, state, and zip code. Do not use a P.O. Box number.
3. Indicate whether the facility is located on Indian Lands.
4. Indicate whether the industrial facility is operated by a department or agency of the Federal Government (see also Section 313 of the Clean Water Act).
5. Enter the latitude and longitude of the approximate center of the facility or site in degrees/minutes/seconds. Latitude and longitude can be obtained from United States Geological Survey (USGS) quadrangle or topographic maps, by calling 1-(888) ASK-USGS, or by accessing EPA's web site at <http://www.epa.gov/owm/sw/industry/index.htm> and selecting Latitude and Longitude Finders under the Resources/Permit section.

Latitude and longitude for a facility in decimal form must be converted to degrees (°), minutes ('), and seconds (") for proper entry on the certification form. To convert decimal latitude or longitude to degrees/minutes/seconds, follow the steps in the following example.

Example: Convert decimal latitude 45.1234567 to degrees (°), minutes ('), and seconds (").

- a) The numbers to the left of the decimal point are the degrees: 45°.
 - b) To obtain minutes, multiply the first four numbers to the right of the decimal point by 0.006: $1234 \times 0.006 = 7.404$.
 - c) The numbers to the left of the decimal point in the result obtained in (b) are the minutes: 7'.
 - d) To obtain seconds, multiply the remaining three numbers to the right of the decimal from the result obtained in (b) by 0.06: $404 \times 0.06 = 24.24$. Since the numbers to the right of the decimal point are not used, the result is 24".
 - e) The conversion for 45.1234567 = 45° 7' 24".
6. Indicate whether the facility was previously covered under an NPDES storm water permit. If so, include the permit number.
 7. Enter the 4-digit SIC code which identifies the facility's primary activity, and second 4-digit SIC code identifying the facility's secondary activity, if applicable. SIC codes can be obtained from the Standard Industrial Classification Manual, 1987.

8. Enter the total size of the site associated with industrial activity in acres. Acreage may be determined by dividing square footage by 43,560, as demonstrated in the following example.

Example: Convert 54,450 ft² to acres

Divide 54,450 ft² by 43,560 square feet per acre:
 $54,450 \text{ ft}^2 \div 43,560 \text{ ft}^2/\text{acre} = 1.25 \text{ acres}$.

9. Check "Yes" or "No" as appropriate to indicate whether you have paved or roofed over a formerly exposed, pervious area (i.e., lawn, meadow, dirt or gravel road/parking lot) in order to qualify for no exposure. If yes, also indicate approximately how much area was paved or roofed over and is now impervious area.

NPDES
FORM
3510-11

Instructions for the NO EXPOSURE CERTIFICATION for Exclusion from NPDES Storm Water Permitting

Form Approved
OMB No. 2040-0211

Section C. Exposure Checklist

Check "Yes" or "No" as appropriate to describe the exposure conditions at your facility. If you answer "Yes" to **ANY** of the questions (1) through (11) in this section, a potential for exposure exists at your site and you cannot certify to a condition of no exposure. You must obtain (or already have) coverage under an NPDES storm water permit. After obtaining permit coverage, you can institute modifications to eliminate the potential for a discharge of storm water exposed to industrial activity, and then certify to a condition of no exposure.

authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures:

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipal, State, Federal, or other public facility: by either a principal executive or ranking elected official.

Section D. Certification Statement

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means:

- (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
- (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where

Paperwork Reduction Act Notice

Public reporting burden for this certification is estimated to average 1.0 hour per certification, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose to provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding the burden estimate, any other aspect of the collection of information, or suggestions for improving this form, including any suggestions which may increase or reduce this burden to: Director, OPPE Regulatory Information Division (2137), USEPA, 401 M Street, SW, Washington, D.C. 20460. Include the OMB control number of this form on any correspondence. Do not send the completed No Exposure Certification form to this address.

EPA Form 3510-11 (10-99)

Page 4 of 4

BILLING CODE 6560-50-C

Appendix 5 to Preamble—Regulatory Flexibility for Small Entities

A. Regulatory Flexibility for Small Municipal Storm Sewer Systems (MS4s)

Different Compliance, Reporting, or Timetables That Are Responsive to Resources of Small Entities

NPDES permitting authorities can issue general permits instead of requiring individual permits. This flexibility avoids the high application costs and administrative burden associated with individual permits.

NPDES permitting authorities can specify a time period of up to five years for small MS4s to fully develop and implement their program

Analytic monitoring is not required.

After the first permit term and subsequent permit terms, submittal of a summary report is only required in years two and four (Phase I municipalities are currently required to submit a detailed report each year).

A brief reporting format is encouraged to facilitate compiling and analyzing data from submitted reports. EPA intends to develop a model form for this purpose.

NPDES Permitting Authorities can phase in permit coverage for small MS4s serving jurisdictions with a population under 10,000

on a schedule consistent with a State watershed permitting approach.

Clarifying, Consolidating, or Simplifying Compliance and Reporting Requirements

The rule avoids duplication in permit requirements by allowing NPDES permitting authorities to include permit conditions that direct an MS4 to follow the requirements of a qualifying local program rather than the requirements of a minimum measure. Compliance with these programs is considered compliance with the NPDES general permit.

The rule allows NPDES permitting authorities to recognize existing responsibilities among different municipal entities to satisfy obligations for the minimum control measures.

A further alternative allows a small MS4 to satisfy its NPDES permit obligations if another governmental entity is already implementing a minimum control measure in the jurisdiction of the small MS4. The following conditions must be met:

1. The other entity is implementing the control measure,
2. The particular control measure (or component thereof) is at least as stringent as the corresponding NPDES permit requirement, and
3. The other entity agrees to implement the control measure on your behalf.

The rule allows a covered small MS4 to "piggy-back" on to the storm water management program of an adjoining Phase I MS4. A small MS4 is waived from the application requirements of § 122.26(d)(1)(iii), (iv) and (d)(2)(iii) [discharge characterization] and may satisfy the requirements of § 122.26(d)(1)(v) and (d)(2)(iv) [identifying a management plan] by referencing the adjoining Phase I MS4's storm water management plan.

The rule accommodates the use of the watershed approach through NPDES general permits that could be issued on a watershed basis. The small MS4 can develop measures that are tailored to meet their watershed requirements. The small MS4's storm water management program can tie into watershed-wide plans.

Performance Rather Than Design Standards for Small Entities

Small governmental jurisdictions whose MS4s are covered by this rule are allowed to choose the best management practices (BMPs) to be implemented and the measurable goals for each of the minimum control measures:

1. Public education and outreach on storm water impacts
2. Public Involvement/Participation
3. Illicit discharge detection and elimination

4. Construction site storm water runoff control

5. Post-construction storm water management in new development and redevelopment

6. Pollution prevention/good housekeeping for municipal operations

EPA will provide guidance and recommend, but not mandate, certain BMPs for some of the minimum control measures listed above. States can provide guidance to supplement or supplant EPA guidance.

Small MS4s can identify the measurable goals for each of the minimum control measures listed above. In their reports to the NPDES permitting authority, the small MS4s must evaluate their progress towards achievement of their identified measurable goals.

Waivers for Small Entities From Coverage

The rule allows permitting authorities to waive from coverage MS4s operated by small governmental jurisdictions located within an urbanized area and serving a population less than 1,000 people where the permitting authority has determined the MS4 is not contributing substantially to the pollutant loadings of an interconnected MS4 and, if the MS4 discharges pollutants that have been identified as a cause of impairment in the receiving water of the MS4 then the permitting authority has determined that storm water controls are not needed based on a TMDL that addresses the pollutants of concern.

The rule allows the permitting authority to waive from coverage MS4s serving a population under 10,000 where the permitting authority has evaluated all waters that receive a discharge from the MS4 and the permitting authority has determined that storm water controls are not needed based on a TMDL that addresses the pollutants of concern and future discharges do not have the potential to result in exceedances of water quality standards.

B. Regulatory Flexibility for Small Construction Activities

Different Compliance, Reporting, or Timetables That Are Responsive to Resources of Small Entities

The rule gives NPDES permitting authorities discretion not to require the submittal of a notice of intent (NOI) for coverage under a NPDES general permit, thereby reducing administrative and financial burden. All construction sites disturbing greater than 5 acres must submit an NOI.

Clarifying, Consolidating, or Simplifying Compliance and Reporting Requirements

The rule avoids duplication by allowing the NPDES permitting authority to incorporate by reference State, Tribal, or local programs under a NPDES general permit. Compliance with these programs is considered compliance with the NPDES general permit.

Performance Rather Than Design Standards for Small Entities

The operator of a covered construction activity selects and implement the BMPs

most appropriate for the construction site based on the operator's storm water pollution prevention plan.

Waivers for Small Entities From Coverage

Waivers could be granted based on the use of a rainfall erosivity factor or a comprehensive analysis of water quality impacts.

(A) *Low rainfall waiver*: When the rainfall erosivity factor ("R" from Revised Universal Soil Loss Equation) is less than 5 during the period of construction activity, a permit is not required.

(B) *Determination based on Water Quality Analysis*: The NPDES permitting authority can waive from coverage construction activities disturbing from 1 acre up to 5 acres of land where storm water controls are not needed based on:

1. A TMDL approved or established by EPA that addresses the pollutants of concern, or

2. For non-impaired waters, an equivalent analysis that determines that such allocations are not needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety.

C. Regulatory Flexibility for Industrial/Commercial Facilities

Waivers for Small Entities From Coverage

The rule provides a "no-exposure" waiver provision for Phase I industrial/commercial facilities. Qualifying facilities seeking this provision simply need to complete a self-certification form indicating that no industrial materials or activities are exposed to rain, snow, snow melt and/or runoff.

Appendix 6 of Preamble— Governmental Entities Located Fully or Partially Within an Urbanized Area

(This is a reference list only, *not* a list of all operators of small MS4s subject to §§ 122.32–122.36. For example, a listed governmental entity is only regulated if it operates a small MS4 within an "urbanized area" boundary as determined by the Bureau of the Census. Furthermore, entities such as military bases, large hospitals, prison complexes, universities, sewer districts, and highway departments that operate a small MS4 within an urbanized area are also subject to the permitting regulations but are not individually listed here. See § 122.26(b)(16) for the definition of a small MS4 and § 122.32(a) for the definition of a regulated small MS4.)

(Source: 1990 Census of Population and Housing, U.S. Bureau of the Census. This list is subject to change with the Decennial Census)

AL Anniston city
AL Attalla city
AL Auburn city
AL Autauga County
AL Blue Mountain town
AL Calhoun County
AL Colbert County
AL Dale County
AL Decatur city
AL Dothan city

AL Elmore County
AL Etowah County
AL Flint City town
AL Florence city
AL Gadsden city
AL Glencoe city
AL Grimes town
AL Hartselle city
AL Hobson City town
AL Hokes Bluff city
AL Houston County
AL Kinsey town
AL Lauderdale County
AL Lee County
AL Limestone County
AL Madison County
AL Midland City town
AL Montgomery County
AL Morgan County
AL Muscle Shoals city
AL Napier Field town
AL Northport city
AL Opelika city
AL Oxford city
AL Phenix City city
AL Prattville city
AL Priceville town
AL Rainbow City city
AL Russell County
AL Sheffield city
AL Southside city
AL Sylvan Springs town
AL Talladega County
AL Tuscaloosa city
AL Tuscaloosa County
AL Tusculumbia city
AL Weaver city
AR Alexander town
AR Barling city
AR Benton County
AR Cammack Village city
AR Crawford County
AR Crittenden County
AR Farmington city
AR Fayetteville city
AR Fort Smith city
AR Greenland town
AR Jacksonville city
AR Jefferson County
AR Johnson city
AR Marion city
AR Miller County
AR North Little Rock city
AR Pine Bluff city
AR Pulaski County
AR Saline County
AR Sebastian County
AR Shannon Hills city
AR Sherwood city
AR Springdale city
AR Sunset town
AR Texarkana city
AR Van Buren city
AR Washington County
AR West Memphis city
AR White Hall city
AZ Apache Junction city
AZ Chandler city
AZ El Mirage town
AZ Gilbert town
AZ Guadalupe town
AZ Maricopa County
AZ Oro Valley town
AZ Paradise Valley town
AZ Peoria city
AZ Pinal County

AZ	South Tucson city	CA	Victorville city	CT	Farmington town
AZ	Surprise town	CA	Villa Park city	CT	Franklin town
AZ	Tolleson city	CA	Visalia city	CT	Glastonbury town
AZ	Youngtown town	CA	Watsonville city	CT	Greenwich town
AZ	Yuma city	CA	West Sacramento city	CT	Groton city
AZ	Yuma County	CA	Yolo County	CT	Groton town
CA	Apple Valley town	CA	Yuba City city	CT	Guilford town
CA	Belvedere city	CA	Yuba County	CT	Hamden town
CA	Benicia city	CO	Adams County	CT	Hartford city
CA	Brentwood city	CO	Arvada city	CT	Hartford County
CA	Butte County	CO	Boulder city	CT	Ledyard town
CA	Capitola city	CO	Boulder County	CT	Lisbon town
CA	Carmel-by-the-Sea city	CO	Bow Mar town	CT	Litchfield County
CA	Carpinteria city	CO	Broomfield city	CT	Manchester town
CA	Ceres city	CO	Cherry Hills Village city	CT	Meriden city
CA	Chico city	CO	Columbine Valley town	CT	Middlebury town
CA	Compton city	CO	Commerce City city	CT	Middlefield town
CA	Corte Madera town	CO	Douglas County	CT	Middlesex County
CA	Cotati city	CO	Edgewater city	CT	Middletown city
CA	Davis city	CO	El Paso County	CT	Milford city (remainder)
CA	Del Rey Oaks city	CO	Englewood city	CT	Monroe town
CA	Fairfax town	CO	Evans city	CT	Montville town
CA	Hesperia city	CO	Federal Heights city	CT	Naugatuck borough
CA	Imperial County	CO	Fort Collins city	CT	New Britain city
CA	Lakewood city	CO	Fountain city	CT	New Canaan town
CA	Lancaster city	CO	Garden City town	CT	New Fairfield town
CA	Larkspur city	CO	Glendale city	CT	New Haven city
CA	Lodi city	CO	Golden city	CT	New Haven County
CA	Lompoc city	CO	Grand Junction city	CT	New London city
CA	Marin County	CO	Greeley city	CT	New London County
CA	Marina city	CO	Greenwood Village city	CT	New Milford town
CA	Marysville city	CO	Jefferson County	CT	Newington town
CA	Merced city	CO	La Salle town	CT	Newtown town
CA	Merced County	CO	Lakeside town	CT	North Branford town
CA	Mill Valley city	CO	Larimer County	CT	North Haven town
CA	Monterey city	CO	Littleton city	CT	Norwalk city
CA	Monterey County	CO	Longmont city	CT	Norwich city
CA	Morgan Hill city	CO	Manitou Springs city	CT	Orange town
CA	Napa city	CO	Mesa County	CT	Oxford town
CA	Napa County	CO	Mountain View town	CT	Plainville town
CA	Novato city	CO	Northglenn city	CT	Plymouth town
CA	Pacific Grove city	CO	Pueblo city	CT	Portland town
CA	Palm Desert city	CO	Pueblo County	CT	Preston town
CA	Palmdale city	CO	Sheridan city	CT	Prospect town
CA	Piedmont city	CO	Thornton city	CT	Rocky Hill town
CA	Placer County	CO	Weld County	CT	Seymour town
CA	Redding city	CO	Westminster city	CT	Shelton city
CA	Rocklin city	CO	Wheat Ridge city	CT	Sherman town
CA	Rohnert Park city	CT	Ansonia city	CT	Somers town
CA	Roseville city	CT	Avon town	CT	South Windsor town
CA	Ross town	CT	Beacon Falls town	CT	Southington town
CA	San Anselmo town	CT	Berlin town	CT	Sprague town
CA	San Buenaventura (Ventura) city	CT	Bethel town	CT	Stonington town
CA	San Francisco city	CT	Bloomfield town	CT	Stratford town
CA	San Joaquin County	CT	Bozrah town	CT	Suffield town
CA	San Luis Obispo city	CT	Branford town	CT	Thomaston town
CA	San Luis Obispo County	CT	Bridgeport city	CT	Thompson town
CA	San Rafael city	CT	Bristol city	CT	Tolland County
CA	Sand City city	CT	Brookfield town	CT	Tolland town
CA	Santa Barbara city	CT	Burlington town	CT	Trumbull town
CA	Santa Barbara County	CT	Cheshire town	CT	Vernon town
CA	Santa Cruz city	CT	Cromwell town	CT	Wallingford town
CA	Santa Cruz County	CT	Danbury city	CT	Waterbury city
CA	Santa Maria city	CT	Darien town	CT	Waterford town
CA	Sausalito city	CT	Derby city	CT	Watertown town
CA	Scotts Valley city	CT	Durham town	CT	West Hartford town
CA	Seaside city	CT	East Granby town	CT	West Haven city
CA	Shasta County	CT	East Hartford town	CT	Weston town
CA	Solano County	CT	East Haven town	CT	Westport town
CA	Sonoma County	CT	East Lyme town	CT	Wethersfield town
CA	Stanislaus County	CT	East Windsor town	CT	Wilton town
CA	Suisun City city	CT	Easton town	CT	Windham County
CA	Sutter County	CT	Ellington town	CT	Windsor Locks town
CA	Tiburon town	CT	Enfield town	CT	Windsor town
CA	Tulare County	CT	Fairfield County	CT	Wolcott town
CA	Vacaville city	CT	Fairfield town	CT	Woodbridge town

CT Woodmont borough	FL Sweetwater city	IA Riverdale city
DE Camden town	FL Titusville city	IA Robins city
DE Dover city	FL Valparaiso city	IA Scott County
DE Kent County	FL Vero Beach city	IA Sergeant Bluff city
DE Newark city	FL Virginia Gardens village	IA Sioux City city
DE Wyoming town	FL Volusia County	IA University Heights city
FL Alachua County	FL Walton County	IA Urbandale city
FL Baldwin town	FL Weeki Wachee city	IA Warren County
FL Bay County	FL West Melbourne city	IA Waterloo city
FL Belleair Shore town	FL Windermere town	IA West Des Moines city
FL Biscayne Park village	GA Albany city	IA Windsor Heights city
FL Brevard County	GA Athens city	IA Woodbury County
FL Callaway city	GA Bartow County	ID Ada County
FL Cape Canaveral city	GA Brunswick city	ID Ammon city
FL Cedar Grove town	GA Catoosa County	ID Bannock County
FL Charlotte County	GA Centerville city	ID Bonneville County
FL Cinco Bayou town	GA Chattahoochee County	ID Chubbuck city
FL Clay County	GA Cherokee County	ID Idaho Falls city
FL Cocoa Beach city	GA Chickamauga city	ID Iona city
FL Cocoa city	GA Clarke County	ID Pocatello city
FL Collier County	GA Columbia County	ID Power County
FL Daytona Beach city	GA Conyers city	IL Addison township
FL Daytona Beach Shores city	GA Dade County	IL Addison village
FL Destin city	GA Dougherty County	IL Algonquin township
FL Edgewater city	GA Douglas County	IL Algonquin village
FL El Portal village	GA Douglasville city	IL Alorton village
FL Florida City city	GA Fayette County	IL Alsip village
FL Fort Pierce city	GA Floyd County	IL Alton city
FL Fort Walton Beach city	GA Fort Oglethorpe city	IL Antioch township
FL Gainesville city	GA Glynn County	IL Antioch village
FL Gulf Breeze city	GA Grovetown city	IL Arlington Heights village
FL Hernando County	GA Henry County	IL Aroma Park village
FL Hillsboro Beach town	GA Houston County	IL Aroma township
FL Holly Hill city	GA Jones County	IL Aurora city
FL Indialantic town	GA Lee County	IL Aurora township
FL Indian Harbour Beach city	GA Lookout Mountain city	IL Avon township
FL Indian River County	GA Mountain Park city	IL Ball township
FL Indian River Shores town	GA Oconee County	IL Bannockburn village
FL Indian Shores town	GA Payne city	IL Barrington township
FL Kissimmee city	GA Rockdale County	IL Barrington village
FL Lazy Lake village	GA Rome city	IL Bartlett village
FL Lynn Haven city	GA Rossville city	IL Bartonville village
FL Malabar town	GA Stockbridge city	IL Batavia city
FL Marion County	GA Vernonburg town	IL Batavia township
FL Martin County	GA Walker County	IL Beach Park village
FL Mary Esther city	GA Warner Robins city	IL Bedford Park village
FL Melbourne Beach town	GA Winterville city	IL Belleville city
FL Melbourne city	GA Woodstock city	IL Bellevue village
FL Melbourne Village town	IA Altoona city	IL Bellwood village
FL Naples city	IA Asbury city	IL Bensenville village
FL New Smyrna Beach city	IA Bettendorf city	IL Benton township
FL Niceville city	IA Black Hawk County	IL Berkeley village
FL Ocala city	IA Buffalo city	IL Berwyn city
FL Ocean Breeze Park town	IA Carter Lake city	IL Bethalto village
FL Okaloosa County	IA Cedar Falls city	IL Blackhawk township
FL Orange Park town	IA Clive city	IL Bloom township
FL Ormond Beach city	IA Coralville city	IL Bloomingdale township
FL Osceola County	IA Council Bluffs city	IL Bloomingdale village
FL Palm Bay city	IA Dallas County	IL Bloomington city
FL Panama City city	IA Dubuque city	IL Bloomington township
FL Parker city	IA Dubuque County	IL Blue Island city
FL Ponce Inlet town	IA Elk Run Heights city	IL Bolingbrook village
FL Port Orange city	IA Evansdale city	IL Bourbonnais township
FL Port St. Lucie city	IA Hiawatha city	IL Bourbonnais village
FL Punta Gorda city	IA Iowa City city	IL Bowling township
FL Rockledge city	IA Johnson County	IL Bradley village
FL Santa Rosa County	IA Johnston city	IL Bremen township
FL Satellite Beach city	IA Le Claire city	IL Bridgeview village
FL Sewall's Point town	IA Linn County	IL Bristol township
FL Shalimar town	IA Marion city	IL Broadview village
FL South Daytona city	IA Norwalk city	IL Brookfield village
FL Springfield city	IA Panorama Park city	IL Brooklyn village
FL St. Johns County	IA Pleasant Hill city	IL Buffalo Grove village
FL St. Lucie County	IA Polk County	IL Burbank city
FL St. Lucie village	IA Pottawattamie County	IL Burnham village
FL Stuart city	IA Raymond city	IL Burr Ridge village

IL Burritt township	IL Elk Grove Village village	IL Jerome village
IL Burton township	IL Elm Grove township	IL Jo Daviess County
IL Cahokia village	IL Elmhurst city	IL Joliet city
IL Calumet City city	IL Elmwood Park village	IL Joliet township
IL Calumet Park village	IL Evanston city	IL Justice village
IL Calumet township	IL Evergreen Park village	IL Kane County
IL Canteen township	IL Fairmont City village	IL Kankakee city
IL Capital township	IL Fairview Heights city	IL Kankakee County
IL Carbon Cliff village	IL Flossmoor village	IL Kankakee township
IL Carol Stream village	IL Fondulac township	IL Kendall County
IL Carpentersville Village	IL Ford Heights village	IL Kenilworth village
IL Cary village	IL Forest Park village	IL Kickapoo township
IL Caseyville township	IL Forest View village	IL Kildeer village
IL Caseyville village	IL Forsyth village	IL La Grange Park village
IL Centreville city	IL Fort Russell township	IL La Grange village
IL Centreville township	IL Foster township	IL Lake Barrington village
IL Champaign city	IL Fox Lake village	IL Lake Bluff village
IL Champaign County	IL Fox River Grove village	IL Lake Forest city
IL Champaign township	IL Frankfort township	IL Lake in the Hills village
IL Channahon township	IL Frankfort village	IL Lake Villa township
IL Cherry Valley township	IL Franklin Park village	IL Lake Villa village
IL Cherry Valley village	IL Fremont township	IL Lake Zurich village
IL Chicago city	IL Gardner township	IL Lakemoor village
IL Chicago Heights city	IL Geneva city	IL Lakewood village
IL Chicago Ridge village	IL Geneva township	IL Lansing village
IL Chouteau township	IL Gilberts village	IL Leland Grove city
IL Cicero town	IL Glen Carbon village	IL Lemont township
IL Cincinnati township	IL Glen Ellyn village	IL Leyden township
IL Clarendon Hills village	IL Glencoe village	IL Libertyville township
IL Coal Valley township	IL Glendale Heights village	IL Libertyville village
IL Coal Valley village	IL Glenview village	IL Limestone township
IL Collinsville city	IL Glenwood village	IL Lincolnshire village
IL Collinsville township	IL Godfrey township	IL Lincolnwood village
IL Colona township	IL Golf village	IL Lindenhurst village
IL Colona village	IL Grafton township	IL Lisle township
IL Columbia city	IL Grandview village	IL Lisle village
IL Country Club Hills city	IL Granite City city	IL Lockport city
IL Countryside city	IL Grant township	IL Lockport township
IL Crest Hill city	IL Grayslake village	IL Lombard village
IL Crestwood village	IL Green Oaks village	IL Long Creek township
IL Crete township	IL Green Rock city	IL Long Grove village
IL Crete village	IL Groveland township	IL Loves Park city
IL Creve Coeur village	IL Gurnee village	IL Lynwood village
IL Crystal Lake city	IL Hainesville village	IL Lyons township
IL Cuba township	IL Hampton township	IL Lyons village
IL Curran township	IL Hampton village	IL Machesney Park village
IL Darien city	IL Hanna township	IL Macon County
IL Decatur city	IL Hanover Park village	IL Madison city
IL Decatur township	IL Hanover township	IL Madison County
IL Deer Park village	IL Harlem township	IL Maine township
IL Deerfield township	IL Harristown township	IL Markham city
IL Deerfield village	IL Harristown village	IL Marquette Heights city
IL Des Plaines city	IL Hartford village	IL Maryville village
IL Dixmoor village	IL Harvey city	IL Matteson village
IL Dolton village	IL Harwood Heights village	IL Maywood village
IL Dorr township	IL Hawthorn Woods village	IL McCook village
IL Downers Grove township	IL Hazel Crest village	IL McCullom Lake village
IL Downers Grove village	IL Henry County	IL McHenry city
IL Dry Grove township	IL Hensley township	IL McHenry County
IL Du Page township	IL Hickory Hills city	IL McHenry township
IL Dundee township	IL Hickory Point township	IL McLean County
IL Dunleith township	IL Highland Park city	IL Medina township
IL Dupo village	IL Highwood city	IL Melrose Park village
IL East Alton village	IL Hillside village	IL Merrionette Park village
IL East Dubuque city	IL Hinsdale village	IL Midlothian village
IL East Dundee village	IL Hodgkins village	IL Milan village
IL East Hazel Crest village	IL Hoffman Estates village	IL Milton township
IL East Moline city	IL Hollis township	IL Moline city
IL East Peoria city	IL Homer township	IL Moline township
IL Edwardsville city	IL Hometown city	IL Monee township
IL Edwardsville township	IL Homewood village	IL Monroe County
IL Ela township	IL Indian Creek village	IL Montgomery village
IL Elgin city	IL Indian Head Park village	IL Moro township
IL Elgin township	IL Inverness village	IL Morton Grove village
IL Elk Grove township	IL Itasca village	IL Morton township
	IL Jarvis township	IL Morton village

IL Mount Prospect village	IL Riverdale village	IL Troy city
IL Mount Zion township	IL Riverside township	IL Troy township
IL Mount Zion village	IL Riverside village	IL University Park village
IL Mundelein village	IL Riverwoods village	IL Urbana city
IL Nameoki township	IL Robbins village	IL Urbana township
IL Naperville city	IL Rochester township	IL Venice city
IL Naperville township	IL Rock Island city	IL Venice township
IL National City village	IL Rock Island County	IL Vernon Hills village
IL New Lenox township	IL Rock Island township	IL Vernon township
IL New Lenox village	IL Rockdale village	IL Villa Park village
IL New Millford village	IL Rockford township	IL Warren township
IL New Trier township	IL Rockton township	IL Warrenville city
IL Newport township	IL Rockton village	IL Washington city
IL Niles township	IL Rolling Meadows city	IL Washington Park village
IL Niles village	IL Romeoville village	IL Washington township
IL Normal town	IL Roscoe township	IL Wauconda township
IL Normal township	IL Roscoe village	IL Waukegan city
IL Norridge village	IL Roselle village	IL Waukegan township
IL North Aurora village	IL Rosemont village	IL Wayne township
IL North Barrington village	IL Round Lake Beach village	IL West Chicago city
IL North Chicago city	IL Round Lake Heights village	IL West Deerfield township
IL North Pekin village	IL Round Lake Park village	IL West Dundee village
IL North Riverside village	IL Round Lake village	IL West Peoria township
IL Northbrook village	IL Roxana village	IL Westchester village
IL Northfield township	IL Rutland township	IL Western Springs village
IL Northfield village	IL Sangamon County	IL Westmont village
IL Northlake city	IL Sauget village	IL Wheatland township
IL Norwood Park township	IL Sauk Village village	IL Wheaton city
IL Norwood village	IL Savoy village	IL Wheeling township
IL Nunda township	IL Schaumburg township	IL Wheeling village
IL Oak Brook village	IL Schaumburg village	IL Whitmore township
IL Oak Forest city	IL Schiller Park village	IL Will County
IL Oak Grove village	IL Shields township	IL Willow Springs village
IL Oak Lawn village	IL Shiloh Valley township	IL Willowbrook village
IL Oak Park village	IL Shiloh village	IL Wilmette village
IL Oakbrook Terrace city	IL Shorewood village	IL Winfield township
IL Oakley township	IL Silvis city	IL Winfield village
IL Oakwood Hills village	IL Skokie village	IL Winnebago County
IL O'Fallon city	IL Sleepy Hollow village	IL Winnetka village
IL O'Fallon township	IL Somer township	IL Winthrop Harbor village
IL Olympia Fields village	IL South Beloit city	IL Wood Dale city
IL Orland Hills village	IL South Chicago Heights village	IL Wood River city
IL Orland Park village	IL South Elgin village	IL Wood River township
IL Orland township	IL South Holland village	IL Woodford County
IL Oswego township	IL South Moline township	IL Woodridge village
IL Oswego village	IL South Rock Island township	IL Woodside township
IL Otto township	IL South Roxana village	IL Worth township
IL Owen township	IL South Wheatland township	IL Worth village
IL Palatine township	IL Southern View village	IL York township
IL Palatine village	IL Spring Bay township	IL Zion city
IL Palos Heights city	IL Springfield city	IN Aboite township
IL Palos Hills city	IL Springfield township	IN Adams township
IL Palos Park village	IL St. Charles city	IN Allen County
IL Palos township	IL St. Charles township	IN Anderson city
IL Park City city	IL St. Clair County	IN Anderson township
IL Park Forest village	IL St. Clair township	IN Baugo township
IL Park Ridge city	IL Steger village	IN Beech Grove city
IL Pekin city	IL Stickney township	IN Bloomington city
IL Pekin township	IL Stickney village	IN Bloomington township
IL Peoria city	IL Stites township	IN Boone County
IL Peoria County	IL Stone Park village	IN Buck Creek township
IL Peoria Heights village	IL Stookey township	IN Calumet township
IL Phoenix village	IL Streamwood village	IN Carmel city
IL Pin Oak township	IL Sugar Grove township	IN Castleton town
IL Plainfield township	IL Sugar Loaf township	IN Cedar Creek township
IL Plainfield village	IL Summit village	IN Center township
IL Pontoon Beach village	IL Sunnyside village	IN Centre township
IL Posen village		IN Chesterfield town
IL Precinct 10	IL Swansea village	IN Chesterton town
IL Prospect Heights city	IL Tazewell County	IN Clark County
IL Proviso township	IL Thornton township	IN Clarksville town
IL Rich township	IL Thornton village	IN Clay township
IL Richton Park village	IL Tinley Park village	IN Clermont town
IL Richwoods township	IL Tolono township	IN Cleveland township
IL River Forest village	IL Tower Lakes village	IN Concord township
IL River Grove village	IL Tremont township	IN Country Club Heights town

IN Crown Point city	IN Osolo township	KS Leawood city
IN Crows Nest town	IN Otter Creek township	KS Lenexa city
IN Cumberland town	IN Penn township	KS Merriam city
IN Daleville town	IN Perry township	KS Minneha township
IN Delaware County	IN Pigeon township	KS Mission city
IN Delaware township	IN Pike township	KS Mission Hills city
IN Dyer town	IN Pleasant township	KS Mission township
IN Eagle township	IN Portage city	KS Mission Woods city
IN East Chicago city	IN Portage township	KS Monticello township
IN Edgewood town	IN Porter County	KS Ohio township
IN Elkhart city	IN Porter town	KS Olathe city
IN Elkhart County	IN Richland township	KS Olathe township
IN Elkhart township	IN Riley township	KS Park City city
IN Evansville city	IN River Forest town	KS Park township
IN Fairfield township	IN Rocky Ripple town	KS Prairie Village city
IN Fall Creek township	IN Roseland town	KS Riverside township
IN Fishers town	IN Ross township	KS Roeland Park city
IN Floyd County	IN Salem township	KS Salem township
IN Fort Wayne city	IN Schererville town	KS Sedgwick County
IN Franklin township	IN Seelyville town	KS Shawnee city
IN Gary city	IN Sellersburg town	KS Shawnee County
IN German township	IN Selma town	KS Shawnee township
IN Goshen city	IN Silver Creek township	KS Soldier township
IN Greenwood city	IN South Bend city	KS Tecumseh township
IN Griffith town	IN Southport city	KS Topeka township
IN Hamilton County	IN Speedway town	KS Waco township
IN Hamilton township	IN Spring Hill town	KS Wakarusa township
IN Hammond city	IN St. John town	KS Washington township
IN Hancock County	IN St. John township	KS Westwood city
IN Hanover township	IN St. Joseph County	KS Westwood Hills city
IN Harris township	IN St. Joseph township	KS Williamsport township
IN Harrison township	IN Sugar Creek township	KS Wyandotte County
IN Hendricks County	IN Taylor township	KY Alexandria city
IN Highland town	IN Terre Haute city	KY Ashland city
IN Hobart city	IN Tippecanoe County	KY Bellefonte city
IN Hobart township	IN Tippecanoe township	KY Bellevue city
IN Homecroft town	IN Union township	KY Boone County
IN Honey Creek township	IN Utica township	KY Boyd County
IN Howard County	IN Van Buren township	KY Bromley city
IN Howard township	IN Vanderburgh County	KY Bullitt County
IN Indian Village town	IN Vigo County	KY Campbell County
IN Jackson township	IN Wabash township	KY Catlettsburg city
IN Jefferson township	IN Warren Park town	KY Christian County
IN Jeffersonville city	IN Warren township	KY Covington city
IN Jeffersonville township	IN Warrick County	KY Crescent Park city
IN Johnson County	IN Washington township	KY Crescent Springs city
IN Knight township	IN Wayne township	KY Crestview city
IN Kokomo city	IN Wea township	KY Crestview Hills city
IN Lafayette city	IN West Lafayette city	KY Daviess County
IN Lafayette township	IN West Terre Haute town	KY Dayton city
IN Lake County	IN Westchester township	KY Edgewood city
IN Lake Station city	IN Westfield town	KY Elsmere city
IN Lawrence city	IN White River township	KY Erlanger city
IN Lawrence township	IN Whiteland town	KY Fairview city
IN Liberty township	IN Whiting city	KY Flatwoods city
IN Lincoln township	IN Williams Creek town	KY Florence city
IN Lost Creek township	IN Woodlawn Heights town	KY Forest Hills city
IN Madison County	IN Wynnedale town	KY Fort Mitchell city
IN Meridian Hills town	IN Yorktown town	KY Fort Thomas city
IN Merrillville town	IN Zionsville town	KY Fort Wright city
IN Mishawaka city	KS Attica township	KY Fox Chase city
IN Monroe County	KS Bel Aire city	KY Greenup County
IN Mount Pleasant township	KS Countryside city	KY Hebron Estates city
IN Muncie city	KS Delano township	KY Henderson city
IN Munster town	KS Doniphan County	KY Henderson County
IN New Albany city	KS Douglas County	KY Highland Heights city
IN New Albany township	KS Eastborough city	KY Hillview city
IN New Chicago town	KS Elwood city	KY Hunters Hollow city
IN New Haven city	KS Fairway city	KY Independence city
IN New Whiteland town	KS Gypsum township	KY Jessamine County
IN Newburgh town	KS Haysville city	KY Kenton County
IN North Crows Nest town	KS Johnson County	KY Kenton Vale city
IN North township	KS Kechi city	KY Lakeside Park city
IN Ogden Dunes town	KS Kechi township	KY Latonia Lakes city
IN Ohio township	KS Lake Quivira city	KY Ludlow city
IN Osceola town	KS Lawrence city	KY Melbourne city

KY	Newport city	MA	Cambridge city	MA	Medway town
KY	Oak Grove city	MA	Canton town	MA	Melrose city
KY	Owensboro city	MA	Charlton town	MA	Merrimac town
KY	Park Hills city	MA	Chelmsford town	MA	Methuen town
KY	Pioneer Village city	MA	Chelsea city	MA	Middlesex County
KY	Raceland city	MA	Chicopee city	MA	Middleton town
KY	Russell city	MA	Cohasset town	MA	Millbury town
KY	Silver Grove city	MA	Concord town	MA	Millis town
KY	Southgate city	MA	Dalton town	MA	Millville town
KY	Taylor Mill city	MA	Danvers town	MA	Milton town
KY	Villa Hills city	MA	Dartmouth town	MA	Nahant town
KY	Wilder city	MA	Dedham town	MA	Natick town
KY	Woodlawn city	MA	Dennis town	MA	Needham town
KY	Wurtland city	MA	Dighton town	MA	New Bedford city
LA	Alexandria city	MA	Dover town	MA	Newton city
LA	Baker city	MA	Dracut town	MA	Norfolk town
LA	Ball town	MA	Dudley town	MA	North Andover town
LA	Bossier City city	MA	East Bridgewater town	MA	North Attleborough town
LA	Bossier Parish	MA	East Longmeadow town	MA	North Reading town
LA	Broussard town	MA	Easthampton town	MA	Northampton city
LA	Caddo Parish	MA	Easton town	MA	Northborough town
LA	Calcasieu Parish	MA	Essex County	MA	Northbridge town
LA	Carencro city	MA	Essex town	MA	Norton town
LA	Denham Springs city	MA	Everett city	MA	Norwell town
LA	Houma city	MA	Fairhaven town	MA	Norwood town
LA	Lafayette city	MA	Fall River city	MA	Oxford town
LA	Lafayette Parish	MA	Fitchburg city	MA	Paxton town
LA	Lafourche Parish	MA	Foxborough town	MA	Peabody city
LA	Lake Charles city	MA	Framingham town	MA	Pembroke town
LA	Livingston Parish	MA	Franklin town	MA	Pittsfield city
LA	Monroe city	MA	Freetown town	MA	Plainville town
LA	Ouachita Parish	MA	Georgetown town	MA	Plymouth County
LA	Pineville city	MA	Gloucester city	MA	Quincy city
LA	Plaquemines Parish	MA	Grafton town	MA	Randolph town
LA	Port Allen city	MA	Granby town	MA	Raynham town
LA	Rapides Parish	MA	Groton town	MA	Reading town
LA	Richwood town	MA	Groveland town	MA	Rehoboth town
LA	Scott town	MA	Hadley town	MA	Revere city
LA	Slidell city	MA	Halifax town	MA	Rockland town
LA	St. Bernard Parish	MA	Hamilton town	MA	Rockport town
LA	St. Charles Parish	MA	Hampden County	MA	Salem city
LA	St. Tammany Parish	MA	Hampden town	MA	Sandwich town
LA	Sulphur city	MA	Hampshire County	MA	Saugus town
LA	Terrebonne Parish	MA	Hanover town	MA	Scituate town
LA	West Baton Rouge Parish	MA	Hanson town	MA	Seekonk town
LA	West Monroe city	MA	Haverhill city	MA	Sharon town
LA	Westlake city	MA	Hingham town	MA	Shrewsbury town
LA	Zachary city	MA	Hinsdale town	MA	Somerset town
MA	Abington town	MA	Holbrook town	MA	Somerville city
MA	Acton town	MA	Holden town	MA	South Hadley town
MA	Acushnet town	MA	Holliston town	MA	Southampton town
MA	Agawam town	MA	Holyoke city	MA	Southborough town
MA	Amesbury town	MA	Hudson town	MA	Southwick town
MA	Andover town	MA	Hull town	MA	Springfield city
MA	Arlington town	MA	Lanesborough town	MA	Stoneham town
MA	Ashland town	MA	Lawrence city	MA	Stoughton town
MA	Attleboro city	MA	Leicester town	MA	Stow town
MA	Auburn town	MA	Leominster city	MA	Sudbury town
MA	Avon town	MA	Lexington town	MA	Sutton town
MA	Barnstable County	MA	Lincoln town	MA	Swampscott town
MA	Barnstable town	MA	Littleton town	MA	Swansea town
MA	Bedford town	MA	Longmeadow town	MA	Taunton city
MA	Bellingham town	MA	Lowell city	MA	Tewksbury town
MA	Belmont town	MA	Ludlow town	MA	Tyngsborough town
MA	Berkshire County	MA	Lunenburg town	MA	Uxbridge town
MA	Beverly city	MA	Lynn city	MA	Wakefield town
MA	Billerica town	MA	Lynnfield town	MA	Walpole town
MA	Blackstone town	MA	Malden city	MA	Waltham city
MA	Boxborough town	MA	Manchester town	MA	Watertown town
MA	Boylston town	MA	Mansfield town	MA	Wayland town
MA	Braintree town	MA	Marblehead town	MA	Webster town
MA	Bridgewater town	MA	Marlborough city	MA	Wellesley town
MA	Bristol County	MA	Mashpee town	MA	Wenham town
MA	Brockton city	MA	Maynard town	MA	West Boylston town
MA	Brookline town	MA	Medfield town	MA	West Bridgewater town
MA	Burlington town	MA	Medford city	MA	West Springfield town

MA Westborough town	ME Cape Elizabeth town	MI Delta township
MA Westfield city	ME Cumberland County	MI Detroit city
MA Westford town	ME Eliot town	MI East China township
MA Westminster town	ME Falmouth town	MI East Detroit city
MA Weston town	ME Gorham town	MI East Grand Rapids city
MA Westport town	ME Kittery town	MI East Lansing city
MA Westwood town	ME Lebanon town	MI Eaton County
MA Weymouth town	ME Lewiston city	MI Ecorse city
MA Whitman town	ME Lisbon town	MI Emmett township
MA Wilbraham town	ME Old Town city	MI Erie township
MA Williamsburg town	ME Orono town	MI Essexville city
MA Wilmington town	ME Penobscot County	MI Farmington city
MA Winchester town	ME Penobscot Indian Island Reservation	MI Farmington Hills city
MA Winthrop town	ME Portland city	MI Ferndale city
MA Woburn city	ME Sabattus town	MI Fillmore township
MA Worcester County	ME Scarborough town	MI Flat Rock city
MA Wrentham town	ME South Berwick town	MI Flint township
MA Yarmouth town	ME South Portland city	MI Flushing city
MD Allegany County	ME Veazie town	MI Flushing township
MD Annapolis city	ME Westbrook city	MI Fort Gratiot township
MD Bel Air town	ME York County	MI Frankenlust township
MD Berwyn Heights town	MI Ada township	MI Franklin village
MD Bladensburg town	MI Allegan County	MI Fraser city
MD Bowie city	MI Allen Park city	MI Fruitport township
MD Brentwood town	MI Alpine township	MI Gaines township
MD Brookeville town	MI Ann Arbor township	MI Garden City city
MD Capitol Heights town	MI Auburn Hills city	MI Genesee County
MD Cecil County	MI Bangor township	MI Genesee township
MD Cheverly town	MI Bath township	MI Georgetown township
MD Chevy Chase Section Five village	MI Battle Creek city	MI Gibraltar city
MD Chevy Chase Section Three village	MI Bay City city	MI Grand Blanc city
MD Chevy Chase town	MI Bay County	MI Grand Blanc township
MD Chevy Chase Village town	MI Bedford township	MI Grand Rapids Charter township
MD College Park city	MI Belleville city	MI Grandville city
MD Colmar Manor town	MI Benton Charter township	MI Grosse Ile township
MD Cottage City town	MI Benton Harbor city	MI Grosse Pointe city
MD Cumberland city	MI Berkley city	MI Grosse Pointe Farms city
MD District Heights city	MI Berlin township	MI Grosse Pointe Park city
MD Edmonston town	MI Berrien County	MI Grosse Pointe Shores village
MD Elkton town	MI Beverly Hills village	MI Grosse Pointe Woods city
MD Fairmount Heights town	MI Bingham Farms village	MI Hampton township
MD Forest Heights town	MI Birmingham city	MI Hamtramck city
MD Frederick city	MI Blackman township	MI Harper Woods city
MD Frostburg city	MI Bloomfield Hills city	MI Harrison township
MD Funkstown town	MI Bloomfield township	MI Hazel Park city
MD Gaithersburg city	MI Bridgeport township	MI Highland Park city
MD Garrett Park town	MI Brownstown township	MI Highland township
MD Glen Echo town	MI Buena Vista Charter township	MI Holland city
MD Glenarden town	MI Burtchville township	MI Holland township
MD Greenbelt city	MI Burton city	MI Howard township
MD Hagerstown city	MI Byron township	MI Hudsonville city
MD Highland Beach town	MI Calhoun County	MI Huntington Woods city
MD Hyattsville city	MI Canton township	MI Huron township
MD Kensington town	MI Carrollton township	MI Independence township
MD Landover Hills town	MI Cascade township	MI Ingham County
MD Laurel city	MI Cass County	MI Inkster city
MD Martin's Additions village	MI Center Line city	MI Ira township
MD Morningside town	MI Chesterfield township	MI Jackson city
MD Mount Rainier city	MI Clarkston village	MI Jackson County
MD New Carrollton city	MI Clawson city	MI James township
MD North Brentwood town	MI Clay township	MI Kalamazoo city
MD Riverdale town	MI Clayton township	MI Kalamazoo County
MD Rockville city	MI Clinton County	MI Kalamazoo township
MD Seat Pleasant city	MI Clinton township	MI Keego Harbor city
MD Smithsburg town	MI Clio city	MI Kent County
MD Somerset town	MI Clyde township	MI Kentwood city
MD Takoma Park city	MI Commerce township	MI Kimball township
MD University Park town	MI Comstock township	MI Kochville township
MD Walkersville town	MI Cooper township	MI Lake Angelus city
MD Washington Grove town	MI Dalton township	MI Laketon township
MD Williamsport town	MI Davison city	MI Laketown township
ME Androscoggin County	MI Davison township	MI Lansing city
ME Auburn city	MI De Witt township	MI Lansing township
ME Bangor city	MI Dearborn city	MI Lathrup Village city
ME Berwick town	MI Dearborn Heights city	MI Leoni township
ME Brewer city	MI Delhi Charter township	MI Lincoln Park city

MI Lincoln township	MI Spring Arbor township	MN Falcon Heights city
MI Livonia city	MI Springfield city	MN Farmington city
MI Macomb County	MI Springfield township	MN Fort Snelling unorg.
MI Macomb township	MI St. Clair city	MN Fridley city
MI Madison Heights city	MI St. Clair County	MN Gem Lake city
MI Marysville city	MI St. Clair Shores city	MN Golden Valley city
MI Melvindale city	MI St. Clair township	MN Grant township
MI Meridian township	MI St. Joseph Charter township	MN Greenwood city
MI Milford township	MI St. Joseph city	MN Ham Lake city
MI Milton township	MI Stevensville village	MN Haven township
MI Monitor township	MI Sullivan township	MN Hennepin County
MI Monroe County	MI Summit township	MN Hermantown city
MI Mount Clemens city	MI Sumpter township	MN Hilltop city
MI Mount Morris city	MI Superior township	MN Hopkins city
MI Mount Morris township	MI Swartz Creek city	MN Houston County
MI Mundy township	MI Sylvan Lake city	MN Inver Grove Heights city
MI Muskegon city	MI Taylor city	MN La Crescent city
MI Muskegon County	MI Texas township	MN La Crescent township
MI Muskegon Heights city	MI Thetford township	MN Lake Elmo city
MI Muskegon township	MI Thomas township	MN Lakeville city
MI New Baltimore city	MI Trenton city	MN Landfall city
MI Niles city	MI Troy city	MN Lauderdale city
MI Niles township	MI Utica city	MN Le Sauk township
MI North Muskegon city	MI Van Buren township	MN Lexington city
MI Northville city	MI Vienna township	MN Lilydale city
MI Northville township	MI Walker city	MN Lino Lakes city
MI Norton Shores city	MI Walled Lake city	MN Little Canada city
MI Novi city	MI Washington township	MN Long Lake city
MI Novi township	MI Washtenaw County	MN Loretto city
MI Oak Park city	MI Waterford township	MN Mahtomedi city
MI Oakland Charter township	MI Wayne city	MN Maple Grove city
MI Oakland County	MI West Bloomfield township	MN Maple Plain city
MI Orchard Lake Village city	MI Westland city	MN Maplewood city
MI Orion township	MI White Lake township	MN Marion township
MI Oshtemo township	MI Whiteford township	MN Medicine Lake city
MI Ottawa County	MI Williamstown township	MN Medina city
MI Parchment city	MI Wixom city	MN Mendota city
MI Park township	MI Wolverine Lake village	MN Mendota Heights city
MI Pavilion township	MI Woodhaven city	MN Midway township
MI Pennfield township	MI Wyandotte city	MN Minden township
MI Pittsfield township	MI Wyoming city	MN Minnetonka Beach city
MI Plainfield township	MI Ypsilanti city	MN Minnetonka city
MI Pleasant Ridge city	MI Ypsilanti township	MN Minnetrista city
MI Plymouth city	MI Zeeland city	MN Moorhead city
MI Plymouth township	MI Zilwaukee city	MN Moorhead township
MI Pontiac city	MN Andover city	MN Mound city
MI Port Huron city	MN Anoka city	MN Mounds View city
MI Port Huron township	MN Anoka County	MN New Brighton city
MI Portage city	MN Apple Valley city	MN New Hope city
MI Portsmouth township	MN Arden Hills city	MN Newport city
MI Redford township	MN Benton County	MN North Oaks city
MI Richfield township	MN Birchwood Village city	MN North St. Paul city
MI River Rouge city	MN Blaine city	MN Oakdale city
MI Riverview city	MN Bloomington city	MN Oakport township
MI Rochester city	MN Brooklyn Center city	MN Olmsted County
MI Rochester Hills city	MN Brooklyn Park city	MN Orono city
MI Rockwood city	MN Burnsville city	MN Osseo city
MI Romulus city	MN Carver County	MN Plymouth city
MI Roosevelt Park city	MN Cascade township	MN Polk County
MI Roseville city	MN Champlin city	MN Prior Lake city
MI Ross township	MN Chanhassen city	MN Proctor city
MI Royal Oak city	MN Circle Pines city	MN Ramsey city
MI Royal Oak township	MN Clay County	MN Robbinsdale city
MI Saginaw city	MN Coon Rapids city	MN Rochester city
MI Saginaw County	MN Cottage Grove city	MN Rochester township
MI Saginaw township	MN Credit River township	MN Rosemount city
MI Schoolcraft township	MN Crystal city	MN Roseville city
MI Scio township	MN Dakota County	MN Sartell city
MI Shelby township	MN Dayton city	MN Sauk Rapids city
MI Shoreham village	MN Deephaven city	MN Sauk Rapids township
MI Sodus township	MN Dilworth city	MN Savage city
MI South Rockwood village	MN Duluth city	MN Scott County
MI Southfield city	MN Eagan city	MN Sherburne County
MI Southfield township	MN East Grand Forks city	MN Shoreview city
MI Southgate city	MN Eden Prairie city	MN Shorewood city
MI Spaulding township	MN Excelsior city	MN South St. Paul city

MN	Spring Lake Park city	MO	Cottleville township	MO	Missouri River township
MN	Spring Park city	MO	Country Club Hills city	MO	Missouri township
MN	St. Anthony city	MO	Country Club village	MO	Moline Acres city
MN	St. Cloud city	MO	Country Life Acres village	MO	Mount Pleasant township
MN	St. Cloud township	MO	Crestwood city	MO	Newton County
MN	St. Louis County	MO	Creve Coeur city	MO	Normandy city
MN	St. Paul Park city	MO	Creve Coeur township	MO	Normandy township
MN	Stearns County	MO	Crystal Lake Park city	MO	North Campbell No. 1 township
MN	Sunfish Lake city	MO	Dardenne township	MO	North Campbell No. 2 township
MN	Tonka Bay city	MO	Dellwood city	MO	North Campbell No. 3 township
MN	Vadnais Heights city	MO	Dennis Acres village	MO	North Kansas City city
MN	Victoria city	MO	Des Peres city	MO	North View township
MN	Waite Park city	MO	Duquesne village	MO	Northmoor city
MN	Washington County	MO	Edmundson village	MO	Northwest township
MN	Wayzata city	MO	Ellisville city	MO	Northwoods city
MN	West St. Paul city	MO	Fenton city	MO	Norwood Court town
MN	White Bear Lake city	MO	Ferguson city	MO	Oakland city
MN	White Bear township	MO	Ferguson township	MO	Oakland Park village
MN	Willernie city	MO	Flordell Hills city	MO	Oaks village
MN	Woodbury city	MO	Florissant city	MO	Oakview village
MN	Woodland city	MO	Florissant township	MO	Oakwood Park village
MN	Wright County	MO	Fox township	MO	Oakwood village
MO	Airport Drive village	MO	Friedens township	MO	O'Fallon city
MO	Airport township	MO	Frontenac city	MO	O'Fallon township
MO	Andrew County	MO	Galena township	MO	Olivette city
MO	Arnold city	MO	Gallatin township	MO	Overland city
MO	Avondale city	MO	Gladstone city	MO	Pagedale city
MO	Ballwin city	MO	Glen Echo Park village	MO	Parkdale town
MO	Battlefield town	MO	Glenaire village	MO	Parkville city
MO	Bella Villa city	MO	Glendale city	MO	Pasadena Hills city
MO	Bellefontaine Neighbors city	MO	Grandview city	MO	Pasadena Park village
MO	Bellerive village	MO	Grantwood Village town	MO	Pettis township
MO	Bel-Nor village	MO	Gravois township	MO	Pine Lawn city
MO	Bel-Ridge village	MO	Greendale city	MO	Platte County
MO	Belton city	MO	Greene County	MO	Platte township
MO	Berkeley city	MO	Hadley township	MO	Platte Woods city
MO	Beverly Hills city	MO	Hanley Hills village	MO	Pleasant Valley city
MO	Big Creek township	MO	Harvester township	MO	Prairie township
MO	Birmingham village	MO	Hazelwood city	MO	Queeny township
MO	Black Jack city	MO	High Ridge township	MO	Randolph village
MO	Blanchette township	MO	Hillsdale village	MO	Raymore city
MO	Blue Springs city	MO	Houston Lake city	MO	Raymore township
MO	Blue township	MO	Huntleigh city	MO	Raytown city
MO	Bonhomme township	MO	Imperial township	MO	Redings Mill village
MO	Boone County	MO	Iron Gates village	MO	Richmond Heights city
MO	Boone township	MO	Jackson County	MO	Rivers township
MO	Breckenridge Hills village	MO	Jasper County	MO	Riverside city
MO	Brentwood city	MO	Jefferson County	MO	Riverview village
MO	Bridgeton city	MO	Jefferson township	MO	Rock Hill city
MO	Brooking township	MO	Jennings city	MO	Rock township
MO	Buchanan County	MO	Joplin city	MO	Rocky Fork township
MO	Calverton Park village	MO	Joplin township	MO	Saginaw village
MO	Campbell No. 1 township	MO	Kickapoo township	MO	Shoal Creek Drive village
MO	Campbell No. 2 township	MO	Kimmswick city	MO	Shoal Creek township
MO	Carl Junction city	MO	Kinloch city	MO	Shrewsbury city
MO	Carroll township	MO	Kirkwood city	MO	Silver Creek village
MO	Carterville city	MO	Ladue city	MO	Sioux township
MO	Cass County	MO	Lake St. Louis city	MO	Sni-A-Bar township
MO	Cedar township	MO	Lake Tapawingo city	MO	Spanish Lake township
MO	Center township	MO	Lake Waukomis city	MO	Spencer Creek township
MO	Charlack city	MO	Lakeshire city	MO	St. Ann city
MO	Chesterfield city	MO	Leawood village	MO	St. Charles city
MO	Chouteau township	MO	Lee's Summit city	MO	St. Ferdinand township
MO	Christian County	MO	Lemay township	MO	St. George city
MO	Clarkson Valley city	MO	Lewis and Clark township	MO	St. John city
MO	Clay County	MO	Liberty city	MO	St. Joseph city
MO	Clay township	MO	Liberty township	MO	St. Louis city
MO	Claycomd village	MO	Mac Kenzie village	MO	St. Peters city
MO	Clayton city	MO	Manchester city	MO	St. Peters township
MO	Clayton township	MO	Maplewood city	MO	Sugar Creek city
MO	Cliff Village village	MO	Marlborough village	MO	Sunset Hills city
MO	Columbia city	MO	Maryland Heights city	MO	Sycamore Hills village
MO	Columbia township	MO	May township	MO	Town and Country city
MO	Concord township	MO	Meramec township	MO	Twin Groves township
MO	Cool Valley city	MO	Midland township	MO	Twin Oaks village
MO	Cottleville town	MO	Mineral township	MO	Unity Village village

MO University City city	NC Catawba County	ND Grand Forks County
MO Uplands Park village	NC Chapel Hill town	ND Grand Forks township
MO Valley Park city	NC China Grove town	ND Hay Creek township
MO Velda Village city	NC Clemmons village	ND Lincoln city
MO Velda Village Hills village	NC Concord city	ND Mandan city
MO Vinita Park city	NC Conover city	ND Mandan unorg.
MO Vinita Terrace village	NC Cramerton town	ND Morton County
MO Warson Woods city	NC Dallas town	ND Reed township
MO Washington township	NC Davidson County	ND West Fargo city
MO Wayne township	NC Durham County	NE Bellevue city
MO Weatherby Lake city	NC Edgecombe County	NE Bellevue No. 2 precinct
MO Webb City city	NC Elon College town	NE Benson precinct
MO Webster Groves city	NC Fletcher town	NE Boys Town village
MO Wellston city	NC Forsyth County	NE Chicago precinct
MO Wentzville township	NC Garner town	NE Covington precinct
MO Westwood village	NC Gaston County	NE Dakota County
MO Wilbur Park village	NC Gastonia city	NE Douglas County
MO Wilson township	NC Gibsonville town	NE Douglas precinct
MO Winchester city	NC Goldsboro city	NE Florence precinct
MO Windsor township	NC Graham city	NE Garfield precinct
MO Woodson Terrace city	NC Greenville city	NE Gilmore No. 1 precinct
MO Zumbahl township	NC Guilford County	NE Gilmore No. 2 precinct
MS Bay St. Louis city	NC Harnett County	NE Gilmore No. 3 precinct
MS Biloxi city	NC Haw River town	NE Grant precinct
MS Brandon city	NC Henderson County	NE Highland No. 1 precinct
MS Clinton city	NC Hickory city	NE Highland No. 2 precinct
MS DeSoto County	NC High Point city	NE Jefferson precinct
MS D'Iberville city	NC Hildebran town	NE La Platte precinct
MS Flowood town	NC Hope Mills town	NE La Vista city
MS Forrest County	NC Indian Trail town	NE Lancaster County
MS Gautier city	NC Jacksonville city	NE Lancaster precinct
MS Gulfport city	NC Jamestown town	NE McArdle precinct
MS Hancock County	NC Kannapolis city	NE Millard precinct
MS Harrison County	NC Landis town	NE Papillion city
MS Hattiesburg city	NC Leland town	NE Papillion No. 2 precinct
MS Hinds County	NC Long View town	NE Pawnee precinct
MS Horn Lake city	NC Lowell city	NE Ralston city
MS Jackson County	NC Matthews town	NE Richland No. 1 precinct
MS Lamar County	NC McAdenville town	NE Richland No. 2 precinct
MS Long Beach city	NC Mebane city	NE Richland No. 3 precinct
MS Madison city	NC Mecklenburg County	NE Sarpy County
MS Madison County	NC Mint Hill town	NE South Sioux City city
MS Moss Point city	NC Montreat town	NE Union precinct
MS Ocean Springs city	NC Mount Holly city	NE Yankee Hill precinct
MS Pascagoula city	NC Nash County	NH Amherst town
MS Pass Christian city	NC New Hanover County	NH Auburn town
MS Pearl city	NC Newton city	NH Bedford town
MS Petal city	NC Onslow County	NH Dover city
MS Rankin County	NC Orange County	NH Durham town
MS Richland city	NC Pineville town	NH Goffstown town
MS Ridgeland city	NC Pitt County	NH Hillsborough County
MS Southaven city	NC Randolph County	NH Hollis town
MS Waveland city	NC Ranlo town	NH Hooksett town
MT Billings city	NC Rocky Mount city	NH Hudson town
MT Cascade County	NC Rowan County	NH Litchfield town
MT Great Falls city	NC Rural Hall town	NH Londonderry town
MT Missoula city	NC Spring Lake town	NH Madbury town
MT Missoula County	NC Stallings town	NH Manchester city
MT Yellowstone County	NC Thomasville city	NH Merrimack County
NC Alamance County	NC Union County	NH Merrimack town
NC Apex town	NC Wake County	NH Nashua city
NC Archdale city	NC Walkertown town	NH New Castle town
NC Asheville city	NC Wayne County	NH Newington town
NC Belmont city	NC Weaverville town	NH Pelham town
NC Belville town	NC Wilmington city	NH Plaistow town
NC Bessemer City city	NC Winterville town	NH Portsmouth city
NC Biltmore Forest town	NC Woodfin town	NH Rochester city
NC Black Mountain town	NC Wrightsville Beach town	NH Rockingham County
NC Brookford town	ND Barnes township	NH Rollinsford town
NC Brunswick County	ND Bismarck city	NH Rye town
NC Buncombe County	ND Bismarck unorg.	NH Salem town
NC Burke County	ND Burleigh County	NH Somersworth city
NC Burlington city	ND Captain's Landing township	NH Strafford County
NC Cabarrus County	ND Cass County	NH Windham town
NC Carrboro town	ND Fargo city	NJ Aberdeen township
NC Cary town	ND Grand Forks city	NJ Absecon city

NJ Allendale borough	NJ Deal borough	NJ Hillsborough township
NJ Allenhurst borough	NJ Delanco township	NJ Hillsdale borough
NJ Alpha borough	NJ Delran township	NJ Hillside township
NJ Alpine borough	NJ Demarest borough	NJ Hi-Nella borough
NJ Asbury Park city	NJ Denville township	NJ Hoboken city
NJ Atlantic City city	NJ Deptford township	NJ Ho-Ho-Kus borough
NJ Atlantic County	NJ Dover town	NJ Holmdel township
NJ Atlantic Highlands borough	NJ Dover township	NJ Hopatcong borough
NJ Audubon borough	NJ Dumont borough	NJ Hopewell township
NJ Audubon Park borough	NJ Dunellen borough	NJ Howell township
NJ Avon-by-the-Sea borough	NJ East Brunswick township	NJ Hunterdon County
NJ Barrington borough	NJ East Greenwich township	NJ Interlaken borough
NJ Bay Head borough	NJ East Hanover township	NJ Irvington township
NJ Bayonne city	NJ East Newark borough	NJ Island Heights borough
NJ Beachwood borough	NJ East Orange city	NJ Jackson township
NJ Bedminster township	NJ East Rutherford borough	NJ Jamesburg borough
NJ Belleville township	NJ Eastampton township	NJ Jefferson township
NJ Bellmawr borough	NJ Eatontown borough	NJ Jersey City city
NJ Belmar borough	NJ Edgewater borough	NJ Keansburg borough
NJ Bergenfield borough	NJ Edgewater Park township	NJ Kearny town
NJ Berkeley Heights township	NJ Edison township	NJ Kenilworth borough
NJ Berkeley township	NJ Egg Harbor township	NJ Keyport borough
NJ Berlin borough	NJ Elizabeth city	NJ Kinnelon borough
NJ Berlin township	NJ Elk township	NJ Lakehurst borough
NJ Bernards township	NJ Elmwood Park borough	NJ Lakewood township
NJ Bernardsville borough	NJ Emerson borough	NJ Laurel Springs borough
NJ Beverly city	NJ Englewood city	NJ Lavallette borough
NJ Bloomfield township	NJ Englewood Cliffs borough	NJ Lawnside borough
NJ Bloomingdale borough	NJ Englishtown borough	NJ Lawrence township
NJ Bogota borough	NJ Essex Fells township	NJ Leonia borough
NJ Boonton town	NJ Evesham township	NJ Lincoln Park borough
NJ Boonton township	NJ Ewing township	NJ Linden city
NJ Bordentown city	NJ Fair Haven borough	NJ Lindenwold borough
NJ Bordentown township	NJ Fair Lawn borough	NJ Linwood city
NJ Bound Brook borough	NJ Fairfield township	NJ Little Falls township
NJ Bradley Beach borough	NJ Fairview borough	NJ Little Ferry borough
NJ Branchburg township	NJ Fanwood borough	NJ Little Silver borough
NJ Brick township	NJ Fieldsboro borough	NJ Livingston township
NJ Bridgewater township	NJ Florence township	NJ Loch Arbour village
NJ Brielle borough	NJ Florham Park borough	NJ Lodi borough
NJ Brigantine city	NJ Fort Lee borough	NJ Long Branch city
NJ Brooklawn borough	NJ Franklin Lakes borough	NJ Longport borough
NJ Buena borough	NJ Franklin township	NJ Lopatcong township
NJ Buena Vista township	NJ Freehold borough	NJ Lumberton township
NJ Burlington city	NJ Freehold township	NJ Lyndhurst township
NJ Burlington County	NJ Galloway township	NJ Madison borough
NJ Burlington township	NJ Garfield city	NJ Magnolia borough
NJ Butler borough	NJ Garwood borough	NJ Mahwah township
NJ Byram township	NJ Gibbsboro borough	NJ Manalapan township
NJ Caldwell Borough township	NJ Glassboro borough	NJ Manasquan borough
NJ Camden city	NJ Glen Ridge Borough township	NJ Manchester township
NJ Cape May County	NJ Glen Rock borough	NJ Mantoloking borough
NJ Carlstadt borough	NJ Gloucester City city	NJ Mantua township
NJ Carneys Point township	NJ Gloucester County	NJ Manville borough
NJ Carteret borough	NJ Gloucester township	NJ Maple Shade township
NJ Cedar Grove township	NJ Green Brook township	NJ Maplewood township
NJ Chatham borough	NJ Greenwich township	NJ Margate City city
NJ Chatham township	NJ Guttenberg town	NJ Marlboro township
NJ Cherry Hill township	NJ Hackensack city	NJ Matawan borough
NJ Chesilhurst borough	NJ Haddon Heights borough	NJ Maywood borough
NJ Chester township	NJ Haddon township	NJ Medford Lakes borough
NJ Chesterfield township	NJ Haddonfield borough	NJ Medford township
NJ Cinnaminson township	NJ Hainesport township	NJ Mendham borough
NJ City of Orange township	NJ Haledon borough	NJ Mendham township
NJ Clark township	NJ Hamilton township	NJ Mercer County
NJ Clayton borough	NJ Hanover township	NJ Merchantville borough
NJ Clementon borough	NJ Harding township	NJ Metuchen borough
NJ Cliffside Park borough	NJ Harrington Park borough	NJ Middlesex borough
NJ Clifton city	NJ Harrison town	NJ Middlesex County
NJ Closter borough	NJ Hasbrouck Heights borough	NJ Middletown township
NJ Collingswood borough	NJ Haworth borough	NJ Midland Park borough
NJ Colts Neck township	NJ Hawthorne borough	NJ Millburn township
NJ Commercial township	NJ Hazlet township	NJ Millstone borough
NJ Cranford township	NJ Helmetta borough	NJ Milltown borough
NJ Cresskill borough	NJ Highland Park borough	NJ Millville city
NJ Cumberland County	NJ Highlands borough	NJ Mine Hill township

NJ Monmouth Beach borough	NJ Pompton Lakes borough	NJ Verona township
NJ Monmouth County	NJ Prospect Park borough	NJ Victory Gardens borough
NJ Monroe township	NJ Rahway city	NJ Vineland city
NJ Montclair township	NJ Ramsey borough	NJ Voorhees township
NJ Montvale borough	NJ Randolph township	NJ Waldwick borough
NJ Montville township	NJ Raritan borough	NJ Wall township
NJ Moonachie borough	NJ Readington township	NJ Wallington borough
NJ Moorestown township	NJ Red Bank borough	NJ Wanaque borough
NJ Morris County	NJ Ridgefield borough	NJ Warren County
NJ Morris Plains borough	NJ Ridgefield Park village	NJ Warren township
NJ Morris township	NJ Ridgewood village	NJ Washington township
NJ Morristown town	NJ Ringwood borough	NJ Watchung borough
NJ Mount Arlington borough	NJ River Edge borough	NJ Waterford township
NJ Mount Ephraim borough	NJ River Vale township	NJ Wayne township
NJ Mount Holly township	NJ Riverdale borough	NJ Weehawken township
NJ Mount Laurel township	NJ Riverside township	NJ Wenonah borough
NJ Mount Olive township	NJ Riverton borough	NJ West Caldwell township
NJ Mountain Lakes borough	NJ Rochelle Park township	NJ West Deptford township
NJ Mountainside borough	NJ Rockaway borough	NJ West Long Branch borough
NJ National Park borough	NJ Rockaway township	NJ West New York town
NJ Neptune City borough	NJ Rockleigh borough	NJ West Orange township
NJ Neptune township	NJ Roseland borough	NJ West Paterson borough
NJ Netcong borough	NJ Roselle borough	NJ Westampton township
NJ New Brunswick city	NJ Roselle Park borough	NJ Westfield town
NJ New Milford borough	NJ Roxbury township	NJ Westville borough
NJ New Providence borough	NJ Rumson borough	NJ Westwood borough
NJ Newark city	NJ Runnemede borough	NJ Wharton borough
NJ Newfield borough	NJ Rutherford borough	NJ Willingboro township
NJ North Arlington borough	NJ Saddle Brook township	NJ Winfield township
NJ North Bergen township	NJ Saddle River borough	NJ Winslow township
NJ North Brunswick township	NJ Salem County	NJ Woodbridge township
NJ North Caldwell township	NJ Sayreville borough	NJ Woodbury city
NJ North Haledon borough	NJ Scotch Plains township	NJ Woodbury Heights borough
NJ North Plainfield borough	NJ Sea Bright borough	NJ Woodcliff Lake borough
NJ Northfield city	NJ Sea Girt borough	NJ Woodlynne borough
NJ Northvale borough	NJ Seaside Heights borough	NJ Wood-Ridge borough
NJ Norwood borough	NJ Seaside Park borough	NJ Wyckoff township
NJ Nutley township	NJ Secaucus town	NM Bernalillo County
NJ Oakland borough	NJ Shamong township	NM Corrales village
NJ Oaklyn borough	NJ Shrewsbury borough	NM Dona Ana County
NJ Ocean City city	NJ Shrewsbury township	NM Las Cruces city
NJ Ocean County	NJ Somerdale borough	NM Los Ranchos de Albuquerque village
NJ Ocean Gate borough	NJ Somers Point city	NM Mesilla town
NJ Ocean township	NJ Somerset County	NM Rio Rancho city
NJ Oceanport borough	NJ Somerville borough	NM Sandoval County
NJ Old Bridge township	NJ South Amboy city	NM Santa Fe city
NJ Old Tappan borough	NJ South Belmar borough	NM Santa Fe County
NJ Oradell borough	NJ South Bound Brook borough	NM Sunland Park city
NJ Palisades Park borough	NJ South Brunswick township	NY Albany city
NJ Palmyra borough	NJ South Hackensack township	NY Albany County
NJ Paramus borough	NJ South Orange Village township	NY Amherst town
NJ Park Ridge borough	NJ South Plainfield borough	NY Amityville village
NJ Parsippany-Troy Hills township	NJ South River borough	NY Ardsley village
NJ Passaic city	NJ South Toms River borough	NY Ashland town
NJ Passaic County	NJ Spotswood borough	NY Atlantic Beach village
NJ Passaic township	NJ Spring Lake borough	NY Babylon town
NJ Paterson city	NJ Spring Lake Heights borough	NY Babylon village
NJ Paulsboro borough	NJ Springfield township	NY Baldwinsville village
NJ Pennington borough	NJ Stanhope borough	NY Ballston town
NJ Penns Grove borough	NJ Stratford borough	NY Barker town
NJ Pennsauken township	NJ Summit city	NY Baxter Estates village
NJ Pennsville township	NJ Sussex County	NY Bayville village
NJ Pequannock township	NJ Tabernacle township	NY Beacon city
NJ Perth Amboy city	NJ Tavistock borough	NY Bedford town
NJ Phillipsburg town	NJ Teaneck township	NY Belle Terre village
NJ Pine Beach borough	NJ Tenaflly borough	NY Bellerose village
NJ Pine Hill borough	NJ Teterboro borough	NY Bellport village
NJ Pine Valley borough	NJ Tinton Falls borough	NY Bethlehem town
NJ Piscataway township	NJ Totowa borough	NY Big Flats town
NJ Pitman borough	NJ Trenton city	NY Binghamton city
NJ Pittsgrove township	NJ Union Beach borough	NY Binghamton town
NJ Plainfield city	NJ Union City city	NY Blasdell village
NJ Pleasantville city	NJ Union township	NY Boston town
NJ Pohatcong township	NJ Upper Saddle River borough	NY Briarcliff Manor village
NJ Point Pleasant Beach borough	NJ Upper township	NY Brighton town
NJ Point Pleasant borough	NJ Ventnor City city	NY Brightwaters village

NY Bronxville village	NY Grand View-on-Hudson village	NY Menands village
NY Brookhaven town	NY Great Neck Estates village	NY Mill Neck village
NY Brookville village	NY Great Neck Plaza village	NY Mineola village
NY Broome County	NY Great Neck village	NY Minoa village
NY Brunswick town	NY Greece town	NY Monroe County
NY Buchanan village	NY Green Island village	NY Montebello village
NY Buffalo city	NY Greenburgh town	NY Montgomery town
NY Camillus town	NY Guilderland town	NY Moreau town
NY Camillus village	NY Halfmoon town	NY Mount Kisco village
NY Carmel town	NY Hamburg town	NY Mount Pleasant town
NY Cayuga Heights village	NY Hamburg village	NY Mount Vernon city
NY Cedarhurst village	NY Harrison village	NY Munsey Park village
NY Charlton town	NY Hastings-on-Hudson village	NY Muttontown village
NY Cheektowaga town	NY Haverstraw town	NY New Castle town
NY Chemung County	NY Haverstraw village	NY New Hartford town
NY Chenango town	NY Hempstead town	NY New Hartford village
NY Chestnut Ridge village	NY Hempstead village	NY New Hempstead village
NY Chili town	NY Henrietta town	NY New Hyde Park village
NY Cicero town	NY Herkimer County	NY New Rochelle city
NY Clarence town	NY Hewlett Bay Park village	NY New Square village
NY Clarkstown town	NY Hewlett Harbor village	NY New Windsor town
NY Clay town	NY Hewlett Neck village	NY New York Mills village
NY Clayville village	NY Hillburn village	NY Newburgh city
NY Clifton Park town	NY Horseheads town	NY Newburgh town
NY Clinton village	NY Horseheads village	NY Niagara County
NY Cohoes city	NY Hudson Falls village	NY Niagara Falls city
NY Colonie town	NY Huntington Bay village	NY Niagara town
NY Colonie village	NY Huntington town	NY Niskayuna town
NY Conklin town	NY Hyde Park town	NY North Castle town
NY Cornwall on Hudson village	NY Irondequoit town	NY North Greenbush town
NY Cornwall town	NY Irvington village	NY North Hempstead town
NY Cortlandt town	NY Island Park village	NY North Hills village
NY Croton-on-Hudson village	NY Islandia village	NY North Syracuse village
NY De Witt town	NY Islip town	NY North Tarrytown village
NY Deerfield town	NY Ithaca city	NY North Tonawanda city
NY Depew village	NY Ithaca town	NY Northport village
NY Dickinson town	NY Johnson City village	NY Nyack village
NY Dobbs Ferry village	NY Kenmore village	NY Ogden town
NY Dryden town	NY Kensington village	NY Old Brookville village
NY Dutchess County	NY Kent town	NY Old Westbury village
NY East Fishkill town	NY Kings Point village	NY Oneida County
NY East Greenbush town	NY Kingsbury town	NY Onondaga County
NY East Hills village	NY Kirkland town	NY Onondaga town
NY East Rochester village	NY Kirkwood town	NY Orange County
NY East Rockaway village	NY La Grange town	NY Orangetown town
NY East Syracuse village	NY Lackawanna city	NY Orchard Park town
NY East Williston village	NY LaFayette town	NY Orchard Park village
NY Eastchester town	NY Lake Grove village	NY Oriskany village
NY Elma town	NY Lake Success village	NY Ossining town
NY Elmira city	NY Lancaster town	NY Ossining village
NY Elmira Heights village	NY Lancaster village	NY Oswego County
NY Elmira town	NY Lansing town	NY Owego town
NY Elmsford village	NY Lansing village	NY Oyster Bay town
NY Endicott village	NY Larchmont village	NY Paris town
NY Erie County	NY Lattingtown village	NY Patchogue village
NY Evans town	NY Lawrence village	NY Patterson town
NY Fairport village	NY Lee town	NY Peekskill city
NY Farmingdale village	NY Lewiston town	NY Pelham Manor village
NY Fayetteville village	NY Lewiston village	NY Pelham town
NY Fenton town	NY Lindenhurst village	NY Pelham village
NY Fishkill town	NY Liverpool village	NY Pendleton town
NY Fishkill village	NY Lloyd Harbor village	NY Penfield town
NY Floral Park village	NY Lloyd town	NY Perinton town
NY Flower Hill village	NY Long Beach city	NY Philipstown town
NY Floyd town	NY Lynbrook village	NY Phoenix village
NY Fort Edward town	NY Lysander town	NY Piermont village
NY Fort Edward village	NY Malta town	NY Pittsford town
NY Frankfort town	NY Malverne village	NY Pittsford village
NY Freeport village	NY Mamaroneck town	NY Plandome Heights village
NY Garden City village	NY Mamaroneck village	NY Plandome Manor village
NY Gates town	NY Manlius town	NY Plandome village
NY Geddes town	NY Manlius village	NY Pleasant Valley town
NY Glen Cove city	NY Manorhaven village	NY Pleasantville village
NY Glens Falls city	NY Marcy town	NY Poestenkill town
NY Glenville town	NY Massapequa Park village	NY Pomona village
NY Grand Island town	NY Matinecock village	NY Poospatuck Reservation

NY Poquott village	NY Wappinger town	OH Brown township
NY Port Chester village	NY Wappingers Falls village	OH Brownhelm township
NY Port Dickinson village	NY Warren County	OH Brunswick city
NY Port Jefferson village	NY Washington County	OH Brunswick Hills township
NY Port Washington North village	NY Waterford town	OH Butler County
NY Poughkeepsie city	NY Waterford village	OH Butler township
NY Poughkeepsie town	NY Watervliet city	OH Campbell city
NY Pound Ridge town	NY Webster town	OH Canfield city
NY Putnam County	NY Webster village	OH Canfield township
NY Putnam Valley town	NY Wesley Hills village	OH Canton city
NY Queensbury town	NY West Haverstraw village	OH Canton township
NY Ramapo town	NY West Seneca town	OH Carlisle township
NY Rensselaer city	NY Westbury village	OH Carlisle village
NY Rensselaer County	NY Westchester County	OH Centerville city
NY Riverhead town	NY Western town	OH Chagrin Falls township
NY Rochester city	NY Wheatfield town	OH Chagrin Falls village
NY Rockville Centre village	NY White Plains city	OH Champain township
NY Rome city	NY Whitesboro village	OH Chesapeake village
NY Roslyn Estates village	NY Whitestown town	OH Cheviot city
NY Roslyn Harbor village	NY Williamsville village	OH Chippewa township
NY Roslyn village	NY Williston Park village	OH Cincinnati city
NY Rotterdam town	NY Woodsburgh village	OH Clark County
NY Russell Gardens village	NY Yonkers city	OH Clear Creek township
NY Rye Brook village	NY Yorktown town	OH Clermont County
NY Rye city	NY Yorkville village	OH Cleveland city
NY Rye town	OH Addyston village	OH Cleveland Heights city
NY Saddle Rock village	OH Allen County	OH Cleves village
NY Salina town	OH Allen township	OH Clinton township
NY Sands Point village	OH Amberley village	OH Coal Grove village
NY Saratoga County	OH Amelia village	OH Coitsville township
NY Scarsdale town	OH American township	OH Colerain township
NY Scarsdale village	OH Amherst city	OH Columbia township
NY Schaghticoke town	OH Amherst township	OH Concord township
NY Schenectady city	OH Anderson township	OH Copley township
NY Schenectady County	OH Arlington Heights village	OH Coventry township
NY Schodack town	OH Auglaize County	OH Cridersville village
NY Schroepel town	OH Aurora city	OH Cross Creek township
NY Schuyler town	OH Austintown township	OH Cuyahoga County
NY Scotia village	OH Avon city	OH Cuyahoga Falls city
NY Sea Cliff village	OH Avon Lake city	OH Cuyahoga Heights village
NY Shoreham village	OH Bainbridge township	OH Deer Park city
NY Sloan village	OH Barberton city	OH Deerfield township
NY Sloatsburg village	OH Batavia township	OH Delaware County
NY Smithtown town	OH Bath township	OH Delhi township
NY Solvay village	OH Bay Village city	OH Doylestown village
NY Somers town	OH Beachwood city	OH Dublin city
NY South Floral Park village	OH Beaver township	OH Duchouquet township
NY South Glens Falls village	OH Beaver creek city	OH East Cleveland city
NY South Nyack village	OH Beaver creek township	OH Eastlake city
NY Southampton town	OH Bedford city	OH Eaton township
NY Southport town	OH Bedford Heights city	OH Elmwood Place village
NY Spencerport village	OH Bellaire city	OH Elyria city
NY Spring Valley village	OH Bellbrook city	OH Elyria township
NY Stewart Manor village	OH Belmont County	OH Englewood city
NY Stony Point town	OH Belpre city	OH Erie County
NY Suffern village	OH Belpre township	OH Etna township
NY Suffolk County	OH Bentleyville village	OH Euclid city
NY Syracuse city	OH Berea city	OH Evendale village
NY Tarrytown village	OH Bethel township	OH Fairborn city
NY Thomaston village	OH Bexley city	OH Fairfax village
NY Tioga County	OH Blendon township	OH Fairfield city
NY Tompkins County	OH Blue Ash city	OH Fairfield County
NY Tonawanda city	OH Boardman township	OH Fairfield township
NY Tonawanda town	OH Brady Lake village	OH Fairlawn city
NY Troy city	OH Bratenahl village	OH Fairport Harbor village
NY Tuckahoe village	OH Brecksville city	OH Fairview Park city
NY Ulster County	OH Brice village	OH Fayette township
NY Union town	OH Bridgeport village	OH Forest Park city
NY Upper Brookville village	OH Brilliant village	OH Fort Shawnee village
NY Upper Nyack village	OH Brimfield township	OH Franklin city
NY Utica city	OH Broadview Heights city	OH Franklin County
NY Valley Stream village	OH Brook Park city	OH Franklin township
NY Van Buren town	OH Brookfield township	OH Gahanna city
NY Vestal town	OH Brooklyn city	OH Garfield Heights city
NY Veteran town	OH Brooklyn Heights village	OH Geauga County
NY Village of the Branch village	OH Brookside village	OH Genoa township

OH German township	OH Marble Cliff village	OH Pease township
OH Girard city	OH Mariemont village	OH Pepper Pike city
OH Glendale village	OH Martins Ferry city	OH Perry township
OH Glenwillow village	OH Mason city	OH Perrysburg city
OH Golf Manor village	OH Massillon city	OH Perrysburg city
OH Goshen township	OH Maumee city	OH Perrysburg township
OH Grand River village	OH Mayfield Heights city	OH Pierce township
OH Grandview Heights city	OH Mayfield village	OH Plain township
OH Green township	OH McDonald village	OH Pleasant township
OH Green village	OH Mead township	OH Poland township
OH Greene County	OH Medina County	OH Poland village
OH Greenhills village	OH Mentor city	OH Portage County
OH Grove City city	OH Mentor-on-the-Lake city	OH Powell village
OH Groveport village	OH Meyers Lake village	OH Prairie township
OH Hamilton city	OH Miami County	OH Proctorville village
OH Hamilton County	OH Miami township	OH Pultney township
OH Hamilton township	OH Miamisburg city	OH Randolph township
OH Hanging Rock village	OH Middleburg Heights city	OH Ravenna city
OH Hanover township	OH Middletown city	OH Ravenna township
OH Harbor View village	OH Mifflin township	OH Reading city
OH Harrison township	OH Milford city	OH Reminderville village
OH Hartville village	OH Millbury village	OH Reynoldsburg city
OH Heath city	OH Millville village	OH Richfield township
OH Highland Heights city	OH Minerva Park village	OH Richfield village
OH Hilliard city	OH Mingo Junction city	OH Richland County
OH Hills and Dales village	OH Mogadore village	OH Richmond Heights city
OH Hinckley township	OH Monclova township	OH Riveredge township
OH Holland village	OH Monroe township	OH Riverlea village
OH Howland township	OH Monroe village	OH Riverside village
OH Hubbard city	OH Montgomery city	OH Rocky River city
OH Hubbard township	OH Montgomery County	OH Rome township
OH Huber Heights city	OH Moorefield township	OH Ross township
OH Hudson township	OH Moraine city	OH Rossford city
OH Hudson village	OH Moreland Hills village	OH Russell township
OH Independence city	OH Mount Healthy city	OH Russia township
OH Ironton city	OH Munroe Falls village	OH Sagamore Hills township
OH Island Creek township	OH New Miami village	OH Seven Hills city
OH Jackson township	OH New Middletown village	OH Shadyside village
OH Jefferson County	OH New Rome village	OH Shaker Heights city
OH Jefferson township	OH Newark city	OH Sharon township
OH Jerome township	OH Newark township	OH Sharonville city
OH Kent city	OH Newburgh Heights village	OH Shawnee Hills village
OH Kettering city	OH Newton township	OH Shawnee township
OH Kirtland city	OH Newtown village	OH Sheffield Lake city
OH Lake County	OH Niles city	OH Sheffield township
OH Lake township	OH Nimishillen township	OH Sheffield village
OH Lakeline village	OH North Bend village	OH Silver Lake village
OH Lakemore village	OH North Canton city	OH Silverton city
OH Lakewood city	OH North College Hill city	OH Solon city
OH Lawrence County	OH North Olmsted city	OH South Amherst village
OH Lawrence township	OH North Randall village	OH South Euclid city
OH Lemon township	OH North Ridgeville city	OH South Point village
OH Lexington village	OH North Royalton city	OH South Russell village
OH Liberty township	OH Northfield Center township	OH Springboro city
OH Licking County	OH Northfield village	OH Springdale city
OH Licking township	OH Northwood city	OH Springfield city
OH Lima city	OH Norton city	OH Springfield township
OH Lima township	OH Norwich township	OH St. Bernard city
OH Lincoln Heights city	OH Norwood city	OH St. Clair township
OH Linndale village	OH Oakwood city	OH Stark County
OH Lockland village	OH Oakwood village	OH Steubenville city
OH Lorain city	OH Obetz village	OH Steubenville township
OH Lorain County	OH Ohio township	OH Stow city
OH Louisville city	OH Olmsted Falls city	OH Strongsville city
OH Loveland city	OH Olmsted township	OH Struthers city
OH Lowellville village	OH Ontario village	OH Suffield township
OH Lucas County	OH Orange township	OH Sugar Bush Knolls village
OH Lyndhurst city	OH Orange village	OH Sugar Creek township
OH Macedonia city	OH Oregon city	OH Summit County
OH Mad River township	OH Ottawa County	OH Sycamore township
OH Madeira city	OH Ottawa Hills village	OH Sylvania city
OH Madison township	OH Painesville city	OH Sylvania township
OH Mahoning County	OH Painesville township	OH Symmes township
OH Maineville village	OH Palmyra township	OH Tallmadge city
OH Mansfield city	OH Parma city	OH Terrace Park village
OH Maple Heights city	OH Parma Heights city	OH The Village of Indian Hill city

OH Timberlake village	OK Logan County	PA Berks County
OH Trenton city	OK Midwest City city	PA Bern township
OH Trotwood city	OK Moffett town	PA Bethel Park borough
OH Troy township	OK Moore city	PA Bethel township
OH Trumbull County	OK Mustang city	PA Bethlehem city
OH Truro township	OK Nichols Hills city	PA Bethlehem township
OH Turtle Creek township	OK Nicoma Park city	PA Big Beaver borough
OH Tuscarawas township	OK Norman city	PA Birdsboro borough
OH Twinsburg city	OK Oklahoma County	PA Birmingham township
OH Twinsburg township	OK Osage County	PA Blair County
OH Union city	OK Pottawatomie County	PA Blair township
OH Union County	OK Rogers County	PA Blakely borough
OH Union township	OK Sand Springs city	PA Blawnox borough
OH University Heights city	OK Sequoyah County	PA Boyertown borough
OH Upper Arlington city	OK Smith Village town	PA Brackenridge borough
OH Upper township	OK Spencer city	PA Braddock borough
OH Urbancrest village	OK The Village city	PA Braddock Hills borough
OH Valley View village	OK Tulsa County	PA Bradfordwoods borough
OH Valleyview village	OK Valley Brook town	PA Brentwood borough
OH Vandalia city	OK Wagoner County	PA Bridgeport borough
OH Vermilion city	OK Warr Acres city	PA Bridgeville borough
OH Vermilion township	OK Woodlawn Park town	PA Bridgewater borough
OH Violet township	OK Yukon city	PA Brighton township
OH Wadsworth city	OR Central Point city	PA Bristol borough
OH Wadsworth township	OR Columbia County	PA Bristol township
OH Waite Hill village	OR Durham city	PA Brookhaven borough
OH Walbridge village	OR Jackson County	PA Brownstown borough
OH Walton Hills village	OR Keizer city	PA Brownsville borough
OH Warren city	OR King City city	PA Brownsville township
OH Warren County	OR Lane County	PA Bryn Athyn borough
OH Warren township	OR Marion County	PA Buckingham township
OH Warrensville Heights city	OR Maywood Park city	PA Bucks County
OH Warrensville township	OR Medford city	PA California borough
OH Washington County	OR Phoenix city	PA Caln township
OH Washington township	OR Polk County	PA Cambria County
OH Wayne County	OR Rainier city	PA Camp Hill borough
OH Wayne township	OR Springfield city	PA Canonsburg borough
OH Weathersfield township	OR Troutdale city	PA Canton township
OH Wells township	OR Tualatin city	PA Carbondale city
OH West Carrollton City city	OR Wood Village city	PA Carbondale township
OH West Milton village	PA Abington township	PA Carnegie borough
OH Westerville city	PA Adamsburg borough	PA Carroll township
OH Westlake city	PA Alburtis borough	PA Castle Shannon borough
OH Whitehall city	PA Aldan borough	PA Catasauqua borough
OH Whitewater township	PA Aleppo township	PA Cecil township
OH Wickliffe city	PA Aliquippa city	PA Center township
OH Willoughby city	PA Allegheny County	PA Centre County
OH Willoughby Hills city	PA Allegheny township	PA Chalfant borough
OH Willowick city	PA Allen township	PA Chalfont borough
OH Wintersville village	PA Allenport borough	PA Charleroi borough
OH Wood County	PA Alsace township	PA Charlestown township
OH Woodlawn village	PA Altoona city	PA Chartiers township
OH Woodmere village	PA Ambler borough	PA Cheltenham township
OH Worthington city	PA Ambridge borough	PA Chester city
OH Wyoming city	PA Amwell township	PA Chester County
OH Youngstown city	PA Antis township	PA Chester Heights borough
OK Arkoma town	PA Antrim township	PA Chester township
OK Bethany city	PA Archbald borough	PA Cheswick borough
OK Bixby city	PA Arnold city	PA Chippewa township
OK Broken Arrow city	PA Ashley borough	PA Churchill borough
OK Canadian County	PA Aspinwall borough	PA Clairton city
OK Catoosa city	PA Aston township	PA Clarks Green borough
OK Choctaw city	PA Avalon borough	PA Clarks Summit borough
OK Cleveland County	PA Avoca borough	PA Clifton Heights borough
OK Comanche County	PA Baden borough	PA Coal Center borough
OK Creek County	PA Baldwin borough	PA Coatesville city
OK Del City city	PA Baldwin township	PA Colebrookdale township
OK Edmond city	PA Beaver borough	PA College township
OK Forest Park town	PA Beaver City	PA Collegeville borough
OK Hall Park town	PA Beaver Falls city	PA Collier township
OK Harrah town	PA Bell Acres borough	PA Collingdale borough
OK Jenks city	PA Belle Vernon borough	PA Columbia borough
OK Jones town	PA Bellevue borough	PA Colwyn borough
OK Lake Alumna town	PA Ben Avon borough	PA Concord township
OK Lawton city	PA Ben Avon Heights borough	PA Conemaugh township
OK Le Flore County	PA Bensalem township	PA Conestoga township

PA Conewago township	PA Emmaus borough	PA Hummelstown borough
PA Conshohocken borough	PA Emsworth borough	PA Hunker borough
PA Conway borough	PA Erie city	PA Indiana township
PA Coplay borough	PA Erie County	PA Ingram borough
PA Coraopolis borough	PA Etna borough	PA Irwin borough
PA Courtdale borough	PA Exeter borough	PA Ivyland borough
PA Crafton borough	PA Exeter township	PA Jackson township
PA Crescent township	PA Export borough	PA Jacobus borough
PA Cumberland County	PA Fairfield township	PA Jeannette city
PA Cumru township	PA Fairview township	PA Jefferson borough
PA Daisytown borough	PA Fallowfield township	PA Jenkins township
PA Dale borough	PA Falls township	PA Jenkintown borough
PA Dallas borough	PA Fallston borough	PA Jermyn borough
PA Dallas township	PA Farrell city	PA Jessup borough
PA Dallastown borough	PA Fayette City borough	PA Johnstown city
PA Darby borough	PA Fayette County	PA Juniata township
PA Darby township	PA Fell township	PA Kenhorst borough
PA Daugherty township	PA Ferguson township	PA Kennedy township
PA Dauphin County	PA Ferndale borough	PA Kilbuck township
PA Delaware County	PA Findlay township	PA Kingston borough
PA Delmont borough	PA Finleyville borough	PA Kingston township
PA Derry township	PA Folcroft borough	PA Koppel borough
PA Dickson City borough	PA Forest Hills borough	PA Lackawanna County
PA Donora borough	PA Forks township	PA Lafflin borough
PA Dormont borough	PA Forty Fort borough	PA Lancaster city
PA Douglass township	PA Forward township	PA Lancaster County
PA Dover borough	PA Fountain Hill borough	PA Lancaster township
PA Dover township	PA Fox Chapel borough	PA Langhorne borough
PA Downingtown borough	PA Franconia township	PA Langhorne Manor borough
PA Doylestown borough	PA Franklin borough	PA Lansdale borough
PA Doylestown township	PA Franklin County	PA Lansdowne borough
PA Dravosburg borough	PA Franklin Park borough	PA Larksville borough
PA Duboistown borough	PA Franklin township	PA Laurel Run borough
PA Duncansville borough	PA Frankstown township	PA Laureldale borough
PA Dunlevy borough	PA Frazer township	PA Lawrence County
PA Dunmore borough	PA Freedom borough	PA Lawrence Park township
PA Dupont borough	PA Freemansburg borough	PA Lebanon County
PA Duquesne city	PA Geistown borough	PA Leesport borough
PA Duryea borough	PA Glassport borough	PA Leet township
PA East Allen township	PA Glendon borough	PA Leetsdale borough
PA East Bradford township	PA Glenfield borough	PA Lehigh County
PA East Brandywine township	PA Glenolden borough	PA Lehman township
PA East Caln township	PA Green Tree borough	PA Lemoyne borough
PA East Conemaugh borough	PA Greensburg city	PA Liberty borough
PA East Coventry township	PA Hallam borough	PA Limerick township
PA East Deer township	PA Hampden township	PA Lincoln borough
PA East Fallowfield township	PA Hampton township	PA Lititz borough
PA East Goshen township	PA Hanover township	PA Logan township
PA East Hempfield township	PA Harborcreek township	PA Loganville borough
PA East Lampeter township	PA Harmar township	PA London Britain township
PA East Lansdowne borough	PA Harmony township	PA Londonderry township
PA East McKeesport borough	PA Harris township	PA Lorain borough
PA East Norriton township	PA Harrisburg city	PA Lower Allen township
PA East Pennsboro township	PA Harrison township	PA Lower Alsace township
PA East Petersburg borough	PA Harveys Lake borough	PA Lower Burrell city
PA East Pikeland township	PA Hatboro borough	PA Lower Chichester township
PA East Pittsburgh borough	PA Hatfield borough	PA Lower Frederick township
PA East Rochester borough	PA Hatfield township	PA Lower Gwynedd township
PA East Taylor township	PA Haverford township	PA Lower Heidelberg township
PA East Vincent township	PA Haysville borough	PA Lower Macungie township
PA East Washington borough	PA Heidelberg borough	PA Lower Makefield township
PA East Whiteland township	PA Hellam township	PA Lower Merion township
PA Easton city	PA Hellertown borough	PA Lower Moreland township
PA Easttown township	PA Hempfield township	PA Lower Nazareth township
PA Eastvale borough	PA Hepburn township	PA Lower Paxton township
PA Economy borough	PA Hermitage city	PA Lower Pottsgrove township
PA Eddystone borough	PA Highspire borough	PA Lower Providence township
PA Edgewood borough	PA Hilltown township	PA Lower Salford township
PA Edgeworth borough	PA Hollidaysburg borough	PA Lower Saucon township
PA Edgmont township	PA Homestead borough	PA Lower Southampton township
PA Edwardsville borough	PA Homewood borough	PA Lower Swatara township
PA Elco borough	PA Hopewell township	PA Lower Yoder township
PA Elizabeth borough	PA Horsham township	PA Loyalsock township
PA Elizabeth township	PA Houston borough	PA Luzerne borough
PA Ellport borough	PA Hughestown borough	PA Luzerne County
PA Ellwood City borough	PA Hulmeville borough	PA Luzerne township

PA Lycoming County	PA North Franklin township	PA Rostraver township
PA Lycoming township	PA North Huntingdon township	PA Royalton borough
PA Macungie borough	PA North Irwin borough	PA Royersford borough
PA Madison borough	PA North Londonderry township	PA Rutledge borough
PA Maiden creek township	PA North Sewickley township	PA Salem township
PA Malvern borough	PA North Strabane township	PA Salisbury township
PA Manchester township	PA North Versailles township	PA Scalp Level borough
PA Manheim township	PA North Wales borough	PA Schuylkill township
PA Manor borough	PA North Whitehall township	PA Schwenksville borough
PA Manor township	PA North York borough	PA Scott township
PA Marcus Hook borough	PA Northampton borough	PA Scranton city
PA Marple township	PA Northampton County	PA Sewickley borough
PA Marshall township	PA Northampton township	PA Sewickley Heights borough
PA Marysville borough	PA Norwood borough	PA Sewickley Hills borough
PA Mayfield borough	PA Oakmont borough	PA Sewickley township
PA McCandless township	PA O'Hara township	PA Shaler township
PA McKean township	PA Ohio township	PA Sharon city
PA McKees Rocks borough	PA Old Forge borough	PA Sharon Hill borough
PA McKeesport city	PA Old Lycoming township	PA Sharpsburg borough
PA Mechanicsburg borough	PA Olyphant borough	PA Sharpsville borough
PA Media borough	PA Ontelaunee township	PA Shenango township
PA Mercer County	PA Osborne borough	PA Shillington borough
PA Middle Taylor township	PA Paint borough	PA Shiremanstown borough
PA Middletown borough	PA Paint township	PA Silver Spring township
PA Middletown township	PA Palmer township	PA Sinking Spring borough
PA Millbourne borough	PA Palmyra borough	PA Skippack township
PA Millcreek township	PA Parkside borough	PA Somerset County
PA Millersville borough	PA Patterson Heights borough	PA Souderton borough
PA Millvale borough	PA Patterson township	PA South Abington township
PA Modena borough	PA Patton township	PA South Coatesville borough
PA Mohnton borough	PA Paxtang borough	PA South Fayette township
PA Monaca borough	PA Penbrook borough	PA South Greensburg borough
PA Monessen city	PA Penn borough	PA South Hanover township
PA Monongahela city	PA Penn Hills township	PA South Heidelberg township
PA Monroe township	PA Penn township	PA South Heights borough
PA Montgomery County	PA Penndel borough	PA South Huntingdon township
PA Montgomery township	PA Pennsbury Village borough	PA South Park township
PA Montoursville borough	PA Pequea township	PA South Pymatuning township
PA Moon township	PA Perkiomen township	PA South Strabane township
PA Moosic borough	PA Perry County	PA South Whitehall township
PA Morrisville borough	PA Perry township	PA South Williamsport borough
PA Morton borough	PA Peters township	PA Southmont borough
PA Mount Lebanon township	PA Phoenixville borough	PA Southwest Greensburg borough
PA Mount Oliver borough	PA Pine township	PA Speers borough
PA Mount Penn borough	PA Pitcairn borough	PA Spring City borough
PA Mountville borough	PA Pittsburgh city	PA Spring Garden township
PA Muhlenberg township	PA Pittston city	PA Spring township
PA Munhall borough	PA Pittston township	PA Springdale borough
PA Municipality of Monroeville borough	PA Plains township	PA Springdale township
PA Municipality of Murrysville borough	PA Pleasant Hills borough	PA Springettsbury township
PA Nanticoke city	PA Plum borough	PA Springfield township
PA Narberth borough	PA Plymouth borough	PA St. Lawrence borough
PA Nether Providence township	PA Plymouth township	PA State College borough
PA Neville township	PA Port Vue borough	PA Steelton borough
PA New Brighton borough	PA Potter township	PA Stockdale borough
PA New Britain borough	PA Pottstown borough	PA Stonycreek township
PA New Britain township	PA Pringle borough	PA Stowe township
PA New Cumberland borough	PA Prospect Park borough	PA Sugar Notch borough
PA New Eagle borough	PA Pulaski township	PA Summit township
PA New Galilee borough	PA Radnor township	PA Susquehanna township
PA New Garden township	PA Rankin borough	PA Sutersville borough
PA New Hanover township	PA Ransom township	PA Swarthmore borough
PA New Kensington city	PA Reading city	PA Swatara township
PA New Sewickley township	PA Red Lion borough	PA Swissvale borough
PA New Stanton borough	PA Reserve township	PA Swoyersville borough
PA Newell borough	PA Richland township	PA Tarentum borough
PA Newport township	PA Ridley Park borough	PA Taylor borough
PA Newton township	PA Ridley township	PA Telford borough
PA Newtown borough	PA Robinson township	PA Temple borough
PA Newtown township	PA Rochester borough	PA Thornburg borough
PA Norristown borough	PA Rochester township	PA Thornbury township
PA North Belle Vernon borough	PA Rockledge borough	PA Throop borough
PA North Braddock borough	PA Roscoe borough	PA Tinicum township
PA North Catasauqua borough	PA Rose Valley borough	PA Towamencin township
PA North Charleroi borough	PA Ross township	PA Trafford borough
PA North Coventry township	PA Rosslyn Farms borough	PA Trainer borough

PA Trappe borough	PA Whitehall township	RI East Providence city
PA Tredyffrin township	PA Whitemarsh township	RI Gloucester town
PA Tullytown borough	PA Whitpain township	RI Jamestown town
PA Turtle Creek borough	PA Wilkes-Barre city	RI Johnston town
PA Union township	PA Wilkes-Barre township	RI Lincoln town
PA Upland borough	PA Wilkins township	RI Middletown town
PA Upper Allen township	PA Wilkinsburg borough	RI Newport city
PA Upper Chichester township	PA Williams township	RI Newport County
PA Upper Darby township	PA Williamsport city	RI North Kingstown town
PA Upper Dublin township	PA Willistown township	RI North Providence town
PA Upper Gwynedd township	PA Wilmerding borough	RI North Smithfield town
PA Upper Leacock township	PA Wilson borough	RI Pawtucket city
PA Upper Macungie township	PA Windber borough	RI Portsmouth town
PA Upper Makefield township	PA Windsor borough	RI Providence city
PA Upper Merion township	PA Windsor township	RI Providence County
PA Upper Milford township	PA Worcester township	RI Scituate town
PA Upper Moreland township	PA Wormleysburg borough	RI Smithfield town
PA Upper Pottsgrove township	PA Wrightsville borough	RI Tiverton town
PA Upper Providence township	PA Wyoming borough	RI Warren town
PA Upper Saucon township	PA Wyomissing borough	RI Warwick city
PA Upper Southampton township	PA Wyomissing Hills borough	RI Washington County
PA Upper St. Clair township	PA Yardley borough	RI West Greenwich town
PA Upper Yoder township	PA Yatesville borough	RI West Warwick town
PA Uwchlan township	PA Yeadon borough	RI Woonsocket city
PA Valley township	PA Yoe borough	SC Aiken city
PA Vanport township	PA York city	SC Aiken County
PA Verona borough	PA York County	SC Anderson city
PA Versailles borough	PA York township	SC Anderson County
PA Wall borough	PA Youngwood borough	SC Arcadia Lakes town
PA Warminster township	PR Aibonita	SC Berkeley County
PA Warrington township	PR Anasco	SC Burnetown town
PA Warrior Run borough	PR Aquada	SC Cayce city
PA Warwick township	PR Aquadilla	SC Charleston city
PA Washington city	PR Aquas Buenas	SC Charleston County
PA Washington County	PR Arecibo	SC City View town
PA Washington township	PR Bayamon	SC Columbia city
PA Wayne township	PR Cabo Rojo	SC Cowpens town
PA Wernersville borough	PR Caguas	SC Darlington County
PA Wesleyville borough	PR Camuy	SC Dorchester County
PA West Bradford township	PR Canovanas	SC Edgefield County
PA West Brownsville borough	PR Catano	SC Florence city
PA West Chester borough	PR Cayey	SC Florence County
PA West Conshohocken borough	PR Cidra	SC Folly Beach city
PA West Deer township	PR Dorado	SC Forest Acres city
PA West Earl township	PR Guaynabo	SC Fort Mill town
PA West Easton borough	PR Gurabo	SC Georgetown County
PA West Elizabeth borough	PR Hatillo	SC Goose Creek city
PA West Fairview borough	PR Hormigueros	SC Hanahan city
PA West Goshen township	PR Humacao	SC Horry County
PA West Hanover township	PR Juncos	SC Irmo town
PA West Hempfield township	PR Las Piedras	SC Isle of Palms city
PA West Homestead borough	PR Loiza	SC Lexington County
PA West Lampeter township	PR Manati	SC Lincolnville town
PA West Lawn borough	PR Mayaguez	SC Mount Pleasant town
PA West Manchester township	PR Moca	SC Myrtle Beach city
PA West Mayfield borough	PR Naguabo	SC North Augusta city
PA West Middlesex borough	PR Naranjito	SC North Charleston city
PA West Mifflin borough	PR Penueles	SC Pickens County
PA West Newton borough	PR Ponce	SC Pineridge town
PA West Norriton township	PR Rio Grande	SC Quinby town
PA West Pikeland township	PR San German	SC Rock Hill city
PA West Pittston borough	PR San Lorenzo	SC South Congaree town
PA West Pottsgrove township	PR Toa Alta	SC Spartanburg city
PA West Reading borough	PR Toa Baja	SC Spartanburg County
PA West Taylor township	PR Trujillo Alto	SC Springdale town
PA West View borough	PR Vega Alta	SC Sullivan's Island town
PA West Whiteland township	PR Vega Baja	SC Summerville town
PA West Wyoming borough	PR Yabucabo	SC Sumter city
PA West York borough	RI Barrington town	SC Sumter County
PA Westmont borough	RI Bristol town	SC Surfside Beach town
PA Westmoreland County	RI Burrillville town	SC West Columbia city
PA Westtown township	RI Central Falls city	SC York County
PA Wheatland borough	RI Coventry town	SD Big Sioux township
PA Whitaker borough	RI Cranston city	SD Central Pennington unorg.
PA White Oak borough	RI Cumberland town	SD Lincoln County
PA White township	RI East Greenwich town	SD Mapleton township

SD Minnehaha County	TX Brazos County	TX Hunters Creek Village city
SD North Sioux City city	TX Brookside Village city	TX Hurst city
SD Pennington County	TX Brownsville city	TX Hutchins city
SD Rapid City city	TX Bryan city	TX Impact town
SD Split Rock township	TX Buckingham town	TX Jacinto City city
SD Union County	TX Bunker Hill Village city	TX Jefferson County
SD Wayne township	TX Cameron County	TX Jersey Village city
TN Alcoa city	TX Carrollton city	TX Johnson County
TN Anderson County	TX Castle Hills city	TX Jones County
TN Bartlett town	TX Cedar Hill city	TX Katy city
TN Belle Meade city	TX Cedar Park city	TX Kaufman County
TN Berry Hill city	TX Chambers County	TX Keller city
TN Blount County	TX Cibolo city	TX Kemah city
TN Brentwood city	TX Clear Lake Shores city	TX Kennedale city
TN Bristol city	TX Clint town	TX Killeen city
TN Carter County	TX Cockrell Hill city	TX Kirby city
TN Church Hill town	TX College Station city	TX Kleberg County
TN Clarksville city	TX Colleyville city	TX La Marque city
TN Collegedale city	TX Collin County	TX La Porte city
TN Davidson County	TX Comal County	TX Lacy-Lakeview city
TN East Ridge city	TX Combes town	TX Lake Dallas city
TN Elizabethton city	TX Converse city	TX Lake Worth city
TN Farragut town	TX Copperas Cove city	TX Lakeside City town
TN Forest Hills city	TX Corinth town	TX Lakeside town
TN Germantown city	TX Coryell County	TX Lampasas County
TN Goodlettsville city	TX Crowley city	TX Lancaster city
TN Hamilton County	TX Dallas County	TX League City city
TN Hawkins County	TX Dalworthington Gardens city	TX Leander city
TN Hendersonville city	TX Deer Park city	TX Leon Valley city
TN Jackson city	TX Denison city	TX Lewisville city
TN Johnson City city	TX Denton city	TX Live Oak city
TN Jonesborough town	TX Denton County	TX Longview city
TN Kingsport city	TX DeSoto city	TX Lubbock County
TN Knox County	TX Dickinson city	TX Lumberton city
TN Lakesite city	TX Donna city	TX Martin County
TN Lakewood city	TX Double Oak town	TX McAllen city
TN Lookout Mountain town	TX Duncanville city	TX McLennan County
TN Loudon County	TX Ector County	TX Meadows city
TN Madison County	TX Edgecliff village	TX Midland city
TN Maryville city	TX Edinburg city	TX Midland County
TN Montgomery County	TX El Lago city	TX Mission city
TN Mount Carmel town	TX El Paso County	TX Missouri City city
TN Mount Juliet city	TX Ellis County	TX Montgomery County
TN Oak Hill city	TX Euless city	TX Morgan's Point city
TN Red Bank city	TX Everman city	TX Nash city
TN Ridgeside city	TX Farmers Branch city	TX Nassau Bay city
TN Rockford city	TX Flower Mound town	TX Nederland city
TN Shelby County	TX Forest Hill city	TX Nolanville city
TN Signal Mountain town	TX Fort Bend County	TX North Richland Hills city
TN Soddy-Daisy city	TX Friendswood city	TX Northcrest town
TN Sullivan County	TX Galena Park city	TX Nueces County
TN Sumner County	TX Galveston city	TX Odessa city
TN Washington County	TX Galveston County	TX Olmos Park city
TN Williamson County	TX Grand Prairie city	TX Palm Valley town
TN Wilson County	TX Grapevine city	TX Palmview city
TX Addison city	TX Grayson County	TX Pantego town
TX Alamo city	TX Gregg County	TX Parker County
TX Alamo Heights city	TX Groves city	TX Pearland city
TX Allen city	TX Guadalupe County	TX Pflugerville city
TX Archer County	TX Haltom City city	TX Pharr city
TX Azle city	TX Hardin County	TX Piney Point Village city
TX Balch Springs city	TX Harker Heights city	TX Port Arthur city
TX Balcones Heights city	TX Harlingen city	TX Port Neches city
TX Bayou Vista village	TX Harrison County	TX Portland city
TX Baytown city	TX Hedwig Village city	TX Potter County
TX Bedford city	TX Hewitt city	TX Primera town
TX Bell County	TX Hickory Creek town	TX Randall County
TX Bellaire city	TX Hidalgo County	TX Richardson city
TX Bellmead city	TX Highland Park town	TX Richland Hills city
TX Belton city	TX Highland Village city	TX River Oaks city
TX Benbrook city	TX Hill Country Village city	TX Robinson city
TX Beverly Hills city	TX Hilshire Village city	TX Rockwall city
TX Bexar County	TX Hitchcock city	TX Rockwall County
TX Blue Mound city	TX Hollywood Park town	TX Rollingwood city
TX Bowie County	TX Howe town	TX Rose Hill Acres city
TX Brazoria County	TX Humble city	TX Rowlett city

TX Sachse city	UT Logan city	VA Weber City town
TX Saginaw city	UT Mapleton city	VA Williamsburg city
TX San Angelo city	UT Midvale city	VA York County
TX San Benito city	UT Millville city	VT Burlington city
TX San Juan city	UT Murray city	VT Chittenden County
TX San Patricio County	UT North Logan city	VT Colchester town
TX Sansom Park city	UT North Ogden city	VT Essex Junction village
TX Santa Fe city	UT North Salt Lake city	VT Essex town
TX Schertz city	UT Ogden city	VT Shelburne town
TX Seabrook city	UT Orem city	VT South Burlington city
TX Seagoville city	UT Pleasant Grove city	VT Williston town
TX Selma city	UT Pleasant View city	VT Winooski city
TX Shavano Park city	UT Providence city	WA Algona city
TX Sherman city	UT Provo city	WA Auburn city
TX Shoreacres city	UT River Heights city	WA Beaux Arts Village town
TX Smith County	UT Riverdale city	WA Bellevue city
TX Socorro town	UT Riverton city	WA Bellingham city
TX South Houston city	UT Roy city	WA Benton County
TX Southside Place city	UT Sandy city	WA Bonney Lake city
TX Spring Valley city	UT Smithfield city	WA Bothell city
TX Stafford town	UT South Jordan city	WA Bremerton city
TX Sugar Land city	UT South Ogden city	WA Brier city
TX Sunset Valley city	UT South Salt Lake city	WA Clyde Hill town
TX Tarrant County	UT South Weber city	WA Cowlitz County
TX Taylor County	UT Springville city	WA Des Moines city
TX Taylor Lake Village city	UT Sunset city	WA DuPont city
TX Temple city	UT Syracuse city	WA Edmonds city
TX Terrell Hills city	UT Uintah town	WA Everett city
TX Texarkana city	UT Utah County	WA Fife city
TX Texas City city	UT Washington Terrace city	WA Fircrest town
TX Tom Green County	UT Weber County	WA Franklin County
TX Travis County	UT West Bountiful city	WA Gig Harbor city
TX Tye town	UT West Jordan city	WA Hunts Point town
TX Tyler city	UT West Point city	WA Issaquah city
TX Universal City city	UT West Valley City city	WA Kelso city
TX University Park city	UT Woods Cross city	WA Kennewick city
TX Victoria city	VA Albemarle County	WA Kent city
TX Victoria County	VA Alexandria city	WA Kirkland city
TX Wake Village city	VA Amherst County	WA Kitsap County
TX Waller County	VA Bedford County	WA Lacey city
TX Watauga city	VA Botetourt County	WA Lake Forest Park city
TX Webb County	VA Bristol city	WA Longview city
TX Webster city	VA Campbell County	WA Lynnwood city
TX Weslaco city	VA Charlottesville city	WA Marysville city
TX West Lake Hills city	VA Colonial Heights city	WA Medina city
TX West University Place city	VA Danville city	WA Mercer Island city
TX Westover Hills town	VA Dinwiddie County	WA Mill Creek city
TX Westworth village	VA Fairfax city	WA Millwood town
TX White Oak city	VA Falls Church city	WA Milton city
TX White Settlement city	VA Fredericksburg city	WA Mountlake Terrace city
TX Wichita County	VA Gate City town	WA Mukilteo city
TX Wichita Falls city	VA Gloucester County	WA Normandy Park city
TX Williamson County	VA Hanover County	WA Olympia city
TX Wilmer city	VA Herndon town	WA Pacific city
TX Windcrest city	VA Hopewell city	WA Pasco city
TX Woodway city	VA James City County	WA Port Orchard city
UT American Fork city	VA Loudoun County	WA Puyallup city
UT Bluffdale city	VA Lynchburg city	WA Redmond city
UT Bountiful city	VA Manassas city	WA Renton city
UT Cache County	VA Manassas Park city	WA Richland city
UT Cedar Hills town	VA Occoquan town	WA Ruston town
UT Centerville city	VA Petersburg city	WA Selah city
UT Clearfield city	VA Pittsylvania County	WA Steilacoom town
UT Clinton city	VA Poquoson city	WA Sumner city
UT Davis County	VA Prince George County	WA Thurston County
UT Draper city	VA Richmond city	WA Tukwila city
UT Farmington city	VA Roanoke city	WA Tumwater city
UT Farr West city	VA Roanoke County	WA Union Gap city
UT Fruit Heights city	VA Salem city	WA Vancouver city
UT Harrisville city	VA Scott County	WA West Richland city
UT Highland city	VA Spotsylvania County	WA Whatcom County
UT Hyde Park city	VA Stafford County	WA Woodway city
UT Kaysville city	VA Suffolk city	WA Yakima city
UT Layton city	VA Vienna town	WA Yakima County
UT Lehi city	VA Vinton town	WA Yarrow Point town
UT Lindon city	VA Washington County	WI Algoma town

WI Allouez village	WI La Crosse County	WI Vernon town
WI Altoona city	WI La Prairie town	WI Washington County
WI Appleton city	WI Lafayette town	WI Washington town
WI Ashwaubenon village	WI Lannon village	WI Waukesha city
WI Bayside village	WI Lima town	WI Waukesha County
WI Bellevue town	WI Lisbon town	WI Waukesha town
WI Beloit city	WI Little Chute village	WI Wausau city
WI Beloit town	WI Madison town	WI Wauwatosa city
WI Big Bend village	WI Maple Bluff village	WI West Allis city
WI Black Wolf town	WI Marathon County	WI West Milwaukee village
WI Blooming Grove town	WI McFarland village	WI Weston town
WI Brookfield city	WI Medary town	WI Westport town
WI Brookfield town	WI Menasha city	WI Wheaton town
WI Brown County	WI Menasha town	WI Whitefish Bay village
WI Brown Deer village	WI Menomonee Falls village	WI Wilson town
WI Brunswick town	WI Mequon city	WI Wind Point village
WI Buchanan town	WI Middleton city	WI Winnebago County
WI Burke town	WI Middleton town	WV Bancroft town
WI Butler village	WI Monona city	WV Barboursville village
WI Caledonia town	WI Mount Pleasant town	WV Belle town
WI Calumet County	WI Muskego city	WV Benwood city
WI Campbell town	WI Neenah city	WV Berkeley County
WI Cedarburg city	WI Neenah town	WV Bethlehem village
WI Cedarburg town	WI Nekimi town	WV Brooke County
WI Chippewa County	WI New Berlin city	WV Cabell County
WI Chippewa Falls city	WI North Bay village	WV Cedar Grove town
WI Clayton town	WI Norway town	WV Ceredo city
WI Combined Locks village	WI Oak Creek city	WV Charleston city
WI Cudahy city	WI Onalaska city	WV Chesapeake town
WI Dane County	WI Onalaska town	WV Clearview village
WI De Pere city	WI Oshkosh city	WV Dunbar city
WI De Pere town	WI Oshkosh town	WV East Bank town
WI Delafield town	WI Outagamie County	WV Follansbee city
WI Douglas County	WI Ozaukee County	WV Glasgow town
WI Dunn town	WI Pewaukee town	WV Glen Dale city
WI Eagle Point town	WI Pewaukee village	WV Hancock County
WI Eau Claire city	WI Pleasant Prairie town	WV Huntington city
WI Eau Claire County	WI Pleasant Prairie village	WV Hurricane city
WI Elm Grove village	WI Racine city	WV Kanawha County
WI Elmwood Park village	WI Racine County	WV Kenova city
WI Fitchburg city	WI Rib Mountain town	WV Marmet city
WI Fox Point village	WI River Hills village	WV Marshall County
WI Franklin city	WI Rock County	WV McMechen city
WI Germantown town	WI Rock town	WV Mineral County
WI Germantown village	WI Rothschild village	WV Moundsville city
WI Glendale city	WI Salem town	WV Nitro city
WI Grafton town	WI Schofield city	WV North Hills town
WI Grafton village	WI Scott town	WV Ohio County
WI Grand Chute town	WI Sheboygan city	WV Parkersburg city
WI Green Bay city	WI Sheboygan County	WV Poca town
WI Greendale village	WI Sheboygan Falls city	WV Putnam County
WI Greenfield city	WI Sheboygan Falls town	WV Ridgeley town
WI Greenville town	WI Sheboygan town	WV South Charleston city
WI Hales Corners village	WI Shelby town	WV St. Albans city
WI Hallie town	WI Shorewood Hills village	WV Triadelphia town
WI Harmony town	WI Shorewood village	WV Vienna city
WI Harrison town	WI Somers town	WV Wayne County
WI Hobart town	WI South Milwaukee city	WV Weirton city
WI Holmen village	WI St. Francis city	WV Wheeling city
WI Howard village	WI Stettin town	WV Wood County
WI Janesville city	WI Sturtevant village	WY Casper city
WI Janesville town	WI Superior city	WY Cheyenne city
WI Kaukauna city	WI Superior village	WY Evansville town
WI Kenosha city	WI Sussex village	WY Laramie County
WI Kenosha County	WI Thiensville village	WY Mills town
WI Kimberly village	WI Turtle town	WY Natrona County
WI Kohler village	WI Union town	
WI La Crosse city	WI Vandenbroek town	

**Appendix 7 of Preamble—
Governmental Entities (Located Outside
of an Urbanized Area) That Must Be
Examined By the NPDES Permitting
Authority for Potential Designation
Under § 123.35(b)(2)**

(All listed entities have a population of at least 10,000 and a population density of at least 1,000. A listed entity would only be potentially designated if it operates a small MS4. See § 122.26(b)(16) for the definition of a small MS4.)

(This list does not include all operators of small MS4s that may be designated by the NPDES permitting authority. Operators of small MS4s in areas with populations below 10,000 and densities below 1,000 may also be designated but examination of them is not required. Also, entities such as military bases, large hospitals, prison complexes, universities, sewer districts, and highway departments that operate a small MS4 in an area listed here, or in an area otherwise designated by the NPDES permitting authority, may be designated and become subject to permitting regulations.) (Source: 1990 Census of Population and Housing, U.S. Bureau of the Census. This list is subject to change with the Decennial Census)

AL Daphne city	CA Ridgecrest city	IL Jacksonville city
AL Jacksonville city	CA Sanger city	IL Macomb city
AL Selma city	CA Santa Paula city	IL Mattoon city
AR Arkadelphia city	CA Selma city	IL Mount Vernon city
AR Benton city	CA South Lake Tahoe city	IL Ottawa city
AR Blytheville city	CA Temecula city	IL Pontiac city
AR Conway city	CA Tracy city	IL Quincy city
AR El Dorado city	CA Tulare city	IL Rantoul village
AR Hot Springs city	CA Turlock city	IL Sterling city
AR Magnolia city	CA Ukiah city	IL Streator city
AR Rogers city	CA Wasco city	IL Taylorville city
AR Searcy city	CA Woodland city	IL Woodstock city
AR Stuttgart city	CO Canon City city	IN Bedford city
AZ Douglas city	CO Durango city	IN Columbus city
CA Arcata city	CO Lafayette city	IN Crawfordsville city
CA Arroyo Grande city	CO Louisville city	IN Frankfort city
CA Atwater city	CO Loveland city	IN Franklin city
CA Auburn city	CO Sterling city	IN Greenfield city
CA Banning city	FL Bartow city	IN Huntington city
CA Brawley city	FL Belle Glade city	IN Jasper city
CA Calexico city	FL De Land city	IN La Porte city
CA Clearlake city	FL Eustis city	IN Lebanon city
CA Corcoran city	FL Haines City city	IN Logansport city
CA Delano city	FL Key West city	IN Madison city
CA Desert Hot Springs city	FL Leesburg city	IN Marion city
CA Dinuba city	FL Palatka city	IN Martinsville city
CA Dixon city	FL Plant City city	IN Michigan City city
CA El Centro city	FL St. Augustine city	IN New Castle city
CA El Paso de Robles (Paso Robles) city	FL St. Cloud city	IN Noblesville city
CA Eureka city	GA Americus city	IN Peru city
CA Fillmore city	GA Carrollton city	IN Plainfield town
CA Gilroy city	GA Cordele city	IN Richmond city
CA Grover City city	GA Dalton city	IN Seymour city
CA Hanford city	GA Dublin city	IN Shelbyville city
CA Hollister city	GA Griffin city	IN Valparaiso city
CA Lemoore city	GA Hinesville city	IN Vincennes city
CA Los Banos city	GA Moultrie city	IN Wabash city
CA Madera city	GA Newnan city	IN Warsaw city
CA Manteca city	GA Statesboro city	IN Washington city
CA Oakdale city	GA Thomasville city	KS Arkansas City city
CA Oroville city	GA Tifton city	KS Atchison city
CA Paradise town	GA Valdosta city	KS Coffeyville city
CA Petaluma city	GA Waycross city	KS Derby city
CA Porterville city	IA Ames city	KS Dodge City city
CA Red Bluff city	IA Ankeny city	KS El Dorado city
CA Reedley city	IA Boone city	KS Emporia city
	IA Burlington city	KS Garden City city
	IA Fort Dodge city	KS Great Bend city
	IA Fort Madison city	KS Hays city
	IA Indianola city	KS Hutchinson city
	IA Keokuk city	KS Junction City city
	IA Marshalltown city	KS Leavenworth city
	IA Mason City city	KS Liberal city
	IA Muscatine city	KS Manhattan city
	IA Newton city	KS McPherson city
	IA Oskaloosa city	KS Newton city
	IA Ottumwa city	KS Ottawa city
	IA Spencer city	KS Parsons city
	ID Caldwell city	KS Pittsburg city
	ID Coeur d'Alene city	KS Salina city
	ID Lewiston city	KS Winfield city
	ID Moscow city	KY Bowling Green city
	ID Nampa city	KY Danville city
	ID Rexburg city	KY Frankfort city
	ID Twin Falls city	KY Georgetown city
	IL Belvidere city	KY Glasgow city
	IL Canton city	KY Hopkinsville city
	IL Carbondale city	KY Madisonville city
	IL Centralia city	KY Middlesborough city
	IL Charleston city	KY Murray city
	IL Danville city	KY Nicholasville city
	IL De Kalb city	KY Paducah city
	IL Dixon city	KY Radcliff city
	IL Effingham city	KY Richmond city
	IL Freeport city	KY Somerset city
	IL Galesburg city	KY Winchester city

LA Abbeville city	MS Indianola city	NY Kingston city
LA Bastrop city	MS Laurel city	NY Lockport city
LA Bogalusa city	MS McComb city	NY Massena village
LA Crowley city	MS Meridian city	NY Middletown city
LA Eunice city	MS Natchez city	NY Ogdensburg city
LA Hammond city	MS Starkville city	NY Olean city
LA Jennings city	MS Vicksburg city	NY Oneonta city
LA Minden city	MS Yazoo City city	NY Oswego city
LA Morgan City city	MT Bozeman city	NY Plattsburgh city
LA Natchitoches city	MT Havre city	NY Potsdam village
LA New Iberia city	MT Helena city	NY Watertown city
LA Opelousas city	MT Kalispell city	OH Alliance city
LA Ruston city	NC Albemarle city	OH Ashland city
LA Thibodaux city	NC Asheboro city	OH Ashtabula city
MA Amherst town	NC Boone town	OH Athens city
MA Clinton town	NC Eden city	OH Bellefontaine city
MA Milford town	NC Elizabeth City city	OH Bowling Green city
MA Newburyport city	NC Havelock city	OH Bucyrus city
MD Aberdeen town	NC Henderson city	OH Cambridge city
MD Cambridge city	NC Kernersville town	OH Chillicothe city
MD Salisbury city	NC Kinston city	OH Circleville city
MD Westminster city	NC Laurinburg city	OH Coshocton city
ME Waterville city	NC Lenoir city	OH Defiance city
MI Adrian city	NC Lexington city	OH Delaware city
MI Albion city	NC Lumberton city	OH Dover city
MI Alpena city	NC Monroe city	OH East Liverpool city
MI Big Rapids city	NC New Bern city	OH Findlay city
MI Cadillac city	NC Reidsville city	OH Fostoria city
MI Escanaba city	NC Roanoke Rapids city	OH Fremont city
MI Grand Haven city	NC Salisbury city	OH Galion city
MI Marquette city	NC Sanford city	OH Greenville city
MI Midland city	NC Shelby city	OH Lancaster city
MI Monroe city	NC Statesville city	OH Lebanon city
MI Mount Pleasant city	NC Tarboro town	OH Marietta city
MI Owosso city	NC Wilson city	OH Marion city
MI Sturgis city	ND Dickinson city	OH Medina city
MI Traverse City city	ND Jamestown city	OH Mount Vernon city
MN Albert Lea city	ND Minot city	OH New Philadelphia city
MN Austin city	ND Williston city	OH Norwalk city
MN Bemidji city	NE Beatrice city	OH Oxford city
MN Brainerd city	NE Columbus city	OH Piqua city
MN Faribault city	NE Fremont city	OH Portsmouth city
MN Fergus Falls city	NE Grand Island city	OH Salem city
MN Hastings city	NE Hastings city	OH Sandusky city
MN Hutchinson city	NE Kearney city	OH Sidney city
MN Mankato city	NE Norfolk city	OH Tiffin city
MN Marshall city	NE North Platte city	OH Troy city
MN New Ulm city	NE Scottsbluff city	OH Urbana city
MN North Mankato city	NJ East Windsor township	OH Washington city
MN Northfield city	NJ Plainsboro township	OH Wilmington city
MN Owatonna city	NJ Bridgeton city	OH Wooster city
MN Stillwater city	NJ Princeton borough	OH Xenia city
MN Willmar city	NM Alamogordo city	OH Zanesville city
MN Winona city	NM Artesia city	OK Ada city
MO Cape Girardeau city	NM Clovis city	OK Altus city
MO Farmington city	NM Deming city	OK Bartlesville city
MO Hannibal city	NM Farmington city	OK Chickasha city
MO Jefferson City city	NM Gallup city	OK Claremore city
MO Kennett city	NM Hobbs city	OK McAlester city
MO Kirksville city	NM Las Vegas city	OK Miami city
MO Marshall city	NM Portales city	OK Muskogee city
MO Maryville city	NM Roswell city	OK Okmulgee city
MO Poplar Bluff city	NM Silver City town	OK Owasso city
MO Rolla city	NV Elko city	OK Ponca City city
MO Sedalia city	NY Amsterdam city	OK Stillwater city
MO Sikeston city	NY Auburn city	OK Tahlequah city
MO Warrensburg city	NY Batavia city	OK Weatherford city
MO Washington city	NY Canandaigua city	OR Albany city
MS Brookhaven city	NY Corning city	OR Ashland city
MS Canton city	NY Cortland city	OR Astoria city
MS Clarksdale city	NY Dunkirk city	OR Bend city
MS Cleveland city	NY Fredonia village	OR City of the Dalles city
MS Columbus city	NY Fulton city	OR Coos Bay city
MS Greenville city	NY Geneva city	OR Corvallis city
MS Greenwood city	NY Gloversville city	OR Grants Pass city
MS Grenada city	NY Jamestown city	OR Hermiston city

OR	Klamath Falls city	TX	Cleburne city	WA	Oak Harbor city
OR	La Grande city	TX	Conroe city	WA	Port Angeles city
OR	Lebanon city	TX	Coppell city	WA	Pullman city
OR	McMinnville city	TX	Corsicana city	WA	Sunnyside city
OR	Newberg city	TX	Del Rio city	WA	Walla Walla city
OR	Pendleton city	TX	Dumas city	WA	Wenatchee city
OR	Roseburg city	TX	Eagle Pass city	WI	Beaver Dam city
OR	Woodburn city	TX	El Campo city	WI	Fond du Lac city
PA	Berwick borough	TX	Gainesville city	WI	Fort Atkinson city
PA	Bloomsburg town	TX	Gatesville city	WI	Manitowoc city
PA	Butler city	TX	Georgetown city	WI	Marinette city
PA	Carlisle borough	TX	Henderson city	WI	Marshfield city
PA	Chambersburg borough	TX	Hereford city	WI	Menomonie city
PA	Ephrata borough	TX	Huntsville city	WI	Monroe city
PA	Hanover borough	TX	Jacksonville city	WI	Oconomowoc city
PA	Hazleton city	TX	Kerrville city	WI	Stevens Point city
PA	Indiana borough	TX	Kingsville city	WI	Sun Prairie city
PA	Lebanon city	TX	Lake Jackson city	WI	Two Rivers city
PA	Meadville city	TX	Lamesa city	WI	Watertown city
PA	New Castle city	TX	Levelland city	WI	West Bend city
PA	Oil City city	TX	Lufkin city	WI	Whitewater city
PA	Pottsville city	TX	Mercedes city	WI	Wisconsin Rapids city
PA	Sunbury city	TX	Mineral Wells city	WV	Beckley city
PA	Uniontown city	TX	Mount Pleasant city	WV	Bluefield city
PA	Warren city	TX	Nacogdoches city	WV	Clarksburg city
RI	Narragansett town	TX	New Braunfels city	WV	Fairmont city
SC	Clemson city	TX	Palestine city	WV	Martinsburg city
SC	Easley city	TX	Pampa city	WV	Morgantown city
SC	Gaffney city	TX	Pecos city	WY	Evanston city
SC	Greenwood city	TX	Plainview city	WY	Gillette city
SC	Newberry town	TX	Port Lavaca city	WY	Green River city
SC	Orangeburg city	TX	Robstown city	WY	Laramie city
SD	Aberdeen city	TX	Rosenberg city	WY	Rock Springs city
SD	Brookings city	TX	Round Rock city	WY	Sheridan city
SD	Huron city	TX	San Marcos city		
SD	Mitchell city	TX	Seguin city		
SD	Vermillion city	TX	Snyder city		
SD	Watertown city	TX	Stephenville city		
SD	Yankton city	TX	Sweetwater city		
TN	Brownsville city	TX	Taylor city		
TN	Cleveland city	TX	The Colony city		
TN	Collierville town	TX	Uvalde city		
TN	Cookeville city	TX	Vernon city		
TN	Dyersburg city	TX	Vidor city		
TN	Greeneville town	UT	Brigham City city		
TN	Lawrenceburg city	UT	Cedar City city		
TN	McMinnville city	UT	Spanish Fork city		
TN	Millington city	UT	Tooele city		
TN	Morristown city	VA	Blacksburg town		
TN	Murfreesboro city	VA	Christiansburg town		
TN	Shelbyville city	VA	Front Royal town		
TN	Springfield city	VA	Harrisonburg city		
TN	Union City city	VA	Leesburg town		
TX	Alice city	VA	Martinsville city		
TX	Alvin city	VA	Radford city		
TX	Andrews city	VA	Staunton city		
TX	Angleton city	VA	Waynesboro city		
TX	Bay City city	VA	Winchester city		
TX	Beeville city	VT	Rutland city		
TX	Big Spring city	WA	Aberdeen city		
TX	Borger city	WA	Anacortes city		
TX	Brenham city	WA	Centralia city		
TX	Brownwood city	WA	Ellensburg city		
TX	Burkburnett city	WA	Moses Lake city		
TX	Canyon city	WA	Mount Vernon city		

For the reasons set forth in the preamble, chapter I of title 40 of the Code of Federal Regulations is amended as follows:

PART 9—OMB APPROVALS UNDER THE PAPERWORK REDUCTION ACT

1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 *et seq.*, 136–136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601–2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 *et seq.*, 1311, 1313d, 1314, 1318, 1321, 1326, 1330, 1342, 1344, 1345 (d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971–1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g–1, 300g–2, 300g–3, 300g–4, 300g–5, 300g–6, 300j–1, 300j–2, 300j–3, 300j–4, 300j–9, 1857 *et seq.*, 6901–6992k, 7401–7671q, 7542, 9601–9657, 11023, 11048.

2. In § 9.1 the table is amended by adding entries in numerical order under the indicated heading to read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

* * * * *

40 CFR citation						OMB control No.
*	*	*	*	*	*	*
EPA Administered Permit Programs: The National Pollutant Discharge Elimination System						
122.26(g)	.....	.....	.....	.....	.....	2040-0211
*	*	*	*	*	*	*
State Permit Requirements						
123.35(b)	.....	.....	.....	.....	.....	2040-0211
*	*	*	*	*	*	*

PART 122—EPA ADMINISTERED PERMIT PROGRAMS: THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

1. The authority citation for part 122 continues to read as follows:

Authority: The Clean Water Act, 33 U.S.C. 1251 *et seq.*

2. Revise § 122.21(c)(1) to read as follows:

§ 122.21 Application for a permit (applicable to State programs, see § 123.25).

* * * * *

(c) *Time to apply.* (1) Any person proposing a new discharge, shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission for a later date has been granted by the Director. Facilities proposing a new discharge of storm water associated with industrial activity shall submit an application 180 days before that facility commences industrial activity which may result in a discharge of storm water associated with that industrial activity. Facilities described under § 122.26(b)(14)(x) or (b)(15)(i) shall submit applications at least 90 days before the date on which construction is to commence. Different submittal dates may be required under the terms of applicable general permits. Persons proposing a new discharge are encouraged to submit their applications well in advance of the 90 or 180 day requirements to avoid delay. See also paragraph (k) of this section and § 122.26(c)(1)(i)(G) and (c)(1)(ii).

* * * * *

3. Amend § 122.26 as follows:

- a. Revise paragraphs (a)(9), (b)(4)(i), (b)(7)(i), (b)(14) introductory text, (b)(14)(x), (b)(14)(xi);

b. Redesignate paragraph (b)(15) as paragraph (b)(20) and add new paragraphs (b)(15) through (b)(19);

c. Revise the heading for paragraph (c), the first sentence of paragraph (c)(1) introductory text, the first sentence of paragraph (c)(1)(ii) introductory text, paragraphs (e) heading and introductory text, (e)(1), (e)(5) introductory text, and (e)(5)(i);

d. Add paragraphs (e)(8) and (e)(9); and

e. Revise paragraphs (f)(4), (f)(5), and (g).

The additions and revisions read as follows:

§ 122.26 Storm water discharges (applicable to State NPDES programs, see § 123.25).

(a) * * *

(9)(i) On and after October 1, 1994, for discharges composed entirely of storm water, that are not required by paragraph (a)(1) of this section to obtain a permit, operators shall be required to obtain a NPDES permit only if:

(A) The discharge is from a small MS4 required to be regulated pursuant to § 122.32;

(B) The discharge is a storm water discharge associated with small construction activity pursuant to paragraph (b)(15) of this section;

(C) The Director, or in States with approved NPDES programs either the Director or the EPA Regional Administrator, determines that storm water controls are needed for the discharge based on wasteload allocations that are part of "total maximum daily loads" (TMDLs) that address the pollutant(s) of concern; or

(D) The Director, or in States with approved NPDES programs either the Director or the EPA Regional Administrator, determines that the discharge, or category of discharges

within a geographic area, contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States.

(ii) Operators of small MS4s designated pursuant to paragraphs (a)(9)(i)(A), (a)(9)(i)(C), and (a)(9)(i)(D) of this section shall seek coverage under an NPDES permit in accordance with §§ 122.33 through 122.35. Operators of non-municipal sources designated pursuant to paragraphs (a)(9)(i)(B), (a)(9)(i)(C), and (a)(9)(i)(D) of this section shall seek coverage under an NPDES permit in accordance with paragraph (c)(1) of this section.

(iii) Operators of storm water discharges designated pursuant to paragraphs (a)(9)(i)(C) and (a)(9)(i)(D) of this section shall apply to the Director for a permit within 180 days of receipt of notice, unless permission for a later date is granted by the Director (see § 124.52(c) of this chapter).

(b) * * *

(4) * * *

(i) Located in an incorporated place with a population of 250,000 or more as determined by the 1990 Decennial Census by the Bureau of the Census (Appendix F of this part); or

* * * * *

(7) * * *

(i) Located in an incorporated place with a population of 100,000 or more but less than 250,000, as determined by the 1990 Decennial Census by the Bureau of the Census (Appendix G of this part); or

* * * * *

(14) *Storm water discharge associated with industrial activity* means the discharge from any conveyance that is used for collecting and conveying storm

water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under this part 122. For the categories of industries identified in this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are federally, State, or municipally owned or operated that meet the description of the facilities listed in paragraphs (b)(14)(i) through (xi) of this section) include those facilities designated under the provisions of paragraph (a)(1)(v) of this section. The following categories of facilities are considered to be engaging in "industrial activity" for purposes of paragraph (b)(14):

* * * * *

(x) Construction activity including clearing, grading and excavation, except operations that result in the disturbance of less than five acres of total land area. Construction activity also includes the disturbance of less than five acres of total land area that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb five acres or more;

(xi) Facilities under Standard Industrial Classifications 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, and 4221-25;

(15) *Storm water discharge associated with small construction activity* means the discharge of storm water from:

(i) Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one acre and less than five acres. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. The Director may waive the otherwise applicable requirements in a general permit for a storm water discharge from construction activities that disturb less than five acres where:

(A) The value of the rainfall erosivity factor ("R" in the Revised Universal Soil Loss Equation) is less than five during the period of construction activity. The rainfall erosivity factor is determined in accordance with Chapter 2 of *Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)*, pages 21-64, dated January 1997. The Director of the Federal Register approves this incorporation by reference in accordance with 5 U.S.C 552(a) and 1 CFR part 51. Copies may be obtained

from EPA's Water Resource Center, Mail Code RC4100, 401 M St. S.W., Washington, DC 20460. A copy is also available for inspection at the U.S. EPA Water Docket, 401 M Street S.W., Washington, DC. 20460, or the Office of the Federal Register, 800 N. Capitol Street N.W. Suite 700, Washington, DC. An operator must certify to the Director that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five; or

(B) Storm water controls are not needed based on a "total maximum daily load" (TMDL) approved or established by EPA that addresses the pollutant(s) of concern or, for non-impaired waters that do not require TMDLs, an equivalent analysis that determines allocations for small construction sites for the pollutant(s) of concern or that determines that such allocations are not needed to protect water quality based on consideration of existing in-stream concentrations, expected growth in pollutant contributions from all sources, and a margin of safety. For the purpose of this paragraph, the pollutant(s) of concern include sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. The operator must certify to the Director that the construction activity will take place, and storm water discharges will occur, within the drainage area addressed by the TMDL or equivalent analysis.

(ii) Any other construction activity designated by the Director, or in States with approved NPDES programs either the Director or the EPA Regional Administrator, based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to waters of the United States.

EXHIBIT 1 TO § 122.26(b)(15).—SUMMARY OF COVERAGE OF "STORM WATER DISCHARGES ASSOCIATED WITH SMALL CONSTRUCTION ACTIVITY" UNDER THE NPDES STORM WATER PROGRAM

Automatic Designation: Required Nationwide Coverage.	<ul style="list-style-type: none"> • Construction activities that result in a land disturbance of equal to or greater than one acre and less than five acres. • Construction activities disturbing less than one acre if part of a larger common plan of development or sale with a planned disturbance of equal to or greater than one acre and less than five acres. (see § 122.26(b)(15)(i).)
Potential Designation: Optional Evaluation and Designation by the NPDES Permitting Authority or EPA Regional Administrator..	<ul style="list-style-type: none"> • Construction activities that result in a land disturbance of less than one acre based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants. (see § 122.26(b)(15)(ii).)

EXHIBIT 1 TO § 122.26(B)(15).—SUMMARY OF COVERAGE OF “STORM WATER DISCHARGES ASSOCIATED WITH SMALL CONSTRUCTION ACTIVITY” UNDER THE NPDES STORM WATER PROGRAM—Continued

Potential Waiver: Waiver from Requirements as Determined by the NPDES Permitting Authority..	Any automatically designated construction activity where the operator certifies: (1) A rainfall erosivity factor of less than five, or (2) That the activity will occur within an area where controls are not needed based on a TMDL or, for non-impaired waters that do not require a TMDL, an equivalent analysis for the pollutant(s) of concern. (see § 122.26(b)(15)(i).)
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(16) *Small municipal separate storm sewer system* means all separate storm sewers that are:

(i) Owned or operated by the United States, a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.

(ii) Not defined as “large” or “medium” municipal separate storm sewer systems pursuant to paragraphs (b)(4) and (b)(7) of this section, or designated under paragraph (a)(1)(v) of this section.

(iii) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

(17) *Small MS4* means a small municipal separate storm sewer system.

(18) *Municipal separate storm sewer system* means all separate storm sewers that are defined as “large” or “medium” or “small” municipal separate storm sewer systems pursuant to paragraphs (b)(4), (b)(7), and (b)(16) of this section, or designated under paragraph (a)(1)(v) of this section.

(19) *MS4* means a municipal separate storm sewer system.

(c) *Application requirements for storm water discharges associated with industrial activity and storm water discharges associated with small construction activity*—(1) *Individual application*. Dischargers of storm water associated with industrial activity and with small construction activity are required to apply for an individual permit or seek coverage under a promulgated storm water general permit. * * *

(ii) An operator of an existing or new storm water discharge that is associated with industrial activity solely under paragraph (b)(14)(x) of this section or is associated with small construction activity solely under paragraph (b)(15) of this section, is exempt from the requirements of § 122.21(g) and paragraph (c)(1)(i) of this section. * * *

(e) *Application deadlines*. Any operator of a point source required to obtain a permit under this section that does not have an effective NPDES permit authorizing discharges from its storm water outfalls shall submit an application in accordance with the following deadlines:

(1) *Storm water discharges associated with industrial activity*. (i) Except as provided in paragraph (e)(1)(ii) of this section, for any storm water discharge associated with industrial activity identified in paragraphs (b)(14)(i) through (xi) of this section, that is not part of a group application as described in paragraph (c)(2) of this section or that is not authorized by a storm water general permit, a permit application made pursuant to paragraph (c) of this section must be submitted to the Director by October 1, 1992;

(ii) For any storm water discharge associated with industrial activity from a facility that is owned or operated by a municipality with a population of less than 100,000 that is not authorized by a general or individual permit, other than an airport, powerplant, or uncontrolled sanitary landfill, the permit application must be submitted to the Director by March 10, 2003.

(5) A permit application shall be submitted to the Director within 180 days of notice, unless permission for a later date is granted by the Director (see § 124.52(c) of this chapter), for:

(i) A storm water discharge that the Director, or in States with approved NPDES programs, either the Director or the EPA Regional Administrator, determines that the discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States (see paragraphs (a)(1)(v) and (b)(15)(ii) of this section);

(8) For any storm water discharge associated with small construction activity identified in paragraph (b)(15)(i) of this section, see § 122.21(c)(1). Discharges from these sources require permit authorization by March 10, 2003, unless designated for coverage before then.

(9) For any discharge from a regulated small MS4, the permit application made under § 122.33 must be submitted to the Director by:

(i) March 10, 2003 if designated under § 122.32(a)(1) unless your MS4 serves a jurisdiction with a population under 10,000 and the NPDES permitting authority has established a phasing schedule under § 123.35(d)(3) (see § 122.33(c)(1)); or

(ii) Within 180 days of notice, unless the NPDES permitting authority grants a later date, if designated under § 122.32(a)(2) (see § 122.33(c)(2)).

(f) * * *

(4) Any person may petition the Director for the designation of a large, medium, or small municipal separate storm sewer system as defined by paragraph (b)(4)(iv), (b)(7)(iv), or (b)(16) of this section.

(5) The Director shall make a final determination on any petition received under this section within 90 days after receiving the petition with the exception of petitions to designate a small MS4 in which case the Director shall make a final determination on the petition within 180 days after its receipt.

(g) *Conditional exclusion for “no exposure” of industrial activities and materials to storm water*. Discharges composed entirely of storm water are not storm water discharges associated with industrial activity if there is “no exposure” of industrial materials and activities to rain, snow, snowmelt and/or runoff, and the discharger satisfies the conditions in paragraphs (g)(1) through (g)(4) of this section. “No exposure” means that all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste

products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product.

(1) *Qualification.* To qualify for this exclusion, the operator of the discharge must:

(i) Provide a storm resistant shelter to protect industrial materials and activities from exposure to rain, snow, snow melt, and runoff;

(ii) Complete and sign (according to § 122.22) a certification that there are no discharges of storm water contaminated by exposure to industrial materials and activities from the entire facility, except as provided in paragraph (g)(2) of this section;

(iii) Submit the signed certification to the NPDES permitting authority once every five years;

(iv) Allow the Director to inspect the facility to determine compliance with the "no exposure" conditions;

(v) Allow the Director to make any "no exposure" inspection reports available to the public upon request; and

(vi) For facilities that discharge through an MS4, upon request, submit a copy of the certification of "no exposure" to the MS4 operator, as well as allow inspection and public reporting by the MS4 operator.

(2) *Industrial materials and activities not requiring storm resistant shelter.* To qualify for this exclusion, storm resistant shelter is not required for:

(i) Drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak ("Sealed" means banded or otherwise secured and without operational taps or valves);

(ii) Adequately maintained vehicles used in material handling; and

(iii) Final products, other than products that would be mobilized in storm water discharge (e.g., rock salt).

(3) *Limitations.* (i) Storm water discharges from construction activities identified in paragraphs (b)(14)(x) and (b)(15) are not eligible for this conditional exclusion.

(ii) This conditional exclusion from the requirement for an NPDES permit is available on a facility-wide basis only, not for individual outfalls. If a facility has some discharges of storm water that would otherwise be "no exposure" discharges, individual permit requirements should be adjusted accordingly.

(iii) If circumstances change and industrial materials or activities become exposed to rain, snow, snow melt, and/or runoff, the conditions for this

exclusion no longer apply. In such cases, the discharge becomes subject to enforcement for un-permitted discharge. Any conditionally exempt discharger who anticipates changes in circumstances should apply for and obtain permit authorization prior to the change of circumstances.

(iv) Notwithstanding the provisions of this paragraph, the NPDES permitting authority retains the authority to require permit authorization (and deny this exclusion) upon making a determination that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above an applicable water quality standard, including designated uses.

(4) *Certification.* The no exposure certification must require the submission of the following information, at a minimum, to aid the NPDES permitting authority in determining if the facility qualifies for the no exposure exclusion:

(i) The legal name, address and phone number of the discharger (see § 122.21(b));

(ii) The facility name and address, the county name and the latitude and longitude where the facility is located;

(iii) The certification must indicate that none of the following materials or activities are, or will be in the foreseeable future, exposed to precipitation:

(A) Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water;

(B) Materials or residuals on the ground or in storm water inlets from spills/leaks;

(C) Materials or products from past industrial activity;

(D) Material handling equipment (except adequately maintained vehicles);

(E) Materials or products during loading/unloading or transporting activities;

(F) Materials or products stored outdoors (except final products intended for outside use, e.g., new cars, where exposure to storm water does not result in the discharge of pollutants);

(G) Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;

(H) Materials or products handled/stored on roads or railways owned or maintained by the discharger;

(I) Waste material (except waste in covered, non-leaking containers, e.g., dumpsters);

(J) Application or disposal of process wastewater (unless otherwise permitted); and

(K) Particulate matter or visible deposits of residuals from roof stacks/vents not otherwise regulated, i.e., under an air quality control permit, and evident in the storm water outflow;

(iv) All "no exposure" certifications must include the following certification statement, and be signed in accordance with the signatory requirements of § 122.22: "I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of "no exposure" and obtaining an exclusion from NPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed under paragraph (g)(2)) of this section. I understand that I am obligated to submit a no exposure certification form once every five years to the NPDES permitting authority and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the NPDES permitting authority, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under an NPDES permit prior to any point source discharge of storm water from the facility. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

4. Revise § 122.28(b)(2)(v) to read as follows:

§ 122.28 General permits (applicable to State NPDES programs, see § 123.25).

* * * * *

(b) * * *

(2) * * *

(v) Discharges other than discharges from publicly owned treatment works, combined sewer overflows, municipal

separate storm sewer systems, primary industrial facilities, and storm water discharges associated with industrial activity, may, at the discretion of the Director, be authorized to discharge under a general permit without submitting a notice of intent where the Director finds that a notice of intent requirement would be inappropriate. In making such a finding, the Director shall consider: the type of discharge; the expected nature of the discharge; the potential for toxic and conventional pollutants in the discharges; the expected volume of the discharges; other means of identifying discharges covered by the permit; and the estimated number of discharges to be covered by the permit. The Director shall provide in the public notice of the general permit the reasons for not requiring a notice of intent.

* * * * *

5. Add §§ 122.30 through 122.37 to subpart B to read as follows:

§ 122.30 What are the objectives of the storm water regulations for small MS4s?

(a) Sections 122.30 through 122.37 are written in a "readable regulation" format that includes both rule requirements and EPA guidance that is not legally binding. EPA has clearly distinguished its recommended guidance from the rule requirements by putting the guidance in a separate paragraph headed by the word "guidance".

(b) Under the statutory mandate in section 402(p)(6) of the Clean Water Act, the purpose of this portion of the storm water program is to designate additional sources that need to be regulated to protect water quality and to establish a comprehensive storm water program to regulate these sources. (Because the storm water program is part of the National Pollutant Discharge Elimination System (NPDES) Program, you should also refer to § 122.1 which addresses the broader purpose of the NPDES program.)

(c) Storm water runoff continues to harm the nation's waters. Runoff from lands modified by human activities can harm surface water resources in several ways including by changing natural hydrologic patterns and by elevating pollutant concentrations and loadings. Storm water runoff may contain or mobilize high levels of contaminants, such as sediment, suspended solids, nutrients, heavy metals, pathogens, toxins, oxygen-demanding substances, and floatables.

(d) EPA strongly encourages partnerships and the watershed approach as the management framework for efficiently, effectively, and

consistently protecting and restoring aquatic ecosystems and protecting public health.

§ 122.31 As a Tribe, what is my role under the NPDES storm water program?

As a Tribe you may:

(a) Be authorized to operate the NPDES program including the storm water program, after EPA determines that you are eligible for treatment in the same manner as a State under §§ 123.31 through 123.34 of this chapter. (If you do not have an authorized NPDES program, EPA implements the program for discharges on your reservation as well as other Indian country, generally.);

(b) Be classified as an owner of a regulated small MS4, as defined in § 122.32. (Designation of your Tribe as an owner of a small MS4 for purposes of this part is an approach that is consistent with EPA's 1984 Indian Policy of operating on a government-to-government basis with EPA looking to Tribes as the lead governmental authorities to address environmental issues on their reservations as appropriate. If you operate a separate storm sewer system that meets the definition of a regulated small MS4, you are subject to the requirements under §§ 122.33 through 122.35. If you are not designated as a regulated small MS4, you may ask EPA to designate you as such for the purposes of this part.); or

(c) Be a discharger of storm water associated with industrial activity or small construction activity under §§ 122.26(b)(14) or (b)(15), in which case you must meet the applicable requirements. Within Indian country, the NPDES permitting authority is generally EPA, unless you are authorized to administer the NPDES program.

§ 122.32 As an operator of a small MS4, am I regulated under the NPDES storm water program?

(a) Unless you qualify for a waiver under paragraph (c) of this section, you are regulated if you operate a small MS4, including but not limited to systems operated by federal, State, Tribal, and local governments, including State departments of transportation; and:

(1) Your small MS4 is located in an urbanized area as determined by the latest Decennial Census by the Bureau of the Census. (If your small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area is regulated); or

(2) You are designated by the NPDES permitting authority, including where the designation is pursuant to §§ 123.35(b)(3) and (b)(4) of this chapter,

or is based upon a petition under § 122.26(f).

(b) You may be the subject of a petition to the NPDES permitting authority to require an NPDES permit for your discharge of storm water. If the NPDES permitting authority determines that you need a permit, you are required to comply with §§ 122.33 through 122.35.

(c) The NPDES permitting authority may waive the requirements otherwise applicable to you if you meet the criteria of paragraph (d) or (e) of this section. If you receive a waiver under this section, you may subsequently be required to seek coverage under an NPDES permit in accordance with § 122.33(a) if circumstances change. (See also § 123.35(b) of this chapter.)

(d) The NPDES permitting authority may waive permit coverage if your MS4 serves a population of less than 1,000 within the urbanized area and you meet the following criteria:

(1) Your system is not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the NPDES storm water program (see § 123.35(b)(4) of this chapter); and

(2) If you discharge any pollutant(s) that have been identified as a cause of impairment of any water body to which you discharge, storm water controls are not needed based on wasteload allocations that are part of an EPA approved or established "total maximum daily load" (TMDL) that addresses the pollutant(s) of concern.

(e) The NPDES permitting authority may waive permit coverage if your MS4 serves a population under 10,000 and you meet the following criteria:

(1) The permitting authority has evaluated all waters of the U.S., including small streams, tributaries, lakes, and ponds, that receive a discharge from your MS4;

(2) For all such waters, the permitting authority has determined that storm water controls are not needed based on wasteload allocations that are part of an EPA approved or established TMDL that addresses the pollutant(s) of concern or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern;

(3) For the purpose of this paragraph (e), the pollutant(s) of concern include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from your MS4; and

(4) The permitting authority has determined that future discharges from your MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

§ 122.33 If I am an operator of a regulated small MS4, how do I apply for an NPDES permit and when do I have to apply?

(a) If you operate a regulated small MS4 under § 122.32, you must seek coverage under a NPDES permit issued by your NPDES permitting authority. If you are located in an NPDES authorized State, Tribe, or Territory, then that State, Tribe, or Territory is your NPDES permitting authority. Otherwise, your NPDES permitting authority is the EPA Regional Office.

(b) You must seek authorization to discharge under a general or individual NPDES permit, as follows:

(1) If your NPDES permitting authority has issued a general permit applicable to your discharge and you are seeking coverage under the general permit, you must submit a Notice of Intent (NOI) that includes the information on your best management practices and measurable goals required by § 122.34(d). You may file your own NOI, or you and other municipalities or governmental entities may jointly submit an NOI. If you want to share responsibilities for meeting the minimum measures with other municipalities or governmental entities, you must submit an NOI that describes which minimum measures you will implement and identify the entities that will implement the other minimum measures within the area served by your MS4. The general permit will explain any other steps necessary to obtain permit authorization.

(2)(i) If you are seeking authorization to discharge under an individual permit and wish to implement a program under § 122.34, you must submit an application to your NPDES permitting authority that includes the information required under §§ 122.21(f) and 122.34(d), an estimate of square mileage served by your small MS4, and any additional information that your NPDES permitting authority requests. A storm sewer map that satisfies the requirement of § 122.34(b)(3)(i) will satisfy the map requirement in § 122.21(f)(7).

(ii) If you are seeking authorization to discharge under an individual permit and wish to implement a program that is different from the program under § 122.34, you will need to comply with the permit application requirements of § 122.26(d). You must submit both Parts

of the application requirements in §§ 122.26(d)(1) and (2) by March 10, 2003. You do not need to submit the information required by §§ 122.26(d)(1)(ii) and (d)(2) regarding your legal authority, unless you intend for the permit writer to take such information into account when developing your other permit conditions.

(iii) If allowed by your NPDES permitting authority, you and another regulated entity may jointly apply under either paragraph (b)(2)(i) or (b)(2)(ii) of this section to be co-permittees under an individual permit.

(3) If your small MS4 is in the same urbanized area as a medium or large MS4 with an NPDES storm water permit and that other MS4 is willing to have you participate in its storm water program, you and the other MS4 may jointly seek a modification of the other MS4 permit to include you as a limited co-permittee. As a limited co-permittee, you will be responsible for compliance with the permit's conditions applicable to your jurisdiction. If you choose this option you will need to comply with the permit application requirements of § 122.26, rather than the requirements of § 122.34. You do not need to comply with the specific application requirements of § 122.26(d)(1)(iii) and (iv) and (d)(2)(iii) (discharge characterization). You may satisfy the requirements in § 122.26 (d)(1)(v) and (d)(2)(iv) (identification of a management program) by referring to the other MS4's storm water management program.

(4) Guidance: In referencing an MS4's storm water management program, you should briefly describe how the existing plan will address discharges from your small MS4 or would need to be supplemented in order to adequately address your discharges. You should also explain your role in coordinating storm water pollutant control activities in your MS4, and detail the resources available to you to accomplish the plan.

(c) If you operate a regulated small MS4:

(1) Designated under § 122.32(a)(1), you must apply for coverage under an NPDES permit, or apply for a modification of an existing NPDES permit under paragraph (b)(3) of this section by March 10, 2003, unless your MS4 serves a jurisdiction with a population under 10,000 and the NPDES permitting authority has established a phasing schedule under § 123.35(d)(3) of this chapter.

(2) Designated under § 122.32(a)(2), you must apply for coverage under an NPDES permit, or apply for a modification of an existing NPDES

permit under paragraph (b)(3) of this section, within 180 days of notice, unless the NPDES permitting authority grants a later date.

§ 122.34 As an operator of a regulated small MS4, what will my NPDES MS4 storm water permit require?

(a) Your NPDES MS4 permit will require at a minimum that you develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from your MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. Your storm water management program must include the minimum control measures described in paragraph (b) of this section unless you apply for a permit under § 122.26(d). For purposes of this section, narrative effluent limitations requiring implementation of best management practices (BMPs) are generally the most appropriate form of effluent limitations when designed to satisfy technology requirements (including reductions of pollutants to the maximum extent practicable) and to protect water quality. Implementation of best management practices consistent with the provisions of the storm water management program required pursuant to this section and the provisions of the permit required pursuant to § 122.33 constitutes compliance with the standard of reducing pollutants to the "maximum extent practicable." Your NPDES permitting authority will specify a time period of up to 5 years from the date of permit issuance for you to develop and implement your program.

(b) *Minimum control measures*—(1) *Public education and outreach on storm water impacts.* (i) You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

(ii) Guidance: You may use storm water educational materials provided by your State, Tribe, EPA, environmental, public interest or trade organizations, or other MS4s. The public education program should inform individuals and households about the steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil or

household hazardous wastes. EPA recommends that the program inform individuals and groups how to become involved in local stream and beach restoration activities as well as activities that are coordinated by youth service and conservation corps or other citizen groups. EPA recommends that the public education program be tailored, using a mix of locally appropriate strategies, to target specific audiences and communities. Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school age children, and conducting community-based projects such as storm drain stenciling, and watershed and beach cleanups. In addition, EPA recommends that some of the materials or outreach programs be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant storm water impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges. You are encouraged to tailor your outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

(2) *Public involvement/participation.*

(i) You must, at a minimum, comply with State, Tribal and local public notice requirements when implementing a public involvement/participation program.

(ii) Guidance: EPA recommends that the public be included in developing, implementing, and reviewing your storm water management program and that the public participation process should make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local storm water management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts. (Citizens should obtain approval where necessary for lawful access to monitoring sites.)

(3) *Illicit discharge detection and elimination.* (i) You must develop, implement and enforce a program to detect and eliminate illicit discharges

(as defined at § 122.26(b)(2)) into your small MS4.

(ii) You must:

(A) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;

(B) To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;

(C) Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system; and

(D) Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

(iii) You need address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).

(iv) Guidance: EPA recommends that the plan to detect and address illicit discharges include the following four components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and procedures for program evaluation and assessment. EPA recommends visually screening outfalls during dry weather and conducting field tests of selected pollutants as part of the procedures for locating priority areas. Illicit discharge education actions may include storm drain stenciling, a program to promote, publicize, and facilitate public reporting of illicit

connections or discharges, and distribution of outreach materials.

(4) *Construction site storm water runoff control.* (i) You must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. If the NPDES permitting authority waives requirements for storm water discharges associated with small construction activity in accordance with § 122.26(b)(15)(i), you are not required to develop, implement, and/or enforce a program to reduce pollutant discharges from such sites.

(ii) Your program must include the development and implementation of, at a minimum:

(A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;

(B) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

(C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(D) Procedures for site plan review which incorporate consideration of potential water quality impacts;

(E) Procedures for receipt and consideration of information submitted by the public, and

(F) Procedures for site inspection and enforcement of control measures.

(iii) Guidance: Examples of sanctions to ensure compliance include non-monetary penalties, fines, bonding requirements and/or permit denials for non-compliance. EPA recommends that procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements. Procedures for site inspections and enforcement of control measures could include steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving

water quality. You are encouraged to provide appropriate educational and training measures for construction site operators. You may wish to require a storm water pollution prevention plan for construction sites within your jurisdiction that discharge into your system. See § 122.44(s) (NPDES permitting authorities' option to incorporate qualifying State, Tribal and local erosion and sediment control programs into NPDES permits for storm water discharges from construction sites). Also see § 122.35(b) (The NPDES permitting authority may recognize that another government entity, including the permitting authority, may be responsible for implementing one or more of the minimum measures on your behalf.)

(5) *Post-construction storm water management in new development and redevelopment.*

(i) You must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.

(ii) You must:

(A) Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community;

(B) Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law; and

(C) Ensure adequate long-term operation and maintenance of BMPs.

(iii) Guidance: If water quality impacts are considered from the beginning stages of a project, new development and potentially redevelopment provide more opportunities for water quality protection. EPA recommends that the BMPs chosen: be appropriate for the local community; minimize water quality impacts; and attempt to maintain pre-development runoff conditions. In choosing appropriate BMPs, EPA encourages you to participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders including interested citizens. When developing a program that is consistent with this measure's intent, EPA recommends that you adopt a planning

process that identifies the municipality's program goals (e.g., minimize water quality impacts resulting from post-construction runoff from new development and redevelopment), implementation strategies (e.g., adopt a combination of structural and/or non-structural BMPs), operation and maintenance policies and procedures, and enforcement procedures. In developing your program, you should consider assessing existing ordinances, policies, programs and studies that address storm water runoff quality. In addition to assessing these existing documents and programs, you should provide opportunities to the public to participate in the development of the program. Non-structural BMPs are preventative actions that involve management and source controls such as: policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; policies or ordinances that encourage infill development in higher density urban areas, and areas with existing infrastructure; education programs for developers and the public about project designs that minimize water quality impacts; and measures such as minimization of percent impervious area after development and minimization of directly connected impervious areas. Structural BMPs include: storage practices such as wet ponds and extended-detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches. EPA recommends that you ensure the appropriate implementation of the structural BMPs by considering some or all of the following: pre-construction review of BMP designs; inspections during construction to verify BMPs are built as designed; post-construction inspection and maintenance of BMPs; and penalty provisions for the noncompliance with design, construction or operation and maintenance. Storm water technologies are constantly being improved, and EPA recommends that your requirements be responsive to these changes, developments or improvements in control technologies.

(6) *Pollution prevention/good housekeeping for municipal operations.*

(i) You must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, your State, Tribe, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

(ii) Guidance: EPA recommends that, at a minimum, you consider the following in developing your program: maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from your separate storm sewers; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by you, and waste transfer stations; procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris); and ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices. Operation and maintenance should be an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary. Properly developed and implemented operation and maintenance programs reduce the risk of water quality problems.

(c) If an existing qualifying local program requires you to implement one or more of the minimum control measures of paragraph (b) of this section, the NPDES permitting authority may include conditions in your NPDES permit that direct you to follow that qualifying program's requirements rather than the requirements of paragraph (b) of this section. A qualifying local program is a local, State or Tribal municipal storm water management program that imposes, at a minimum, the relevant requirements of paragraph (b) of this section.

(d)(1) In your permit application (either a notice of intent for coverage

under a general permit or an individual permit application), you must identify and submit to your NPDES permitting authority the following information:

(i) The best management practices (BMPs) that you or another entity will implement for each of the storm water minimum control measures at paragraphs (b)(1) through (b)(6) of this section;

(ii) The measurable goals for each of the BMPs including, as appropriate, the months and years in which you will undertake required actions, including interim milestones and the frequency of the action; and

(iii) The person or persons responsible for implementing or coordinating your storm water management program.

(2) If you obtain coverage under a general permit, you are not required to meet any measurable goal(s) identified in your notice of intent in order to demonstrate compliance with the minimum control measures in paragraphs (b)(3) through (b)(6) of this section unless, prior to submitting your NOI, EPA or your State or Tribe has provided or issued a menu of BMPs that addresses each such minimum measure. Even if no regulatory authority issues the menu of BMPs, however, you still must comply with other requirements of the general permit, including good faith implementation of BMPs designed to comply with the minimum measures.

(3) Guidance: Either EPA or your State or Tribal permitting authority will provide a menu of BMPs. You may choose BMPs from the menu or select others that satisfy the minimum control measures.

(e)(1) You must comply with any more stringent effluent limitations in your permit, including permit requirements that modify, or are in addition to, the minimum control measures based on an approved total maximum daily load (TMDL) or equivalent analysis. The permitting authority may include such more stringent limitations based on a TMDL or equivalent analysis that determines such limitations are needed to protect water quality.

(2) Guidance: EPA strongly recommends that until the evaluation of the storm water program in § 122.37, no additional requirements beyond the minimum control measures be imposed on regulated small MS4s without the agreement of the operator of the affected small MS4, except where an approved TMDL or equivalent analysis provides adequate information to develop more specific measures to protect water quality.

(f) You must comply with other applicable NPDES permit requirements, standards and conditions established in the individual or general permit, developed consistent with the provisions of §§ 122.41 through 122.49, as appropriate.

(g) *Evaluation and assessment*—(1) *Evaluation.* You must evaluate program compliance, the appropriateness of your identified best management practices, and progress towards achieving your identified measurable goals.

Note to Paragraph (g)(1): The NPDES permitting authority may determine monitoring requirements for you in accordance with State/Tribal monitoring plans appropriate to your watershed. Participation in a group monitoring program is encouraged.

(2) *Recordkeeping.* You must keep records required by the NPDES permit for at least 3 years. You must submit your records to the NPDES permitting authority only when specifically asked to do so. You must make your records, including a description of your storm water management program, available to the public at reasonable times during regular business hours (see § 122.7 for confidentiality provision). (You may assess a reasonable charge for copying. You may require a member of the public to provide advance notice.)

(3) *Reporting.* Unless you are relying on another entity to satisfy your NPDES permit obligations under § 122.35(a), you must submit annual reports to the NPDES permitting authority for your first permit term. For subsequent permit terms, you must submit reports in year two and four unless the NPDES permitting authority requires more frequent reports. Your report must include:

(i) The status of compliance with permit conditions, an assessment of the appropriateness of your identified best management practices and progress towards achieving your identified measurable goals for each of the minimum control measures;

(ii) Results of information collected and analyzed, including monitoring data, if any, during the reporting period;

(iii) A summary of the storm water activities you plan to undertake during the next reporting cycle;

(iv) A change in any identified best management practices or measurable goals for any of the minimum control measures; and

(v) Notice that you are relying on another governmental entity to satisfy some of your permit obligations (if applicable).

§ 122.35 As an operator of a regulated small MS4, may I share the responsibility to implement the minimum control measures with other entities?

(a) You may rely on another entity to satisfy your NPDES permit obligations to implement a minimum control measure if:

(1) The other entity, in fact, implements the control measure;

(2) The particular control measure, or component thereof, is at least as stringent as the corresponding NPDES permit requirement; and

(3) The other entity agrees to implement the control measure on your behalf. In the reports you must submit under § 122.34(g)(3), you must also specify that you rely on another entity to satisfy some of your permit obligations. If you are relying on another governmental entity regulated under section 122 to satisfy all of your permit obligations, including your obligation to file periodic reports required by § 122.34(g)(3), you must note that fact in your NOI, but you are not required to file the periodic reports. You remain responsible for compliance with your permit obligations if the other entity fails to implement the control measure (or component thereof). Therefore, EPA encourages you to enter into a legally binding agreement with that entity if you want to minimize any uncertainty about compliance with your permit.

(b) In some cases, the NPDES permitting authority may recognize, either in your individual NPDES permit or in an NPDES general permit, that another governmental entity is responsible under an NPDES permit for implementing one or more of the minimum control measures for your small MS4 or that the permitting authority itself is responsible. Where the permitting authority does so, you are not required to include such minimum control measure(s) in your storm water management program. (For example, if a State or Tribe is subject to an NPDES permit that requires it to administer a program to control construction site runoff at the State or Tribal level and that program satisfies all of the requirements of § 122.34(b)(4), you could avoid responsibility for the construction measure, but would be responsible for the remaining minimum control measures.) Your permit may be reopened and modified to include the requirement to implement a minimum control measure if the entity fails to implement it.

§ 122.36 As an operator of a regulated small MS4, what happens if I don't comply with the application or permit requirements in §§ 122.33 through 122.35?

NPDES permits are federally enforceable. Violators may be subject to the enforcement actions and penalties described in Clean Water Act sections 309 (b), (c), and (g) and 505, or under applicable State, Tribal, or local law. Compliance with a permit issued pursuant to section 402 of the Clean Water Act is deemed compliance, for purposes of sections 309 and 505, with sections 301, 302, 306, 307, and 403, except any standard imposed under section 307 for toxic pollutants injurious to human health. If you are covered as a co-permittee under an individual permit or under a general permit by means of a joint Notice of Intent you remain subject to the enforcement actions and penalties for the failure to comply with the terms of the permit in your jurisdiction except as set forth in § 122.35(b).

§ 122.37 Will the small MS4 storm water program regulations at §§ 122.32 through 122.36 and § 123.35 of this chapter change in the future?

EPA will evaluate the small MS4 regulations at §§ 122.32 through 122.36 and § 123.35 of this chapter after December 10, 2012 and make any necessary revisions. (EPA intends to conduct an enhanced research effort and compile a comprehensive evaluation of the NPDES MS4 storm water program. EPA will re-evaluate the regulations based on data from the NPDES MS4 storm water program, from research on receiving water impacts from storm water, and the effectiveness of best management practices (BMPs), as well as other relevant information sources.)

6. In § 122.44, redesignate paragraphs (k)(2) and (k)(3) as paragraphs (k)(3) and (k)(4), remove the comma at the end of newly redesignated paragraph (k)(3) and add a semicolon in its place, and add new paragraphs (k)(2) and (s) to read as follows:

§ 122.44 Establishing limitations, standards, and other permit conditions (applicable to State NPDES programs, see § 123.25).

* * * * *

(k) * * *

(2) Authorized under section 402(p) of CWA for the control of storm water discharges;

* * * * *

(s) *Qualifying State, Tribal, or local programs.* (1) For storm water discharges associated with small construction activity identified in § 122.26(b)(15), the Director may include permit conditions that

incorporate qualifying State, Tribal, or local erosion and sediment control program requirements by reference. Where a qualifying State, Tribal, or local program does not include one or more of the elements in this paragraph (s)(1), then the Director must include those elements as conditions in the permit. A qualifying State, Tribal, or local erosion and sediment control program is one that includes:

(i) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;

(ii) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;

(iii) Requirements for construction site operators to develop and implement a storm water pollution prevention plan. (A storm water pollution prevention plan includes site descriptions, descriptions of appropriate control measures, copies of approved State, Tribal or local requirements, maintenance procedures, inspection procedures, and identification of non-storm water discharges); and

(iv) Requirements to submit a site plan for review that incorporates consideration of potential water quality impacts.

(2) For storm water discharges from construction activity identified in § 122.26(b)(14)(x), the Director may include permit conditions that incorporate qualifying State, Tribal, or local erosion and sediment control program requirements by reference. A qualifying State, Tribal or local erosion and sediment control program is one that includes the elements listed in paragraph (s)(1) of this section and any additional requirements necessary to achieve the applicable technology-based standards of "best available technology" and "best conventional technology" based on the best professional judgment of the permit writer.

7. Add § 122.62(a)(14) to read as follows:

§ 122.62 Modification or revocation and reissuance of permits (applicable to State programs, see § 123.25).

* * * * *

(a) * * *

(14) For a small MS4, to include an effluent limitation requiring implementation of a minimum control measure or measures as specified in § 122.34(b) when:

(i) The permit does not include such measure(s) based upon the

determination that another entity was responsible for implementation of the requirement(s); and

(ii) The other entity fails to implement measure(s) that satisfy the requirement(s).

* * * * *

8. Revise Appendices F, G, H, and I to Part 122 to read as follows:

APPENDIX F TO PART 122.—INCORPORATED PLACES WITH POPULATIONS GREATER THAN 250,000 ACCORDING TO THE 1990 DECEN-NIAL CENSUS BY THE BUREAU OF THE CENSUS

State	Incorporated Place
Alabama	Birmingham.
Arizona	Phoenix. Tucson.
California	Long Beach. Los Angeles. Oakland. Sacramento. San Diego. San Francisco. San Jose. Denver.
Colorado	
District of Columbia	Jacksonville.
Florida	Miami. Tampa. Atlanta.
Georgia	Chicago.
Illinois	Indianapolis.
Indiana	Wichita.
Kansas	Louisville.
Kentucky	New Orleans.
Louisiana	Baltimore.
Maryland	Boston.
Massachusetts	Detroit.
Michigan	Minneapolis.
Minnesota	St. Paul. Kansas City. St. Louis.
Missouri	Omaha.
Nebraska	Newark.
New Jersey	Albuquerque.
New Mexico	Buffalo. Bronx Borough. Brooklyn Borough. Manhattan Borough. Queens Borough. Staten Island Bor- ough.
New York	Charlotte.
North Carolina	Cincinnati.
Ohio	Cleveland. Columbus. Toledo.
Oklahoma	Oklahoma City. Tulsa.
Oregon	Portland.
Pennsylvania	Philadelphia. Pittsburgh.
Tennessee	Memphis. Nashville/Davidson.
Texas	Austin. Dallas. El Paso. Fort Worth. Houston.

APPENDIX F TO PART 122.—INCORPORATED PLACES WITH POPULATIONS GREATER THAN 250,000 ACCORDING TO THE 1990 DECENNIAL CENSUS BY THE BUREAU OF THE CENSUS—Continued

State	Incorporated Place
Virginia	San Antonio. Norfolk. Virginia Beach.
Washington	Seattle.
Wisconsin	Milwaukee.

APPENDIX G TO PART 122.—INCORPORATED PLACES WITH POPULATIONS GREATER THAN 100,000 BUT LESS THAN 250,000 ACCORDING TO THE 1990 DECENNIAL CENSUS BY THE BUREAU OF THE CENSUS

State	Incorporated place
Alabama	Huntsville. Mobile. Montgomery.
Alaska	Anchorage.
Arizona	Mesa. Tempe.
Arkansas	Little Rock.
California	Anaheim. Bakersfield. Berkeley. Chula Vista. Concord. El Monte. Escondido. Fremont. Fresno. Fullerton. Garden Grove. Glendale. Hayward. Huntington Beach. Inglewood. Irvine. Modesto. Moreno Valley. Oceanside. Ontario. Orange. Aurora.
Colorado	

APPENDIX G TO PART 122.—INCORPORATED PLACES WITH POPULATIONS GREATER THAN 100,000 BUT LESS THAN 250,000 ACCORDING TO THE 1990 DECENNIAL CENSUS BY THE BUREAU OF THE CENSUS—Continued

State	Incorporated place
Connecticut	Bridgeport. Hartford. New Haven. Stamford. Waterbury.
Florida	Fort Lauderdale. Hialeah. Hollywood. Orlando. St. Petersburg. Tallahassee.
Georgia	Columbus. Macon. Savannah.
Idaho	Boise City.
Illinois	Peoria. Rockford.
Indiana	Evansville. Fort Wayne. Gary. South Bend.
Iowa	Cedar Rapids. Davenport. Des Moines.
Kansas	Kansas City. Topeka.
Kentucky	Lexington-Fayette.
Louisiana	Baton Rouge. Shreveport.
Massachusetts	Springfield. Worcester.
Michigan	Ann Arbor. Flint. Grand Rapids. Lansing. Livonia. Sterling Heights. Warren.
Mississippi	Jackson.
Missouri	Independence. Springfield.
Nebraska	Lincoln.
Nevada	Las Vegas. Reno.

APPENDIX G TO PART 122.—INCORPORATED PLACES WITH POPULATIONS GREATER THAN 100,000 BUT LESS THAN 250,000 ACCORDING TO THE 1990 DECENNIAL CENSUS BY THE BUREAU OF THE CENSUS—Continued

State	Incorporated place
New Jersey	Elizabeth. Jersey City. Paterson.
New York	Albany. Rochester. Syracuse. Yonkers.
North Carolina	Durham. Greensboro. Raleigh. Winston-Salem.
Ohio	Akron. Dayton. Youngstown.
Oregon	Eugene.
Pennsylvania	Allentown. Erie. Providence.
Rhode Island	Columbia.
South Carolina	Chattanooga. Knoxville.
Texas	Abilene. Amarillo. Arlington. Beaumont. Corpus Christi. Garland. Irving. Laredo. Lubbock. Mesquite. Pasadena. Plano. Waco.
Utah	Salt Lake City.
Virginia	Alexandria. Chesapeake. Hampton. Newport News. Portsmouth. Richmond. Roanoke.
Washington	Spokane.
Wisconsin	Tacoma. Madison.

APPENDIX H TO PART 122.—COUNTIES WITH UNINCORPORATED URBANIZED AREAS WITH A POPULATION OF 250,000 OR MORE ACCORDING TO THE 1990 DECENNIAL CENSUS BY THE BUREAU OF THE CENSUS

State	County	Unincorporated urbanized population
California	Los Angeles	886,780
	Sacramento	594,889
	San Diego	250,414
Delaware	New Castle	296,996
Florida	Dade	1,014,504
Georgia	DeKalb	448,686
Hawaii	Honolulu ¹	114,506
Maryland	Anne Arundel	344,654
	Baltimore	627,593
	Montgomery	599,028

APPENDIX H TO PART 122.—COUNTIES WITH UNINCORPORATED URBANIZED AREAS WITH A POPULATION OF 250,000 OR MORE ACCORDING TO THE 1990 DECENNIAL CENSUS BY THE BUREAU OF THE CENSUS—Continued

State	County	Unincorporated urbanized population
Texas	Prince George's	494,369
	Harris	729,206
Utah	Salt Lake	270,989
Virginia	Fairfax	760,730
Washington	King	520,468

¹ County was previously listed in this appendix; however, population dropped to below 250,000 in the 1990 Census.

APPENDIX I TO PART 122.—COUNTIES WITH UNINCORPORATED URBANIZED AREAS GREATER THAN 100,000 BUT LESS THAN 250,000 ACCORDING TO THE 1990 DECENNIAL CENSUS BY THE BUREAU OF THE CENSUS

State	County	Unincorporated urbanized population
Alabama	Jefferson	78,608
Arizona	Pima	162,202
California	Alameda	115,082
	Contra Costa	131,082
	Kern	128,503
	Orange	223,081
	Riverside	166,509
	San Bernardino	162,202
Colorado	Arapahoe	103,248
Florida	Broward	142,329
	Escambia	167,463
	Hillsborough	398,593
	Lee	102,337
	Manatee	123,828
	Orange	378,611
	Palm Beach	360,553
	Pasco	148,907
	Pinellas	255,772
	Polk	121,528
	Sarasota	172,600
	Seminole	127,873
Georgia	Clayton	133,237
	Cobb	322,595
	Fulton	127,776
	Gwinnett	237,305
	Richmond	126,476
Kentucky	Jefferson	239,430
Louisiana	East Baton Rouge	102,539
	Parish	331,307
	Jefferson Parish	
Maryland	Howard	157,972
North Carolina	Cumberland	146,827
Nevada	Clark	327,618
Oregon	Multnomah ¹	52,923
	Washington	116,687
South Carolina	Greenville	147,464
	Richland	130,589
Virginia	Arlington	170,936
	Chesterfield	174,488
	Henrico	201,367
	Prince William	157,131
Washington	Pierce	258,530
	Snohomish	157,218

¹ County was previously listed in this appendix; however, population dropped to below 100,000 in the 1990 Census.

PART 123—STATE PROGRAM REQUIREMENTS

1. The authority citation for part 123 continues to read as follows:

Authority: The Clean Water Act, 33 U.S.C. 1251 *et seq.*

2. Amend § 123.25 by removing the word “and” at the end of paragraph (a)(37), by removing the period at the end of paragraph (a)(38) and adding a

semicolon in its place, and by adding paragraphs (a)(39) through (a)(45) to read as follows:

§ 123.25 Requirements for permitting.

(a) * * *

(39) § 122.30 (What are the objectives of the storm water regulations for small MS4s?);

(40) § 122.31 (For Indian Tribes only) (As a Tribe, what is my role under the NPDES storm water program?);

(41) § 122.32 (As an operator of a small MS4, am I regulated under the NPDES storm water program?);

(42) § 122.33 (If I am an operator of a regulated small MS4, how do I apply for an NPDES permit? When do I have to apply?);

(43) § 122.34 (As an operator of a regulated small MS4, what will my NPDES MS4 storm water permit require?);

(44) § 122.35 (As an operator of a regulated small MS4, may I share the responsibility to implement the minimum control measures with other entities?); and

(45) § 122.36 (As an operator of a regulated small MS4, what happens if I don't comply with the application or permit requirements in §§ 122.33 through 122.35?).

* * * * *

3. Add § 123.35 to subpart B to read as follows:

§ 123.35 As the NPDES Permitting Authority for regulated small MS4s, what is my role?

(a) You must comply with the requirements for all NPDES permitting authorities under Parts 122, 123, 124, and 125 of this chapter. (This section is meant only to supplement those requirements and discuss specific issues related to the small MS4 storm water program.)

(b) You must develop a process, as well as criteria, to designate small MS4s other than those described in § 122.32(a)(1) of this chapter, as regulated small MS4s to be covered under the NPDES storm water discharge control program. This process must include the authority to designate a small MS4 waived under paragraph (d) of this section if circumstances change. EPA may make designations under this section if a State or Tribe fails to comply with the requirements listed in this paragraph. In making designations of small MS4s, you must:

(1)(i) Develop criteria to evaluate whether a storm water discharge results in or has the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

(ii) Guidance: For determining other significant water quality impacts, EPA recommends a balanced consideration of the following designation criteria on

a watershed or other local basis: discharge to sensitive waters, high growth or growth potential, high population density, contiguity to an urbanized area, significant contributor of pollutants to waters of the United States, and ineffective protection of water quality by other programs;

(2) Apply such criteria, at a minimum, to any small MS4 located outside of an urbanized area serving a jurisdiction with a population density of at least 1,000 people per square mile and a population of at least 10,000;

(3) Designate any small MS4 that meets your criteria by December 9, 2002. You may wait until December 8, 2004 to apply the designation criteria on a watershed basis if you have developed a comprehensive watershed plan. You may apply these criteria to make additional designations at any time, as appropriate; and

(4) Designate any small MS4 that contributes substantially to the pollutant loadings of a physically interconnected municipal separate storm sewer that is regulated by the NPDES storm water program.

(c) You must make a final determination within 180 days from receipt of a petition under § 122.26(f) of this chapter (or analogous State or Tribal law). If you do not do so within that time period, EPA may make a determination on the petition.

(d) You must issue permits consistent with §§ 122.32 through 122.35 of this chapter to all regulated small MS4s. You may waive or phase in the requirements otherwise applicable to regulated small MS4s, as defined in § 122.32(a)(1) of this chapter, under the following circumstances:

(1) You may waive permit coverage for each small MS4s in jurisdictions with a population under 1,000 within the urbanized area where all of the following criteria have been met:

(i) Its discharges are not contributing substantially to the pollutant loadings of a physically interconnected regulated MS4 (see paragraph (b)(4) of this section); and

(ii) If the small MS4 discharges any pollutant(s) that have been identified as a cause of impairment of any water body to which it discharges, storm water controls are not needed based on wasteload allocations that are part of an EPA approved or established "total maximum daily load" (TMDL) that address the pollutant(s) of concern.

(2) You may waive permit coverage for each small MS4 in jurisdictions with a population under 10,000 where all of the following criteria have been met:

(i) You have evaluated all waters of the U.S., including small streams,

tributaries, lakes, and ponds, that receive a discharge from the MS4 eligible for such a waiver.

(ii) For all such waters, you have determined that storm water controls are not needed based on wasteload allocations that are part of an EPA approved or established TMDL that addresses the pollutant(s) of concern or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the pollutant(s) of concern.

(iii) For the purpose of paragraph (d)(2)(ii) of this section, the pollutant(s) of concern include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the MS4.

(iv) You have determined that current and future discharges from the MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts.

(v) Guidance: To help determine other significant water quality impacts, EPA recommends a balanced consideration of the following criteria on a watershed or other local basis: discharge to sensitive waters, high growth or growth potential, high population or commercial density, significant contributor of pollutants to waters of the United States, and ineffective protection of water quality by other programs.

(3) You may phase in permit coverage for small MS4s serving jurisdictions with a population under 10,000 on a schedule consistent with a State watershed permitting approach. Under this approach, you must develop and implement a schedule to phase in permit coverage for approximately 20 percent annually of all small MS4s that qualify for such phased-in coverage. Under this option, all regulated small MS4s are required to have coverage under an NPDES permit by no later than March 8, 2007. Your schedule for phasing in permit coverage for small MS4s must be approved by the Regional Administrator no later than December 10, 2001.

(4) If you choose to phase in permit coverage for small MS4s in jurisdictions with a population under 10,000, in accordance with paragraph (d)(3) of this section, you may also provide waivers in accordance with paragraphs (d)(1) and (d)(2) of this section pursuant to your approved schedule.

(5) If you do not have an approved schedule for phasing in permit coverage, you must make a determination whether to issue an NPDES permit or allow a waiver in accordance with paragraph (d)(1) or (d)(2) of this section, for each eligible MS4 by December 9, 2002.

(6) You must periodically review any waivers granted in accordance with paragraph (d)(2) of this section to determine whether any of the information required for granting the waiver has changed. At a minimum, you must conduct such a review once every five years. In addition, you must consider any petition to review any waiver when the petitioner provides evidence that the information required for granting the waiver has substantially changed.

(e) You must specify a time period of up to 5 years from the date of permit issuance for operators of regulated small MS4s to fully develop and implement their storm water program.

(f) You must include the requirements in §§ 122.33 through 122.35 of this chapter in any permit issued for regulated small MS4s or develop permit limits based on a permit application submitted by a regulated small MS4. (You may include conditions in a regulated small MS4 NPDES permit that direct the MS4 to follow an existing qualifying local program's requirements, as a way of complying with some or all of the requirements in § 122.34(b) of this chapter. See § 122.34(c) of this chapter. Qualifying local, State or Tribal program requirements must impose, at a minimum, the relevant requirements of § 122.34(b) of this chapter.)

(g) If you issue a general permit to authorize storm water discharges from small MS4s, you must make available a menu of BMPs to assist regulated small MS4s in the design and implementation of municipal storm water management programs to implement the minimum

measures specified in § 122.34(b) of this chapter. EPA plans to develop a menu of BMPs that will apply in each State or Tribe that has not developed its own menu. Regardless of whether a menu of BMPs has been developed by EPA, EPA encourages State and Tribal permitting authorities to develop a menu of BMPs that is appropriate for local conditions. EPA also intends to provide guidance on developing BMPs and measurable goals and modify, update, and supplement such guidance based on the assessments of the NPDES MS4 storm water program and research to be conducted over the next thirteen years.

(h)(1) You must incorporate any additional measures necessary to ensure effective implementation of your State or Tribal storm water program for regulated small MS4s.

(2) Guidance: EPA recommends consideration of the following:

(i) You are encouraged to use a general permit for regulated small MS4s;

(ii) To the extent that your State or Tribe administers a dedicated funding source, you should play an active role in providing financial assistance to operators of regulated small MS4s;

(iii) You should support local programs by providing technical and programmatic assistance, conducting research projects, performing watershed monitoring, and providing adequate legal authority at the local level;

(iv) You are encouraged to coordinate and utilize the data collected under several programs including water quality management programs, TMDL programs, and water quality monitoring programs;

(v) Where appropriate, you may recognize existing responsibilities among governmental entities for the control measures in an NPDES small MS4 permit (see § 122.35(b) of this chapter); and

(vi) You are encouraged to provide a brief (e.g., two page) reporting format to facilitate compiling and analyzing data from submitted reports under § 122.34(g)(3) of this chapter. EPA intends to develop a model form for this purpose.

PART 124—PROCEDURES FOR DECISIONMAKING

1. The authority citation for part 124 continues to read as follows:

Authority: Resource Conservation and Recovery Act, 42 U.S.C. 6901 *et seq.*; Safe Drinking Water Act, 42 U.S.C. 300(f) *et seq.*; Clean Water Act, 33 U.S.C. 1251 *et seq.*; Clean Air Act, 42 U.S.C. 7401 *et seq.*

2. Revise § 124.52(c) to read as follows:

§ 124.52 Permits required on a case-by-case basis.

* * * * *

(c) Prior to a case-by-case determination that an individual permit is required for a storm water discharge under this section (see § 122.26(a)(1)(v), (c)(1)(v), and (a)(9)(iii) of this chapter), the Regional Administrator may require the discharger to submit a permit application or other information regarding the discharge under section 308 of the CWA. In requiring such information, the Regional Administrator shall notify the discharger in writing and shall send an application form with the notice. The discharger must apply for a permit within 180 days of notice, unless permission for a later date is granted by the Regional Administrator. The question whether the initial designation was proper will remain open for consideration during the public comment period under § 124.11 or § 124.118 and in any subsequent hearing.

[FR Doc. 99-29181 Filed 12-7-99; 8:45 am]

BILLING CODE 6560-50-P

Senate Bill No. 790

CHAPTER 620

An act to amend Section 30916 of the Public Resources Code, and to amend Section 10540 of, and to add Part 2.3 (commencing with Section 10560) to Division 6 of, the Water Code, relating to resources.

[Approved by Governor October 11, 2009. Filed with
Secretary of State October 11, 2009.]

LEGISLATIVE COUNSEL'S DIGEST

SB 790, Pavley. Resources: water quality: stormwater resource plans.

(1) The Watershed, Clean Beaches, and Water Quality Act authorizes the Water Resources Control Board, in consultation with the State Coastal Conservancy, to award grants to public agencies and nonprofit organizations for projects designed to restore and protect the water quality and environment of coastal waters, estuaries, bays, and near shore waters, including, among other things, a project to make improvements to, or upgrades or conversions of, existing sewer collection systems and septic systems for the restoration and protection of coastal water quality.

This bill would also authorize grants for projects designed to implement or promote low-impact development for new or existing developments that will contribute to the improvement of water quality or reduce stormwater runoff and for projects designed to implement specified stormwater resource plans.

(2) Under existing law, the State Water Resources Control Board and the California regional water quality control boards prescribe waste discharge requirements for the discharge of stormwater in accordance with the national pollutant discharge elimination system (NPDES) permit program and the Porter-Cologne Water Quality Control Act. Existing law authorizes a regional water management group, as defined, to adopt an integrated regional water management plan that addresses specified matters.

This bill would authorize a city, county, or special district to develop, jointly or individually, stormwater resource plans that meet certain standards. The bill would authorize a regional water management group to coordinate its planning activities to address or incorporate into its plan any stormwater resource planning that is undertaken pursuant to the bill's provisions.

The people of the State of California do enact as follows:

SECTION 1. Section 30916 of the Public Resources Code is amended to read:

30916. (a) Upon appropriation by the Legislature, funds provided under this chapter may be used by the board, in consultation with the State Coastal Conservancy, to award grants not to exceed five million dollars (\$5,000,000) per project to public agencies and nonprofit organizations for the purposes of this chapter. Grants may be awarded for any of the following projects:

(1) A project designed to improve water quality at public beaches and to make improvements for the purpose of ensuring that coastal waters adjacent to public beaches meet the bacteriological standards set forth in Article 2 (commencing with Section 115875) of Chapter 5 of Part 10 of Division 104 of the Health and Safety Code.

(2) A project to make improvements to, or upgrades or conversions of, existing sewer collection systems and septic systems for the restoration and protection of coastal water quality.

(3) A project designed to implement stormwater and runoff pollution reduction and prevention programs, or for the implementation of best management practices, for the restoration and protection of coastal water quality.

(4) A project designed to implement or promote low-impact development for new or existing developments that will contribute to the improvement of water quality or reduce stormwater runoff.

(5) A project designed to implement a stormwater resource plan prepared pursuant to Part 2.3 (commencing with Section 10560) of Division 6 of the Water Code.

(b) The projects funded pursuant to this chapter shall be consistent with the state's nonpoint source control program, as revised to meet the requirements of Division 20 (commencing with Section 30000), Section 6217 of the federal Coastal Zone Act Reauthorization Amendments of 1990, Section 319 of the federal Clean Water Act (33 U.S.C. Sec. 1329), Division 7 (commencing with Section 13000) of the Water Code, and the California Coastal Commission.

(c) The projects funded pursuant to this chapter shall demonstrate the capability of contributing to sustained, long-term water quality or environmental restoration or protection benefits for a period of 20 years, address the causes of degradation, rather than the symptoms, and be consistent with water quality and resource protection plans prepared, implemented, or adopted by the board, the applicable regional water quality control board, and the State Coastal Conservancy.

(d) An applicant for funds under this chapter shall be required to submit to the board a monitoring and reporting plan that does all of the following:

(1) Identifies the nonpoint source or sources of pollution to be prevented or reduced by the project.

(2) Describes the baseline water quality or environmental quality to be addressed.

(3) Describes the manner in which the project will be effective in preventing or reducing pollution and in demonstrating the desired environmental results.

(4) Describes the monitoring program, including, but not limited to, the methodology, and the frequency and duration of monitoring.

(e) Upon completion of the project, a recipient of funds under this chapter shall submit a report to the board that summarizes the completed activities and indicates whether the purposes of the project have been met. The report shall include information collected by the recipient in accordance with the project monitoring and reporting plan, including a determination of the effectiveness of the project in preventing or reducing pollution, and the results of the monitoring program. The board shall make the report available to the public, watershed groups, and federal, state, and local agencies.

(f) Not more than 25 percent of a grant may be awarded in advance of actual expenditure.

(g) An applicant for funds under this chapter shall inform the board of any necessary public agency approvals, entitlements, and permits that may be necessary to implement the project. The application shall certify to the board, at the appropriate time, that those approvals, entitlements, and permits have been granted.

(h) Where recovery plans for coho salmon, steelhead trout, or other threatened or endangered aquatic species exist, projects funded under this chapter shall be consistent with those plans and, to the extent feasible, shall seek to implement actions specified in those plans.

(i) The board shall appoint a Clean Beaches Task Force comprised of individuals representing the breadth and diversity of coastal communities. All proposals for funding shall be reviewed by the task force. The task force may recommend projects to the board for funding consideration.

SEC. 2. Section 10540 of the Water Code is amended to read:

10540. (a) A regional water management group may prepare and adopt an integrated regional water management plan in accordance with this part.

(b) A regional water management group may coordinate its planning activities to address or incorporate all or part of any of the following actions of its members into its plan:

(1) Groundwater management planning pursuant to Part 2.75 (commencing with Section 10750) or other specific groundwater management authority.

(2) Urban water management planning pursuant to Part 2.6 (commencing with Section 10610).

(3) The preparation of a water supply assessment required pursuant to Part 2.10 (commencing with Section 10910).

(4) Agricultural water management planning pursuant to Part 2.8 (commencing with Section 10800).

(5) City and county general planning pursuant to Section 65350 of the Government Code.

(6) Stormwater resource planning that is undertaken pursuant to Part 2.3 (commencing with Section 10560).

(7) Other water resource management planning, including flood protection, watershed management planning, and multipurpose program planning.

(c) At a minimum, all plans shall address all of the following:

(1) Protection and improvement of water supply reliability, including identification of feasible agricultural and urban water use efficiency strategies.

(2) Identification and consideration of the drinking water quality of communities within the area of the plan.

(3) Protection and improvement of water quality within the area of the plan, consistent with the relevant basin plan.

(4) Identification of any significant threats to groundwater resources from overdrafting.

(5) Protection, restoration, and improvement of stewardship of aquatic, riparian, and watershed resources within the region.

(6) Protection of groundwater resources from contamination.

(7) Identification and consideration of the water-related needs of disadvantaged communities in the area within the boundaries of the plan.

(d) This section does not obligate a local agency to fund the implementation of any project or program.

SEC. 3. Part 2.3 (commencing with Section 10560) is added to Division 6 of the Water Code, to read:

PART 2.3. STORMWATER RESOURCE PLANNING

10560. This part shall be known and may be cited as “The Stormwater Resource Planning Act.”

10561. The Legislature hereby finds and declares all of the following:

(a) In many parts of the state stormwater is a source of surface water and groundwater contamination, contributing to a loss of usable water supplies, and the pollution and impairment of rivers, lakes, streams, and coastal waters.

(b) Improved management of stormwater, including, but not limited to, pollution prevention and source control, can improve water quality and increase water supplies for beneficial uses and the environment.

(c) Most of California’s current stormwater drainage systems are designed to capture and convey water away from people and property rather than capturing that water for beneficial uses.

(d) Historical patterns of precipitation are predicted to change and an increasing amount of California’s water is predicted to fall not as snow in the mountains, but as rain in other areas of the state. This will likely have a profound and transforming effect on California’s hydrologic cycle and much of that water will no longer be captured by California’s reservoirs, many of which are located to capture snow melt.

(e) Stormwater, properly managed, can contribute significantly to local water supplies through onsite storage and reuse, or letting it percolate into the ground to recharge groundwater, thereby increasing available supplies of drinking water.

(f) New developments and redevelopments should be designed to be consistent with low-impact development principles to improve the retention, reuse, and percolation of stormwater onsite.

(g) Stormwater can be managed to achieve environmental and societal benefits such as wetland creation, riverside habitats, instream flows, and an increase in urban green space.

(h) Stormwater management through multiobjective projects can achieve additional benefits, including augmenting recreation opportunities for communities, increased tree canopy, reduced urban heat island effect, and improved air quality.

10562. (a) A city, county, or special district, either individually or jointly, may develop a stormwater resource plan pursuant to this part.

(b) Stormwater resource plans shall:

(1) Be developed on a watershed basis.

(2) Provide for multiple benefit project design to maximize water supply, water quality, and environmental and other community benefits.

(3) Provide for community participation in plan development and implementation.

(4) Be consistent with, and assist in, compliance with total maximum daily load (TMDL) implementation plans and applicable national pollutant discharge elimination system (NPDES) permits.

(5) Be consistent with all applicable waste discharge permits.

(6) Be consistent with any applicable integrated regional water management plan.

(c) The proposed or adopted plan shall meet the standards outlined in this section. The plan need not be referred to as a “stormwater resource plan.” Existing planning documents may be utilized as a functionally equivalent plan, including, but not limited to, watershed management plans, integrated resource plans, urban water management plans, or similar plans. If a planning document does not meet the standards of this section, a collection of local and regional plans may constitute a functional equivalent.

(d) Stormwater resource plans shall identify all of the following:

(1) Opportunities to augment local water supply through groundwater recharge or storage for beneficial reuse of stormwater.

(2) Opportunities for source control for both pollution and stormwater runoff volume, onsite and local infiltration, and reuse of stormwater.

(3) Projects to reestablish natural water drainage treatment and infiltration systems, or mimic natural system functions to the maximum extent feasible.

(4) Opportunities to develop or enhance habitat and open space through stormwater management, including wetlands, riverside habitats, parkways, and parks.

(5) Design criteria and best management practices to prevent stormwater pollution and increase effective stormwater management for new and upgraded infrastructure and residential, commercial, industrial, and public development. These design criteria and best management practices shall accomplish all of the following:

(A) Reduce effective impermeability within a watershed by creating permeable surfaces and directing stormwater to permeable surfaces, retention basins, cisterns, and other storage for beneficial reuse.

(B) Increase water storage for beneficial use through a variety of on-site storage techniques.

(C) Increase groundwater supplies through infiltration, where appropriate and feasible.

(D) Support low-impact development for new and upgraded infrastructure and development using low-impact techniques.

(6) Activities that generate or contribute to the pollution of stormwater, or that impair the effective beneficial use of stormwater.

(7) Projects and programs to ensure the effective implementation of the stormwater resource plan pursuant to this part and achieve multiple benefits.

(8) Ordinances or other mechanisms necessary to ensure the effective implementation of the stormwater resource plan pursuant to this part.

10563. (a) Nothing in this part interferes with or prevents the exercise of authority by a public agency to carry out its programs, projects, or responsibilities.

(b) Nothing in this part affects requirements imposed under any other provision of law.

10564. For purposes of this part, “low-impact development” means new development or redevelopment projects that employ natural and constructed features that reduce the rate of stormwater runoff, filter out pollutants, facilitate stormwater storage onsite, infiltrate stormwater into the ground to replenish groundwater supplies, or improve the quality of receiving groundwater and surface water.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 22 2002

OFFICE OF
WATER

MEMORANDUM

SUBJECT: Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs

FROM: Robert H. Wayland, III, Director
Office of Wetlands, Oceans and Watersheds

A handwritten signature in blue ink, appearing to read "Robert H. Wayland, III".

James A. Hanlon, Director
Office of Wastewater Management

A handwritten signature in black ink, appearing to read "James A. Hanlon".

TO: Water Division Directors
Regions 1 - 10

This memorandum clarifies existing EPA regulatory requirements for, and provides guidance on, establishing wasteload allocations (WLAs) for storm water discharges in total maximum daily loads (TMDLs) approved or established by EPA. It also addresses the establishment of water quality-based effluent limits (WQBELs) and conditions in National Pollutant Discharge Elimination System (NPDES) permits based on the WLAs for storm water discharges in TMDLs. The key points presented in this memorandum are as follows:

NPDES-regulated storm water discharges must be addressed by the wasteload allocation component of a TMDL. See 40 C.F.R. § 130.2(h).

NPDES-regulated storm water discharges may not be addressed by the load allocation (LA) component of a TMDL. See 40 C.F.R. § 130.2 (g) & (h).

Storm water discharges from sources that are not currently subject to NPDES regulation may be addressed by the load allocation component of a TMDL. See 40 C.F.R. § 130.2(g).

It may be reasonable to express allocations for NPDES-regulated storm water discharges from multiple point sources as a single categorical wasteload allocation when data and information are insufficient to assign each source or outfall individual WLAs. See 40 C.F.R. § 130.2(i). In cases where wasteload allocations

are developed for categories of discharges, these categories should be defined as narrowly as available information allows.

The WLAs and LAs are to be expressed in numeric form in the TMDL. See 40 C.F.R. § 130.2(h) & (i). EPA expects TMDL authorities to make separate allocations to NPDES- regulated storm water discharges (in the form of WLAs) and unregulated storm water (in the form of LAs). EPA recognizes that these allocations might be fairly rudimentary because of data limitations and variability in the system.

NPDES permit conditions must be consistent with the assumptions and requirements of available WLAs. See 40 C.F.R. § 122.44(d)(1)(vii)(B).

WQBELs for NPDES-regulated storm water discharges that implement WLAs in TMDLs may be expressed in the form of best management practices (BMPs) under specified circumstances. See 33 U.S.C. § 1342(p)(3)(B)(iii); 40 C.F.R. § 122.44(k)(2)&(3). If BMPs alone adequately implement the WLAs, then additional controls are not necessary.

EPA expects that most WQBELs for NPDES-regulated municipal and small construction storm water discharges will be in the form of BMPs, and that numeric limits will be used only in rare instances.

When a non-numeric water quality-based effluent limit is imposed, the permit's administrative record, including the fact sheet when one is required, needs to support that the BMPs are expected to be sufficient to implement the WLA in the TMDL. See 40 C.F.R. §§ 124.8, 124.9 & 124.18.

The NPDES permit must also specify the monitoring necessary to determine compliance with effluent limitations. See 40 C.F.R. § 122.44(i). Where effluent limits are specified as BMPs, the permit should also specify the monitoring necessary to assess if the expected load reductions attributed to BMP implementation are achieved (e.g., BMP performance data).

The permit should also provide a mechanism to make adjustments to the required BMPs as necessary to ensure their adequate performance.

This memorandum is organized as follows:

- (I). Regulatory basis for including NPDES-regulated storm water discharges in WLAs in TMDLs;
- (II). Options for addressing storm water in TMDLs; and

(III). Determining effluent limits in NPDES permits for storm water discharges consistent with the WLA

(I). Regulatory Basis for Including NPDES-regulated Storm Water Discharges in WLAs in TMDLs

As part of the 1987 amendments to the CWA, Congress added Section 402(p) to the Act to cover discharges composed entirely of storm water. Section 402(p)(2) of the Act requires permit coverage for discharges associated with industrial activity and discharges from large and medium municipal separate storm sewer systems (MS4), *i.e.*, systems serving a population over 250,000 or systems serving a population between 100,000 and 250,000, respectively. These discharges are referred to as Phase I MS4 discharges.

In addition, the Administrator was directed to study and issue regulations that designate additional storm water discharges, other than those regulated under Phase I, to be regulated in order to protect water quality. EPA issued regulations on December 8, 1999 (64 FR 68722), expanding the NPDES storm water program to include discharges from smaller MS4s (including all systems within “urbanized areas” and other systems serving populations less than 100,000) and storm water discharges from construction sites that disturb one to five acres, with opportunities for area-specific exclusions. This program expansion is referred to as Phase II.

Section 402(p) also specifies the levels of control to be incorporated into NPDES storm water permits depending on the source (industrial versus municipal storm water). Permits for storm water discharges associated with industrial activity are to require compliance with all applicable provisions of Sections 301 and 402 of the CWA, *i.e.*, all technology-based and water quality-based requirements. See 33 U.S.C. §1342(p)(3)(A). Permits for discharges from MS4s, however, “shall require controls to reduce the discharge of pollutants to the maximum extent practicable ... and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.” See 33 U.S.C. §1342(p)(3)(B)(iii).

Storm water discharges that are regulated under Phase I or Phase II of the NPDES storm water program are point sources that must be included in the WLA portion of a TMDL. See 40 C.F.R. § 130.2(h). Storm water discharges that are not currently subject to Phase I or Phase II of the NPDES storm water program are not required to obtain NPDES permits. 33 U.S.C. §1342(p)(1) & (p)(6). Therefore, for regulatory purposes, they are analogous to nonpoint sources and may be included in the LA portion of a TMDL. See 40 C.F.R. § 130.2(g).

(II). Options for Addressing Storm Water in TMDLs

Decisions about allocations of pollutant loads within a TMDL are driven by the quantity and quality of existing and readily available water quality data. The amount of storm water data available for a TMDL varies from location to location. Nevertheless, EPA expects TMDL authorities will make separate aggregate allocations to NPDES-regulated storm water discharges

(in the form of WLAs) and unregulated storm water (in the form of LAs). It may be reasonable to quantify the allocations through estimates or extrapolations, based either on knowledge of land use patterns and associated literature values for pollutant loadings or on actual, albeit limited, loading information. EPA recognizes that these allocations might be fairly rudimentary because of data limitations.

EPA also recognizes that the available data and information usually are not detailed enough to determine waste load allocations for NPDES-regulated storm water discharges on an outfall-specific basis. In this situation, EPA recommends expressing the wasteload allocation in the TMDL as either a single number for all NPDES-regulated storm water discharges, or when information allows, as different WLAs for different identifiable categories, e.g., municipal storm water as distinguished from storm water discharges from construction sites or municipal storm water discharges from City A as distinguished from City B. These categories should be defined as narrowly as available information allows (e.g., for municipalities, separate WLAs for each municipality and for industrial sources, separate WLAs for different types of industrial storm water sources or dischargers).

(III). Determining Effluent Limits in NPDES Permits for Storm Water Discharges Consistent with the WLA

Where a TMDL has been approved, NPDES permits must contain effluent limits and conditions consistent with the requirements and assumptions of the wasteload allocations in the TMDL. See 40 CFR § 122.44(d)(1)(vii)(B). Effluent limitations to control the discharge of pollutants generally are expressed in numerical form. However, in light of 33 U.S.C. §1342(p)(3)(B)(iii), EPA recommends that for NPDES-regulated municipal and small construction storm water discharges effluent limits should be expressed as best management practices (BMPs) or other similar requirements, rather than as numeric effluent limits. See *Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits*, 61 FR 43761 (Aug. 26, 1996). The Interim Permitting Approach Policy recognizes the need for an iterative approach to control pollutants in storm water discharges. Specifically, the policy anticipates that a suite of BMPs will be used in the initial rounds of permits and that these BMPs will be tailored in subsequent rounds.

EPA's policy recognizes that because storm water discharges are due to storm events that are highly variable in frequency and duration and are not easily characterized, only in rare cases will it be feasible or appropriate to establish numeric limits for municipal and small construction storm water discharges. The variability in the system and minimal data generally available make it difficult to determine with precision or certainty actual and projected loadings for individual dischargers or groups of dischargers. Therefore, EPA believes that in these situations, permit limits typically can be expressed as BMPs, and that numeric limits will be used only in rare instances.

Under certain circumstances, BMPs are an appropriate form of effluent limits to control pollutants in storm water. See 40 CFR § 122.44(k)(2) & (3). If it is determined that a BMP approach (including an iterative BMP approach) is appropriate to meet the storm water component of the TMDL, EPA recommends that the TMDL reflect this.

EPA expects that the NPDES permitting authority will review the information provided by the TMDL, see 40 C.F.R. § 122.44(d)(1)(vii)(B), and determine whether the effluent limit is appropriately expressed using a BMP approach (including an iterative BMP approach) or a numeric limit. Where BMPs are used, EPA recommends that the permit provide a mechanism to require use of expanded or better-tailored BMPs when monitoring demonstrates they are necessary to implement the WLA and protect water quality.

Where the NPDES permitting authority allows for a choice of BMPs, a discussion of the BMP selection and assumptions needs to be included in the permit's administrative record, including the fact sheet when one is required. 40 C.F.R. §§ 124.8, 124.9 & 124.18. For general permits, this may be included in the storm water pollution prevention plan required by the permit. See 40 C.F.R. § 122.28. Permitting authorities may require the permittee to provide supporting information, such as how the permittee designed its management plan to address the WLA(s). See 40 C.F.R. § 122.28. The NPDES permit must require the monitoring necessary to assure compliance with permit limitations, although the permitting authority has the discretion under EPA's regulations to decide the frequency of such monitoring. See 40 CFR § 122.44(i). EPA recommends that such permits require collecting data on the actual performance of the BMPs. These additional data may provide a basis for revised management measures. The monitoring data are likely to have other uses as well. For example, the monitoring data might indicate if it is necessary to adjust the BMPs. Any monitoring for storm water required as part of the permit should be consistent with the state's overall assessment and monitoring strategy.

The policy outlined in this memorandum affirms the appropriateness of an iterative, adaptive management BMP approach, whereby permits include effluent limits (e.g., a combination of structural and non-structural BMPs) that address storm water discharges, implement mechanisms to evaluate the performance of such controls, and make adjustments (i.e., more stringent controls or specific BMPs) as necessary to protect water quality. This approach is further supported by the recent report from the National Research Council (NRC), *Assessing the TMDL Approach to Water Quality Management* (National Academy Press, 2001). The NRC report recommends an approach that includes "adaptive implementation," i.e., "a cyclical process in which TMDL plans are periodically assessed for their achievement of water quality standards" . . . and adjustments made as necessary. *NRC Report* at ES-5.

This memorandum discusses existing requirements of the Clean Water Act (CWA) and codified in the TMDL and NPDES implementing regulations. Those CWA provisions and regulations contain legally binding requirements. This document describes these requirements; it does not substitute for those provisions or regulations. The recommendations in this memorandum are not binding; indeed, there may be other approaches that would be appropriate

in particular situations. When EPA makes a TMDL or permitting decision, it will make each decision on a case-by-case basis and will be guided by the applicable requirements of the CWA and implementing regulations, taking into account comments and information presented at that time by interested persons regarding the appropriateness of applying these recommendations to the particular situation. EPA may change this guidance in the future.

If you have any questions please feel free to contact us or Linda Boornazian, Director of the Water Permits Division or Charles Sutfin, Director of the Assessment and Watershed Protection Division.

cc:
Water Quality Branch Chiefs
Regions 1 - 10

Permit Branch Chiefs
Regions 1 - 10



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

NOV 12 2010

OFFICE OF
WATER

MEMORANDUM

SUBJECT: Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs"

FROM: James A. Hanlon, Director
Office of Wastewater Management

Denise Keehner, Director
Office of Wetlands, Oceans and Watersheds

TO: Water Management Division Directors
Regions 1 - 10

This memorandum updates aspects of EPA's November 22, 2002 memorandum from Robert H. Wayland, III, Director of the Office of Wetlands, Oceans and Watersheds, and James A. Hanlon, Director of the Office of Wastewater Management, on the subject of "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs" (hereafter "2002 memorandum").

Background

Section III of the 2002 memorandum "affirm[ed] the appropriateness of an iterative, adaptive management best management practices (BMP) approach" for improving stormwater management over time as permitting agencies, the regulated community, and other involved stakeholders gain more experience and knowledge. Since 2002, States and EPA have obtained considerable experience in developing TMDLs and WLAs that address stormwater sources. The technical capacity to monitor stormwater and its impacts on water quality has increased. In many areas, monitoring of the impacts of stormwater on water quality has become more sophisticated and widespread. Better information on the effectiveness of stormwater controls to reduce pollutant loadings and address water quality impairments is now available. In many parts of the country, permitting agencies have issued several rounds of permits for Phase I municipal separate storm sewer systems (MS4s), Phase II MS4s, and stormwater discharges associated with industrial activity, including stormwater from construction activities. Notwithstanding these developments, stormwater discharges remain a significant cause of water quality

impairment in many places, highlighting a continuing need for more useful WLAs and better NPDES permit provisions to restore impaired waters to their beneficial uses.

With this additional experience in mind, EPA is updating and revising the following four elements of the 2002 memorandum to better reflect current practices and trends in permits and WLAs for stormwater discharges:

- Providing numeric water quality-based effluent limitations in NPDES permits for stormwater discharges;
- Disaggregating stormwater sources in a WLA;
- Using surrogates for pollutant parameters when establishing targets for TMDL loading capacity; and
- Designating additional stormwater sources to regulate and treating load allocations as wasteload allocations for newly regulated stormwater sources.

EPA is currently reviewing other elements of the 2002 memorandum and will consider making appropriate revisions in the future.

Providing Numeric Water Quality-Based Effluent Limitations in NPDES Permits for Stormwater Discharges

In today's memorandum, EPA is revising the 2002 memorandum with respect to water quality-based effluent limitations (WQBELs) in stormwater permits. Since 2002, many NPDES authorities have documented the contributions of stormwater discharges to water quality impairment and have identified the need to include clearer permit requirements in order to address these impairments. Numeric WQBELs in stormwater permits can clarify permit requirements and improve accountability and enforceability. For the purpose of this memorandum, numeric WQBELs use numeric parameters such as pollutant concentrations, pollutant loads, or numeric parameters acting as surrogates for pollutants, such as stormwater flow volume or percentage or amount of impervious cover.

The CWA provides that stormwater permits for MS4 discharges shall contain controls to reduce the discharge of pollutants to the "maximum extent practicable" and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. CWA section 402(p)(3)(B)(iii). Under this provision, the NPDES permitting authority has the discretion to include requirements for reducing pollutants in stormwater discharges as necessary for compliance with water quality standards. *Defenders of Wildlife v. Browner*, 191 F.3d 1159, 1166 (9th Cir. 1999).

Where the NPDES authority determines that MS4 discharges have the reasonable potential to cause or contribute to a water quality standard excursion, EPA recommends that, where feasible, the NPDES permitting authority exercise its discretion to include numeric effluent limitations as necessary to meet water quality standards. The 2002

memorandum stated “EPA expects that most WQBELs for NPDES-regulated municipal and small construction stormwater discharges will be in the form of BMPs, and that numeric limitations will be used only in rare instances.” Those expectations have changed as the stormwater permit program has matured. EPA now recognizes that where the NPDES authority determines that MS4 discharges and/or small construction stormwater discharges have the reasonable potential to cause or contribute to water quality standards excursions, permits for MS4s and/or small construction stormwater discharges should contain numeric effluent limitations where feasible to do so. EPA recommends that NPDES permitting authorities use numeric effluent limitations where feasible as these types of effluent limitations create objective and accountable means for controlling stormwater discharges.

The Clean Water Act (CWA) requires that permits for stormwater discharges associated with industrial activity comply with section 301 of the Act, including the requirement under section 301(b)(1)(C) to contain WQBELs for any discharge that the permitting authority determines has the reasonable potential to cause or contribute to a water quality standard excursion. CWA section 402(p)(3)(A), 40 CFR 122.44(d)(1)(iii). When the permitting authority determines, using the procedures specified at 40 CFR 122.44(d)(1)(ii) that the discharge causes or has the reasonable potential to cause or contribute to an in-stream excursion of the water quality standards, the permit must contain effluent limits for that pollutant. EPA recommends that NPDES permitting authorities use numeric effluent limitations where feasible as these types of effluent limitations create objective and accountable means for controlling stormwater discharges.

Where WQBELs in permits for stormwater discharges from MS4s, small construction sites or industrial sites are expressed in the form of BMPs, the permit should contain objective and measurable elements (e.g., schedule for BMP installation or level of BMP performance). The objective and measurable elements should be included in permits as enforceable provisions. Permitting authorities should consider including numeric benchmarks for BMPs and associated monitoring protocols or specific protocols for estimating BMP effectiveness in stormwater permits. These benchmarks could be used as thresholds that would require the permittee to take additional action specified in the permit, such as evaluating the effectiveness of the BMPs, implementing and/or modifying BMPs, or providing additional measures to protect water quality.

If the State or EPA has established a TMDL for an impaired water that includes WLAs for stormwater discharges, permits for either industrial stormwater discharges or MS4 discharges must contain effluent limits and conditions consistent with the requirements and assumptions of the WLAs in the TMDL. See 40 CFR § 122.44(d)(1)(vii)(B). Where the WLA of a TMDL is expressed in terms of a surrogate pollutant parameter, then the corresponding permit can generally use the surrogate pollutant parameter in the WQBEL as well. Where the TMDL includes WLAs for stormwater sources that provide numeric pollutant load or numeric surrogate pollutant parameter objectives, the WLA should, where feasible, be translated into numeric WQBELs in the applicable stormwater permits.

The permitting authority's decision as to how to express the WQBEL(s), either as numeric effluent limitations or BMPs, including BMPs accompanied by numeric benchmarks, should be based on an analysis of the specific facts and circumstances surrounding the permit, and/or the underlying WLA, including the nature of the stormwater discharge, available data, modeling results or other relevant information. As discussed in the 2002 memorandum, the permit's administrative record needs to provide an adequate demonstration that, where a BMP-based approach to permit limitations is selected, the BMPs required by the permit will be sufficient to implement applicable WLAs. Improved knowledge of BMP effectiveness gained since 2002 should be reflected in the demonstration and supporting rationale that implementation of the BMPs will attain water quality standards and WLAs.

EPA's regulations at 40 CFR § 122.47 govern the use of compliance schedules in NPDES permits. Central among the requirements is that the effluent limitation(s) must be met "as soon as possible." 40 CFR 122.47(a)(1). EPA expects the permitting authority to include in the permit record a sound rationale for determining that any compliance schedule meets this requirement. Where a TMDL has been established and there is an accompanying implementation plan that provides a schedule for an MS4 to implement the TMDL, the permitting authority should consider the schedule as it decides whether and how to establish enforceable interim requirements and interim dates in the permit.

Lastly, NPDES permits must specify monitoring requirements necessary to determine compliance with effluent limitations. See CWA section 402(a)(2); 40 C.F.R. 122.44(i). Where WQBELs are expressed as BMPs, the permit must require adequate monitoring to determine if the BMPs are performing as necessary. When developing monitoring requirements, the NPDES authority should consider the variable nature of stormwater as well the availability of reliable and applicable field data describing the treatment efficiencies of the BMPs required and supporting modeling analysis.

Disaggregating Stormwater Sources in a WLA

As stated in the 2002 memorandum, EPA expects TMDL authorities will make separate aggregate allocations to NPDES-regulated storm water discharges (in the form of WLAs) and unregulated storm water (in the form of LAs). EPA also recognized that the available data and information usually are not detailed enough to determine waste load allocations for NPDES-regulated storm water discharges on an outfall-specific basis.

EPA still recognizes that decisions about allocations of pollutant loads within a TMDL are driven by quantity and quality of existing and readily available water quality data. However, today, TMDL writers may have better data or better access to data and, over time, may have gained more experience since 2002 in developing TMDLs and WLAs in a less aggregated manner. Moreover, since 2002, EPA has noted the difficulty of establishing clear, effective, and enforceable NPDES permit limitations for sources covered by WLAs that are expressed as single categorical or aggregated wasteload allocations.

Accordingly, for all these reasons, EPA recommends that WLAs for NPDES-regulated stormwater discharges should be disaggregated into specific categories (e.g., separate WLAs for MS4 and industrial stormwater discharges) to the extent feasible based on available data and/or modeling projections. In addition, these disaggregated WLAs should be defined as narrowly as available information allows (e.g., for MS4s, separate WLAs for each one; and, for industrial sources, separate WLAs for different sources or types of industrial sources or discharges.)

Where appropriate, EPA encourages permit writers to assign specific shares of the wasteload allocation to specific permittees during the permitting process.

Using Surrogate for Pollutant Parameters When Establishing Targets for TMDL Loading Capacity

Many waterbodies affected by stormwater discharges are listed as impaired under Section 303(d) due to biological degradation or habitat alteration, rather than for specific pollutants (e.g., metals, pathogens, sediment). Impairment can be due to pollutants where hydrologic changes such as quantity of flow and variation in flow regimes are important factors in their transport. Since the stormwater-source impairment is usually the result of the cumulative impact of multiple pollutants and physical effects, it may be difficult to identify a specific pollutant (or pollutants) causing the impairment. Using a surrogate parameter in developing wasteload allocations for waters impaired by stormwater sources may, at times, be the appropriate approach for restoring the waterbodies.

In the 2009 report *Urban Stormwater Management in the United States*, the National Research Council suggests: “A more straightforward way to regulate stormwater contributions to waterbody impairment would be to use flow or a surrogate, like impervious cover, as a measure of stormwater loading . . . Efforts to reduce stormwater flow will automatically achieve reductions in pollutant loading. Moreover, flow is itself responsible for additional erosion and sedimentation that adversely impacts surface water quality.”

Therefore, when developing TMDLs for receiving waters where stormwater sources are the primary source of impairment, it may be suitable to establish a numeric target for a surrogate pollutant parameter, such as stormwater flow volume or impervious cover, that would be expected to provide attainment of water quality standards. This is consistent with the TMDL regulations that specify that TMDLs can be expressed in terms of mass per time, toxicity or other appropriate measure (40 C.F.R. §130.2(i)).

Where a surrogate parameter is used, the TMDL document must demonstrate the linkage between the surrogate parameter and the documented impairment (e.g., biological degradation). In addition, the TMDL should provide supporting documentation to indicate that the surrogate pollutant parameter appropriately represents stormwater pollutant loadings. Monitoring is an essential undertaking to ensure that compliance with the effluent limitations occurs.

Recent examples of TMDLs using flow or impervious cover as surrogates for pollutants in setting TMDL loading targets include: the Eagleville Brook (CT) TMDL and the Barberry Creek (ME) TMDL which used impervious cover as a surrogate; and, the Potash Brook (VT) TMDL which used stormwater flow volume as a surrogate.

Designating Additional Stormwater Sources to Regulate and Treating Load Allocations as Wasteload Allocations for Newly Regulated Stormwater Sources

The 2002 memorandum states that “stormwater discharges from sources that are not currently subject to NPDES regulation may be addressed by the load allocation component of a TMDL.” Section 402(p)(2) of the Clean Water Act (CWA) requires industrial stormwater sources, certain municipal separate storm sewer systems, and other designated sources to be subject to NPDES permits. Section 402(p)(6) provides EPA with authority to identify additional stormwater discharges as needing a permit.

In addition to the stormwater discharges specifically identified as needing an NPDES permit, the CWA and the NPDES regulations allow for EPA and NPDES authorized States to designate, additional stormwater discharges for regulation. See 40 CFR 122.26 (a)(9)(i)(C), (a)(9)(i)(D), (b)(4)(iii), (b)(7)(iii), (b)(15)(ii) and 122.32(a)(2). Since 2002, EPA has become concerned that NPDES authorities have generally not adequately considered exercising these authorities to designate for NPDES permitting stormwater discharges that are currently not required to obtain permit coverage but that are significant enough to be identified in the load allocation component of a TMDL. Accordingly, EPA encourages permitting authorities to consider designation of stormwater sources in situations where coverage under NPDES permits would afford a more effective mechanism to reduce pollutants in stormwater discharges than available nonpoint source control methods.

In situations where a stormwater source addressed in a TMDL’s load allocation is not currently regulated by an NPDES permit but may be required to obtain an NPDES permit in the future, the TMDL writer should consider including language in the TMDL explaining that the allocation for the stormwater source is expressed in the TMDL as a “load allocation” contingent on the source remaining unpermitted, but that the “load allocation” would later be deemed a “wasteload allocation” if the stormwater discharge from the source were required to obtain NPDES permit coverage. Such language, while not legally required, would help ensure that the allocation is properly characterized by the permit writer should the source’s regulatory status change. This will help ensure that effluent limitations in a NPDES permit applicable to the newly permitted source are consistent with the requirements and assumptions of the TMDL’s allocation to that source.

Such recharacterization of a load allocation as a wasteload allocation would not automatically require resubmission of the TMDL to EPA for approval. However, if the TMDL’s allocation for the newly permitted source had been part of a single aggregated or gross load allocation for all unregulated stormwater sources, it may be appropriate for the NPDES permit authority to determine a wasteload allocation and corresponding

effluent limitation specific to the newly permitted stormwater source. Any additional analysis used to refine the allocation should be included in the administrative record for the permit. In such cases, the record should describe the basis for

(1) recharacterizing the load allocation as a wasteload allocation for this source and
(2) determining that the permit's effluent limitations are consistent with the assumptions and requirements of this recharacterized wasteload allocation. For purposes of this discussion, it is assumed that the permit writer's additional analysis or recharacterization of the load allocation as a wasteload allocation does not change the TMDL's overall loading cap. Any change in a TMDL loading cap would have to be resubmitted for EPA approval.

If you have any questions please feel free to contact us or Linda Boornazian, Director of the Water Permits Division or Benita Best-Wong, Director of the Assessment and Watershed Protection Division.

cc: Association of State and Interstate Water Pollution Control Administrators
Water Quality Branch Chiefs, Regions 1 – 10
Permits Branch Chiefs, Regions 1 – 10