FACT SHEET/TECHNICAL REPORT

FOR

SDRWQCB ORDER NO. 2001-01

MUNICIPAL STORM WATER PERMIT
FOR
SAN DIEGO COUNTY AND CITIES

San Diego Regional Water Quality Control Board
November 6, 2001

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LIST OF ABBREVIATIONS

BAT	Best Available Technology
BMP	Best Management Practice
CEQA	California Environmental Quality Act
CWA	Clean Water Act
CWC	California Water Code
MEP	Maximum Extent Practicable
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
NURP	Nationwide Urban Runoff Program
SANDAG	San Diego Association of Governments
SDRWQCB	San Diego Regional Water Quality Control Board
SUSMP	Standard Urban Storm Water Mitigation Plan
SWRCB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	State Water Resources Control Board Urban Runoff Technical Advisory Committee
TMDL	Total Maximum Daily Load
URMP	Urban Runoff Management Program
US EPA	United States Environmental Protection Agency

I. FACT SHEET/TECHNICAL REPORT FORMAT

The purpose of this Fact Sheet/Technical Report is to give the Copermittees and the interested public an overview of the permit and a practical discussion of its requirements, as well as a clear explanation of the regulatory justification for the permit requirements. The Fact Sheet/Technical Report can be considered to consist of two primary parts. The first part (which includes sections I. through V.) contains general information regarding urban runoff and the permit, including a summary of the permit in section IV. This part of the Fact Sheet/Technical Report provides an overview of the permit and the reasoning behind its requirements, and is likely to be the most pertinent part of the Fact Sheet/Technical Report for the more casual reader.

The second part of the Fact Sheet/Technical Report (which includes sections VI. and VII.) contains more detailed practical discussions and regulatory justifications of each permit component, and is meant to be used as a reference document during review of the permit. In sections V. and VI. of this Fact Sheet/Technical Report, each component of the permit is displayed in italics, followed by a discussion of the permit component. Section VII. (which addresses permit directives) also includes appropriate legal authority citations for each permit component. Each permit component is broken down in this manner so that the reader may find "stand alone" justification for each issue or permit component. This allows the Fact Sheet/Technical Report to be used as a reference during review of the permit. Please note that this has led to some repetition, as justifications for different sections are often similar or identical.

The text in the second part of the Fact Sheet/Technical Report (sections VI. and VII.) refers to the version of the permit provided to the San Diego Regional Water Quality Control Board (SDRWQCB) on October 11, 2000. The October 11, 2000 version of the permit is largely indicative of the final version of the permit, dated February 21, 2001. However, some minor changes to the permit were made between October 11, 2000 and February 21, 2001. To ensure that the final Fact Sheet/Technical Report is up to date and addresses the final permit in its entirety, Attachments 5 and 6 have been included in the final Fact Sheet/Technical Report. These attachments specifically address any changes to the permit not addressed in sections VI. and VII. of the Fact Sheet/Technical Report. Attachment 5 exhibits changes made to the permit between October 11, 2000 and February 21, 2001 in a redline strikeout version of the permit. Attachment 6 is a "response to comments" document which clarifies the reasoning behind each change to the permit found in the redline strikeout version of the permit. In this manner, the final Fact Sheet/Technical Report comprehensively addresses the contents of the final permit adopted by the SDRWQCB.

II. BACKGROUND – IMPACTS OF URBAN RUNOFF

Urban runoff is fundamentally important to the water quality of Southern California. It has been found to be a leading cause of water quality impairment in the San Diego Region and nationwide. Untreated pollutants in urban runoff, indiscriminate of dry or wet weather conditions, routinely find their way to our creeks, lagoons, bays, and ocean as easily from over watering of residential lawns as from rainstorms. San Diego area urban runoff is commonly contaminated with pesticides, fertilizers, animal droppings, trash, food wastes, automotive byproducts, and many other toxic substances which are generated by our urban environment. Water that flows over streets, parking lots, construction sites, and

industrial, commercial, residential, and municipal areas carries these untreated pollutants through storm drain networks directly to the receiving waters of the region. Southern California, with the highest coastal population density of the entire country,[1] suffers multiple tribulations from this urban generated pollution source.

The United States Environmental Protection Agency (US EPA) recognizes urban wet weather flows as the number one source of estuarine pollution in coastal communities.[2] This trend is reflected locally by the 1998-1999 City of San Diego and Co-Permittee NPDES Stormwater Monitoring Program Report, which names urban runoff as one of the most significant contributors of pollution to our waterways and coastal areas. Furthermore, this document reports that monitoring efforts indicate that instream concentrations of pathogen indicators (fecal coliform and streptococcus) and heavy metals (such as cadmium, copper, lead, and zinc) exceed state and federal water quality criteria. Storm water within the region has also been found to contain the pesticides diazinon and chlorpyrifos (Dursban) at levels that can cause chronic or acute toxicity. [3]

Urban runoff causes many impacts in Southern California, including increased public health risks, high concentrations of toxic metals in harbor and ocean sediments, and toxicity to aquatic life.[4] A study exploring the health risks associated with urban runoff in Southern California was conducted in 1995 by the Santa Monica Bay Restoration Project using a survey of 15,000 bathers at three Santa Monica beaches. The study concluded that there is a 57% 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 potential for public health risks resulting from urban runoff is reflected in the San Diego region as well. In 1999, there were 29 days in which the San Diego County Health Department issued general advisories to avoid waters 300 feet either side of all storm drain outlets in order to protect the public from potential adverse health effects caused by urban runoff. Also, in 1999 there were 720 combined beach closures and postings in San Diego County. The San Diego County Department of Health does not recommend the public recreate in closed or posted waters due to associated health risk. A breakdown of the beach closure and posting data is as follows: 127 of these closings were related to sewage spills, 71 related to river mouth outlets or some other excavation, and 522 of the days were related to some exceedance of water quality standards.[5] Urban runoff can also

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[1] Culliton, T.M. et al. 1988. "50 years of population changes along the nation's coast." *Coastal Trends Series, Report No. 2*. National Oceanic and Atmospheric Administration, Strategic Assessments Branch. As cited in Moore, S. L., et al. *Composition and Distribution of Beach Debris in Orange County, California.* Southern California Coastal Water Research Project, Southern California Marine Institute, Divers Involved Voluntarily in Environmental Rehabilitation and Safety.

[2] US EPA. 1999. 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. 64 FR 68727.

[3] City of San Diego. 1999. 1989-1999 City of San Diego and Co-permittee NPDES Stormwater Monitoring Program Report. URS Greiner Woodward Clyde.

[4] Threats to beneficial uses such as swimming and seafood consumption or ecosystem health have been demonstrated in numerous studies. Two important studies to note for Southern California are: Bay, S., Jones, B.H. and Schiff, K. 1999. Study of the Impact of Stormwater Discharge on Santa Monica Bay. Sea Grant Program, University of Southern California; and Haile, R.W., et al. 1996. An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay. Santa Monica Bay Restoration Project.

[5] Information provided by the San Diego County Department of Public Health.

impact drinking water; contamination by urban runoff has forced the closure of potable water reservoirs within the City of San Diego in order to protect public health.

The SDRWQCB finds that such problems are indeed frequently urban runoff related. For instance, a common conveyance for a sewage spill to reach a beach is through the municipal storm water system. Also, exceedances of standards at some of our Region's beaches have unquestionably been conveyed by the storm water drainage system.[6] In addition, urban runoff is increasingly being targeted as the cause of beach closures and postings in other areas of the San Diego region and Southern California. Urban runoff has been identified as a principal contributor to fecal coliform contamination in Orange County's Aliso Creek, a creek which often causes beach postings when flowing into the ocean.[7] Municipal enforcement efforts focusing on urban runoff have also resulted in reduced coliform levels in receiving waters in Encinitas.[8] Finally, US EPA goes on to say that urban storm water runoff and sewer overflows have become the largest cause of beach closings in the United States for the previous three years, becoming more significant than such sources as oil spills and publicly owned treatment works.[9]

Regardless of how beach posting and closure data is interpreted, one thing is clear: Beneficial uses are not being met for the waters in the San Diego Region, and urban runoff is a significant contributor to this receiving water impairment. For San Diego, known throughout the world for its beach lifestyle, these statistics are bound to have increasingly serious effects on tourism revenue as well as the local cultural identity.

III. ECONOMIC ISSUES

Polluted urban runoff not only poses a public health threat, but an economic one as well. A January 5, 1997 New York Times article warns: *Travel Advisory. Storm Drains Pose San Diego Health Risk*.[10] In the July 3, 2000 edition of Forbes Magazine, an article entitled *Don't Go Near the Water. Beaches That Make You Go Ewwwww!*, two San Diego area beaches are highlighted as having troubles. The article is particularly hard on the Mission Bay beaches, in stating, "If San Diego County has established itself as the California capital of sewage spills, this beach is its White House."[11] Our local problems do indeed make national news. US EPA also brings attention to our region in the guidance document *Liquid Assets 2000* in saying, "Although our lakes, rivers, estuaries, and wetlands are much cleaner than they were in 1970, headlines like these are all too common…"[12] Next to the quote is pictured the San Diego page from the San Diego Union Tribune bearing the

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6 SDRWQCB Cleanup and Abatement Order No. 97-69 and Cease and Desist Order No. 98-74, both were issued to the City of Coronado.

7 SDRWQCB Cleanup and Abatement Order No. 99-211, issued to the City of Laguna Niguel and the County of Orange.

8 Kathy Weldon, City of Encinitas, Presentation to Beach Water Quality Workgroup, June 1, 2000.

9 US EPA. 1999. 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. 64 FR 68727.

10 Kopytoff, V.G. 1/5/1997. *Travel Advisory: Storm Drains Pose San Diego Health Risk*. The New York Times.

11 Powers, K. 7/3/2000. *Don't Go Near the Water. Beaches That Make You Go Ewwwww*! Forbes Magazine.

12 US EPA. 2000. Liquid Assets 2000. *America's Water Resources at a Turning Point*. EPA –840-B-00-001.

headline "Human Waste Fouls Three Beaches, DNA Tests Find."[13] Being spotlighted by the federal government in this context is definitely less than auspicious.

There may be no way to measure what effects such negative press have had on value lost due to changed vacation plans. However, one can presume that continued publicity will take its toll on local economies. According to a 1996 San Diego Association of Governments (SANDAG) Memorandum, the California Division of Tourism has estimated that each out-of-state visitor spends $101.00 a day. The memo goes on to state that based on projections from the California Department of Boating and Waterways nearly $1.2 billion in direct revenue and $1.2 billion in indirect revenue is pumped into the San Diego area economy each year by out-of-state visitors.[14] It would seem that given the importance of tourism to our area, municipalities cannot afford to ignore water quality. The bottom line is that there is no need to wait and see how much the waters can take before our economy is affected. We can simply look to catastrophes that other regions have already had to bear. The 1988 medical waste wash-ups closing New York and New Jersey beaches caused an estimated $4 billion loss to the local economy.[15]

"Willingness to pay" gives an indication of how much the public values clean water. A study conducted by Colorado State University researchers on a 45 mile stretch of the South Platte River looked at the value of ecosystem services. The services studied were habitat for fish and wildlife, recreation, erosion control, natural purification of water and dilution of wastewater. Results from nearly 100 in-person interviews show that households would pay on average $21 per month for additional ecosystem services.[16] The article goes on to explain that while the marginal benefits are often quite small per person, the non-rival nature of environmental goods often results in simultaneous enjoyment by millions of people. Therefore, ensuring dependable good water quality could mean huge social benefits. The National Water Research Institute states, "Water has a psychological value…People derive measurable pleasure from recreational activities like boating and fishing and find comfort in knowing that the water they drink is of the highest quality."[17]

Water quality as an externality can also cause shifts in real estate value. To help assess this we consider other areas of the country. US EPA looked at a study conducted on real estate around Lake Champlain in the Northeastern United States. Property values in the area of the lake with good water quality were valued an average of 20% more than property around poor water quality.[18] Research right here in California indicates that

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13 Rodgers, T. 1/21/00. Human Waste Fouls 3 Beaches, DNA Tests find. The San Diego Union-Tribune.

14 San Diego Association of Governments. 10/25/96. *Memorandum: California Department of Boating and Waterways: Unpublished Survey Information Regarding Beach Use*. Written to the Shoreline Erosion Committee.

15 US EPA. 1996. Liquid Assets: A Summertime Perspective on the Importance of Clean Water to the Nation's Economy. EPA 800-R-96-002. Page 5.

16 Loomis J., et al. 1999. Measuring the Total Economic Value of Restoring Ecosystem Services in an Impaired River Basin: Results from a Contingent Valuation Method Survey. Proceedings of the Third Workshop in the Environmental Policy and Economics Workshop Series. Sponsored by US EPA's Offices of Economy & Environment, and Reserved & Development. April 21-22, 1999.

17 National Water Research Institute. The Value of Water: Recognizing and Using the Full Water Supply. National Water Research Institute, Fountain Valley, CA as cited in US EPA. 2000. Liquid Assets 2000. *America's Water Resources at a Turning Point.* EPA –840-B-00-001.

18 US EPA. 1996. Liquid Assets: A Summertime Perspective on the Importance of Clean Water to the Nation's Economy. EPA 800-R-96-002. Page 8.

property values can increase by at least 3% for employing bank stabilization procedures and up to 11% for improving fishing habitat.[19]

Within the past decade or so we see that investor's concerns about environmental quality do indeed drive investment decisions. *Money* magazine conducts a "Best Places to Live" survey every year. In 1995, clean water and air ranked as the most important factors in choosing a place to live. It is important to note that they were ranked above typical high priority quality of life issues such as low crime rates, plentiful doctors or hospitals, and low taxes.[20] In the 2000 *Money* magazine "Best Places to Live" analysis, clean water was cited as a contributing factor in three of the top six choices from around the country.[21] Needless to say, San Diego did not make the list this year.

The SANDAG *Regional Growth Management Strategy, Water Quality Element* summarizes future needs in development strategies by stating, "Protecting the health of the water bodies in the region calls for a new approach to storm water management in new development and redevelopment, an approach which considers the possibilities for *pollution prevention* and maximizing infiltration."[22] However, many stakeholders feel that the prospect of such planning presents an economic burden. Not so, according to a *Watershed Protection Techniques* article, "The Benefits of Better Site Design in Residential Subdivision."[23] The journal did a comparative hydrology analysis for a medium-density residential subdivison using open space and conventional design. The following table shows the environmental benefits of using an open space versus conventional design.

Table One: Change in Site Characteristics from a Conventional Design to Open Space Design (*Both employ storm water protection practices*).

Factor of Concern	Percent Change by Applying Open Space Design
Impervious cover	24% decrease
Residential Lawn	48% decrease
Stormwater Runoff	24% decrease
Stormwater Infiltration	55% increase
Phosphorus Export	60% decrease
Nitrogen Export	45% decrease
Development Cost	20% decrease

Source: Adapted from the Center for Watershed Protection, 2000.

It's no surprise that environmentally sensitive planning techniques will produce environmental benefits, but what may be surprising is they can also produce economic

[19] Streiner C. and Loomis. J. 1996. Estimating the Benefits of Urban Stream Restoration Using the Hedonic Price Method. Rivers 5(4): 267-268 as cited in Loomis J., et al. 1999. Measuring the Total Economic Value of Restoring Ecosystem Services in an Impaired River Basin: Results from a Contingent Valuation Method Survey. Proceedings of the Third Workshop in the Environmental Policy and Economics Workshop Series. Sponsored by US EPA's Offices of Economy & Environment, and Reserved & Development. April 21-22, 1999.

[20] US EPA. 1996. Liquid Assets: A Summertime Perspective on the Importance of Clean Water to the Nation's Economy. EPA 800-R-96-002. Page 9.

[21] Gertner J. and Kirwan, R. 2000. *Money Magazine.* "The Best Places to Live 2000." As downloaded from http://www.money.com/money/depts/real_estate/bestplaces

[22] San Diego Association of Governments. 1997. *Regional Growth Management Strategy: Water Quality Element.*

[23] Center for Watershed Protection. 2000. The Benefits of Better Site Design in Residential Subdivisions. Water Protection Techniques. 3(2): Page 641.

benefits. The total cost to build this development was about 20% less using the open space design as opposed to the conventional design. Less road paving, as well as shorter sidewalks, water lines, sewer lines, curbs and gutters contributed to the savings.

An example from Davis, California reflects similar results. The Village Homes development, consisting of 22 houses and 40 apartments, employed narrow streets, plus graded land, channels and ponds to encourage on-site rain absorption. The resulting cost savings was $700/unit less than using conventional storm water management systems. It is also important to note that the development did not flood when a 100-year level flood hit the area. In fact, the owner Judy Corbett reported that the development soaked in some runoff from surrounding communities.[24] The ideas and technologies used in both of these examples have been available for many years. However, outdated development requirements, subdivision codes, zoning regulations, street standards, and drainage requirements have discouraged developers from even attempting changes in convention.

This problem can best be remedied on the municipal level. Local authorities can work to better encourage water quality sensitive planning techniques. Conditions of approval for new developments can be updated to allow for site designs which address water quality concerns. For instance, cities could decrease the width of impervious streets by allowing one way streets on alternate blocks. Providing discretion for creative thinking on site design can save developers money and help municipalities protect their local water quality. Employing such techniques also follows with SANDAG's *Regional Growth Management Strategy.* Preserving natural habitats and open spaces is one of the five basic elements the strategy recommends for addressing all growth related questions.[25]

SANDAG has also developed *The Cites/County Forecast for the San Diego Region*, which attempts to project the demands that humans are going to place on the region over the next 20 years. The report contains some startling projections. According to the article, we can expect 1 million more people and over 400,000 new homes in the area over the next two decades.[26] According to the United States Census Bureau, the estimated population for San Diego County in July 1999 was 2,820,844 people.[27] We can therefore expect a 35% increase in population in just over 20 years. Secondly, the implications of 400,000 new homes extend beyond the homes themselves to include new roads, shopping malls, business parks, parking lots, schools and all the other amenities that accompany new development. Regulations of today must anticipate and address this growth.

To help with this matter, the 2000 Permit includes a requirement for Copermittees to develop Standard Urban Storm Water Mitigation Plans (SUSMPs) for broad categories of new development and significant redevelopment. SUSMPs as developed by the Copermittees will require developers to implement post-construction best management practices (BMPs) to reduce storm water flows and the associated pollutant loads generated from the development. What this means is that runoff carrying automobile

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[24] Keith, L.D. 6/5/00. Fight Brewing in Southern California Over Construction Rules Aimed at Stormwater Runoff. Fresno Bee.

[25] San Diego Association of Governments. 1999. "2020 Cities/County Forecast for the San Diego Region." *SANDAG INFO*. Page 2.

[26] San Diego Association of Governments. 1999. "2020 Cities/County Forecast for the San Diego Region." *SANDAG INFO*. Page 2.

[27] As downloaded from the United States Census Bureau website: Http://www.census.gov/population/estimates/county/co-00-1/99C_06.txt

byproducts, pet droppings, trash, and lawn chemicals for instance will need to be infiltrated, filtered, or treated before it is allowed to leave all new development. The reasoning for this is simple: Since we have not been successful in protecting the beneficial uses of water quality in the past, increased population and development pressures will need to be addressed differently than they were in the past.

IV. PERMIT SUMMARY

HISTORICAL PERSPECTIVE ON THE DEVELOPMENT OF THE PERMIT (PERMIT SUMMARY)

The federal Clean Water Act was amended in 1987 to address urban runoff. One requirement of the amendment was that many municipalities throughout the United States were obligated for the first time to obtain National Pollutant Discharge Elimination System (NPDES) permits for discharges of urban runoff from their municipal separate storm sewer systems (MS4s). In response to the Clean Water Act amendment (and the pending federal NPDES regulations which would implement the amendment), the SDRWQCB issued an "early" municipal storm water permit, Order No. 90-42, in July 1990 to the County of San Diego, the 18 incorporated cities within the County of San Diego, and the San Diego Unified Port District (hereinafter Copermittees) for their urban runoff discharges. As the name implies, this "early" permit was issued prior to the November 1990 promulgation of the final federal storm water regulations. Although Order No. 90-42 contained the "essentials" of the 1990 regulations, the requirements were written in very broad generic and often vague terms. Broad generic terms were incorporated into the permit for the purpose of providing the maximum amount of flexibility to the Copermittees in implementing the new requirements (flexibility was, in fact, the stated reason for issuing the permit in advance of the final regulations). From staff's perspective however, this same lack of specificity, combined with the lack of funding and political will, also provided the Copermittees with ample reasons to take few substantive steps towards permit compliance. The situation was exacerbated by the SDRWQCB's own lack of storm water resources and the general sense that the infant program was a considerably lower priority than its existing and competing core regulatory programs. In staff's assessment, the result was a general lack of action by the Copermittees and a general lack of corresponding reaction (enforcement) by the SDRWQCB during the early years of the storm water program.

When viewed relative to the early years, substantial progress towards compliance has been made by many of the Copermittees and improvements in the SDRWQCB's oversight have occurred as well. But when viewed relative to the magnitude of the problem, we've collectively progressed little in ten years and enormous challenges remain. Today, urban runoff is the leading cause of water quality impairment in the San Diego Region. One has only to look as far as the now too familiar "health advisory or beach closure" signs to see the troubling local consequences of urban runoff.

Although administratively extended pursuant to federal law, Order No. 90-42 was due for renewal in July 1995. Two previous formal drafts of the renewal permit were released to the public (in 1995 and 1998 respectively) and substantial written public comments on the drafts were considered by the SDRWQCB. In addition, a working group of Copermittees and stakeholders was convened by the SDRWQCB in 1997 and 1998 to advise the SDRWQCB on renewal permit issues, many of which were and currently remain

controversial in nature. Despite the efforts by the public, the stakeholder group, and SDRWQCB, and in part due to the concurrent issuance and appeal of three other municipal storm water permits, Order No. 90-42 was not reissued by the SDRWQCB.

MUNICIPAL STORM WATER NPDES PERMITS OVERVIEW (PERMIT SUMMARY)

Municipal storm water NPDES permits seek to ensure that the beneficial uses of a receiving water are protected despite discharges from MS4s into that receiving water. Beneficial uses are defined as the uses of water necessary for the survival or well being of man, plants, and wildlife. Municipal storm water NPDES permits contain requirements to achieve numeric and narrative receiving water quality objectives which are established to protect these beneficial uses. Water quality objectives are defined as constituent concentrations, levels, or narrative statements, representing a quality of water that supports the most sensitive beneficial uses which have been designated for a water body. At this time, municipal storm water NPDES permits contain water quality objectives and a prohibition that MS4 discharges may not cause the water quality objectives in the receiving water to be exceeded. By definition, when the water quality objectives of a receiving water are exceeded, the beneficial uses of that water are not adequately protected.

Typical NPDES permits are based on the concept of employing full-scale treatment of an effluent to remove pollutants at the end of the pipe (i.e., just before being discharged into receiving waters). Accordingly, typical NPDES permits contain numeric effluent limits which are arithmetically derived from receiving water quality objectives for each pollutant of concern in the effluent. However, municipal storm water permits are not typical NPDES permits because they are not based on the concept of full-scale treatment of polluted storm water. Full scale end of pipe treatment for storm water is not considered economically and technologically feasible at this time. Therefore municipal storm water permits do not contain numeric effluent limits, but rather are based on the concept that pollutants can be effectively reduced in storm water to the maximum extent practicable by the application of a wide range of best management practices (BMPs). The technology-based performance standard of “maximum extent practicable” refers to evaluation and implementation of BMPs to the maximum extent practicable, except where (1) other effective BMPs will achieve greater or substantially similar pollution benefits; (2) the BMP is not technically feasible; or (3) the cost of BMP implementation greatly outweighs the pollution control benefits.

In other words, in municipal storm water permits, receiving water quality objectives are attained by way of BMP implementation, including use of pollution prevention, source control, and treatment control BMPs. To protect receiving water beneficial uses, municipal storm water permits require the use of best management practices which prevent the generation of pollutants and keep runoff from coming into contact with pollutants, to be supplemented by the use of methods that remove or treat pollutants.

COPERMITTEE RESPONSIBILITY BASED ON LAND USE AUTHORITY (PERMIT SUMMARY)

Storm water permits are issued to municipalities because of their land use authority. The ultimate responsibility for the pollutant discharges, increased runoff, and inevitable long-term water quality degradation that results from urbanization lies with local governments. This responsibility is based on the fact that it is the local governments that have authorized the urbanization (i.e., conversion of natural pervious ground cover to impervious urban

surfaces) and the land uses that generate the pollutants and runoff. Furthermore, the MS4 through which the pollutants and increased flows are conveyed, and ultimately discharged into San Diego's natural receiving waters, are owned and operated by the same local governments. In summary, the municipal Copermittees under Order No. 2001-01 are responsible for discharges into and out of their storm water conveyance systems because (1) they own and operate the MS4; and (2) they have the legal authority that authorizes the very development and land uses which generate the pollutants and increased flows in the first place.

Order No. 2001-01 holds the local government accountable for this direct link between its land use decisions and water quality degradation. The permit recognizes that each of the three major stages in the urbanization process (development planning, construction, and the use or operational stage) are controlled by and must be authorized by the local government. Accordingly, this permit requires the local government to implement, or require others to implement, appropriate best management practices to reduce pollutant discharges and increased flow during each of the three stages of urbanization.

For example, since grading cannot commence prior to the issuance of a local grading permit, the Copermittees have a built-in mechanism to ensure that all grading activities are protective of receiving water quality. The Copermittee has the authority and discretion to withhold issuance of the grading permit until the project proponent has demonstrated to the satisfaction of the Copermittee that the project will not violate the Copermittee's ordinances or cause the Copermittee to be in violation of its municipal storm water permit. Since the Copermittee will ultimately be held responsible for any discharges from the grading project by the SDRWQCB, the Copermittee will want to use its own permitting authority to ensure that whatever measures the Copermittee deems necessary to protect discharges into its MS4 are in fact taken by the project proponent.

ORDER NO. 2001-01 OVERVIEW (PERMIT SUMMARY)

Order No. 2001-01 is the proposed re-issuance of Order No. 90-42 (i.e., the renewal municipal storm water permit for the Copermittees within the County of San Diego). Order No. 2001-01 incorporates not only the SDRWQCB's responses to all oral and written comments on previous drafts received to date; it also reflects two highly controversial precedent setting decisions by the State Water Resources Control Board (SWRCB). Specifically, Order No. 2001-01 includes: (1) explicit language requiring municipal storm water dischargers to meet numeric water quality standards[28] (in addition

28 The issue of whether municipal storm water dischargers must meet water quality standards has been intensely debated for the past five years in California and throughout the nation. During that same five-year period, and in between sporadic work on the municipal storm water permit for San Diego County Copermittees, the SDRWQCB developed and adopted three other municipal storm water permits. As a consequence of the ongoing debate, each of the three permits was immediately appealed (primarily) on the basis of the water quality standards language. SDRWQCB Order No. 96-03, the municipal storm water permit for Orange County Copermittees was adopted and appealed in 1996. SDRWQCB Order No. 97-08, the municipal storm water permit for CALTRANS was adopted and appealed in 1997. SDRWQCB Order No. 98-02, the municipal storm water permit for Riverside County Copermittees was adopted and appealed in 1998.

In response to the appeal of the SDRWQCB's permit for Orange County, the SWRCB issued Order WQ 98-01 prescribing specific precedent-setting water quality standards language to be included in all future California MS4 permits. In essence, the SWRCB's precedent-setting language made very clear that storm water discharges must attain receiving water quality standards. In addition, unlike previously adopted versions of the language, it did not state that "violations of water quality standards are not violations of the municipal storm

to meeting the Maximum Extent Practicable or MEP technology based-standard); and (2) numeric sizing criteria (i.e., design standards) for structural post-construction best management practices (BMPs) for new development and significant redevelopment.

While the requirements of Order No. 2001-01 are markedly more clear and specific than those of Order No. 90-42, they are based on the same 1990 federal storm water regulations. Where Order No. 90-42 and Order No. 2001-01 differ, Order No. 2000-01 is more specific as to what is necessary for Copermittee compliance. The increased specificity of Order No. 2001-01's requirements is necessary to address specific local urban runoff concerns, promote the attainment of water quality standards, and satisfy the Copermittee's repeated request for the SDRWQCB to identify the minimum effort required for compliance with the permit. Where requirements are more stringent than the federal storm water regulations, they are generally based on specific guidance from the USEPA and/or the SWRCB and are authorized under both the Clean Water Act section 402(p)(3)(iii) as well as the California Water Code section 13377. Furthermore, the requirements contained in Order No. 2001-01 represent the SDRWQCB's interpretation of the requisite maximum extent practicable (MEP) technology-based standard.

Order No. 2001-01 places the responsibility for urban runoff discharges into and from MS4s on the Copermittees which own and operate the systems. This responsibility is based on the Copermittees' land use authority. Since the Copermittees permit, authorize, and profit from urban development within their jurisdictions, Order No. 2001-01 holds the Copermittees responsible for the short and long-term water quality consequences of their land use decisions. Furthermore because water quality degradation is the direct result of the urbanization process, Copermittees must implement (or require others to implement) controls to reduce the flow and pollutants

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water permit under certain conditions." Likewise, the order's language did not indicate that the "implementation of best management practices is the 'functional equivalent' of meeting water quality standards."

In response to the appeal of the SDRWQCB's permit for Riverside County and the formal objection of the permit by the USEPA, the SWRCB issued Order WQ 99-05, modifying its own precedent-setting language (as specified in Order WQ 98-01) to meet the specific objections of the USEPA. SWRCB Order WQ 99-05 specified even more stringent requirements for municipal dischargers to meet water quality standards. In response to USEPA's formal objections to SDRWQCB Order No. 98-02, the USEPA assumed responsibility for the Riverside County permit and subsequently issued its own MS4 permit with water quality standards language for Riverside County in 1999. Upon issuance of its own permit, the USEPA returned full responsibility for the NPDES permit back to the SDRWQCB. (Riverside County Copermittees are currently subject to both SDRWQCB Order No. 98-02 as state waste discharge requirements and to the USEPA-issued NPDES permit No. CAS108766 for which the SDRWQCB has resumed full responsibility. In November 2000, the SDRWQCB plans to amend its Order No. 98-02 to replace the existing language with the full text of the USEPA-issued NPDES permit. At that time, SDRWQCB Order No. 98-02 will officially resume function as both state waste discharge requirements and a federal NPDES permit.)

Also following USEPA's issuance of its own MS4 permit for Riverside Copermittees (but in response to a separate similar USEPA-issued MS4 permit), the United States Court of Appeals for the Ninth Circuit (Defenders of Wildlife v. Browner, 1999, 197 F. 3d 1035), upheld USEPA's requirement for MS4 dischargers to meet water quality standards, but it did so on the basis of USEPA's discretion rather than on the basis of strict compliance with the Clean Water Act.

On October 14, 1999, the SWRCB issued what is currently its "final" legal opinion on the matter. In summary, the 1999 SWRCB opinion concluded that RWQCBs should continue to include the water quality standards language established in SWRCB Order WQ 99-05 in all future MS4 permits issued in California.

generated from each of the three major phases of urbanization that they authorize; namely the (1) land use planning, (2) construction; and (3) use or existing development phase.

The principal requirements of Order No. 2001-01 include the following: (1) each Copermittee shall prohibit non-storm water discharges to its MS4; (2) each Copermittee shall reduce pollutants in urban runoff discharges into and from its MS4 to the maximum extent practicable, (MEP); (3) each Copermittee shall ensure that urban runoff discharges into and from its MS4 do not cause or contribute to an exceedance of receiving water quality objectives; (4) each Copermittee shall actively seek and eliminate all sources of illicit discharges to its MS4; and (5) each Copermittee shall obtain, maintain, and enforce adequate legal authority (such as local ordinances and permits) to comply with all provisions of the order.

Two Levels of Copermittee Responsibility

Each Copermittee must carry out the requirements of Order No. 2001-01 across two broad levels of responsibility. Copermittees have responsibility for the water quality impacts of urbanization within (1) their jurisdiction and (2) their watershed. The jurisdictional responsibility of each Copermittee stems from Copermittee land use authority within its jurisdiction. As discussed above, the Copermittee has authority over the three stages of development (planning, construction, and use or operation) within its jurisdiction. Each Copermittee must therefore take responsibility for water quality impacts resulting from their jurisdictional land use decisions.

Watershed responsibility is also necessary from each Copermittee. This is because each Copermittee is located somewhere within a watershed it shares with other Copermittees. Urban runoff generated in various Copermittee jurisdictions does not follow jurisdictional boundaries, but rather travels through many jurisdictions while flowing towards receiving waters. Simplistically, a watershed can be thought of as a common pipe to the ocean, along the length of which reside the Copermittees within the watershed. Inland Copermittees can be thought of as upstream contributors of pollutants and flow to the common pipe; while coastal Copermittees can be considered downstream contributors. Collectively the Copermittees within the watershed each contribute to the cumulative pollutant load that is conveyed in urban runoff by their interconnected MS4 systems to the receiving waters. Therefore, each Copermittee has shared responsibility for the impacts of its urbanization on the watershed in which it is located. Both coastal and inland cities contribute to receiving water quality problems and both must accept responsibility for contributing to the solution.

Order No. 2001-01 reflects these two broad levels of responsibility, in that it requires implementation of comprehensive urban runoff management plans on both a jurisdictional and watershed level.

Permit Requirements

Order No. 2001-01 contains the following principal elements:

- Legal Authority – Each Copermittee shall establish and maintain adequate legal authority to control pollutant discharges into and from its MS4.

- Jurisdictional Urban Runoff Management Program – Each Copermittee shall develop and implement a Jurisdictional Urban Runoff Management Program which will reduce discharges of pollutants and runoff flow during each major phase of urban development (i.e., planning, construction, and use or operation phases) within its jurisdiction.
- Watershed Urban Runoff Management Program – Each Copermittee shall collaborate with other Copermittees within its watershed(s) to develop and implement a Watershed Urban Runoff Management Program which will identify and address the highest priority water quality issues/pollutants in their respective watershed(s).
- All Copermittee Collaboration – Each Copermittee shall collaborate with all other Copermittees to address common issues, promote consistency, and plan and coordinate urban runoff activities.
- Monitoring – The Copermittees shall develop and implement a Receiving Waters Monitoring Program which shall focus on the collection of monitoring data to be used for the achievement of water quality objectives and the protection of beneficial uses.
- Reporting – Each Copermittee shall submit various reports describing the measures it is undertaking to meet the requirements of Order No. 2001-01.

Each of these principal elements of Order No. 2001-01 is discussed in greater detail below.

Legal Authority

Each Copermittee must adopt and enforce whatever legal authority is needed to eliminate or reduce pollutant discharges from all urban land use sources into and out of its MS4. This legal authority must include the ability to prohibit all discharges into the MS4 except for those which originate from precipitation (and a few other minor exceptions). Each Copermittee must also have legal authority to conduct inspections, collect samples, and require businesses to implement BMPs. Legal authority can be developed through ordinance, permit, contract, or similar means. Each Copermittee must ensure that its requirements are being complied with and use its legal authority to take enforcement actions against violators which are not meeting the Copermittee's requirements.

Jurisdictional Urban Runoff Management Program

The focus of the Jurisdictional Urban Runoff Management Program (URMP) is to address urban runoff during each phase of urbanization (i.e., planning, construction, and use or operation phases). The Jurisdictional URMP includes specific requirements for each of these phases of urbanization, as well as broad requirements which apply to all of the phases.

The Jurisdictional URMP singles out the planning phase of urbanization since addressing urban runoff during the planning phase of development is an effective means (in terms of both cost and performance) for protecting receiving water quality. The planning stage provides the greatest number and variety of opportunities for addressing runoff, as well as the most cost effective time for implementation of BMPs. Order No. 2001-01 includes the following requirements for addressing urban runoff during the planning phase of new development:

- Each Copermittee shall incorporate water quality protection principles and policies into its General Plan or equivalent plan to guide land use decisions.
- Each Copermittee shall modify its development project approval processes to ensure water quality concerns are addressed by development projects. This requirement includes development and implementation by each Copermittee of water quality conditions of approval for projects. Each Copermittee shall also develop and implement Standard Urban Storm Water Mitigation Plans (SUSMPs), requiring various categories of development to implement post-construction BMPs meeting specific numeric sizing criteria.
- Each Copermittee shall revise its environmental review process, including California Environmental Quality Act (CEQA) checklists, to include requirements for evaluation of water quality effects from development projects.
- Each Copermittee shall conduct education efforts for its planning and development review staffs, as well as the development community at large.

The construction phase of urbanization is also singled out in the Jurisdictional URMP requirements of Order No. 2001-01. Construction sites and practices are given a high priority in the Jurisdictional URMP requirements due to their significant potential for erosion and discharge of pollutants to MS4s and receiving waters. Order No. 2001-01 includes the following requirements for addressing urban runoff during the construction phase of urbanization:

- Each Copermittee shall implement, or require implementation of, pollution prevention measures at construction sites.
- Each Copermittee shall update its grading ordinance to require grading and construction activities to include pollution prevention, source control, and structural treatment BMPs.
- Each Copermittee shall update its construction and grading approval processes to ensure water quality concerns are addressed by construction/grading projects. This requirement includes development and implementation by each Copermittee of water quality conditions of approval for construction and grading projects.
- Each Copermittee shall maintain an inventory of all construction sites within its jurisdiction.
- Each Copermittee shall establish priorities for construction oversight activities.
- Each Copermittee shall implement, or require implementation of, minimum BMPs at construction sites. The level of BMPs to be implemented shall be bases on the priority level of the site.
- Each Copermittee shall conduct inspections of construction sites based on construction site priority level.
- Each Copermittee shall enforce its ordinances at all construction sites.
- Each Copermittee shall report non-compliant construction sites to the SDRWQCB.
- Each Copermittee shall conduct education efforts for its construction, building, and grading review staffs, as well as the construction community at large.

The Jurisdictional URMP contains extensive requirements for existing development as well. All urban land uses are addressed by the requirements. The specific land uses identified in the Jurisdictional URMP are municipal, industrial, commercial, and residential land uses. In general, the structure of the Jurisdictional URMP requirements for each of

these land uses are similar. For each of the existing development land uses, the Jurisdictional URMP requirements include:

- Each Copermittee shall implement, or require implementation of, pollution prevention measures for each land use.
- Each Copermittee shall maintain an inventory of sites for the various land uses within its jurisdiction. The types of sites to be inventoried for each land use are detailed in section VII. of this fact sheet as well as the permit.
- Each Copermittee shall establish priorities for oversight activities of sites for each land use. The types of sites to be prioritized for each land use are detailed in section VII. of this fact sheet as well as the permit .
- Each Copermittee shall implement, or require implementation of, minimum BMPs at sites for each land use, based on the sites' designated priority levels.
- Each Copermittee shall conduct inspections of sites for each land use based on the sites' designated priority levels.
- Each Copermittee shall enforce its ordinances at all sites for all land uses.

In addition to the general requirements listed above for each land use, the Jurisdictional URMP also contains specific requirements for each land use. These requirements are detailed section VII. of this fact sheet as well as the permit.

While the specific Jurisdictional URMP requirements for each of the three phases of urbanization (i.e., planning, construction, and use or operational phase) are detailed above, the Jurisdictional URMP also contains requirements which apply to all of the phases of urbanization. These include:

- Education – Each Copermittee shall implement an education program using various types of media to (1) increase the knowledge of target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions; and (2) change the behavior of target communities and thereby reduce pollutant releases to the MS4 and receiving waters.
- Illicit Discharge Detection and Elimination – Each Copermittee shall develop and implement measures to detect and eliminate all illicit discharges. This includes measures to respond to sewage and other spills, limit infiltration from sanitary sewers, and facilitate proper disposal and encourage reporting by the public.
- Public Participation – Each Copermittee shall incorporate a mechanism for public participation in the implementation of the Jurisdictional URMP.
- Assessment of Effectiveness – Each Copermittee shall develop a long-term strategy for assessing the effectiveness of its urban runoff management program.
- Fiscal Analysis – Each Copermittee conduct annual fiscal analyses to exhibit adequate fiscal resources necessary to meet the requirements of Order No. 2001-01.

Watershed Urban Runoff Management Program

As discussed above, each Copermittee has responsibility for the impacts of its urban runoff on its respective watershed(s). This is because urban runoff does not follow jurisdictional boundaries, and often travels through many jurisdictions while flowing to receiving waters. Therefore, the actions of various municipalities within a watershed regarding urban runoff can have a cumulative impact upon shared receiving waters. For

this reason, Order No. 2001-01 requires each Copermittee to develop and implement a Watershed URMP. The Watershed URMPs are to be developed later in the permit cycle. Copermittees within each watershed shall collaborate to develop and implement a Watershed URMP for the watershed. The purpose of the Watershed URMPs is to identify and address the highest priority water quality issues/pollutants in each watershed. Under the Watershed URMP requirements, the Copermittees of a watershed shall:

- Map the watershed and identify all receiving waters, all impaired receiving waters, land uses, highways, jurisdictional boundaries, and inventoried commercial, industrial, construction, municipal sites, and residential areas.
- Assess the water quality of all receiving waters in the watershed based on existing data, and eventually perform watershed based water quality monitoring.
- Identify and prioritize major water quality problems in the watershed caused or contributed to by discharges from MS4s, including potential sources of the problems.
- Develop and implement a time schedule of activities needed to address the highest priority water quality problems.
- Identify which Copermittee is responsible for implementing each recommended watershed activity.
- Develop and implement a mechanism for public participation in watershed activities.
- Develop and implement a watershed based education program.
- Develop a strategy for assessing the effectiveness of the Watershed URMP.

All Copermittee Collaboration

The Copermittees shall implement a collective management structure to allow individual Copermittees to carry out permit requirements with other Copermittees, either as a whole (all of the Copermittees countywide) or within a watershed (Copermittees within a watershed). This Order No. 2001-01 requirement provides for more effective urban runoff management, in that it allows for various Copermittee roles to be defined and aids in the sharing of costs to meet permit requirements.

Monitoring

Order No. 2001-01 requires a comprehensive monitoring program for urban runoff impacts to receiving waters. The monitoring program will help prioritize efforts so that limited resources will be most effective in improving receiving water quality. It will also aid in assessing the effectiveness of urban runoff management efforts. The Copermittees are to develop the monitoring program; however, the SDRWQCB has outlined several aspects to be included in the program. These aspects include:

- Development of a Previous Monitoring and Future Recommendations Report which summarizes all previous wet weather monitoring results and recommends future monitoring activities.
- Development and implementation of a urban stream bioassessment monitoring program, which shall consist of station identification, sampling, monitoring, and analysis of bioassessment stations to determine the biological and physical integrity of urban streams within the County of San Diego.

- Monitoring of existing mass loading stations for the purposes of evaluating long-term trends.
- Development and implementation of a monitoring program for discharges of urban runoff from coastal storm drain outfalls.
- Development and implementation of a monitoring program to assess the impact of urban runoff on ambient receiving water quality.
- Development and implementation of a monitoring program to assess the impact of urban runoff on Toxic Hot Spots in San Diego Bay.

Reporting

Under Order No. 2001-01, each Copermittee must submit a series of documents and reports. The following is a brief description of the primary reports required by Order No. 2001-01. When each Copermittee has developed its Jurisdictional Urban Runoff Management Programs and Watershed Urban Runoff Management Programs (by dates specified in the permit), it must submit documents describing the programs. Each Copermittee must also annually submit Jurisdictional URMP Annual Reports and Watershed URMP Annual Reports once the programs have been implemented. An annual monitoring report for the Copermittees must also be submitted. There are other documents and reports required for submittal; these documents and reports are detailed in section VII. of this fact sheet and in Order No. 2001-01.

CONCLUSION (PERMIT SUMMARY)

Order No. 2001-01 is an essential mechanism for maintaining and improving water quality in San Diego County. Since the inception of the NPDES Storm Water Program, some advancements have been made in the San Diego region to control urban runoff pollution. This includes a better understanding by local managers of the regulations, the Think Blue public education campaign, and improved Copermittee group communication. However, continued improvement in urban runoff quality is still necessary to achieve sound protection of beneficial uses of the region's receiving waters.

V. COMMON MUNICIPAL STORM WATER PERMIT ISSUES

Interested parties have frequently brought the following issues listed below to the attention of the SDRWQCB. During issuance of previous draft versions of this municipal storm water permit, most comments from interested parties have revolved around these issues. For this reason, the SDRWQCB has included its responses to the following issues in order to clarify its position regarding the issues.

1. Issue: Is the SDRWQCB required to meet California Environmental Quality Act (CEQA) requirements prior to adoption of the tentative Municipal Storm Water Permit for San Diego County and Cities (tentative permit)?

> **Response:** No. The adoption and issuance of the tentative permit itself, and the requirements contained in the tentative permit, are exempt from CEQA under California Water Code section 13389. California Water Code section 13389 exempts the adoption of waste discharge requirements (such as NPDES permits) from CEQA requirements.

2. Issue: Do the requirements of the tentative permit constitute an "unfunded mandate"?

Response: No. The requirements of the tentative permit are not within the definition of "unfunded mandate" that would require reimbursement of costs under the California Constitution. This is because the requirements of the tentative permit are derived from the federal Clean Water Act, as opposed to State Law. Since the order would implement a federal requirement, rather than a state requirement, the order is not an "unfunded mandate" by the state. The State Water Resources Control Board (SWRCB) has previously determined in several circumstances that regional board orders are exempt from the requirement for reimbursement under the California Constitution.

3. Issue: Does the SDRWQCB have the legal authority to require municipalities to regulate urban runoff flow to protect beneficial uses of receiving waters?

Response: Yes. Federal NPDES regulation 40 CFR 122.44(d)(1) requires municipal storm water permits to include any requirements necessary to "[a]cheive water quality standards established under section 303 of the CWA, including State narrative criteria for water quality." The term "water quality standards" in this context refers to a water body's **beneficial uses** and the water quality objectives necessary to protect those beneficial uses. The negative impact of urban runoff flow on the beneficial uses of receiving waters has been widely documented. Increases in flows from impervious surfaces associated with urbanization can result in (1) increases in the number of bankfull events and increased peak flow rates; (2) sedimentation and increased sediment transport; (3) frequent flooding; (4) stream bed scouring and habitat degradation; (5) shoreline erosion and stream bank widening; (6) decreased baseflow; (7) loss of fish populations and loss of sensitive aquatic species; (8) aesthetic degradation; and (9) changes in stream morphology.[29] US EPA finds that the level of imperviousness resulting from urbanization is strongly correlated with the water quality impairment of nearby receiving waters.[30] US EPA further attributes much of this water quality impairment to changes in flow conditions from urbanization, stating "[I]n many cases, the impacts on receiving streams due to high storm water flow rates or volumes can be more significant than those attributable to the contaminants found in storm water discharges."[31] Therefore, in order to protect the beneficial uses and water quality objectives of waters receiving urban runoff flows (as **required** by 40 CFR 122.44(d)(1)), the SDRWQCB has under certain circumstances placed limits on urban runoff flows in the tentative permit.

In addition, the authority of states to regulate flow in order to protect water quality standards has been addressed by the U.S. Supreme Court in PUD No. 1 v. Washington Department of Ecology, 511 U.S. 700 (1994). In this case the U.S.

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[29] U.S. Environmental Protection Agency. 1999. Preliminary Data Summary of Urban Storm Water Best Management Practices. EPA-821-R-99-012. p. 4-24.

[30] U.S. Environmental Protection Agency. 1999. 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. p. 68727.

[31] U.S. Environmental Protection Agency. 1999. Preliminary Data Summary of Urban Storm Water Best Management Practices. EPA-821-R-99-012. p. 4-23.

Supreme Court found that the Clean Water Act applies to water quantity as well as water quality, stating "[p]etitioners also assert more generally that the Clean Water Act is only concerned with water 'quality' and does not allow the regulation of water 'quantity.' This is an artificial distinction. In many cases, water quantity is closely related to water quality." The U.S. Supreme court goes on to refer to the Clean Water Act's definition of pollution ("the man-made or man induced alteration of the chemical, physical, biological, and radiological integrity of water" 33 U.S.C. 1362(19)) and states "[t]his broad conception of pollution – one which expressly evinces Congress' concern with the physical and biological integrity of water – refutes petitioners' assertion that the Act draws a sharp distinction between the regulation of water 'quantity' and water 'quality'." In this context, the U.S. Supreme Court held that the state's regulation of flow was "a limitation necessary to enforce the designated use of the River as a fish habitat." Finally, it was held that the state's regulation of flow was "a proper application of the state and federal antidegradation regulations, as it ensures than an 'existing instream water use' will be 'maintained and protected.' 40 CFR 131.12(a)(1) (1992)."

4. Issue: Can the SDRWQCB include in the tentative permit more specific requirements than those stated in the federal NPDES regulations?

Response: Yes. In both a general sense, as well as specifically relating to municipal storm water, the Clean Water Act explicitly preserves independent state authority to enact and implement its own standards and requirements, provided that such standards and requirements are at least as stringent as those that would be mandated by the Clean Water Act and the federal regulations. For example, as one general overriding principle, Clean Water Act section 510 states "nothing in this chapter shall (1) preclude or deny the right of any State or political subdivision thereof or interstate agency to adopt or enforce (A) any standard or limitation respecting discharges of pollutants, or (B) any requirement respecting control or abatement of pollution […]." When relating specifically to storm water, Clean Water Act section 402(p)(3)(B)(iii) clearly provides states with wide-ranging discretion, stating that municipal storm water permits "[s]hall 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**" (emphasis added).

Therefore, where the tentative permit contains requirements more specific than those included in the federal NPDES regulations 40 CFR 122.26(d), it is seeking to meet the above Clean Water Act requirements, as well as other particular federal NPDES regulations such as 40 CFR 122.44(d)(1)(i). This federal NPDES regulation requires NPDES permits to include limitations to "control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." Given the continued impact of urban runoff on receiving waters within the San Diego region, increased specificity in municipal storm water permits is necessary to meet the above CWA and federal regulation requirements.

In a 1992 decision, the U.S. Court of Appeals for the Ninth Circuit (NRDC v. US EPA, 966 F.2d 1292) interpreted the language in Clean Water Act section 402(p)(3)(B)(iii) as providing the State with substantial discretion and authority: "[t]he language in (iii), above, requires the Administrator or the State to design controls. Congress did not mandate a minimum standards approach or specify that U.S. EPA develop minimal performance requirements […] we must defer to U.S. EPA on matters such as this, where U.S. EPA has supplied a reasoned explanation of its choices." The decision in essence holds that the U.S. EPA and the States are authorized to require implementation of storm water control programs that, upon "reasoned explanation," accomplish the goals of CWA section 402(p). The Ninth Circuit Court of Appeals further reinforced the State's authority in this area more recently in 1999. In Defenders of Wildlife v. Browner (1999) Case No. 98-71080, the Court cited the language of CWA section 402(p)(3)(B)(iii) and stated "[t]hat provision gives the U.S. EPA discretion to determine what pollution controls are appropriate. As this court stated in NRDC v. U.S. EPA, 'Congress gave the administrator discretion to determine what controls are necessary […].'"

Furthermore, the increased specificity included in the tentative permit is in line with US EPA guidance included in its *Guidance Manual for the Preparation of Part 2 of the NPDES Permit Applications for Discharges from Municipal Separate Storm Sewer Systems*[32] and its *Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits*.[33] Where the tentative permit is more specific than the federal regulations, it is frequently based on the recommendations of the Guidance Manual. The Interim Permitting Approach also supports increased specificity in storm water permits, recommending that municipal storm water permits use "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" (emphasis added). It is important to note that the SWRCB cited US EPA's Interim Permitting Approach as support for its recent tentative decision which upheld the increased specificity of numeric sizing criteria requirements for post-construction BMPs as appropriate requirements in municipal storm water permits.

Finally, the Copermittees have frequently requested clarification from the SDRWQCB on what is necessary to achieve compliance with the current Municipal Storm Water Permit for San Diego County and Cities (Order No. 90-42). The tentative permit responds to this request by describing the minimum permit requirements in detail.

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[32] U.S. Environmental Protection Agency. 1992. Guidance Manual for the Preparation of Part 2 of the NPDES Permit Applications for Discharges from Municipal Separate Storm Sewer Systems. EPA 833-B-92-002.

[33] U.S. Environmental Protection Agency. 1996. Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits. 61 FR 43761.

5. Issue: Does the tentative permit dictate the design and manner of compliance in which the Copermittees are to comply with its requirements, in violation of California Water Code section 13360?

Response: No. CWA section 402(p)(3)(B)(iii) provides that municipal storm water permits "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." To meet this requirement of the CWA, the tentative permit requires the implementation of BMPs, as required under Federal NPDES regulation 40 CFR 122.44(k). While the tentative permit includes requirements for widespread BMP implementation, it does not require use of any particular BMPs. The tentative permit actually encourages implementation of combinations of BMPs, and further does not preclude any particular BMPs or other means of compliance. A permit which allows for seemingly infinite means for achieving compliance does not 'specify the design or manner of compliance' in violation of California Water Code section 13360.

The specified programs included in the tentative permit must be implemented by the Copermittees in order to carry out the CWA requirements. Any specified programs in the tentative permit are made all the more necessary by the exclusion of numerical effluent limits from the permit. Reliance on BMPs as opposed to numerical effluent limits requires specification of those programs that are relied upon to reduce pollution.

Finally, the SWRCB's recent tentative decision on the appeal of the Los Angeles Regional Water Quality Control Board's (LARWQCB's) action on SUSMPs and numeric sizing criteria appears to support inclusion of detail in municipal storm water permits on the level which is found in the tentative permit. The SWRCB tentatively found that the numeric sizing criteria requirement for post-construction BMPs did not violate California Water Code section 13360. Provided that the numeric sizing criteria requirement is most likely the most specific requirement in the tentative permit, the SWRCB tentative decision in support of numeric sizing criteria indicates its general approval of the level of detail found in the tentative permit.

6. Issue: Do discharges from municipal separate storm sewer systems (MS4s) need to meet the water quality standards (beneficial uses and water quality objectives) of the receiving waters to which they discharge?

Response: Yes. The issue of whether storm water discharges from MS4s must meet water quality standards has been intensely debated for the past five years. The argument arises because Clean Water Act section 402(p) fails to clearly state that municipal dischargers of storm water must meet water quality standards. On the issue of industrial discharges of storm water, the statute clearly indicates that industrial dischargers must meet both (1) the technology-based standard of "best available technology economically achievable (BAT)" and (2) applicable water quality standards. On the issue of municipal discharges however, the statute states that municipal dischargers must meet (1) the technology-based standard of "maximum extent practicable (MEP)" and (2) "such

other provisions that the Administrator or the State determines appropriate for the control of such pollutants." The statute fails, however, to specifically state that municipal dischargers must meet water quality standards.

As a result, the municipal storm water dischargers have argued that they do not have to meet water quality standards; and that they only are required to meet the MEP standard. Environmental interest groups maintain that not only do MS4 discharges have to meet water quality standards, but that MS4 permits must also comply with numeric effluent limitations for the purpose of meeting water quality standards. On the issue of water quality standards, the US EPA, the SWRCB, and the SDRWQCB have consistently maintained that MS4s must indeed comply with water quality standards. On the issue of whether water quality standards must be met by numeric effluent limits, the US EPA, the SWRCB (in Orders WQ 91-03 and WQ 91-04), and the SDRWQCB have maintained that MS4 permits can, at this time, contain narrative requirements for the implementation of BMPs in place of numeric effluent limits.

SWRCB rationale: In addition to relying on US EPA's legal opinion concluding that MS4s must meet MEP and water quality standards, the SWRCB also relied on the Clean Water Act's explicit authority for States to require "such other provisions that the Administrator or the State determines appropriate for the control of such pollutants" in addition to the technology-based standard of MEP. To further support its conclusions that MS4 permit dischargers must meet water quality standards, the SWRCB relied on provisions of the California Water Code that specify that all waste discharge requirements must implement applicable Basin Plans and take into consideration the appropriate water quality objectives for the protection of beneficial uses.

The SWRCB first formally concluded that permits for MS4s must contain effluent limitations based on water quality standards in its Order WQ 91-03. In that Order, the SWRCB also concluded that it was appropriate for Regional Boards to achieve this result by requiring best management practices, rather than by inserting numeric effluent limitations into MS4 permits. In Order WQ 98-01, the SWRCB prescribed specific precedent setting Receiving Water Limitations language to be included in all future MS4 permits. This language specifically requires that MS4 dischargers meet water quality standards and allows for the use of narrative BMPs (increasing in stringency and implemented in an iterative process) as the mechanism by which water quality standards can be met.

In Order WQ 99-05, the SWRCB modified its receiving water limitations language found in Order WQ 98-01 to meet specific objections by the US EPA (the modifications resulted in stricter compliance with water quality standards). SWRCB Order WQ 99-05 states "In Order WQ 98-01, the State Water Resources Control Board (State Water Board) ordered that certain receiving water limitation language be included in future municipal storm water permits. Following inclusion of that language in permits issued by the San Francisco Bay and San Diego Regional Water Quality Control Boards (Regional Water Boards) for Vallejo and Riverside respectively, the United States Environmental Protection Agency (EPA) objected to the permits. The EPA objection was based on the receiving water limitation language. The EPA has now issued those

permits itself and has included receiving water limitation language it deems appropriate.

"In light of EPA's objection to the receiving water limitation language in Order WQ 98-01 and its adoption of alternative language, the State Water Board is revising its instructions regarding receiving water limitation language for municipal storm water permits. It is hereby ordered that Order WQ 98-01 will be amended to remove the receiving water limitation language contained therein and to substitute the EPA language. Based on the reasons stated here, and as a precedent decision, the following receiving water limitation language [which is found in Receiving Water Limitations item C. of Order No. 2001-01] shall be included in future municipal storm water permits."

In a late 1999 case involving MS4 permits issued by US EPA to several Arizona cities (Defenders of Wildlife v. Browner, 1999, 197 F. 3d 1035), the United States Court of Appeals for the Ninth Circuit upheld US EPA's requirement for MS4 dischargers to meet water quality standards, but it did so on the basis of US EPA's discretion rather than on the basis of strict compliance with the Clean Water Act. In other words, while holding that the Clean Water Act does not require all MS4 discharges to comply strictly with state water quality standards, the Court also held that US EPA has the authority to determine that ensuring strict compliance with state water quality standards is necessary to control pollutants. On the question of whether MS4 permits must contain numeric effluent limitations, the court upheld US EPA's use of iterative BMPs in place of numeric effluent limits.

SWRCB's final position: On October 14, 1999, the SWRCB issued a legal opinion on the federal appellate decision and provided advice to the Regional Boards on how to proceed in the future. In the memorandum, the SWRCB concludes that the recent Ninth Circuit opinion upholds the discretion of US EPA and the State to (continue to) issue permits to MS4s that require compliance with water quality standards through iterative BMPs. Moreover, the memorandum states that "[…] because most MS4 discharges enter impaired water bodies, there is a real need for permits to include stringent requirements to protect those water bodies. As total maximum daily loads (TMDLs) are developed, it is likely that MS4s will have to participate in pollutant load reductions, and the MS4 permits are the most effective vehicles for those reductions." In summary, the SWRCB concludes that the Regional Boards should continue to include the Receiving Water Limitations language established in SWRCB Order WQ 99-05 in all future permits.

Accordingly, the SDRWQCB has required in the tentative permit that discharges from MS4s meet receiving water quality objectives.

7. Issue: What is the definition of "maximum extent practicable (MEP)" and who defines it?

Response: Under Section 402(p) of the Clean Water Act, municipalities are required to reduce the discharge of pollutants from their storm water conveyance systems to the maximum extent practicable (MEP). MEP is the critical technology-based performance standard which municipalities must attain in order to comply with their municipal storm water permits. The MEP standard establishes the level of pollutant reductions the municipality must achieve. MEP

generally emphasizes pollution prevention and source control BMPs (as the first line of defense) **in combination** with treatment methods serving as a backup (additional line of defense).

To achieve the MEP standard, municipalities must employ whatever BMPs are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive. In selecting BMPs to achieve the MEP standard, the following factors may be useful to consider:

a. Effectiveness: Will the BMPs address a pollutant (or pollutant source) of concern?
b. Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?
c. Public Acceptance: Does the BMP have public support?
d. Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?
e. Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc?

If a municipality reviews a lengthy menu of BMPs and chooses to select only a few of the least expensive BMPs, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost is prohibitive, it would have met the standard. Where a choice may be made between two BMPs which should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPs which would address a pollutant source, or to pick a BMP base solely on cost, which would be clearly less effective. In selecting BMPs the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPs, it is the responsibility of the discharger to ensure that all BMPs are implemented.[34]

A definition of MEP is not provided in either the federal statute or in the federal regulations. The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. While Regional or State Boards ultimately define MEP, it is the responsibility of the Copermittees to initially propose actions that implement BMPs to reduce pollution to the MEP. In other words, the Copermittees' Jurisdictional and Watershed Urban Runoff Management Programs (URMPs) to be developed under the tentative permit are the Copermittees' proposals of MEP. Their total collective and individual activities conducted pursuant to their URMPs become their proposal for MEP as it applies both to their overall effort, as well as to specific activities.

[34] Source: February 11, 1993 memo entitled "Definition of Maximum Extent Practicable" by Elizabeth Jennings, Senior Staff Counsel, SWRCB

It is the SDRWQCB's responsibility to evaluate the proposed programs and specific BMPs to determine what constitutes MEP, using the above guidance and the court's decision in NRDC v. California Department of Transportation, Federal District Court, Central District of California (1994). The court stated that a permittee must evaluate and implement BMPs except where (1) other effective BMPs will achieve greater or substantially similar pollution control benefits; (2) the BMP is not technically feasible; or (3) the cost of BMP implementation greatly outweighs the pollution control benefits. In the absence of a proposal acceptable to the SDRWQCB, the SDRWQCB will define MEP by requiring implementation of additional measures by the Copermittees.

8. Issue: Can the SDRWQCB compel municipalities to use the local authority to control activities of third parties subject to their governmental jurisdiction that could affect the quality of the waters of the state?

Response: Yes. Copermittees cannot passively receive and discharge pollutants from third parties. As US EPA states, "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."[35]

Discharges of pollutants to the MS4 must therefore be controlled, and an important means for a municipality to achieve this is through the development and enforcement of municipal legal authority. USEPA states "A crucial requirement of the NPDES storm water regulation is that a municipality must demonstrate that it has adequate legal authority to control the contribution of pollutants in storm water discharged to its MS4. […] In order to have an effective municipal storm water management program, a municipality must have adequate legal authority to control the contribution of pollutants to the MS4. […] 'Control,' in this context, means not only to require disclosure of information, but also to limit, discourage, or terminate a storm water discharge to the MS4." [36]

Since discharges which enter the MS4 are generally discharged unimpeded directly into receiving waters, the Copermittee's legal authority is to apply to both discharges into and from MS4s. Federal NPDES regulations clearly provide the SDRWQCB with the legal authority to require municipalities to control discharges from third parties into their MS4. 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff **from** commercial, residential, industrial, and construction land uses or activities. Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A - D) require municipalities to have legal authority to control various discharges **to** their MS4. This concept is further supported in the Preamble to the Phase II Final Rule NPDES storm water

[35] U.S. Environmental Protection Agency. 1999. 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. p. 68765.
[36] U.S. Environmental Protection Agency. 1992. Guidance Manual for the Preparation of Part 2 of the NPDES Permit Applications for Discharges from Municipal Separate Storm Sewer Systems. EPA 833-B-92-002.

regulations, which states "The operators of regulated small MS4s cannot passively receive and discharge pollutants **from** third parties"[37] (emphasis added). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule findings for small municipalities are also applicable to larger municipalities such as the Copermittees. Finally, underlying the Federal NPDES storm water regulations is the Clean Water Act, which states in section 402(p)(3)(B)(ii) that municipalities shall "effectively prohibit non-stormwater discharges **into** the storm sewers" (emphasis added).

The requirement for municipal storm water dischargers to have, and exercise, local governmental authority in order to comply with water quality control obligations is analogous to the requirement for Publicly Owned Treatment Works to have and exercise legal authority to require pretreatment of industrial wastes being discharged to their sewage collections systems (CWA 402(b)(8)).

9. Issue: Does the tentative permit improperly shift responsibility for control of construction and industrial sources of pollution to the Copermittees?

Response: No. US EPA felt it so important to control the discharge of pollutants from construction and industry that it established a double system of regulation over construction and industrial sites. Two parallel regulatory systems were established with the same common objective of keeping pollutants from construction and industrial sites out of the municipal separate storm sewer system (MS4). A structure was created where local governments must enforce their local ordinances and permits as required under their municipal storm water permits, while the SDRWQCB (state) must enforce its statewide general construction and industrial storm water permits. The two regulatory systems were designed to complement and support each other in the shared goal of minimizing pollutant discharges in runoff from construction and industrial sites.

Local governments have the primary regulatory authority over the majority of construction and industrial sites since they issue the development and land use permits for the sites. In other words, the Copermittees are responsible for the water quality consequences of their planning, construction, and land use decisions. Since local governments are the lead permitting authority for construction and industrial sites, they are also the lead for enforcement of discharges from the sites, with support coming from the SDRWQCB. If it is found that a local government has made a good faith, but unsuccessful effort to achieve compliance with its ordinances and permits, the SDRWQCB will step in to assist the local government by enforcing its general statewide permit. However, it is important to note that the SDRWQCB looks first to the local government that has authorized the construction or land use to enforce compliance with its applicable ordinances and permits.

US EPA supports this approach, clearly placing responsibility for the control of discharges from construction and industrial sites with municipalities. US EPA notes in the preamble to the storm water regulations that municipalities are in the

[37] U.S. Environmental Protection Agency. 1999. 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. p. 68765.

best place to enforce industrial compliance with storm water discharge requirements, stating "[b]ecause storm water from industrial facilities may be a major contributor of pollutants to MS4s, municipalities are obligated to develop controls for storm water discharges associated with industrial activity through their system in their storm water management program […]"[38] and "[t]hese permits are expected to require that controls be placed on storm water discharges associated with industrial activity which discharge through the municipal system."[39]

Regarding construction sites, US EPA also places enforcement responsibility on municipalities, requiring small municipalities to develop and implement "[a]n ordinance or other regulatory mechanism to require erosion and sediment controls, as well as **sanctions** to ensure compliance […]" (40 CFR 122.34(b)(4)(ii)(A)) (emphasis added). In its guidance for the Phase II regulations, US EPA goes on to support increased municipality responsibility, stating "Even though all construction sites that disturb more than one acre are covered nationally by an NPDES storm water permit, the construction site runoff control minimum measure for the small MS4 program is needed to induce more localized site regulation and enforcement efforts, and to enable operators of regulated small MS4s to more effectively control construction site discharges into their MS4s."[40] While these above citations refer to small municipalities under Phase II of the NPDES program, US EPA recommendations to small municipalities are applicable to larger municipalities such as the Copermittees, due to the typically more serious water quality concerns attributed to such larger municipalities.

10. Issue: Must the tentative permit require that municipal storm water discharges meet numeric effluent limits?

Response: No. Although NPDES permits must contain conditions to ensure that water quality standards are met, this does not require the use of numeric effluent limitations. Under the Clean Water Act and federal NPDES regulations, permitting authorities may employ a variety of conditions and limitations in storm water permits, including best management practices, performance objectives, narrative conditions, monitoring triggers, actions levels (e.g., monitoring benchmarks, toxicity reduction evaluation action levels), etc., as the necessary effluent limitations, where numeric effluent limitations are determined to be unnecessary or infeasible.

Neither the Clean Water Act nor the federal NPDES regulations require numeric effluent limitations for municipal storm water discharges. Section 301 of the Clean Water Act requires that discharger permits include effluent limitations necessary to meet water quality standards. Section 502 defines "effluent

[38] U.S. Environmental Protection Agency. 1990. 40 CFR Parts 122, 123, and 124 National Pollutant discharge Elimination System Permit Application Regulations for Storm Water Discharges; Final Rule. p. 48000.

[39] U.S. Environmental Protection Agency. 1990. 40 CFR Parts 122, 123, and 124 National Pollutant discharge Elimination System Permit Application Regulations for Storm Water Discharges; Final Rule. p. 48006.

[40] U.S. Environmental Protection Agency. 2000. Storm Water Phase II Compliance Assistance Guide. EPA 833-R-00-002.

limitations" to mean any restriction on quantities, rates, and concentrations of constituents discharged from point sources. The Clean Water Act does not say that effluent limitations need be numeric. As a result, US EPA and States have flexibility in terms of how to express effluent limitations.

US EPA has, through the federal NPDES regulations, interpreted the Clean Water Act statute to allow for non-numeric effluent limitations (e.g., best management practices) to replace numeric effluent limitations where numeric effluent limitations are infeasible (40 CFR 122.44(k)). US EPA has found numeric effluent limitations infeasible because storm water discharges are highly variable both in terms of flow and pollutant concentrations, and the relationships between discharges and water quality can be complex. The current use of system-wide permits and a variety of jurisdiction-wide BMPs, including educational and programmatic BMPs, does not easily lend itself to the existing methodologies for deriving numeric effluent limitations.

It should be noted that while the tentative permit does not specify numeric effluent limitations for municipal urban runoff discharges, it does not preclude numeric effluent limitations from applying to municipal urban runoff discharges into impaired water bodies. Where impaired water bodies are not meeting their water quality standards, numeric effluent limitations may be placed on municipal urban runoff discharges through the implementation of total maximum daily loads (TMDLs) or other means. Furthermore, methods utilized to calculate waste load allocations for TMDLs may eventually be used to develop numeric effluent limitations for urban runoff in municipal storm water permits.[41]

11. Issue: Does the tentative permit provide adequate time for the Copermittees to develop and implement programs to meet its requirements?

Response: Yes. The tentative permit provides the Copermittees with at least six months to develop and implement their Jurisdictional Urban Runoff Management Programs. With regards to the component of the Jurisdictional Urban Runoff Management Programs which addresses planning and new development, the Copermittees are given a full year for development and implementation. In addition, the Copermittees are allowed at least 18 months to develop and implement their individual Standard Urban Storm Water Mitigation Plans (SUSMPs) for new development. Given that the federal NPDES storm water regulations, as well as the Copermittees' current storm water permit, have been in place for approximately 10 years, the Copermittees should require little time to develop and implement Jurisdictional Urban Runoff Management Programs which meet the tentative permit requirements. The time periods provided by the tentative permit should be more than adequate.

12. Issue: Should the tentative permit allow for urban runoff from new development and significant redevelopment to be addressed by regional BMPs (i.e., end of pipe or diversion BMPs) in lieu of site-specific BMPs?

[41] Source: U.S. Environmental Protection Agency. 1996. Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits. 61 FR 43761.

Response: No. The SDRWQCB feels that regional BMP approaches (such as end of pipe diversions) send the wrong message to dischargers and the public, which can then cause setbacks in progress which has already been made. Instead of the idea that "business as usual" is acceptable since regional BMPs will "take care of everything" downstream, the message that SUSMPs and numeric sizing criteria should send is that behavior and site design must change in order for water quality to improve. In the San Diego region, it is already difficult to convince residents and businesses in inland cities that activities there will have an important impact on water quality in coastal waters such as San Diego Bay or Los Penasquitos Lagoon. Both of these water bodies are listed as Clean Water Act section 303(d) impaired water bodies due in part to urban runoff. The advent of regional end of pipe BMP approaches will make that message even more difficult to communicate. Moreover, on-site structural BMPs are important education tools. Movement of BMPs out of sight of the public reduces their educational benefits. Rather than send false messages, BMPs and their site selection should encourage environmental stewardship by the public for the watersheds in which they live and work. Consequently, nearly all of the programs required and implemented under the Phase I Municipal Storm Water NPDES permits have been focused on source reduction through modification of behaviors/practices, in combination with the use of on-site structural BMPs, rather than on regional end of pipe treatment or diversion. In fact, on-site BMP implementation (such as a combination of pollution prevention, source control, and treatment BMPs) is a fundamental requirement of Order No. 2001-01. Shifting BMP implementation from an on-site focus to a regional focus violates this fundamental requirement.

The SDRWQCB is skeptical that large-scale regional BMPs would be cost effective. Treatment costs for municipal storm water generally increase with distance from the source. Regional "end of pipe" treatment also results in the loss of cost reducing opportunities for water quality improvements en route. Rather than increasing costs, small collection strategies, located at the point where runoff initially meets the ground, repeated consistently over entire projects, will usually yield the greatest water quality improvements for the least cost.[42] Furthermore, where regional approaches have been relatively successful, such as Fresno, generally few municipalities have been involved. In urbanized watersheds with many different jurisdictions, such as those in Los Angeles and San Diego, there will be significantly greater organizational and jurisdictional difficulties, and hence drastically higher costs. For example, the failure in the San Diego Region of a regional BMP approach, the Carmel Valley Restoration Project, occurred due to a breakdown in coordination among agencies and resulted in a $527,000 Administrative Civil Liability fine against the City of San Diego. While the SDRWQCB supports watershed based intergovernmental coordination, this coordination is not yet in place and may take many years to develop. Furthermore, the difficulties of coordination on a watershed level are only compounded when expanded to a regional level.

In specific cases, a coordinated regional approach may be appropriate for **existing** development. However, by its very definition, new development presents opportunities for on-site BMPs to be designed into the development as an integral

[42] Bay Area Stormwater Management Agencies Association. 1999. Start at the Source. Forbes Custom Publishing.

component, at low cost, and with a greater likelihood for protecting water quality downstream over the life of the development. Where a regional BMP approach is to be used, it must be done in conjunction with on-site BMPs. On-site BMPs provide the "pre-treatment" necessary to ensure effectiveness of any potential regional BMPs, as well as to minimize maintenance and the chance of "upsets."

The problem of locating and constructing regional end of pipe BMPs is also considerable. Costs associated with finding locations for the regional treatment facilities in areas that are already largely built out, as well as the hurdles that CEQA, Waste Discharge Requirements, and NPDES permitting may present, should not be ignored. Historically, the public has been very reluctant to support the construction of treatment facilities in their neighborhoods. Opposition to such facilities, especially along the coast, has been an especially virulent form of NIMBYism (Not In My Back Yard). Moreover, the construction, maintenance, and operation of such facilities sized to treat large, seasonal, and potentially toxic volumes of storm water runoff pose high costs and protracted time delays to implement. Additionally, popular short-term regional solutions, such as end of pipe diversions into sanitary sewers, are effective only for dry weather flows. The sanitary sewerage collection systems found in the San Diego region were not designed to handle the increased loads from dry weather flows, let alone flows from even minor storm runoff events. Likewise, the existing coastal Publicly Owned Treatment Works (POTWs) are not sized to treat wet weather flows, have almost no capacity for expansion, and will not be able to treat storm water flows.

Furthermore, a regional BMP approach (i.e. end of pipe treatment) will probably lead to a progressive erosion of storm water quality gains achieved through aforementioned education programs. Since most municipalities in Southern California have historically used natural drainage features as storm water conveyances, there could be a additional loss of beneficial uses, including aesthetic benefits, in those waterways upstream of the proposed regional mitigation facilities. The inadequate implementation of on-site BMPs, which may consequently result from focusing on regional end of pipe BMP approaches, may be more damaging than maintaining the status quo. The overall result of a regional BMP approach could be additional water quality degradation to already impacted receiving waters, while new development and significant redevelopment with inadequate BMP controls continues apace.

Finally, it is important to note that Governor Davis recently opposed increasing funding for regional diversion BMPs. In his veto message of a $6.9 million bill that would have funneled money to Orange County to help curb urban runoff and clean beaches, Davis said the legislation "focuses on a temporary, seasonal fix and does not provide for identification and elimination of the sources of contamination."

13. Issue: Will the SDRWQCB approve the Copermittees' Urban Runoff Management Programs (URMPs) and other submittals?

Response: No. The SDRWQCB does not approve dischargers' submittals.[43] It is the responsibility of the Copermittees to develop and implement adequate URMPs

[43] This response refers to the SDRWQCB's policy against staff approval of dischargers' programs or documents. At times, the SDRWQCB will approve dischargers' programs or documents at a public hearing

and other measures required by Order No. 2001-01 in a timely manner. In other words, a Copermittee cannot postpone implementation of its URMP because the URMP has not been approved by the SDRWQCB. The SDRWQCB will review the URMPs and other documents and provide comments where inadequacies are observed. Provision of comments by the SDRWQCB or lack thereof does not constitute approval on the part of the SDRWQCB. The SDRWQCB will provide as much guidance as possible regarding the requirements of Order No. 2001-01, but ultimately the responsibility for development and implementation lies with the Copermittees.

VI. FINDINGS DISCUSSION

1. Finding states the following:

COPERMITTEES ARE DISCHARGERS OF URBAN RUNOFF: Each of the persons in Table 1 below, hereinafter called Copermittees or dischargers, owns or operates a municipal separate storm sewer system (MS4), through which it discharges urban runoff into waters of the United States within the San Diego Region. These MS4s fall into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) a small MS4 that is "interrelated" to a medium or large MS4; or (3) an MS4 which contributes to a violation of a water quality standard; or (4) an MS4 which is a significant contributor of pollutants to waters of the United States.

Table 1. Municipal Copermittees

1.	*City of Carlsbad*	*11.*	*City of National City*
2.	*City of Chula Vista*	*12.*	*City of Oceanside*
3.	*City of Coronado*	*13.*	*City of Poway*
4.	*City of Del Mar*	*14.*	*City of San Diego*
5.	*City of El Cajon*	*15.*	*City of San Marcos*
6.	*City of Encinitas*	*16.*	*City of Santee*
7.	*City of Escondido*	*17.*	*City of Solana Beach*
8.	*City of Imperial Beach*	*18.*	*City of Vista*
9.	*City of La Mesa*	*19.*	*County of San Diego*
10.	*City of Lemon Grove*	*20.*	*San Diego Unified Port District*

Discussion: Section 402 of the Clean Water Act prohibits the discharge of any pollutant to waters of the United States from a point source, unless that discharge is authorized by a NPDES permit. Though urban runoff comes from a diffuse source, it is discharged through MS4s, which are point sources under the Clean Water Act. Federal NPDES regulation 40 CFR 122.26(a) (iii) and (iv) provide that discharges from MS4s, which service medium or large populations greater than 100,000 or 250,000 respectively, shall be required to obtain a NPDES permit. Federal NPDES regulation 40 CFR 122.26(a)(v) also provides that a NPDES permit is required for "A [storm water] 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." Such sources are then designated into the program. See Attachment 1,

during the public process. An example of this is the Order No. 2001-01 requirement for the Copermittees to develop a model Standard Urban Storm Water Mitigation Plan (SUSMP). The model SUSMP is to be approved by the SDRWQCB during a public hearing. However, in general, the documents and programs required by Order No. 2001-01 will not be approved by SDRWQCB, and never by SDRWQCB staff.

NPDES Municipal Storm Water Permit Justifications, for an explanation on NPDES municipal storm water permit coverage for each municipality.

2. Finding states the following:

URBAN RUNOFF IS A "WASTE" AND A "POINT SOURCE DISCHARGE OF POLLUTANTS": Urban runoff is a waste, as defined in the California Water Code, that contains pollutants and adversely affects the quality of the waters of the State. The discharge of urban runoff from an MS4 is a "discharge of pollutants from a point source" into waters of the United States as defined in the Clean Water Act.

Discussion: The legal definition of "waste" can be found in California Water Code (CWC) section 13050(d), which states "'Waste' includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal." 40 CFR 122.2 defines "point source" 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." 40 CFR 122.2 defines "discharge of a pollutant" as "Any addition of any 'pollutant' or combination of pollutants to 'waters of the United States' from any point source." Also, the justification for control of pollution into Californian waters can be found at CWC Section 13260(a)(1).

3. Finding states the following:

URBAN RUNOFF CAUSES RECEIVING WATER DEGRADATION: Urban runoff discharges from MS4s are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. As runoff flows over urban areas, it picks up harmful pollutants such as pathogens, sediment, fertilizers, pesticides, heavy metals, and petroleum products. These pollutants often become dissolved or suspended in urban runoff and are conveyed and discharged to receiving waters, such as streams, lakes, lagoons, bays, and the ocean without treatment. Once in receiving waters, these pollutants harm aquatic life primarily through toxicity and habitat degradation. Furthermore, the pollutants can enter the food chain and may eventually enter the tissues of fish and humans.

There is a strong direct correlation between "urbanization" and "impacts to receiving water quality". In general, the more heavily developed the area, the greater the impacts to receiving waters from urban runoff.

Discussion: Urbanization generally results in an increase in pollutant sources and impervious surfaces. The increase in pollutant sources associated with human land use leads to an increase in pollutant loads found in urban runoff, while the increase in impervious surfaces associated with development prevents natural processes from reducing those pollutant loads. The impervious surfaces associated with urbanization prevent soil infiltration and natural vegetation filtration of urban runoff. The end result is urban runoff flows that are higher in volume and pollutant loads. This causes the quality of receiving waters to be adversely impacted and beneficial uses to be impaired.

The US EPA supports this finding, stating in its 1996 National Water Quality Inventory that urban runoff/discharges from storm sewers are a major source of water quality impairment nationwide.[44] The 1996 Inventory also found urban runoff to be the leading cause of ocean impairment for those ocean miles surveyed.[45] In addition, the Region's Clean Water Act section 303(d) list (see Attachment 2), which identifies water bodies with impaired beneficial uses within the region, also indicates that the impacts of urban runoff on receiving waters are significant. Many of the impaired water bodies on the 303(d) list are impaired by constituents which have been found at high levels within urban runoff by the regional storm water monitoring program.[46] Examples of constituents frequently responsible for beneficial use impairment include total and fecal coliform, heavy metals, and sediment; these constituents have been found at high levels in urban runoff both regionally and nationwide.[47, 48]

Beneficial use impairment resulting from urban runoff not only harms aquatic life, but can adversely impact human health as well. The US EPA finds that receiving water impairment from urban runoff can impact human health when it states "As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans." [49]

4. Finding states the following:

URBAN DEVELOPMENT INCREASES POLLUTANT LOAD, VOLUME, AND VELOCITY OF RUNOFF: During urban development two important changes occur. First, natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops, and parking lots. Natural vegetated soil can both absorb rainwater and remove pollutants providing a very effective natural purification process. Because pavement and concrete can neither absorb water nor remove pollutants, the natural purification characteristics of the land are lost.

Secondly, urban development creates new pollution sources as human population density increases and brings with it proportionately higher levels of car emissions, car maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, trash, etc. which can either be washed or directly dumped into the MS4.

As a result of these two changes, the runoff leaving the developed urban area is significantly greater in volume, velocity and pollutant load than the pre-development runoff from the same area.

Discussion: Urbanization increases the amount of impervious ground cover of an area. For example, residential areas commonly cover the ground with

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44 US EPA. 1998. The National Water Quality Inventory, 1996 Report to Congress. EPA 841-R-97-008. As cited in 64 FR 68726.

45 US EPA. 1998. The National Water Quality Inventory, 1996 Report to Congress. EPA 841-R-97-008. As cited in 64 FR 68726.

46 City of San Diego. 1999. 1998-1999 City of San Diego and Co-permittee NPDES Storm Water Monitoring Program Report. By URS Greiner Woodward Clyde.

47 City of San Diego. 1999. 1998-1999 City of San Diego and Co-permittee NPDES Storm Water Monitoring Program Report. By URS Greiner Woodward Clyde.

48 US EPA. 1983. Results of the Nationwide Urban Runoff Program, Volume 1 – Final Report.

49 US EPA. 2000. Storm Water Phase II Compliance Assistance Guide. EPA 833-R-00-002.

approximately 30-70% impervious surfaces.[50] Regarding the impact of urbanization's impervious surfaces on urban runoff volume and velocity, the State Water Resources Control Board (SWRCB) Urban Runoff Technical Advisory Committee states in its 1994 report:

> Changes in stream hydrology resulting from urbanization include: increased peak discharges; increased total volume of runoff; decreased time needed for runoff to reach the stream; increased frequency and severity of flooding; changes in stream flow during dry periods due to reduced levels of infiltration in the watershed; and greater runoff velocity during storms.

This finding is further supported by the SDRWQCB's Water Quality Control Plan (Basin Plan). Regarding the impact of urban development on urban runoff pollutant loads, the Basin Plan states:

> Nonpoint source pollution is primarily the result of man's uses of land such as urbanization, roads and highways, vehicles, agriculture, construction, industry, mineral extraction, physical habitat alteration (dredging/filling), hydromodification (diversion, impoundment, channelization), silviculture (logging), and other activities which disturb land.[51] As a result, when rain falls on and drains through urban freeways, industries, construction sites, and neighborhoods it picks up a multitude of pollutants. The pollutants can be dissolved in the runoff and quickly transported by gravity flow through a vast network of concrete channels and underground pipes referred to as storm water conveyance systems. Such systems ultimately discharge the polluted runoff, without treatment, into the nation's creeks, rivers, estuaries, bays, and oceans.[52]

5. Finding states the following:

> *WATER QUALITY DEGRADATION INCREASES WITH PERCENT IMPERVIOUSNESS: The increased volume and velocity of runoff from developed urban areas greatly accelerates the erosion of downstream natural channels. Numerous studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving water quality. Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as a 10% conversion from natural to impervious surfaces. (Developments of medium density single family homes range between 25 to 60% impervious). Today "% impervious coverage" is believed to be a reliable indicator and predictor of the water quality degradation expected from planned new development.*

Discussion: Studies have shown that the level of imperviousness in an area strongly correlates with the quality of nearby receiving waters.[53] One comprehensive study which looked at numerous areas, variables, and methods revealed that stream degradation occurs at levels of imperviousness as low as

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[50] Dunne, T. and Leopold, L.B. 1978. Water in Environmental Planning.

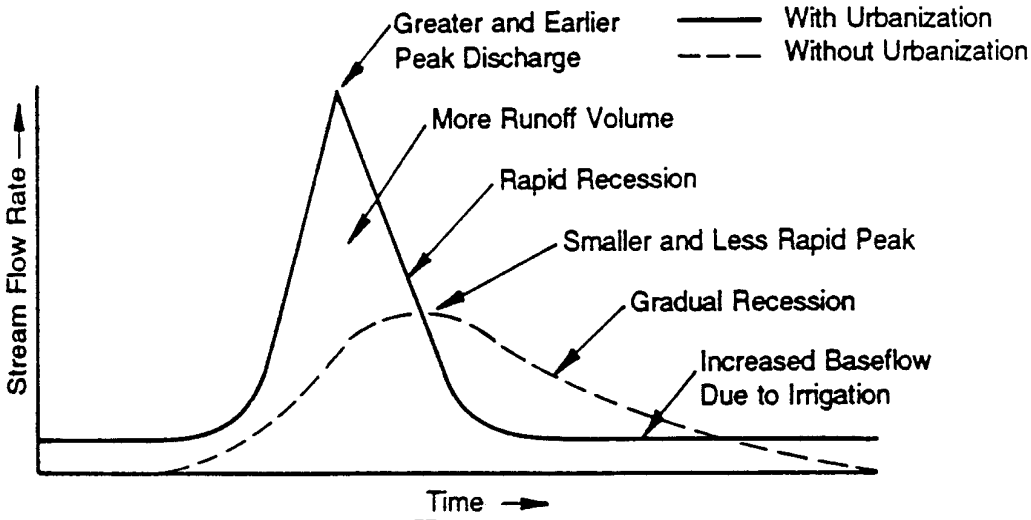
[51] SDRWQCB. 1994. Water Quality Control Plan for the San Diego Basin. Page 4-66.

[52] SDRWQCB. 1994. Water Quality Control Plan for the San Diego Basin. Page 4-69 through 4-70.

[53] US EPA. 1999. 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. 64 FR 68725.

(10% to 20%).[54] Degradation indicates a decline in the biological integrity and physical habitat conditions that are necessary to support natural biological diversity. For instance, few urban streams can support diverse benthic communities with imperviousness greater or equal to 25%.[55] To provide some perspective, a medium density, single family home area can be from 25% to 60% impervious (variation due to street and parking design).[56]

The following figure shows the flow rate of an urban vs. a natural stream. What the figure demonstrates is that urban stream flows have greater peaks and volumes, as well as shorter retention times than natural stream flows. The greater peak flows and volumes result in stream degradation through increased erosion of stream banks and damage to aquatic habitat. The shorter retention times result in less time for sediments and other pollutants to settle before being carried out to the ocean. This sediment, and the associated pollutants it carries, can be a significant cause of degradation to the region's receiving waters, including coastal lagoons.



Source: Adapted from Schueler, 1997[57]

6. Finding states the following:

URBAN RUNOFF IS A HUMAN HEALTH THREAT: Urban runoff contains pollutants, which threaten human health. Human illnesses have been clearly linked to recreating (i.e., swimming, surfing, etc.) near storm drains flowing to coastal beach waters. Such flows from urban areas often result in the posting or closure of local beaches.

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[54] US EPA. 1999. 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. 64 FR 68725.

[55] US EPA. 1999. 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. 64 FR 68725.

[56] Schueler, T.R. 1994. *The Importance of Imperviousness*. Watershed Protection Techniques. As cited in 64 FR 68725.

[57] Schueler, T.R. 1987. Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs. Metropolitan Washington Council of Governments.

Pollutants transported to receiving waters by urban runoff can also enter the food chain. Once in the food chain they can "bioaccumulate" in the tissues of invertebrates (e.g., mussels, oysters, and lobsters) and fish which may be eventually consumed by humans. Furthermore, some pollutants are also known to "biomagnify". This phenomenon can result in pollutant concentrations in the body fat of top predators that are millions of times greater than the concentrations in the tissues of their lower trophic (food chain) counterparts or in ambient waters.

Discussion: This finding is supported by a landmark study conducted by the Santa Monica Bay Restoration Project. The study found that there was an increased occurrence of illness in people that swam in proximity to a flowing storm drain outlet.[58]

In addition to the human health risk urban runoff poses from bodily contact, urban runoff also has the potential to adversely impact human health through bioaccumulation/biomagnification of urban runoff pollutants in the food chain. Pollutants such as heavy metals and pesticides, which are commonly found in urban runoff, have been found to bioaccummulate and biomagnify in long-lived organisms at the higher trophic levels.[59] Since many aquatic species are utilized for human consumption, toxic substances accumulated in species' tissues can pose a significant threat to public health.

The US EPA supports this finding when it states "As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans." [60]

7. Finding states the following:

POLLUTANT TYPES: The most common categories of pollutants in urban runoff include total suspended solids, sediment (due to anthropogenic activities); pathogens (e.g., bacteria, viruses, protozoa); heavy metals (e.g., copper, lead, zinc and cadmium); petroleum products and polynuclear aromatic hydrocarbons; synthetic organics (e.g., pesticides, herbicides, and PCBs); nutrients (e.g., nitrogen and phosphorus fertilizers), oxygen-demanding substances (decaying vegetation, animal waste), and trash.

Discussion: US EPA Nationwide Urban Runoff Program (NURP) data shows that heavy metals, organics, coliform bacteria, nutrients (e.g., fertilizers), oxygen demanding substances (e.g., decaying vegetation), and total suspended solids are found at relatively high levels in urban runoff.[61] The Basin Plan goes on to identify examples of nonpoint sources in southern California to include lawn and garden chemicals, household and automotive care products dumped or drained on streets, sediment that erodes from construction sites, and various pollutants deposited by atmospheric deposition.[62] In addition, the SWRCB Urban Runoff Technical

[58] Haile, R.W., et al. 1996. An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay. Santa Monica Bay Restoration Project.

[59] Abel, P.D. 1996. Water Pollution Biology.

[60] US EPA. 2000. Storm Water Phase II Compliance Assistance Guide. EPA 833-R-00-002.

[61] US EPA. 1983. Results of the Nationwide Urban Runoff Program, Volume 1-Final Report.

[62] SDRWQCB. 1994. Water Quality Control Plan for the San Diego Basin. Page 4-1.

Advisory Committee finds urban runoff pollutants to include sediment, nutrients, oxygen-demanding substances, road salts, heavy metals, petroleum hydrocarbons, pathogenic bacteria, viruses, and pesticides."

8. Finding states the following:

URBAN STREAMS AS AN MS4 COMPONENT: Historic and current development make use of natural drainage patterns and features as conveyances for urban runoff. Urban streams used in this manner are part of the municipalities MS4 regardless of whether they are natural, man-made, or partially modified features. In these cases, the urban stream is both an MS4 and a receiving water.

Discussion: Natural drainage patterns and urban streams are frequently used by municipalities to convey urban runoff away from development within their jurisdiction. This is exhibited when urban streams and natural drainage systems are often altered (channelized, lined, widened, etc.) by municipalities in order to control and convey the increased urban runoff flows resulting from the urban development. Since the natural drainage or urban stream is used by the municipality to convey urban runoff, it becomes part of the municipality's MS4. However, urban streams and natural drainages used to convey urban runoff are part of a municipality's MS4 regardless of whether they have been altered by the municipality or not. For example, urban streams frequently run back and forth between lined and unlined (or natural) segments. Changes in the condition of an urban stream's channel (lined or unlined) does not constitute a change in the use of the urban stream or drainage by a municipality. In this manner, urban streams can be both receiving waters and MS4s.

9. Finding states the following:

URBAN RUNOFF CAUSES BENEFICIAL USE IMPAIRMENT: Individually and in combination, the discharge of pollutants and increased flows from MS4s can cause or threaten to cause a condition of pollution (i.e., unreasonable impairment of water quality for designated beneficial uses), contamination, or nuisance. The discharge of pollutants from MS4s can cause the concentration of pollutants to exceed applicable receiving water quality objectives and impair or threaten to impair designated beneficial uses.

Discussion: The Basin Plan supports this finding:

> [W]hen rain falls on and drains through urban freeways, industries, construction sites, and neighborhoods it picks up a multitude of pollutants. The pollutants can be dissolved in the runoff and quickly transported by gravity flow through a vast network of concrete channels and underground pipes referred to as storm water conveyance systems. Such systems ultimately discharge the polluted runoff, without treatment, into the nation's creeks, rivers, estuaries, bays, and oceans. […] These pollutants severely degrade the beneficial uses of surface waters, and threaten the health of both humans and aquatic organisms.[63]

The US EPA also supports this finding, stating in its 1996 National Water Quality Inventory that urban runoff/discharges from storm sewers are a major source of

63 SDRWQCB. 1994. Water Quality Control Plan for the San Diego Basin. Page 4-69 through 4-70.

water quality impairment nationwide.[64] The 1996 Inventory also found urban runoff to be the leading cause of ocean impairment for those ocean miles surveyed.[65] In addition, the Region's Clean Water Act section 303(d) list (see Attachment 2), which identifies water bodies with impaired beneficial uses within the region, also indicates that the impacts of urban runoff on receiving waters are significant. Many of the impaired water bodies on the 303(d) list are impaired by constituents which have been found at high levels within urban runoff by the regional storm water monitoring program.[66] Examples of constituents frequently responsible for beneficial use impairment include total and fecal coliform, heavy metals, and sediment; these constituents have been found at high levels in urban runoff both regionally and nationwide.[67,68]

10. Finding states the following:

COPERMITTEES IMPLEMENT URBAN RUNOFF MANAGEMENT PROGRAMS (URMPs): Copermittee implementation of Urban Runoff Management Programs (URMPs) designed to reduce discharges of pollutants and flow into and from MS4s to the maximum extent practicable (MEP) can protect receiving water quality by promoting attainment of water quality objectives necessary to support designated beneficial uses. To be most effective, URMPs must contain both structural and non-structural best management practices (BMPs).

Discussion: US EPA finds that a "satisfactory proposed management program will address: management practices; control techniques and systems; design and engineering methods; and other measures to ensure the reduction of pollutants to the maximum extent practicable (MEP)."[69] The US EPA further states that "at a minimum, the proposed management program must include: […] Identification of structural control measures to be included in these proposed programs."[70] These statements indicate that it is expected that URMPs be developed by the Copermittees which contain both structural and non-structural BMPs for the purpose of reducing pollutants in MS4 discharges to the maximum extent practicable. When pollutants in MS4 discharges are treated to the maximum extent practicable, receiving water quality and beneficial uses are typically protected through the attainment of water quality objectives. However, its should be noted that pollutant discharges which have the potential to cause or contribute to an exceedance of water quality objectives (such as discharges to Clean Water Act section 303(d) waterbodies) may require implementation of BMPs beyond the "maximum extent practicable" standard (40 CFR 122.44(d)(1)(i).

11. Finding states the following:

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64 US EPA. 1998. The National Water Quality Inventory, 1996 Report to Congress. EPA 841-R-97-008. As cited in 64 FR 68726.

65 US EPA. 1998. The National Water Quality Inventory, 1996 Report to Congress. EPA 841-R-97-008. As cited in 64 FR 68726.

66 City of San Diego. 1999. 1998-1999 City of San Diego and Co-permittee NPDES Storm Water Monitoring Program Report. By URS Greiner Woodward Clyde.

67 City of San Diego. 1999. 1998-1999 City of San Diego and Co-permittee NPDES Storm Water Monitoring Program Report. By URS Greiner Woodward Clyde.

68 US EPA. 1983. Results of the Nationwide Urban Runoff Program, Volume 1 – Final Report.

69 US EPA. 1992. Guidance Manual for the Preparation of Part II of the NPDES Permit Applications for discharges from Municipal Separate Storm Sewer Systems. EPA 833-B-92-002.

70 US EPA. 1992. Guidance Manual for the Preparation of Part II of the NPDES Permit Applications for discharges from Municipal Separate Storm Sewer Systems. EPA 833-B-92-002.

BEST MANAGEMENT PRACTICES (BMPs): Pollutants can be effectively reduced in urban runoff by the application of a combination of pollution prevention, source control, and treatment control BMPs. Source control BMPs (both structural and non-structural) minimize the contact between pollutants and flows (e.g., rerouting run-on around pollutant sources or keeping pollutants on-site and out of receiving waters). Treatment control (or structural) BMPs remove pollutants from urban runoff.

Discussion: The SWRCB finds in its Order WQ 98-01 that BMPs are effective in reducing pollutants in urban runoff, stating that "implementation of BMPs [is] generally the most appropriate form of effluent limitations when designed to satisfy technology requirements, including reduction of pollutants to the maximum extent practicable." The SWRCB Urban Runoff Technical Advisory Committee further supports this finding by recommending "that nonpoint source pollution control can be accomplished most effectively by giving priority to [best management practices] in the following order:

1. Prevention – implementation of practices that use or promote pollution free alternatives;
2. Source Control – implementation of control measures that focus on preventing or minimizing urban runoff from contacting pollution sources;
3. Treatment Controls – implementation of practices that require treatment of polluted runoff either onsite or offsite."

US EPA also supports the utilization of a combination of BMPs to address pollutants in urban runoff. For example, US EPA has found there has been success in addressing illicit discharge related problems through BMP initiatives like storm drain stenciling and recycling programs, including household hazardous waste special collection days.[71] Structural BMP performance data has also been compiled and summarized by US EPA.[72] This data indicates that structural BMPs can be effective in reducing pollutants in urban runoff discharges. The summary provides the performance ranges of various types of structural BMPs for removing suspended solids, nutrients, pathogens, and metals from storm water flows. These pollutants are in general the pollutants of most concern in storm water in the San Diego Region. For suspended solids, the least effective structural BMP type was found to remove 30-65% of the pollutant load, while the most effective was found to remove 65-100% of the pollutant load. For nutrients, the least effective structural BMP type was found to remove 15-45% of the pollutant load, while the most effective was found to remove 65-100% of the pollutant load. For pathogens, the least effective structural BMP type was found to remove <30% of the pollutant load, while the most effective was found to remove 65-100% of the pollutant load. For metals, the least effective structural BMP type was found to remove 15-45% of the pollutant load, while the most effective was found to remove 65-100% of the pollutant load.

12. Finding states the following:

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[71] US EPA. 1999. 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. 64 FR 68728.

[72] USEPA. 1999. Preliminary Data Summary of Urban Storm Water Best Management Practices. EPA 821-R-99-012.

POLLUTION PREVENTION: Pollution prevention, the initial reduction/elimination of pollutant generation at its source, is the best "first line of defense" for Copermittees and should be used in conjunction with source control and treatment control BMPs. Pollutants that are never generated do not have to be controlled or treated.

Discussion: Pollution prevention, the reduction or elimination of pollutant generation at its source, is an essential aspect of BMP implementation. By limiting the generation of pollutants by urban activities, less pollutants are available to be washed from urban areas, resulting in reduced pollutant loads in storm water discharges from these areas. In addition, there is no need to control or treat pollutants which are not initially generated. Furthermore, pollution prevention BMPs are generally more cost effective than removal of pollutants by treatment facilities or cleanup of contaminated media.

In the Pollution Prevention Act of 1990, Congress established a national policy that emphasizes pollution prevention over control and treatment. California Water Code section 13263.3(a) also supports pollution prevention, stating "The Legislature finds and declares that pollution prevention should be the first step in a hierarchy for reducing pollution and managing wastes, and to achieve environmental stewardship for society. The Legislature also finds and declares that pollution prevention is necessary to support the federal goal of zero discharge of pollutants into navigable waters." Finally, the Basin Plan also supports this finding by stating that "[T]o eliminate pollutants in storm water, one can either clean it up by removing pollutants or prevent it from becoming polluted in the first place. Because of the overwhelming volume of storm water and the enormous costs associated with pollutant removal, pollution prevention is the only approach that makes sense."

13. Finding states the following:

RECEIVING WATER LIMITATIONS: Compliance with receiving water limits based on applicable water quality objectives is necessary to ensure that MS4 discharges will not cause or contribute to violations of water quality objectives and the creation of conditions of pollution.

Discussion: Urban runoff discharges from MS4s are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. Due to this significant contribution to the impairment of receiving waters, discharges from MS4s that cause or contribute to the violation of water quality standards (i.e., beneficial uses and the water quality objectives necessary to protect those uses) must be controlled and prohibited. MS4 permits must therefore include stringent discharge requirements to protect water bodies from discharges from MS4s.

The issue of whether storm water discharges from MS4s must meet water quality standards has been intensely debated for the past five years. The argument arises because Clean Water Act section 402(p) fails to clearly state that municipal dischargers of storm water must meet water quality standards. On the issue of industrial discharges of storm water, the statute clearly indicates that industrial dischargers must meet both (1) the technology-based standard of "best available technology economically achievable (BAT)" and (2) applicable water quality standards. On the issue of municipal discharges however, the statute states that municipal dischargers must meet (1) the technology-based standard of "maximum

extent practicable (MEP)" and (2) "such other provisions that the Administrator or the State determines appropriate for the control of such pollutants." The statute fails, however, to specifically state that municipal dischargers must meet water quality standards.

As a result, the municipal storm water dischargers have argued that they do not have to meet water quality standards; and that they only are required to meet MEP. Environmental interest groups maintain that not only do MS4 discharges have to meet water quality standards, but that MS4 permits must also comply with numeric effluent limitations for the purpose of meeting water quality standards. On the issue of water quality standards, the US EPA, the SWRCB, and the SDRWQCB have consistently maintained that MS4s must indeed comply with water quality standards. On the issue of whether water quality standards must be met by numeric effluent limits, the US EPA, the SWRCB (in Orders WQ 91-03 and WQ 91-04), and the SDRWQCB have maintained that MS4 permits can, at this time, contain narrative requirements for the implementation of BMPs in place of numeric effluent limits.

SWRCB rationale: In addition to relying on US EPA's legal opinion concluding that MS4s must meet MEP and water quality standards, the SWRCB also relied on the Clean Water Act's explicit authority for States to require "such other provisions that the Administrator or the State determines appropriate for the control of such pollutants" in addition to the technology-based standard of MEP. To further support its conclusions that MS4 permit dischargers must meet water quality standards, the SWRCB relied on provisions of the California Water Code that specify that all waste discharge requirements must implement applicable Basin Plans and take into consideration the appropriate water quality objectives for the protection of beneficial uses.

The SWRCB first formally concluded that permits for MS4s must contain effluent limitations based on water quality standards in its Order WQ 91-03. In that Order, the SWRCB also concluded that it was appropriate for Regional Boards to achieve this result by requiring best management practices, rather than by inserting numeric effluent limitations into MS4 permits. In Order WQ 98-01, the SWRCB prescribed specific precedent setting Receiving Water Limitations language to be included in all future MS4 permits. This language specifically requires that MS4 dischargers meet water quality standards and allows for the use of narrative BMPs (increasing in stringency and implemented in an iterative process) as the mechanism by which water quality standards can be met.

In Order WQ 99-05, the SWRCB modified its receiving water limitations language in Order WQ 98-01 to meet specific objections by the US EPA (the modifications resulted in stricter compliance with water quality standards). SWRCB Order WQ 99-05 states "In Order WQ 98-01, the State Water Resources Control Board (State Water Board) ordered that certain receiving water limitation language be included in future municipal storm water permits. Following inclusion of that language in permits issued by the San Francisco Bay and San Diego Regional Water Quality Control Boards (Regional Water Boards) for Vallejo and Riverside respectively, the United States Environmental Protection Agency (EPA) objected to the permits. The EPA objection was based on the receiving water limitation

language. The EPA has now issued those permits itself and has included receiving water limitation language it deems appropriate.

"In light of EPA's objection to the receiving water limitation language in Order WQ 98-01 and its adoption of alternative language, the State Water Board is revising its instructions regarding receiving water limitation language for municipal storm water permits. It is hereby ordered that Order WQ 98-01 will be amended to remove the receiving water limitation language contained therein and to substitute the EPA language. Based on the reasons stated here, and as a precedent decision, the following receiving water limitation language [which is found in Receiving Water Limitations item C. of Order No. 2001-01] shall be included in future municipal storm water permits."

In a late 1999 case involving MS4 permits issued by US EPA to several Arizona cities (*Defenders of Wildlife v. Browner*, 1999, 197 F. 3d 1035), the United States Court of Appeals for the Ninth Circuit upheld US EPA's requirement for MS4 dischargers to meet water quality standards, but it did so on the basis of US EPA's discretion rather than on the basis of strict compliance with the Clean Water Act. In other words, while holding that the Clean Water Act does not require all MS4 discharges to comply strictly with state water quality standards, the Court also held that US EPA has the authority to determine that ensuring strict compliance with state water quality standards is necessary to control pollutants. On the question of whether MS4 permits must contain numeric effluent limitations, the court upheld US EPA's use of iterative BMPs in place of numeric effluent limits.

SWRCB's final position: On October 14, 1999, the SWRCB issued a legal opinion on the federal appellate decision and provided advice to the Regional Boards on how to proceed in the future. In the memorandum, the SWRCB concludes that the recent Ninth Circuit opinion upholds the discretion of US EPA and the State to (continue to) issue permits to MS4s that require compliance with water quality standards through iterative BMPs. Moreover, the memorandum states that "[…] because most MS4 discharges enter impaired water bodies, there is a real need for permits to include stringent requirements to protect those water bodies. As total maximum daily loads (TMDLs) are developed, it is likely that MS4s will have to participate in pollutant load reductions, and the MS4 permits are the most effective vehicles for those reductions." In summary, the SWRCB concludes that the Regional Boards should continue to include the Receiving Water Limitations language established in SWRCB Order WQ 99-05 in all future permits.

Accordingly, the SDRWQCB has included the Receiving Water Limitations language in Receiving Water Limitations item C. of Order No. 2001-01.

14. Finding states the following:

RECEIVING WATER LIMITATION COMPLIANCE STRATEGY: Implementation of BMPs cannot ensure attainment of receiving water quality objectives under all circumstances; some BMPs may not prove to be as effective as anticipated. An iterative process of BMP development, implementation, monitoring, and assessment is necessary to assure that an Urban Runoff Management Program is sufficiently comprehensive and effective to achieve compliance with receiving water quality objectives.

Discussion: As discussed above in the Finding 13 discussion, the US EPA and SWRCB have discretion to issue municipal storm water permits which require

compliance with water quality standards. To ensure that MS4 discharges comply with water quality standards, the SWRCB has adopted US EPA language in SWRCB Order WQ 99-05 which dictates implementation of an iterative BMP process when water quality standards are not met. This language is included in Order No. 2001-01 in Receiving Water Limitations item C. The iterative BMP process requires the implementation of increasingly stringent BMPs until receiving water standards are achieved. This is necessary because implementation of BMPs alone cannot ensure attainment of receiving water quality objectives. For example, a BMP which is effective in one situation may not be applicable in another. An iterative process of BMP development, implementation, and assessment is needed to promote consistent compliance with receiving water quality objectives. If assessment of a given BMP confirms that the BMP is ineffective, the iterative process should be restarted, with redevelopment of a new BMP which is anticipated to result in compliance with receiving water quality objectives. Regarding BMP assessment, the SWRCB Urban Runoff Technical Advisory Committee states "The [Storm Water Pollution Prevention Plan] SWPPP must be revised if an inspection indicates a need to alter the BMPs: drop ineffective BMPs, add new BMPs, or modify a BMP that is to remain in the SWPPP." It should be noted that while implementation of the iterative BMP process is a means to achieve compliance with water quality objectives, it does not shield the discharger from enforcement actions for continued non-compliance with water quality objectives.

15. Finding states the following:

COPERMITTEES' RESPONSIBILITY FOR ILLICIT DISCHARGES FROM THIRD PARTIES: As operators of MS4s, the Copermittees cannot passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to the waters of the United States, the operator of an MS4 that does not prohibit and/or control discharges into its system essentially accepts "title" for those discharges.

Discussion: Clean Water Act section 402(p) requires operators of MS4s to prohibit non-storm water into their MS4s. This is necessary because pollutants which enter the MS4 generally are conveyed through the MS4 to be eventually discharged into receiving waters. If a municipality does not prohibit non-storm water discharges, it is providing the pathway (its MS4) which enables pollutants to reach receiving waters. Since the municipality's storm water management service can result in pollutant discharges to receiving waters, the municipality must accept responsibility for the water quality consequences resulting from this service. Furthermore, third party discharges can cause a municipality to be out of compliance with its permit. Since pollutants from third parties which enter the MS4 will eventually be discharged from the MS4 to receiving waters, the third party discharges can result in a situation of municipality non-compliance if the discharges lead to an exceedance of water quality standards. For these reasons, each Copermittee must prohibit and/or control discharges from third parties to its MS4.

16. Finding states the following:

COPERMITTEES' RESPONSIBILITY BASED ON LAND USE AUTHORITY: Utilizing their land use authority, Copermittees authorize and profit from the urban development which generates the pollutants and runoff that impair receiving waters. Since the Copermittees utilize their legal authority to authorize urbanization, they must also exercise their legal authority to ensure that the resulting increased pollutant loads and flows do not further degrade receiving waters.

Discussion: Storm water permits are issued to municipalities because of their land use authority. The ultimate responsibility for the pollutant discharges, increased runoff, and inevitable long-term water quality degradation that results from urbanization lies with local governments. This responsibility is based on the fact that it is the local governments that have authorized the urbanization (i.e., conversion of natural pervious ground cover to impervious urban surfaces) and the land uses that generate the pollutants and runoff. Furthermore, the MS4 through which the pollutants and increased flows are conveyed, and ultimately discharged into San Diego's natural receiving waters, are owned and operated by the same local governments. In summary, the municipal Copermittees under Order No. 2001-01 are responsible for discharges into and out of their storm water conveyance systems because (1) they own and operate the MS4; and (2) they have the legal authority that authorizes the very development and land uses with generate the pollutants and increased flows in the first place.

Order No. 2001-01 holds the local government accountable for this direct link between its land use decisions and water quality degradation. The permit recognizes that each of the three major stages in the urbanization process (development planning, construction, and the use or operational stage) are controlled by and must be authorized by the local government. Accordingly, this permit requires the local government to implement, or require others to implement, appropriate best management practices to reduce pollutant discharges and increased flow during each of the three stages of urbanization.

For example, since grading cannot commence prior to the issuance of a local grading permit, the Copermittees have a built-in mechanism to ensure that all grading activities are protective of receiving water quality. The Copermittee has the authority and discretion to withhold issuance of the grading permit until the project proponent has demonstrated to the satisfaction of the Copermittee that the project will not violate the Copermittee's ordinances or cause the Copermittee to be in violation of its municipal storm water permit. Since the Copermittee will ultimately be held responsible for any discharges from the grading project by the SDRWQCB, the Copermittee will want to use its own permitting authority to ensure that whatever measures the Copermittee deems necessary to protect discharges into its MS4 are in fact taken by the project proponent.

17. Finding states the following:

THREE PHASES OF URBAN DEVELOPMENT: Urban development has three major phases: (1) land use planning for new development; (2) construction; and (3) the "use" or existing development phase. Because the Copermittees authorize, permit, and profit from each of these phases, and because each phase has a profound impact on water quality, the Copermittees have commensurate responsibilities to protect water quality during each phase.

In other words, Copermittees are held responsible for the short and long-term water quality consequences of their land use planning, construction, and existing development decisions.

Discussion: Through its permitting processes, each Copermittee authorizes the three major phases of urban development within its jurisdiction. Each Copermittee can also profit from the authorization of urban development. For these reasons, each Copermittee must assume responsibility for its urban development decisions

(see also the Discussion for Finding 16). The Federal Regulations clearly require municipalities to address urban runoff during each stage of development. Regarding BMP implementation during each stage of urban development, US EPA recommends that Copermittees 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 noncompliance with design, construction or operation and maintenance.[73]

18. Finding states the following:

PLANNING PHASE FOR NEW DEVELOPMENT: Because land use planning and zoning is where urban development is conceived, it is the phase in which the greatest and most cost effective opportunities to protect water quality exists. When a Copermittee incorporates policies and principles designed to safeguard water resources into its General Plan and development project approval processes, it has taken a far-reaching step towards the preservation of local water resources for future generations.

Discussion: Including plans for BMP implementation during the design phase of new development and redevelopment offers the most cost effective strategy to reduce urban runoff pollutant loads to surface waters.[74] The Phase II regulations for small municipalities reflect the necessity of addressing urban runoff during the early planning phase. Due to the greater water quality concerns generally experienced by larger municipalities, Phase II requirements for small municipalities are also applicable to larger municipalities such as the Copermittees. The Phase II regulations direct municipalities to 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. The program must ensure that controls are in place that would prevent or minimize water quality impacts. This includes developing and implementing strategies which include a combination of structural and/or non-structural BMPs appropriate to the locality. The program must also ensure the adequate long-term operation and maintenance of BMPs.[75] US EPA expands on the Phase II regulations for urban development when it recommends that Copermittees:

> "[A]dopt 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

[73] US EPA. 1999. 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. 64 FR 68845.

[74] US EPA. 2000. Storm Water Phase II Compliance Assistance Guide. EPA 833-R-00-002.

[75] US EPA. 1999. 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. 64 FR 68845.

existing ordinances, policies, programs and studies that address storm water runoff quality."

19. Finding states the following:

CONSTRUCTION PHASE: Construction activities are a significant cause of receiving water impairment. Siltation is currently the largest cause of river impairment in the United States. Sediment runoff rates from construction sites greatly exceed natural erosion rates of undisturbed lands causing siltation and impairment of receiving waters. In addition to requiring implementation of the full range of BMPs, an effective construction runoff program must include local plan review, permit conditions, field inspections, and enforcement.

Discussion: The US EPA strongly supports this finding in the Phase II regulations. The US EPA explains in the regulations that 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 due to runoff from construction sites. Fine sediment from construction sites can adversely affect 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 the streambed, and reducing intergravel dissolved oxygen by reducing the permeability of the bed material. Water quality impairment also 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, metals, and organic compounds into aquatic systems.[76]

20. Finding states the following:

EXISTING DEVELOPMENT: The Copermittees' wet weather monitoring results collected during the past decade, as well as volumes of other references in the literature today, confirm substantial pollutant loads to receiving waters in runoff from existing urban development. Implementation of jurisdictional and watershed URMPs, which include extensive controls on existing development, can reduce pollutant loadings over the long term.

Discussion: This finding is supported by the results of the City of San Diego and Co-permittee NPDES Stormwater Monitoring Program annual reports.[77]

21. Finding states the following:

CHANGES NEEDED: Because the urbanization process is a direct and leading cause of water quality degradation in this Region, fundamental changes to existing policies and practices about urban development are needed if the beneficial uses of San Diego's natural water resources are to be protected.

Discussion: Urban runoff has been recognized as a leading cause of water quality degradation both regionally and nationwide. The 1998-1999 City of San Diego and

[76] US EPA. 1999. 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. 64 FR 68728.

[77] City of San Diego. Multiple Years. City of San Diego and Co-permittee NPDES Stormwater Monitoring Program. Prepared by Woodward Clyde Consultants.

Co-Permittee NPDES Stormwater Monitoring Program Report reflects the water quality issues resulting from urban runoff that have been observed in the San Diego region and on a nationwide level. Monitoring efforts indicate that instream concentrations of pathogen indicators (fecal coliform and streptococcus) and heavy metals (such as cadmium, copper, lead, and zinc) exceed state and federal water quality criteria. In addition, storm water within the region has been found to contain the pesticides diazinon and chlorpyrifos (Dursban) at levels which can cause chronic or acute toxicity.[78]

As the monitoring program results indicate, urban runoff is identified as a primary source of receiving water quality impairment within the Region. Though urban land use occupies approximately 30% of the monitoring program study area, approximately 50% or more of the total pollutant load for many constituents is contributed by urbanized land uses including residential, commercial, and industrial land uses.[79] The Region's Clean Water Act Section 303(d) list, which identifies water bodies with impaired beneficial uses within the Region, also indicates that the impacts of urban runoff are significant. Many of the impaired water bodies on the 303(d) list are impaired by constituents which have been found at high levels within urban runoff by the regional storm water monitoring program. Examples of constituents frequently responsible for beneficial use impairment include total and fecal coliform, heavy metals, and sediment; these constituents have been found at high levels in urban runoff both regionally and nationwide.

Clearly, current policies and practices to protect water quality from the impacts of urbanization have not been entirely effective. A shift is toward new and expanded policies and practices is needed to achieve the requirements of the Clean Water Act. The requirements of Order No. 2001-01 include and encourage new policies and practices to manage urban runoff. These new policies and practices are based on US EPA and SWRCB guidance, and are supported by recent and ongoing research. The requirements of Order No. 2001-01 are discussed individually in further detail in section VII of this Fact Sheet/Technical Report.

22. Finding states the following:

DUAL REGULATION OF INDUSTRIAL AND CONSTRUCTION SITES: Discharges of runoff from industrial and construction sites in this Region are subject to dual (state and local) regulation. (1) All industries and construction sites are subject to the local permits, plans, and ordinances of the municipal jurisdiction in which it is located. Pursuant to this Order, local (storm water, grading, construction, and use) permits, plans, and ordinances must (a) prohibit the discharge of pollutants and non-storm water into the MS4; and (b) require the routine use of BMPs to reduce pollutants in site runoff. (2) Many industries and construction sites are also subject to regulation under the statewide General Industrial Storm Water Permit or statewide General Construction Storm Water Permit . These statewide general permits are adopted by the State Water Resources Control Board and enforced by the nine Regional Water Quality Control Boards throughout California. Like the Copermittees' local permits and ordinances, the statewide General Industrial and Construction Permits also (a) prohibit the discharge of pollutants and non-storm water; and (b) require the routine use of BMPs to reduce pollutants in site runoff.

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[78] City of San Diego. 1999. 1998-1999 City of San Diego and Co-permittee NPDES Stormwater Monitoring Program Report. Prepared by URS Greiner Woodward Clyde.

[79] City of San Diego. 1998. 1997-1998 City of San Diego and Co-permittee NPDES Stormwater Monitoring Program Report. Woodward Clyde Consultants.

Recognizing that both authorities share a common goal, the federal storm water regulations at 40 CFR 122.26 (and its preamble) call for the dual system to ensure the most effective oversight of industrial and construction site discharges. Under this dual system, each municipal Copermittee is responsible for enforcing its local permits, plans, and ordinances within its jurisdiction. Similarly, the SDRWQCB is responsible for enforcing both statewide general permits and this Order within the San Diego Region.

Discussion: US EPA finds the control of pollutant discharges from industry and construction so important to receiving water quality that it has established a double system of regulation over industrial and construction sites. This double system of regulation consists of two parallel regulatory systems with the same common objective: to keep pollutants from industrial and construction sites out of the MS4. In this double system of regulation for runoff from industrial and construction sites, local governments must enforce their legal authorities (i.e., local ordinances and permits) while the SDRWQCB must enforce its legal authority (i.e., statewide general industrial and construction storm water permits). These two regulatory systems are designed to complement and support each other. Municipalities are not required to enforce SDRWQCB and SWRCB permits; however, they are required to enforce their ordinances and permits. The Federal regulations are clear that municipalities have responsibility to address runoff from industrial and construction sites which enters their MS4s.

Municipalities have this responsibility because they have the authority to issue land use and development permits. Since municipalities are the lead permitting authority for industrial land use and construction activities, they are also the lead for enforcement regarding runoff discharges from these sites. For sites where the municipality is the lead permitting authority, the SDRWQCB will work with the municipality and provide support where needed. In some instances, where the SDRWQCB is the primary regulatory authority and lead permitting authority (e.g., for landfills and sewage collection and treatment systems), the SDRWQCB is the lead for enforcement and will look for support from the municipalities.

23. Finding states the following:

EDUCATION: Education is the foundation of every effective URMP and the basis for changes in behavior at a societal level. Education of municipal planning, inspection, and maintenance department staffs is especially critical to ensure that in-house staffs understand how their activities impact water quality, how to accomplish their jobs while protecting water quality, and their specific roles and responsibilities for compliance with this Order. Public education, designed to target various urban land users and other audiences, is also essential to inform the public of how individual actions impact receiving water quality and how these impacts can be minimized.

Discussion: The SWRCB and US EPA both recognize education as a critical component of storm water management. In its 1994 report, the SWRCB Technical Advisory Committee (TAC) "recognizes that education with an emphasis on pollution prevention is the fundamental basis for solving nonpoint source pollution problems." The TAC goes on to recommend that target audiences for education efforts include the government, youth groups, the development community, and business and industrial groups. According to the Phase II Storm Water Regulations found at 64 FR 68754 and 68754, US EPA believes that as the public gains a greater understanding of the storm water program through education, the municipality is likely to gain more support for the program (including funding initiatives). In addition, compliance with the program will probably be greater is the

public understands the personal responsibilities expected of them. US EPA goes on to explain that a public education program should inform individuals and households about problems and the steps they can take to reduce or prevent storm water pollution.

24. Finding states the following:

ENFORCING LOCAL LEGAL AUTHORITY: Enforcement of local urban runoff related ordinances, permits, and plans is an essential component of every URMP and is specifically required in the federal storm water regulations and this Order. Routine inspections provide an effective means by which Copermittees can evaluate compliance with their permits and ordinances. Inspections are especially important at high-risk areas for pollutant discharges such as industrial and construction sites.

When industrial or construction site discharges occur in violation of local permits and ordinances, the SDRWQCB looks first to the municipality that has authorized the discharge for appropriate actions (typically education followed by enforcement where education has been unsuccessful). If the municipality has demonstrated a good faith effort to educate and enforce but remains unsuccessful, the SDRWQCB will then step in to enforce the applicable statewide general permit. If the municipality has not demonstrated a good faith enforcement effort, the SDRWQCB may initiate enforcement action against both the industrial or construction discharger (under the statewide general permit), as well as against the authorizing municipal Copermittee for violations of this Order. Each Copermittee must also provide the first level of enforcement against illegal discharges from other land uses it has authorized, such as commercial and residential developments that it has authorized.

Discussion: Since municipalities approve and permit construction and land use within their jurisdiction, they must assume responsibility for urban runoff discharges from these activities and land uses. The Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A – D) are clear in placing responsibility on municipalities for control of urban runoff from third party activities and land uses to their MS4. In order for municipalities to assume this responsibility, they must implement ordinances, permits, and plans addressing urban runoff from third parties. Assessments for compliance with their ordinances, permits, and plans are essential for a municipality to ensure that third parties are not causing the municipality to be in violation of its municipal storm water permit. When conditions of non-compliance is determined, enforcement is necessary to ensure that violations of municipality ordinances and permits are corrected. Without enforcement, third parties do not have incentive to correct violations. US EPA supports inspections and enforcement by municipalities when it states "Effective inspection and enforcement requires […] penalties to deter infractions and intervention by the municipal authority to correct violations. Enforcement mechanisms […] also must be described."[80]

US EPA discusses the "dual regulation" of construction sites in its *Storm Water Phase II Compliance Assistance Guide*, which states "Even though all construction sites that disturb more than one acre are covered nationally by an NPDES storm water permit, the construction site runoff control minimum measure […] is needed to induce more localized site regulation and enforcement efforts, and to enable operators […] to more effectively control construction site discharges into their MS4s." While the *Storm Water Phase II Compliance Assistance Guide* applies to small municipalities, requirements for small municipalities are applicable to larger

[80] US EPA. 1992. Guidance Manual for the Preparation of Part II of the NPDES Permit Applications for Discharges from Municipal Separate Storm Sewer Systems. EPA 833-B-92-002.

municipalities, such as the Copermittees, due to the generally more serious water quality problems caused by larger municipalities.

Municipalities assume initial responsibility for enforcement against illegal discharges from land uses and activities within their jurisdiction because of their land use authority. Since the municipality approves and permits development and land use, it must ensure that its development or land use decisions do not result in receiving water quality degradation. The SDRWQCB will assist municipalities in enforcement against non-compliant sites after the municipality has exhibited a good faith effort to bring the site into compliance.

25. Finding states the following:

PUBLIC PARTICIPATION: Public participation during the URMP development process is necessary to ensure that all stakeholder interests and a variety of creative solutions are considered.

Discussion: This finding is supported by the Phase II Storm Water Regulations found at 64 FR 68755 which states, "[E]arly and frequent public involvement can shorten implementation schedules and broaden public support for a program." It goes on to explain,"[P]ublic participation is likely to ensure a more successful storm water program by providing valuable expertise and a conduit to other programs and governments."

26. Finding states the following:

TOXICITY: Urban runoff discharges from MS4s often contain pollutants that cause toxicity, (i.e., adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies). The water quality objectives for toxicity provided in the Water Quality Control Plan, San Diego Basin, Region 9, (Basin Plan), state in part "All waters shall be free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life….The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge…" Urban runoff discharges from MS4s are considered toxic when (1) the toxic effect observed in an acute toxicity test exceeds zero Toxic Units Acute (TUa=0); or (2) the toxic effect observed in a chronic toxicity test exceeds one Toxic Unit Chronic (TUc=1).

Discussion: Consideration of urban runoff toxicity is significant because toxicity assessments measure the potential effect of a discharge on receiving waters. This is particularly useful in assessing impacts, as opposed to measurements of pollutant concentrations where the effect of the pollutant concentration on receiving waters may be unknown. Finding 26 and this discussion clarify SDRWQCB expectations regarding urban runoff toxicity. Toxicity is also further discussed in Appendix I of the SWRCB's 1997 Water Quality Control Plan – Ocean Waters of California, "California Ocean Plan."

Toxicity is commonly evaluated in terms of both acute toxicity and chronic toxicity. "Acute toxicity concentration" can be expressed in Toxic Units Acute (TUa). The Ocean Plan defines acute toxicity and a method for calculating TUa in a manner that can be used for ocean waters and other waters. Using this Ocean Plan definition and calculation methodology, 100% survival of test organisms in an acute toxicity test yields an acute toxicity concentration of zero

TUa. 100% survival of test organisms corresponds to the Basin Plan narrative objective of 'no toxics in toxic amounts.' Therefore, an acute toxicity concentration in excess of zero TUa would not meet the Basin Plan narrative objective for toxicity.

"Chronic toxicity concentration" can be expressed in Toxic Units Chronic (TUc). As with acute toxicity, the Ocean Plan defines chronic toxicity and a method for calculating TUc that can be used for ocean waters and other waters. Using this Ocean Plan definition and calculation methodology, the absence of observable effects on test organisms in undiluted test water in a critical life stage toxicity test yields a chronic toxicity concentration of 1 TUc. The absence of observable effects on test organisms in undiluted test water corresponds to the Basin Plan narrative objective of 'no toxics in toxic amounts.' Therefore, a chronic toxicity concentration in excess of 1 TUc would not meet the Basin Plan narrative objective for toxicity.

27. Finding states the following:

FOCUS ON MAN-MADE POLLUTANTS AND FLOWS: The focus of this Order is on the control of urban runoff pollutants and flows which are either generated or accelerated by human activities. This Order is not meant to control background or naturally occurring pollutants and flows.

Discussion: In general, man-made pollutants and flows are the cause of receiving water impairment resulting from urban runoff. This is because human activities increase the concentrations of constituents above natural or background levels. Flow volumes and rates are also increased above background levels due to human activities, in both wet and dry weather. The focus of Order No. 2001-01 is therefore placed man-made pollutants and flows. Man-made pollutants and flows are also focused on due to our ability to control them. In comparison with naturally occurring pollutants and flows, man-made pollutants and flows are significantly easier to control. The SDRWQCB has discretion to require control of flows under a United States Supreme Court decision, which held that regulation of flow to protect beneficial uses is within the authority of the Clean Water Act (PUD No. 1 v. WA Dept. of Ecology, 511 U.S. 700 (1994)).

28. Finding states the following:

COMMON WATERSHEDS AND CWA SECTION 303(d) IMPAIRED WATERS: The Copermittees discharge urban runoff into lakes, drinking water reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within ten of the eleven hydrologic units (watersheds) comprising the San Diego Region as shown in Table 2 below. During its downstream course, urban runoff is conveyed through lined and unlined (natural, manmade, and partially modified) channels, all of which are defined as components of the Copermittees' MS4.

Some of the receiving water bodies, which receive or convey urban runoff discharges, have been designated as impaired by the SDRWQCB and USEPA in 1998 pursuant to Clean Water Act section 303(d). Also shown below are the watershed management areas (WMAs) as defined in the SDRWQCB report, Watershed Management Approach, January 2000.

Table 2. Watershed Management Areas (WMAs)

SDRWQCB WATERSHED MANAGEMENT AREA (WMA)	HYDROLOGIC UNIT(S)	MAJOR SURFACE WATER BODIES	303(d) POLLUTANT(S) OF CONCERN OR WATER QUALITY EFFECT	COPERMITTEES
Santa Margarita River	*Santa Margarita (902.00)*	*Santa Margarita River and Estuary, Pacific Ocean*	*1. Coliform Bacteria 2. Nutrients*	*1. County of San Diego*
San Luis Rey River	*San Luis Rey (903.00)*	*San Luis Rey River and Estuary, Pacific Ocean*	*1. Coliform Bacteria 2. Nutrients*	*1. City of Escondido 2. City of Oceanside 3. City of Vista 4. County of San Diego*
Carlsbad	*Carlsbad (904.00)*	*Batiquitos Lagoon San Elijo Lagoon Agua Hedionda Lagoon Buena Vista Lagoon And Tributary Streams Pacific Ocean*	*1. Coliform Bacteria 2. Nutrients 3. Sediment*	*1. City of Carlsbad 2. City of Encinitas 3. City of Escondido 4. City of Oceanside 5. City of San Marcos 6. City of Solana Beach 7. City of Vista 8. County of San Diego*
San Dieguito River	*San Dieguito (905.00)*	*San Dieguito River and Estuary, Pacific Ocean*	*1. Coliform Bacteria*	*1. City of Del Mar 2. City of Escondido 3. City of Poway 4. City of San Diego 5. City of Solana Beach 6. County of San Diego*
Mission Bay	*Peñasquitos (906.00)*	*Los Peñasquitos Lagoon Mission Bay, Pacific Ocean*	*1. Coliform Bacteria 2. Metals 3. Nutrients 4. Sediment*	*1. City of Del Mar 2. City of Poway 3. City of San Diego 4. County of San Diego*
San Diego River	*San Diego (907.00)*	*San Diego River, Pacific Ocean*	*1. Coliform Bacteria*	*1. City of El Cajon 2. City of La Mesa 3. City of Poway 4. City of San Diego 5. City of Santee 6. County of San Diego*
San Diego Bay	*Pueblo San Diego (908.00) Sweetwater (909.00) Otay (910.00)*	*San Diego Bay Sweetwater River Otay River Pacific Ocean*	*1. Coliform Bacteria 2. Metals 3. Toxicity 4. Benthic Community Degradation*	*1. City of Chula Vista 2. City of Coronado 3. City of El Cajon 4. City of Imperial Beach 5. City of La Mesa 6. City of Lemon Grove 7. City of National City 8. City of San Diego 9. County of San Diego 10. San Diego Unified Port District*
Tijuana River	*Tijuana (911.00)*	*Tijuana River and Estuary Pacific Ocean*	*1. Coliform Bacteria 2. Low Dissolved Oxygen 3. Metals 4. Nutrients 5. Pesticides 6. Synthetic Organics 7. Total Dissolved Solids 8. Trash*	*1. City of Imperial Beach 2. City of San Diego 3. County of San Diego*

Discussion: The 1998 California 303(d) List and TMDL Priority Schedule identifies impaired receiving water bodies and their watersheds within the State of California. The Copermittees which discharge from Ms4s to these water bodies are identified in the Regional Board *Draft Watershed Management Approach*.[81] For an explanation on how the watershed approach fits into the NPDES municipal storm water permitting program, see Attachment 4, Municipal Storm Water Permitting and the Watershed Approach.

[81] SDRWQCB. 1999. Fifth Draft Watershed Management Approach for the San Diego Region.

29. Finding states the following:

CUMULATIVE POLLUTANT LOAD CONTRIBUTIONS: Because they are interconnected, each MS4 within a watershed contributes to the cumulative pollutant loading, volume, and velocity of urban runoff and the ensuing degradation of the downstream receiving water bodies. Accordingly, inland MS4s contribute to coastal impairments.

Discussion: A watershed is the drainage basin, outlined by topographic divides, which drain to a common outlet, such as a stream, lake, estuary, enclosed bay, or ocean. Therefore, when various MS4s discharge into the same watershed, the discharges eventually flow into a common receiving water body. In this manner, individual MS4s which share the same watershed contribute to cumulative pollutant loading in the watershed's receiving water body. To help alleviate this cumulative loading, watershed based water quality protection is needed. The SWRCB Urban Runoff Technical Advisory Committee defines watershed based water quality protection as "the prevention/control of pollution and management of human activities within a geographically or other defined drainage area to protect, restore, and/or enhance the natural resources and beneficial uses within the watershed."

30. Finding states the following:

LAND USE PLANNING ON A WATERSHED SCALE: Because urban runoff does not recognize political boundaries, "watershed-based" land use planning (pursued collaboratively by neighboring local governments) can greatly enhance the protection of shared natural water resources. Such planning enables multiple jurisdictions to work together to plan for both development and resource conservation that can be environmentally as well as economically sustainable.

Discussion: Conventional planning and zoning can be limited in their ability to protect the environmental quality of creeks, rivers, and other waterbodies. Watershed-based planning is often ignored, despite the fact that receiving waters unite land by collecting runoff from throughout the watershed. Since watersheds unite land, they can be used as an effective basis for planning. Watershed-based planning enables local and regional areas to realize economic, social, and other benefits associated with growth, while conserving the resources needed to sustain such growth, including water quality. This type of planning can involve four steps: (1) Identify the watersheds shared by the participating jurisdictions; (2) Identify, assess, and prioritize the natural, social, and other resources in the watersheds; (3) Prioritize areas for growth, protection, and conservation, based on prioritized resources; and (4) Develop plans and regulations to guide growth and protect resources. Local governments can start with simple, yet effective, steps toward watershed planning, such as adopting a watershed-based planning approach, articulating the basic strategy in their General Plans, and beginning to pursue the basic strategy in collaboration with neighboring local governments who share the watersheds. New mechanisms have been created to facilitate watershed-based planning and zoning, such as the San Francisquito Creek Watershed Coordinated Resource Management Process and the Santa Clara Basin Watershed Management Initiative.[82]

31. Finding states the following:

[82] Source: Bay Area Stormwater Management Agencies Association. 1999. Start at the Source. Forbes Custom Publishing.

INTERGOVERNMENTAL COORDINATION: Within their common watersheds it is essential for the Copermittees to coordinate their water quality protection and land use planning activities to achieve the greatest protection of receiving water bodies. Copermittee coordination with other watershed stakeholders, especially Caltrans and the Department of Defense, is also critical.

Establishment of a management structure, within which the Copermittees subject to this Order, will fund and coordinate those aspects of their joint obligations will promote implementation of Urban Runoff Management Programs on a watershed and regional basis in the most cost effective manner.

Discussion: Within a given watershed, "water quality and beneficial uses may be affected by many different activities – which may occur throughout or only in certain parts of watersheds, and which may occur near to or far from locations of known water problems" (SDRWQCB,1999). This implies that pollutant sources may actually be located far from where the water quality problem manifests itself. Therefore, water quality problems generated by one municipality may impact another municipality. In addition, municipalities within a watershed all contribute pollutants to shared receiving waters. For these reasons, coordination between municipalities and stakeholders within a watershed is necessary. Watershed scale coordination provides for the highest priority water quality problems to be addressed, resulting in the greatest improvements in water quality for costs incurred. Intergovernmental coordination can also result in cost savings through the sharing of resources between Copermittees.

Also, federal NPDES regulation 40 CFR 122.26(d)(2)(iv) requires where necessary intergovernmental coordination by stating "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." In addition, the US EPA finds that "[Copermittees] may use jurisdictional agreements to show adequate legal authority and to ensure planning, coordination, and the sharing of the resource burden of permit compliance" (1992).

32. Finding states the following:

WASTE REMOVAL: Waste and pollutants which are deposited and accumulate in MS4 drainage structures will be discharged from these structures to waters of the United States unless they are removed. These discharges may cause or contribute to, or threaten to cause or contribute to, a condition of pollution in receiving waters. Once removed, such accumulated wastes must be characterized and lawfully disposed.

Discussion: When rain falls and drains urban freeways, industries, construction sites, and neighborhoods it picks up a multitude of pollutants. Gravity flow transports the pollutants to the MS4. Illicit discharges and connections also contribute a significant amount of pollutants to MS4s. MS4s are commonly designed to convey their contents as quickly as possible. Due to these typically high flow rates within the concrete conveyance systems of MS4s, pollutants which enter or are deposited in the MS4 and not removed are generally flushed unimpeded through the MS4 to waters of the United States. The US EPA found in its National Urban Runoff Pollution study (1983) that pollutant concentrations in urban runoff discharged from MS4s frequently exceed established receiving water

quality objectives and drinking water standards. Therefore, when waste is deposited in the MS4, it is generally flushed to receiving waters, when it can potentially cause or contribute to a violation of water quality standards.

33. Finding states the following:

TOXIC HOT SPOTS: Urban runoff is a significant contributor to the creation and persistence of Toxic Hot Spots in San Diego Bay. California Water Code section 13395 requires regional boards to reevaluate waste discharge requirements (WDRs) associated with toxic hot spots. The State Water Resources Control Board (SWRCB) adopted the Consolidated Toxic Hot Spot Cleanup Plan in June 1999. The Plan states: "The reevaluation [of WDRs associated with toxic hot spots] shall consist of (1) an assessment of the WDRs that may influence the creation or further pollution of the known toxic hot spot, (2) an assessment of which WDRs need to be modified to improve environmental conditions at the known toxic hot spot, and (3) a schedule for completion of any WDR modifications deemed appropriate."

Discussion: Toxic hot spots are those areas in enclosed bays, estuaries, or any adjacent waters in the "contiguous zone" or the "ocean", where pollution or contamination affects the interests of the state, and where hazardous substances have accumulated to levels which: 1) may pose a substantial present or potential hazard to aquatic life, wildlife, fisheries, or human health, or 2) may adversely affect the beneficial uses of the bay, estuary, or ocean waters, or 3) exceeds adopted water quality or sediment quality objectives. San Diego Bay contains several toxic hot spots. In a National Oceanic and Atmospheric Administration (NOAA) study which compared EMAP-type sediment toxicity data from various bays, San Diego Bay ranked second with 56 percent of the area of the Bay considered toxic. For these reasons, Order No. 2001-01 includes directives to prevent urban runoff from contributing to the further degradation of toxic hot spots.

34. Finding states the following:

CHANGING THE STORM WATER MANAGEMENT APPROACH: In contrast to the conventional "conveyance" approach, a more natural approach to storm water management seeks to filter and infiltrate runoff by allowing it to flow slowly over permeable vegetated surfaces. By "preserving and restoring the natural hydrologic cycle", filtration and infiltration can greatly reduce the volume/peak rate, velocity, and pollutant loads of urban runoff. The greatest opportunities for changing from a "conveyance" to a more natural management approach occur during the land use planning and zoning processes and when new development projects are under early design.

Discussion: Urbanization generally results in an increase in pollutant sources and impervious surfaces. The increase in pollutant sources leads to an increase in pollutant loads found in storm water, while the increase in impervious surfaces prevents natural processes from reducing those pollutant loads. The impervious surfaces associated with urbanization and its storm water conveyance systems prevent storm water from infiltrating into the soil. Natural vegetation and soil are prevented from filtering urban runoff, resulting in storm water flows that are higher in volume and pollutant loads. This causes the quality of receiving waters to be adversely impacted and beneficial uses to be impaired.

Studies have revealed that the level of imperviousness resulting from urbanization is strongly correlated with the water quality impairment of nearby

receiving waters.[83] Urbanization creates new sources of pollutants and provides for their rapid transport to receiving waters through storm water conveyance systems. Urbanization also adversely impacts receiving waters through changes it causes to local hydrology. Increases in population density and imperviousness stemming from urbanization result in changes to stream hydrology, including:

1. increased peak discharges compared to predevelopment levels;
2. increased volume of storm water runoff with each storm compared to pre- development levels;
3. decreased travel time to reach receiving water;
4. increased frequency and severity of floods;
5. increased runoff velocity during storms due to a combination of effects of higher discharge peaks, rapid time of concentration, and smoother hydraulic surfaces from channelization; and
6. decreased infiltration and diminished groundwater recharge.

In many cases the impacts on receiving waters due to changes in hydrology can be more significant than those attributable to the contaminants found in storm water discharges (USEPA, 1999b). These impacts include stream bank erosion (increased sediment load and subsequent deposition), benthic habitat degradation, and decreased diversity of macroinvertebrates.

For the above reasons, this Order encourages an approach to storm water management which seeks to preserve and restore the natural hydrologic cycle. Open space designs which maximize pervious surfaces and retention of "natural" drainages have been found to reduce both the costs of development and pollutant export.[84] Moreover, US EPA finds including plans for a "natural" site design and BMP implementation during the design phase of new development and redevelopment offers the most cost effective strategy to reduce pollutant loads to surface waters.[85]

35. Finding states the following:

INFILTRATION AND POTENTIAL GROUNDWATER CONTAMINATION: Any drainage feature that infiltrates runoff poses some risk of potential groundwater contamination. Although dependent on several factors, the risks typically associated with the infiltration of runoff (especially from residential land use areas) are not significant. The risks associated with infiltration can be managed by many techniques, including (1) designing landscape drainage features that promote infiltration of runoff, but do not "inject" runoff (injection bypasses the natural processes of filtering and transformation that occur in the soil); (2) taking reasonable steps to prevent the illegal disposal of wastes; and (3) ensuring that each drainage feature is adequately maintained in perpetuity. Minimum conditions needed to protect groundwater are specified in section F.1.b. of this Order.

Discussion: Infiltration is an effective means for managing urban runoff. However, measures must be taken to protect groundwater quality when infiltration of urban

[83] U.S. Environmental Protection Agency. 1999. 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.

[84] Center for Watershed Protection. 2000. "The Benefits of Better Site Design in Residential Subdivisions." Watershed Protection Techniques. Vol. 3. No. 2.

[85] U.S. Environmental Protection Agency. 1999. 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.

runoff is implemented. US EPA supports urban runoff infiltration and provides guidance for protection of groundwater: "With a reasonable degree of site-specific design considerations to compensate for soil characteristics, infiltration may be very effective in controlling both urban runoff quality and quantity problems. This strategy encourages infiltration of urban runoff to replace the natural infiltration capacity lost through urbanization and to use the natural filtering and sorption capacity of soils to remove pollutants; however, the potential for some types of urban runoff to contaminate groundwater through infiltration requires some restrictions."[86] The restrictions placed on urban runoff infiltration in Order No. 2001-01 are based on recommendations provided by the US EPA Risk Reduction Engineering Laboratory. The SWRCB tentatively found in its draft order on the appeal of the Los Angeles Regional Water Quality Control Board's (LARWQCB's) Standard Urban Storm Water Mitigation Plan (SUSMP) requirements that the guidance provided in the above referenced document by the US EPA Risk Reduction Engineering Laboratory is sufficient for the protection of groundwater quality from urban runoff infiltration. To further protect groundwater quality, Order No. 2001-01 also includes guidance from the LARWQCB,[87] the State of Washington,[88] and the State of Maryland.[89]

36. Finding states the following:

ANTIDEGRADATION: Conscientious implementation of URMPs that satisfy the requirements contained in this Order will reduce the likelihood that discharges from MS4s will cause or contribute to unreasonable degradation of the quality of receiving waters. Therefore, this Order is in conformance with SWRCB Resolution No. 68-16 and the federal antidegradation policy described in 40 CFR 131.12.

Discussion: Implementation of URMPs is required to reduce pollutants in urban runoff to the maximum extent practicable. Reduction of pollutants to the maximum extent practicable will prevent degradation of the quality of receiving waters. Therefore, implementation of URMPs which satisfy the requirements of Order No. 2001-01 will prevent violations of receiving water quality objectives. The Basin Plan states that "Water quality objectives must […] conform to US EPA regulations covering antidegradation (40 CFR 131.12) and State Board Resolution 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California." As a result, when water quality objectives are met through the implementation of URMPs, US EPA and SWRCB antidegradation policy requirements are also met.

37. Finding states the following:

CEQA: The issuance of waste discharge requirements for the discharge of urban runoff from MS4s to waters of the United States is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, § 21000 et seq.) in accordance with the CWC § 13389.

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86 U.S. Environmental Protection Agency. 1994. Potential Groundwater Contamination from Intentional and Nonintentional Stormwater Infiltration. EPA 600 SR-94 051.

87 Guidance on vertical distance from base of BMP to groundwater table. LARWQCB. 2000. Standard Urban Storm Water Mitigation Plan for Los Angeles County and Cities in Los Angeles County.

88 Washington State Department of Ecology. 1999. Draft Stormwater Management in Washington State. Volume V – Runoff Treatment BMPs. Pub. No. 99-15.

89 Maryland Department of the Environment. 1999. 2000 Maryland Stormwater Design Manual. Volume I.

Discussion: CWC section 13389 provides that "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."

38. Finding states the following:

PUBLIC NOTICE: The SDRWQCB has notified the Copermittees, all known interested parties, and the public of its intent to consider adoption of an order prescribing waste discharge requirements that would serve to renew an NPDES permit for the existing discharge of urban runoff.

Discussion: Public notification of development of a draft permit is required under Federal regulation 40 CFR 124.10(a)(1)(ii). This regulation states "(a) Scope. (1) The Director shall give public notice that the following actions have occurred: (ii) A draft permit has been prepared under Sec. 124.6(d)." Public notifications "shall allow at least 30 days for public comment," as required under Federal regulation 40 CFR 124.10(b)(1).

39. Finding states the following:

PUBLIC HEARING: The SDRWQCB has, at a public meeting on December 13, 2000, held a public hearing and heard and considered all comments pertaining to the terms and conditions of this Order.

Discussion: Public hearings are required under California Water Code Section 13378, which states "Waste discharge requirements and dredged or fill material permits shall be adopted only after notice and any necessary hearing." Federal regulation 40 CFR 124.12(a)(1) also requires public hearings for draft permits, stating "The Director shall hold a public hearing whenever he or she finds, on the basis or requests, a significant degree of public interest in a draft permit(s)." Regarding public notice of a public hearing, Federal regulation 40 CFR 124.10(b)(2) states that "Public notice of a public hearing shall be given at least 30 days before the hearing."

VII. DIRECTIVES DISCUSSION

UNDERLYING BROAD LEGAL AUTHORITY FOR ORDER NO. 2001-01

The following statutes, regulations, and Water Quality Control Plans provided the basis for Order No. 2001-01: Clean Water Act, California Water Code, 40 CFR Parts 122, 123, 124 (National Pollutant Discharge Elimination System Permit Application Regulations for Storm Water Discharges, Final Rule), Part II of 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), Water Quality Control Plan – Ocean Waters of California (California Ocean Plan), Water Quality Control Plan for the San Diego Basin (Basin Plan), 40 CFR 131 Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; Rule (California Toxics Rule), and the California Toxics Rule Implementation Plan.

The following broad legal authority citations generally apply to all directives in Order No. 2001-01, and provide the SDRWQCB with ample underlying authority to require each of the directives.

CWA 402(p)(3)(B)(ii) – Prohibit Non-Storm Water
The CWA requires in section 402(p)(3)(B)(ii) that permits for discharges from municipal storm sewers "shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers."

CWA 402(p)(3)(B)(iii) – Reduce to MEP and Whatever Else is Needed
The CWA requires in section 402(p)(3)(B)(iii) that 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."

40 CFR 122.26(d)(2)(i)(B,C,E, and F) – Obtain Adequate Legal Authority
Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) provide that each Copermitee's permit 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: […] (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; […] (E) Require compliance with condition 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."

40 CFR 122.26(d)(2)(iv) – Reduce to the MEP and Whatever Else is Needed
Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) provides that the Copermittee shall develop and implement a proposed management program which "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. […] Proposed programs may impose controls on a systemwide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. […] Proposed management programs shall describe priorities for implementing controls."

CWC 13377 – Implement Clean Water Act and Whatever Else is Needed
California Water Code section 13377 provides that "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 (Clean Water 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 anymore stringent effluent standards or limitation necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance."

In addition to the five broad legal authority items cited above, which underlie all of the directives in Order No. 2001-01, additional specific legal authority citations applicable to particular directives of Order No. 2001-01 are provided in this Fact Sheet/Technical Report as necessary. Some of these additional specific legal authority citations apply to entire components of Order No. 2001-01. In this case, the specific legal authority quotations are provided at the beginning of the discussion of the permit component, while the legal authority is again cited under each directive of the component. Furthermore, some specific legal authority citations only apply to distinct directives of Order No. 2001-01. When this occurs, the quotation of the specific legal authority citation will appear with the discussion of the distinct permit directive.

A. PROHIBITIONS – DISCHARGES

A.1. Prohibitions – Discharges states the following:

> *Discharges into and from MS4s in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance (as defined in CWC § 13050), in waters of the state are prohibited.*
>
> Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).
>
> Specific Legal Authority: The SDRWQCB Water Quality Control Plan for the San Diego Basin (Basin Plan) contains the following waste discharge prohibition: "The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination, or nuisance as defined in California Water Code Section 13050, is prohibited."
>
> California Water Code section 13050(l) states"(1) 'Pollution' means an alteration of the quality of waters of the state by waste to a degree which unreasonably affects either of the following: (A) The water for beneficial uses. (B) Facilities which serve beneficial uses. (2) 'Pollution' may include "contamination."
>
> California Water Code section 13050(k) states "'Contamination' means an impairment of the quality of waters of the state by waste to a degree which creates a hazard to public health through poisoning or through the spread of disease. 'Contamination' includes any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected."
>
> California Water Code section 13050(m) states "'Nuisance' means anything which 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."

California Water Code Section 13243 provides that "A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted."

California Water Code Section 13263(a) provides that waste discharge requirements prescribed by the SDRWQCB implement the Basin Plan.

Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff from commercial, residential, industrial, and construction land uses or activities.

Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A - D) require municipalities to have legal authority to control various discharges to their MS4.

Discussion: Prohibition item A.1. characterizes a basic premise and primary goal of Order No. 2001-01. The entire thrust of Order No. 2001-01 is to prevent discharges from MS4s from causing, or threatening to cause, a condition of pollution, contamination, or nuisance. In fact, Prohibition item A.1. exhibits a major component of the SDRWQCB's mission, and is included in its Basin Plan. The SDRWQCB seeks to preserve and enhance the quality of the region's waters, and one primary method to achieve this is by preventing conditions of pollution, contamination, or nuisance in the region's waters. As discussed in Finding 9, urban runoff discharges from MS4s can cause these conditions. Therefore, Prohibition item A.1 is included in Order No. 2001-01 to prevent urban runoff discharges which may cause or threaten to cause conditions of pollution, contamination, or nuisance.

Since discharges which enter the MS4 are generally discharged unimpeded directly into receiving waters, this prohibition applies to both discharges into and from MS4s. Federal NPDES regulations clearly provide the SDRWQCB with the legal authority to require municipalities to control discharges from third parties into their MS4. 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff **from** commercial, residential, industrial, and construction land uses or activities. Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A - D) require municipalities to have legal authority to control various discharges **to** their MS4. This concept is further supported in the Preamble to the Phase II Final Rule NPDES storm water regulations, which states "The operators of regulated small MS4s cannot passively receive and discharge pollutants **from** third parties" (US EPA, 1999). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule findings for small municipalities are also applicable to larger municipalities such as the Copermittees. Finally, underlying the Federal NPDES storm water regulations is the Clean Water Act, which states in section 402(p)(3)(B)(ii) that municipalities shall "effectively prohibit non-stormwater discharges **into** the storm sewers."

The requirement for municipal storm water dischargers to have, and exercise, local governmental authority in order to comply with water quality control obligations (such as Prohibition A.1 of Order No. 2001-01) is analogous to the requirement for Publicly Owned Treatment Works to have and exercise legal authority to require pretreatment of industrial wastes being discharged to their sewage collections systems (CWA 402(b)(8)).

The SDRWQCB has discretion to require Prohibition item A.1. in Order No. 2001-01 under the broad and specific legal authority cited above.

A.2. Prohibitions – Discharges states the following:

Discharges from MS4s which cause or contribute to exceedances of receiving water quality objectives for surface water or groundwater are prohibited.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.44(d)(1)(i) requires NPDES permits to include limitations to "control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

California Water Code section 13241 requires each regional board to "establish such water quality objectives in water quality control plans as in its judgement will ensure the reasonable protection of beneficial uses and the prevention of nuisance […]."

California Water Code Section 13243 provides that "A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted."

California Water Code Section 13263(a) provides that waste discharge requirements prescribed by the SDRWQCB implement the Basin Plan.

Discussion: As with Prohibition item A.1., Prohibition item A.2. also characterizes a primary goal of Order No. 2001-01 and the SDRWQCB. This goal is to protect the beneficial uses of the region's waters and achieve the water quality objectives necessary to protect those uses. The overarching intent of the Clean Water Act embodies Prohibition item A.2. as well; the Act's objective is to "restore and maintain all chemical, physical and biological integrity of the Nation's waters [to make all surface waters] fishable [and] swimmable."

As discussed in Finding 3, urban runoff discharges from MS4s can cause or contribute to exceedances of receiving water quality objectives. For this reason, there is a real need for municipal storm water permits to include stringent requirements such as Prohibition item A.2. to protect those water bodies. To meet

this need the SDRWQCB has included receiving water limitations, which dictate water quality standards (designated beneficial uses and water quality objectives developed to protect beneficial uses), in Receiving Water Limitations item C. of Order No. 2001-01 (see the Discussion for this item for more information). To ensure that water quality standards are protected and receiving water limitations met, the SDRWQCB must prohibit MS4 discharges that cause or contribute to exceedances of receiving water quality objectives.

The SDRWQCB has discretion to require Prohibition item A.2. in Order No. 2001-01 under the broad and specific legal authority cited above.

A.3. Prohibitions – Discharges states the following:

Discharges from MS4s to waters of the United States containing pollutants which have not been reduced to the maximum extent practicable (MEP) are prohibited.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: California Water Code Section 13243 provides that "A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted."

Discussion: As discussed in Findings 3 and 9, urban runoff discharges from MS4s can cause receiving water degradation and beneficial use impairment. For this reason, pollutants in these discharges must be reduced to the maximum extent practicable (see Finding 10). The Clean Water Act and Federal NPDES regulations clearly require operators of MS4s to reduce pollutants in discharges from MS4s to the maximum extent practicable. Therefore, the SDRWQCB has prohibited discharges which do not meet this requirement. The SDRWQCB has discretion to require Prohibition item A.3. in Order No. 2001-01 under the broad and specific legal authority cited above.

A.4. Prohibitions – Discharges states the following:

Applicable to New Development and Significant Redevelopment Only:
Post-development runoff which is greater in peak rate or velocity than pre-development runoff from the same site is prohibited. Post-development runoff containing pollutants loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable is prohibited. Discharges of post-development runoff into a Clean Water Act section 303(d) water body containing any pollutant (for which the water body is already impaired) in levels exceeding predevelopment levels (for those same pollutants) is prohibited.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.44(d)(1)(i) requires NPDES permits to include limitations to "control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have

reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

Federal NPDES regulation 40 CFR 122.44(d)(1) requires municipal storm water permits to include any requirements necessary to "[a]cheive water quality standards established under section 303 of the CWA, including State narrative criteria for water quality."

California Water Code Section 13243 provides that "A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted."

Discussion: In order to prevent receiving water quality problems within the region from worsening, urban runoff from new development must be addressed. This is because the increased urbanization associated with new development generally results in an increase in pollutant sources and impervious surfaces. The increase in pollutant sources leads to an increase in pollutant loads found in storm water, while the increase in impervious surfaces prevents natural processes from reducing those pollutant loads. The impervious surfaces associated with urbanization prevent storm water from infiltrating into the soil. Natural vegetation and soil are prevented from filtering urban runoff, resulting in storm water flows that are higher in volume and pollutant loads. This causes the quality of receiving waters to be adversely impacted and beneficial uses to be impaired.

Federal NPDES regulation 40 CFR 122.44(d)(1) requires municipal storm water permits to include any requirements necessary to "[a]cheive water quality standards established under section 303 of the CWA, including State narrative criteria for water quality." The term "water quality standards" in this context refers to a water body's **beneficial uses** and the water quality objectives necessary to protect those beneficial uses. The negative impact of urban runoff flow on the beneficial uses of receiving waters has been widely documented. Increases in flows from impervious surfaces associated with urbanization can result in (1) increases in the number of bankfull events and increased peak flow rates; (2) sedimentation and increased sediment transport; (3) frequent flooding; (4) stream bed scouring and habitat degradation; (5) shoreline erosion and stream bank widening; (6) decreased baseflow; (7) loss of fish populations and loss of sensitive aquatic species; (8) aesthetic degradation; and (9) changes in stream morphology.[90] US EPA finds that the level of imperviousness resulting from urbanization is strongly correlated with the water quality impairment of nearby receiving waters.[91] US EPA further attributes much of this water quality impairment to changes in flow conditions from urbanization, stating "[I]n many cases, the impacts on receiving streams due to high storm water flow rates or volumes can be more significant than those attributable to the contaminants found

[90] U.S. Environmental Protection Agency. 1999. Preliminary Data Summary of Urban Storm Water Best Management Practices. EPA-821-R-99-012. p. 4-24.

[91] U.S. Environmental Protection Agency. 1999. 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. p. 68727.

in storm water discharges."[92] Therefore, in order to protect the beneficial uses and water quality objectives of waters receiving urban runoff flows from new development (as **required** by 40 CFR 122.44(d)(1)), the SDRWQCB has placed limits on urban runoff flows from new development in the Prohibition A.4.

While new development increases urban runoff flows, it also increases the amount of pollutants found in those flows. Urban runoff was found by the 1996 US EPA National Water Quality Inventory to be the leading cause of ocean impairment nationwide. As regional monitoring program results indicate, urban runoff is also identified as a primary source of receiving water quality impairment within the Region. Though urban land use occupies approximately 30% of the monitoring program study area, approximately 50% or more of the total pollutant load for many constituents is contributed by urbanized land uses including residential, commercial, and industrial land uses (City of San Diego, 1998). The Region's Clean Water Act Section 303(d) list, which identifies water bodies with impaired beneficial uses within the Region, also indicates that the impacts of urban runoff are significant. Many of the impaired water bodies on the 303(d) list are impaired by constituents which have been found at high levels within urban runoff by the regional storm water monitoring program. Examples of constituents frequently responsible for beneficial use impairment include total and fecal coliform, heavy metals, and sediment; these constituents have been found at high levels in urban runoff both regionally and nationwide.

Urban runoff clearly has a significant impact on receiving water quality within the region. Without proper controls, new development only exacerbates the problem. To keep the problem from worsening, and to prevent the further degradation of impaired receiving waters (as required by Federal NPDES regulation 40 CFR 122.44 (d)(1)(i)), Prohibition A.4 places limits on the discharge of pollutants from new development.

The SDRWQCB has discretion to require Prohibition item A.4. in Order No. 2001-01 under the broad and specific legal authority cited above.

A.5. Prohibitions – Discharges states the following:

In addition to the above prohibitions, discharges from MS4s are subject to all Basin Plan prohibitions cited in Attachment A to this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: California Water Code Section 13243 provides that "A regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted."

[92] U.S. Environmental Protection Agency. 1999. Preliminary Data Summary of Urban Storm Water Best Management Practices. EPA-821-R-99-012. p. 4-23.

California Water Code Section 13263(a) provides that waste discharge requirements prescribed by the SDRWQCB implement the Basin Plan.

Discussion: As discussed in Findings 3, 6, and 9, the discharge of pollutants from MS4s can cause the concentration of pollutants to exceed applicable receiving water quality objectives, impair or threaten to impair designated beneficial uses, and pose a significant threat to the public health. To prevent these conditions, the Prohibitions included in the SDRWQCB's Basin Plan must therefore apply to MS4 discharges. The Basin Plan contains Prohibitions established by the SDRWQCB pursuant to California Water Code Section 13243. The SDRWQCB is required to implement Basin Plan Prohibitions in Order No. 2001-01 pursuant to California Water Code Section 13263(a). The SDRWQCB has discretion to require Prohibition item A.5. in Order No. 2001-01 under the broad and specific legal authority cited above.

B.1. Prohibitions – Non-Storm Water Discharges states the following:

*Each Copermittee shall effectively prohibit **all** types of non-storm water discharges into its Municipal Separate Storm Sewer System (MS4) unless such discharges are either authorized by a separate NPDES permit; or not prohibited in accordance with B.2. and B.3. below.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B) requires MS4 operators "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(1) provides that the Copermittees shall prevent all types of illicit discharges into the MS4 except for the non-storm water discharges listed in Prohibition item B.2., provided that these discharges are not found to be a significant source of pollutants.

Discussion: Illicit or non-storm water discharges can constitute a significant portion of urban runoff discharges from MS4s. US EPA states "A study conducted in 1987 in Sacramento, California, found that almost one-half of the water discharged from a local MS4 was not directly attributable to precipitation runoff. A significant portion of these dry weather flows were from illicit and/or inappropriate discharges and connections to the MS4" (2000).

MS4 discharges attributable to illicit or non-storm water discharges can be a significant source of pollutant loading to receiving waters. The NURP study concluded that the quality of urban runoff can be adversely impacted by illicit discharges and connections (US EPA, 1983). Furthermore, US EPA states that illicit or non-storm water discharges result in "untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to

significantly degrade receiving water quality and threaten aquatic wildlife and human health" (2000).

For these reasons, CWA section 402(p)(3)(B)(ii) requires each Copermittee to prohibit non-storm water discharges into its MS4. The detection and elimination of illicit discharges and connections is also clearly identified in the federal regulations as a high priority (40 CFR 122.26(d)(2)(iv)(B) and 122.26(d)(2)(iv)(B)(1)). As guidance for detecting and eliminating illicit discharges and connections, the US EPA suggests "The proposed management program must include a description of inspection procedures, orders, ordinances, and other legal authorities necessary to prevent illicit discharges to the MS4" (1992).

The SDRWQCB has the discretion to require Prohibition item B.1. in Order 2001-01 under the broad and specific legal authority cited above.

B.2. Prohibitions – Non-Storm Water Discharges states the following:

Pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1), the following categories of non-storm water discharges need only be prohibited from entering an MS4 if such categories of discharges are identified by the Copermittee as a significant source of pollutants to waters of the United States:

a. Diverted stream flows;
b. Rising ground waters;
c. Uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to MS4s;
d. Uncontaminated pumped ground water;
e. Foundation drains;
f. Springs;
g. Water from crawl space pumps;
h. Footing drains;
i. Air conditioning condensation;
j. Flows from riparian habitats and wetlands;
k. Water line flushing;
l. Landscape irrigation;
m. Discharges from potable water sources;
n. Irrigation water;
o. Lawn watering;
p. Individual residential car washing; and
q. Dechlorinated swimming pool discharges.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B) requires MS4 operators "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(1) provides that the Copermittees shall prevent all types of illicit discharges into the MS4 except for the non-storm water discharges listed in Prohibition item B.2., provided that these discharges are not found to be a significant source of pollutants.

Discussion: The discharges listed in Prohibition item B.2. are referred to as "de minimis" discharges in the Federal NPDES regulations. They are considered

acceptable non-storm water discharges to the MS4 only when found by the municipality to not be a significant source of pollutants to the MS4 (40 CFR 122.26(d)(2)(iv)(B)(1)). Regarding these discharges, US EPA states "While EPA does not consider these flows to be innocuous, they are only to be regulated by the storm water program to the extent that they may be identified as significant sources of pollutants to waters of the United States under certain circumstances" (1992). The SDRWQCB has discretion to require Prohibition item B.2. in Order No. 2001-01 under the broad and specific legal authority cited above.

B.3. Prohibitions – Non-Storm Water Discharges states the following:

When a discharge category above is identified as a significant source of pollutants to waters of the United States, the Copermittee shall either:

*a. Prohibit the discharge category from entering its MS4; **OR***

*b. Not prohibit the discharge category and implement, or require the responsible party(ies) to implement, BMPs which will reduce pollutants to the MEP; **AND***

c. For each discharge or discharge class not prohibited, the Copermittee shall submit the following information to the SDRWQCB within 180 days of adoption of this Order:

(1) The non-storm water discharge category listed above which the Copermittee elects not to prohibit; and

(2) The BMP(s) for each discharge class listed above which the Copermittee will implement, or require the responsible party(ies) to implement, to prevent or reduce pollutants to the MEP.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B) requires MS4 operators "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(1) provides that the Copermittees shall prevent all types of illicit discharges into the MS4 except for the non-storm water discharges listed in Prohibition item B.2., provided that these discharges are not found to be a significant source of pollutants.

California Water Code Section 13267 provides that "the regional board may require that any person who has discharged […] shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires."

Discussion: Discharges listed in Prohibition item B.2. which are found to be significant sources of pollutants cannot be discharged to the MS4 without implementation of applicable control measures. These control measures can include prohibition of the discharges or implementation of BMPs to reduce pollutants in the discharges to the maximum extent practicable. If a municipality chooses not to prohibit such a discharge, the municipality must supply the SDRWQCB information assuring that pollutants in the discharges will be reduced to the maximum extent practicable. This will help ensure that the municipality has

a plan in place to address the discharges, thereby reducing the potential for the discharges to impact receiving water quality. The SDRWQCB has discretion to require Prohibition item B.3. in Order No. 2001-01 under the broad and specific legal authority cited above.

B.4. Prohibitions – Non-Storm Water Discharges states the following:

> ***Fire Fighting Flows:*** *BMPs must be implemented to reduce pollutants from non-emergency fire fighting flows (i.e., flows from controlled or practice blazes) identified by the Copermittee to be significant sources of pollutants to waters of the United States. Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) need not be prohibited.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B) requires MS4 operators "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(1) provides that Copermittees "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."

Discussion: Discharges or flows from non-emergency fire fighting can be a significant source of pollutants to the MS4. Pollutants which enter the MS4 are generally flushed out to receiving waters. Discharges or flows from non-emergency fire fighting activities can therefore negatively impact receiving water quality. For this reason, non-emergency fire fighting discharges and flows must be addressed when identified as significant sources of pollutants. The SDRWQCB has discretion to require Prohibition item B.4. in Order No. 2001-01 under the broad and specific legal authority cited above.

B.5. Prohibitions – Non-Storm Water Discharges states the following:

> *Dry Weather Analytical Monitoring and Non-Storm Water Discharges: Each Copermittee shall examine all dry weather analytical monitoring results collected in accordance with section F.5. and Attachment E of this Order to identify water quality problems which may be the result of any non-prohibited discharge category(ies) identified above in Non-Storm Water Discharges to MS4s Prohibition B.2. Follow-up investigations shall be conducted as necessary to identify and control any non-prohibited discharge category(ies) listed above. Non-prohibited discharges listed in B.2. above which contain pollutants which cannot be reduced to the maximum extent practicable by the implementation of BMPs shall be prohibited on a categorical or case by case basis.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B) requires MS4 operators "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(2) requires that Copermittees shall provide "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(3) provides that Copermittees shall "investigate portions of the separate storm sewer system that, based on the results of a field screen, or other appropriate information, indicate a reasonable potential of containing illicit discharges or other sources on non-storm water."

Discussion: Non-prohibited non-storm water discharges can be a significant source of pollutants to the MS4. These discharges can reach receiving waters, causing negative impacts to receiving water quality. Field screening can be an effective tool to help prevent these conditions. Field screening results can be used to identify non-prohibited discharges which may be a significant source of pollutants to the MS4. When field screening results exhibit potential non-storm water discharges, follow-up investigations should be conducted to find if non-prohibited discharges are the source. This information can then be used to prohibit the non-prohibited discharge or require implementation of BMPs. The SDRWQCB has discretion to require Prohibition item B.5. in Order No. 2001-01 under the broad and specific legal authority cited above.

C. RECEIVING WATER LIMITATIONS

C. Receiving Water Limitation states the following:

1. *Discharges from MS4s that cause or contribute to the violation of water quality standards (designated beneficial uses and water quality objectives developed to protect beneficial uses) are prohibited.*

2. *Each Copermittee shall comply with Part C.1. of this Order through timely implementation of control measures and other actions to reduce pollutants in urban runoff discharges in accordance with the Jurisdictional Urban Runoff Management Program (Jurisdictional URMP) and other requirements of this Order including any modifications. The Jurisdictional URMP shall be designed to achieve compliance with Part C.1. of this Order. If exceedance(s) of water quality standards persist notwithstanding implementation of the URMP and other requirements of this Order, the Copermittee shall assure compliance with Part C.1. of this Order by complying with the following procedure:*

    a. *Upon a determination by either the Copermittee or the SDRWQCB that MS4 discharges are causing or contributing to an exceedance of an applicable water quality standard, the Copermittee shall promptly notify and thereafter submit a report to the SDRWQCB that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. The report may be incorporated in the annual update to the Jurisdictional URMP unless the SDRWQCB directs an earlier submittal. The report shall include an implementation schedule. The SDRWQCB may require modifications to the report;*

b. Submit any modifications to the report required by the SDRWQCB within 30 days of notification;

c. Within 30 days following approval of the report described above by the SDRWQCB, the Copermittee shall revise its Jurisdictional URMP and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required;

d. Implement the revised Jurisdictional URMP and monitoring program in accordance with the approved schedule.

So long as the Copermittee has complied with the procedures set forth above and are implementing the revised Jurisdictional URMP, the Copermittee does not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the SDRWQCB to do so.

3. Nothing in this section shall prevent the SDRWQCB from enforcing any provision of this Order while the Copermittee prepares and implements the above report.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: California Water Code Section 13241 provides that the "SDRWQCB shall establish such water quality objectives in water quality control plans as in its judgement will ensure the reasonable protection of beneficial uses and the prevention of nuisance."

California Water Code Section 13263(a) provides that waste discharge requirements prescribed by the SDRWQCB implement the Basin Plan.

Discussion: See the above discussion of Finding 13 in section VI. of this Fact Sheet/Technical Report.

D. LEGAL AUTHORITY

D.1. Legal Authority states the following:

*Each Copermittee shall establish, maintain, and enforce adequate legal authority to control pollutant discharges **into** and **from** its MS4 through ordinance, statute, permit, contract or similar means. This legal authority must, at a minimum, authorize the Copermittee to:*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(A) provides that the Copermittees shall develop and implement legal authority to "Control through ordinance, 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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(D) provides that the Copermittees shall develop and implement legal authority to "Control through

interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system."

Illicit discharge is defined under Federal NPDES regulation 40 CFR 122.26(b)(2) as "any discharge to a municipal separate storm sewer system 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."

Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff from commercial, residential, industrial, and construction land uses or activities.

Discussion: As discussed in Finding 15, Copermittees cannot passively receive and discharge pollutants from third parties. As US EPA states, "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" (1999).

Discharges of pollutants to the MS4 must therefore be controlled, and an important means for a municipality to achieve this is through development of municipal legal authority. USEPA states "A crucial requirement of the NPDES storm water regulation is that a municipality must demonstrate that it has adequate legal authority to control the contribution of pollutants in storm water discharged to its MS4. […] In order to have an effective municipal storm water management program, a municipality must have adequate legal authority to control the contribution of pollutants to the MS4. […] 'Control,' in this context, means not only to require disclosure of information, but also to limit, discourage, or terminate a storm water discharge to the MS4" (1992).

Since discharges which enter the MS4 are generally discharged unimpeded directly into receiving waters, the Copermittee's legal authority is to apply to both discharges into and from MS4s. Federal NPDES regulations clearly provide the SDRWQCB with the legal authority to require municipalities to control discharges from third parties into their MS4. 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff **from** commercial, residential, industrial, and construction land uses or activities. Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A - D) require municipalities to have legal authority to control various discharges **to** their MS4. This concept is further supported in the Preamble to the Phase II Final Rule NPDES storm water regulations, which states "The operators of regulated small MS4s cannot passively receive and discharge pollutants **from** third parties" (US EPA, 1999). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule findings for small municipalities are also applicable to larger municipalities such as the Copermittees. Finally, underlying the Federal NPDES storm water regulations is the Clean Water Act, which states in section 402(p)(3)(B)(ii) that municipalities shall "effectively prohibit non-stormwater discharges **into** the storm sewers."

The requirement for municipal storm water dischargers to have, and exercise, local governmental authority in order to comply with water quality control obligations is analogous to the requirement for Publicly Owned Treatment Works to have and exercise legal authority to require pretreatment of industrial wastes being discharged to their sewage collections systems (CWA 402(b)(8)).

The SDRWQCB has discretion to require Legal Authority item D.1 in Order No. 2001-01 under the broad and specific legal authority cited above.

D.1.a. Legal Authority states the following:

*Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity **to** its MS4 and control the quality of runoff **from** industrial and construction sites. This requirement applies both to industrial and construction sites which have coverage under the statewide general industrial or construction storm water permits, as well as to those sites which do not. Grading ordinances shall be upgraded as necessary to comply with this Order.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(A) provides that the Copermittees shall develop and implement legal authority to "Control through ordinance, 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."

Federal NPDES regulation 40 CFR 122.26(b)(14) provides that "The following categories of facilities are considered to be engaging in 'industrial activity' for purposes of this subsection: […] (x) Construction activity including clearing, grading and excavation activities […]."

Discussion: Industrial and construction sites are frequently sources of pollutants such as hazardous materials or sediment. These pollutants are typically carried to MS4s by urban runoff. As discussed in Finding 32, pollutants in urban runoff which enter the MS4 are generally discharged from these structures into receiving waters, where they may cause or contribute to a condition of pollution. Pollutant discharges from industrial and construction sites to MS4s must therefore be controlled. As discussed in Finding 22, municipalities are responsible for discharges from industrial and construction sites to their MS4s (see also Discussion under Legal Authority item D.1). US EPA supports this when it states "To comply with its permit, a municipality must have the authority to hold dischargers accountable for their contributions to separate storm sewers" (1992).

A necessary means for controlling pollutant discharges from industrial and construction sites is the development and implementation of legal authority which addresses urban runoff from these sites. The Federal NPDES regulations clearly emphasize the development and implementation of legal authority for controlling pollutant discharges from industrial and construction sites in 40 CFR 122.26(d)(2)(i)(A) and 40 CFR 122.26(b)(14).

Ordinances, statutes, permits, or contracts can be used to develop legal authority. For example, grading ordinances should be upgraded to control pollutant discharges from construction sites. The US EPA suggests this, stating "All construction sites, regardless of size, must be addressed by the municipality. […] A description of the local erosion and sediment control law or ordinance is needed to satisfy this program requirement. The description should include information that links the enforcement of the law or ordinance to the legal authority of the applicant" (1992). The US EPA further states "a municipality, to satisfy its permit conditions, may need to impose additional requirements on discharges from permitted industrial facilities, as well as discharges from industrial facilities and construction sites not required to obtain permits. Therefore, a municipality should develop a mechanism to assure that all industrial facilities and construction sites that discharge to the MS4 know their obligation to comply with the applicable terms of the municipality's storm water ordinances" (1992).

The SDRWQCB has discretion to require Legal Authority item D.1.a in Order No. 2001-01 under the broad and specific legal authority cited above.

D.1.b. Legal Authority states the following:

*Prohibit **all** illicit discharges including but not limited to:*

(1) Sewage;

(2) Discharges of wash water resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities;

(3) Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility including motor vehicles, cement-related equipment, and port-a-potty servicing;

(4) Discharges of wash water from mobile operations such as mobile automobile washing, steam cleaning, power washing, and carpet cleaning, etc.;

(5) Discharges of wash water from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, and residential areas including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.;

(6) Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;

(7) Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water;

(8) Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related wastes; and

(9) *Discharges of food-related wastes (e.g., grease, fish processing, and restaurant kitchen mat and trash bin wash water, etc.).*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26 (b)(2) defines an illicit discharge as "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."

California Water Code Section 13243 also provides that a "regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted."

Discussion: Illicit or non-storm water discharges can be a significant source of pollutants to the MS4. As discussed in Finding 32, pollutants which enter the MS4 are generally discharged to receiving waters, where they can impact receiving water quality. Illicit or non-storm water discharges must therefore be prohibited. In order to effectively prohibit illicit or non-storm water discharges, legal authority addressing the discharges must be developed and implemented by each Copermittee. The SDRWQCB has discretion to require Legal Authority item D.1.b in Order No. 2001-01 under the broad and specific legal authority cited above.

D.1.c. Legal Authority states the following:

Prohibit and eliminate illicit connections to the MS4;

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(b)(2) defines an illicit discharge as "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."

California Water Code Section 13243 also provides that a "regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted."

Discussion: An illicit connection is a connection to the MS4 which carries illicit discharges to the MS4. Because illicit discharges to the MS4 are prohibited (discussed in section D.1.b. Legal Authority above), illicit connections are also prohibited and must be eliminated. In order to effectively prohibit and eliminate illicit connections, legal authority addressing the discharges must be developed and implemented by each Copermittee. The SDRWQCB has discretion to require Legal Authority item D.1.c in Order No. 2001-01 under the broad and specific legal authority cited above.

D.1.d. Legal Authority states the following:

Control the discharge of spills, dumping, or disposal of materials other than storm water to its MS4;

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: California Water Code Section 13243 also provides that a "regional board, in a water quality control plan or in waste discharge requirements, may specify certain conditions or areas where the discharge of waste, or certain types of waste, will not be permitted."

Discussion: Non-storm water discharges such as spills, dumping, and disposal of materials can be a significant source of pollutants to the MS4. As discussed in Finding 32, pollutants deposited in MS4s most likely will be discharged to receiving waters, where they can impact receiving water quality. Non-storm water discharges such as spills, dumping, or disposal of materials must therefore be prohibited. In order to effectively prohibit these non-storm water discharges, legal authority addressing the discharges must be developed and implemented by each Copermittee. The SDRWQCB has discretion to require Legal Authority item D.1.d in Order 2001-01 under the broad and specific legal authority cited above.

D.1.e. and D.1.f. Legal Authority state the following:

Require compliance with conditions in Copermittee ordinances, permits, contracts or orders (i.e., hold dischargers to its MS4 accountable for their contributions of pollutants and flows);

Utilize enforcement mechanisms to require compliance with Copermittee storm water ordinances, permits, contracts, or orders;

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Discussion: As discussed in Finding 15, the Copermittees cannot passively receive and discharge pollutants from third parties. Each Copermittee must implement ordinances, permits, contracts, and orders to hold discharges to MS4s accountable for their contributions of pollutants. In order for the ordinances to be effective, each Copermittee must be able to require compliance with the ordinances. Lack of ordinance enforcement by a Copermittee allows third parties to violate a municipality's ordinances with little fear of retribution, leading to receiving water quality degradation. US EPA recommends that a municipality in its urban runoff management program "identify the administrative and legal procedures available to mandate compliance with appropriate ordinances, and therefore, with permit conditions. [Programs] should contain descriptions of how ordinances are implemented and appealed. In particular, a municipality should indicate if it can issues administrative orders and injunctions or if it must go through the court system for enforcement actions" (1992). The SDRWQCB has discretion to require Legal Authority item D.1.e in Order No. 2001-01 under the broad and specific legal authority cited above.

D.1.g. Legal Authority states the following:

Control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Copermittees (and other owners of the MS4 such as Caltrans or Department of Defense);

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(D) provides that the Copermittee must demonstrate that it can control "through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system."

Discussion: Discharges from Copermittees which share an MS4 eventually reach the same receiving water body. Each Copermittee which discharges to the shared MS4 is therefore responsible for discharges from the shared MS4, and the impacts of those discharges on receiving waters. The Copermittees of a shared MS4 must demonstrate that together they can control the contribution of pollutants over the whole shared MS4. To this effect, the US EPA states "When two or more municipalities submit a joint application, each coapplicant must demonstrate that it individually possesses adequate legal authority over the entire municipal system it operates and owns. A coapplicant need not fulfill every component of legal authority specified in the regulations, as long as the combined legal authority of all coapplicants satisfies the regulatory criteria for every segment of the MS4 (including authority over all sources that discharge to the MS4). […] Coapplicants also may use interjurisdictional agreements to show legal authority and to ensure planning, coordination, and the sharing of the resource burden of permit compliance" (1992). The SDRWQCB has discretion to require Legal Authority item D.1.g. in Order No. 2001-01 under the broad and specific legal authority cited above.

D.1.h. Legal Authority states the following:

Carry out all inspections, surveillance, and monitoring necessary to determine compliance and noncompliance with local ordinances and permits and with this Order, including the prohibition on illicit discharges to the MS4. This means the Copermittee must have authority to enter, sample, inspect, review and copy records, and require regular reports from industrial facilities discharging into its MS4, including construction sites; and

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Discussion: The Copermittees' ability to determine compliance and noncompliance with permit conditions is critical to control pollutant discharges to and from MS4s. Determination of compliance and noncompliance allows for significant sources of pollutants to be identified and addressed, thereby minimizing the discharge of pollutants from the MS4 and the resulting receiving water quality degradation. For this reason each Copermittee must have legal authority to carry out the inspections, surveillance, and monitoring necessary to assess compliance. Regarding compliance determination, US EPA states "municipalities should provide documentation of their authority to enter, sample,

inspect, review, and copy records, etc., as well as demonstrate their authority to require regular reports" (1992). The SDRWQCB has discretion to require Legal Authority item D.1.g in Order No. 2001-01 under the broad legal authority cited above.

D.1.i. Legal Authority states the following:

Require the use of best management practices (BMPs) to prevent or reduce the discharge of pollutants to MS4s.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(1)(ii) requires from the Copermittee "A description of existing legal authority to control discharges to the municipal separate storm sewer system."

Discussion: As discussed in Finding 15, the Copermittees cannot passively receive and discharge pollutants from third parties. The Copermittees must ensure discharges of pollutants to the MS4 are reduced to the maximum extent practicable. In order to achieve this, and hold third party dischargers responsible for their contributions of pollutants, the Copermittees must require the use of BMPs by third party dischargers (see Discussion under Legal Authority item D.1). The SDRWQCB has discretion to require Legal Authority item D.1.i in Order 2001-01 under the broad and specific legal authority cited above.

D.2. Legal Authority states the following:

Within 90 days of adoption of this Order, each Copermittee shall provide to the SDRWQCB a statement certified by its chief legal counsel that the Copermittee has adequate legal authority to implement and enforce each of the requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and this Order. This statement shall include:

a. Identification of all departments within the jurisdiction that conduct urban runoff related activities, and their roles and responsibilities under this Order. Include an up to date organizational chart specifying these departments and key personnel.

b. Citation of urban runoff related ordinances and the reasons they are enforceable;

c. Identification of the administrative and legal procedures available to mandate compliance with urban runoff related ordinances and therefore with the conditions of this Order;

d. Description of how these ordinances are implemented and appealed; and

e. Description of whether the municipality can issue administrative orders and injunctions or if it must go through the court system for enforcement actions.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(A) provides that the Copermittees shall develop and implement legal authority to

"Control through ordinance, 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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(D) provides that the Copermittee must demonstrate that it can control "through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system."

Discussion: Copermittees must demonstrate that they can operate pursuant to legal authority to meet the requirements of Federal NPDES regulations 40 CFR 122.26(d)(2)(A-F). For the Copermittee demonstrate this legal authority, the US EPA suggests that "One acceptable way to support a declaration of adequate legal authority, including the ability to enforce appropriate ordinances, is for the municipality to provide a certification from the Municipal General Counsel or equivalent. The certification should state that the applicant has the legal authority to apply and enforce the requirements of 40 CFR 122.26(d)(2)(i)(A-F) in State or local courts. The certification would, therefore, cite specific ordinances and the reasons why they are enforceable. The statement should discuss what the municipality can do to ensure full compliance with 40 CFR 122.26(d)(2)(i)" (1992). The SDRWQCB has discretion to require Legal Authority item D.2 in Order No. 2001-01 under the broad and specific legal authority cited above.

E. TECHNOLOGY BASED STANDARDS

E. Technology Based Standards states the following:

*Each Copermittee shall implement, or require implementation of, best management practices to ensure that the following pollutant discharges **into** and **from** its MS4 are reduced to the applicable technology based standard as specified below:*

Table 3. Technology Based Standards

POLLUTANT DISCHARGE FROM	***DESCRIPTION***	***APPLICABLE PERFORMANCE STANDARD***
Industrial Activity owned by the Copermittee	*Categorical Industry in 40 CFR 122.26*	*BAT/BCT (pursuant to Statewide General Industrial Permit)*
Industrial Activity	*All other industry*	*MEP*
Construction Activity owned by the Copermittee	*Greater than or Equal to 5 Acres (or less than 5 acres and Part of a Larger Common Plan of Sale or Development)*	*BAT/BCT (pursuant to Statewide General Construction Permit)*
Construction Activity	*All Other construction*	*MEP*
Other Sources	*All Other Land Use Activities*	*MEP*
MS4s	*All discharges from MS4s*	*MEP*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B, C, E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: CWA section 402(p)(3)(A) requires "Permits for discharges associated with industrial activity shall meet all applicable provisions of this section and section 301."

CWA section 301(b)(2) requires "effluent limitations for categories and classes of point sources, other than publicly owned treatment works, which (i) shall require application of the best available technology economically achievable for such category or class, which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants."

Federal NPDES regulation 40 CFR 122.26(b)(14) provides that "The following categories of facilities are considered to be engaging in 'industrial activity' for purposes of this subsection: […] (x) Construction activity including clearing, grading and excavation activities […]."

Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A-D) require municipalities to control pollutants in urban runoff discharges to the MS4 to the maximum extent practicable from urban land uses such as residential, commercial, municipal, industrial, and construction.

Discussion: Pollutant discharges in storm water to and from MS4s are held to applicable technology based standards. Storm water discharges to the MS4 from industrial and construction activities owned by the Copermittee, which fall under the general statewide industrial and construction storm water permits, must meet the BAT/BCT performance standard per permit requirements. This BAT/BCT performance standard is required in CWA section 301(b)(2), and is further described in CWA sections 304(b)(2-4).

Pollutant discharges in storm water **to** and **from** the MS4 for all other urban land use activities, including industrial and construction activities not covered under the statewide general permits, must be reduced to the maximum extent practicable. CWA section 402(p)(3)(B)(iii) and Federal NPDES regulation 40 CFR 122.26 (d)(2)(iv) require pollutant discharges in urban runoff discharged **from** MS4s to be reduced to the maximum extent practicable.

Since discharges which enter the MS4 are generally discharged unimpeded directly into receiving waters, the maximum extent practicable standard is to apply to both discharges into and from MS4s. Federal NPDES regulations clearly provide the SDRWQCB with the legal authority to require municipalities to control discharges from third parties into their MS4. 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff **from** commercial, residential, industrial, and construction land uses or activities to the maximum extent practicable. Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A - D) require municipalities to have legal authority to control various discharges **to** their MS4. This concept is further supported in the Preamble to the Phase II Final Rule NPDES storm water regulations, which states "The operators of regulated small MS4s cannot passively receive and discharge pollutants **from** third parties" (US EPA, 1999). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule findings for small municipalities are also applicable to larger municipalities such as the Copermittees. Finally, underlying the Federal NPDES storm water regulations is the Clean Water Act, which states in section 402(p)(3)(B)(ii) that municipalities shall "effectively prohibit non-stormwater discharges **into** the storm sewers."

The requirement for municipal storm water dischargers to have, and exercise, local governmental authority in order to comply with water quality control obligations is analogous to the requirement for Publicly Owned Treatment Works to have and exercise legal authority to require pretreatment of industrial wastes being discharged to their sewage collections systems (CWA 402(b)(8)).

The SDRWQCB has discretion to require Technology Based Standards item E. in Order No. 2001-01 under the broad and specific legal authority cited above.

F. JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM

The following underlying broad legal authority citations generally apply to all directives of section F. Jurisdictional Urban Runoff Management Program of Order No. 2001-01, and provide the SDRWQCB with ample underlying authority to require each of the directives. These legal authority citations are also listed under the Underlying Broad Legal Authority for Order No. 2001-01 segment of section VII. of this Fact Sheet/Technical Report. They are repeated here to emphasize their pertinence to the Jurisdictional Urban Runoff Management Program section of Order No. 2001-01, which is the primary component of the Order.

In addition to the five broad legal authority items cited below that underlie all of the directives in section F. of Order No. 2001-01, additional specific legal authority citations applicable to particular directives of section F. are provided in this section of the Fact Sheet/Technical Report as necessary. Some of these additional specific legal authority citations apply to entire components of section F. of Order No. 2001-01. In these cases, the specific legal authority quotations are provided at the beginning of the discussion of the permit component, while the legal authority is again cited under each directive of the component. Furthermore, some specific legal authority citations only apply to distinct directives of section F. of Order No. 2001-01. When this occurs, the quotation of the specific legal authority citation will appear with the discussion of the distinct permit directive.

CWA 402(p)(3)(B)(ii) – Prohibit Non-Storm Water
The CWA requires in section 402(p)(3)(B)(ii) that a storm water program "shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers."

CWA 402(p)(3)(B)(iii) – Reduce to MEP and Whatever Else is Needed
The CWA requires in section 402(p)(3)(B)(iii) that a storm water program "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."

40 CFR 122.26(d)(2)(i)(B,C,E, and F) – Obtain Adequate Legal Authority
Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) provide that each Copermitee's permit 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: […] (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; […] (E) Require compliance with condition 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."

40 CFR 122.26(d)(2)(iv) – Reduce to MEP and Whatever Else is Needed

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) provides that the Copermittee shall develop and implement a proposed management program which "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. […] Proposed programs may impose controls on a systemwide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. […] Proposed management programs shall describe priorities for implementing controls."

CWC 13377 – Implement CWA and Whatever Else is Needed

California Water Code section 13377 provides that "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 (Clean Water 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 an more stringent effluent standards or limitation necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance."

F. Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall take appropriate actions to reduce discharges of pollutants and runoff flow during each of the three major phases of urban development, i.e., planning, construction, and existing development (or use) phases.

Each Copermittee shall implement a Jurisdictional Urban Runoff Management Program (Jurisdictional URMP) that contains the components shown below as described in Sections F.1. through F.8:

- *F.1. Land-Use Planning for New Development and Redevelopment Component*
- *F.2. Construction Component*
- *F.3. Existing Development Component*
  - *a. Municipal*
  - *b. Industrial*
  - *c. Commercial*
  - *d. Residential*
- *F.4. Education Component*
- *F.5. Illicit Discharge Detection and Elimination Component*
- *F.6. Public Participation Component*
- *F.7. Assessment of Jurisdictional URMP Effectiveness Component*
- *F.8. Fiscal Analysis Component*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A – D) include provisions for inclusion of program components F.1 – F.8 in the Jurisdictional URMPs.

Discussion: As discussed in Finding 17, urban development has three major phases: (1) land use planning for new development; (2) construction; and (3) the land use or existing development phase. Because the Copermittees authorize each of these phases, they have commensurate responsibilities to protect water quality during each phase. Findings 18 – 20 indicate how each of these phases of development can be a significant source of pollutants in urban runoff and can impact receiving water quality. To address the potential negative impacts from the three phases of urban development, Urban Runoff Management Programs focusing on the three phases must be developed and implemented (see Finding 10). US EPA places importance on the development and implementation of URMPs when it states "Under the Part 2 application requirements, municipalities must propose site-specific storm water management programs. This is the most important aspect of the permit application" (1992). The SDRWQCB has discretion to require development and implementation of Jurisdictional Urban Runoff Management Programs in Order No. 2001-01 under the broad and specific legal authority cited above.

F.1. LAND-USE PLANNING FOR NEW DEVELOPMENT AND REDEVELOPMENT COMPONENT

In addition to the underlying broad legal authority citations listed above in section VII. of this Fact Sheet/Technical Report, the following specific legal authority item also generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.1. Land-Use Planning for New Development and Redevelopment Component of Order No. 2001-01. Other specific legal authority items applicable only to distinct directives of Jurisdictional Urban Runoff Management Program item F.1. are provided as necessary.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) provides that Copermittees develop and implement a proposed management program which is to include "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."

F.1. Land-Use Planning for New Development and Redevelopment Component states the following:

Each Copermittee shall minimize the short and long-term impacts on receiving water quality from new development and redevelopment. In order to reduce pollutants and runoff flows from new development and redevelopment to the maximum extent practicable, each Copermittee shall at a minimum:

F.1.a Revise General Plan
F.1.b Modify Development Project Approval Processes
F.1.c Revise Environmental Review Processes Including CEQA Checklists
F.1.d Conduct Education Efforts Focused on New Development and Redevelopment

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.1. Land-Use Planning for New Development and Redevelopment Component of Order No. 2001-01.

Discussion: As discussed in Finding 4, urban development can negatively impact receiving water quality by increasing the pollutant load, volume, and velocity of urban runoff. An effective means for minimizing these impacts is to address water quality concerns during the planning phase of urban development. US EPA supports this, stating "Post-construction storm water management in areas undergoing new development or redevelopment is necessary because runoff from these areas has been shown to significantly effect receiving waterbodies. Many studies indicate that prior planning and design for the minimization of pollutants in post-construction storm water discharges is the most cost-effective approach to storm water quality management" (2000). For these reasons, Order No. 2001-01 includes a requirement for the development and implementation of a Land-Use Planning for New Development and Redevelopment Component. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.1. in Order No. 2001-01 under the broad and specific legal authority cited above.

F.1.a. Revise General Plan of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall incorporate water quality and watershed protection principles and policies into the General Plan or equivalent plan (e.g., Comprehensive, Master, or Community Plan) to guide land-use decisions and require implementation of consistent water quality protection measures for all development projects. These principles and policies shall be designed to protect natural water bodies, reduce impervious land coverage, slow runoff, and where feasible, maximize opportunities for infiltration of rainwater into soil. Such water quality and watershed protection principles and policies shall include for example:

(1) Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible maximize on-site infiltration of runoff.

(2) Implement pollution prevention methods supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into an MS4.

(3) Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. Encourage land acquisition of such areas.

(4) Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

(5) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. Require incorporation of structural and non-structural BMPs to mitigate the projected increases in pollutant loads and flows.

(6) Avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

(7) Reduce pollutants associated with vehicles and increasing traffic resulting from development. Coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

(8) Implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

(9) For new development and significant redevelopment only: The post-development runoff rates and velocities from a site shall not exceed the pre-development runoff rates and velocities from the same site. Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance or receiving water quality objectives or which have not been reduced to the maximum extent practicable. Post-development runoff discharges into a Clean Water Act section 303(d) water body shall not contain any pollutant (for which the water body is already impaired) in levels exceeding pre-development levels (for those same pollutants).

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.1. Land-Use Planning for New Development and Redevelopment Component of Order No. 2001-01.

Discussion: The US EPA finds that the Copermittee "must thoroughly describe how the municipality's comprehensive plan is compatible with the storm water regulations" (1992). To achieve this, the Copermittee shall incorporate water quality and watershed protection principles and policies into its General Plan (or equivalent plan). US EPA supports addressing urban runoff problems in General Plans (or equivalent plans) when it states "Runoff problems can be addressed efficiently with sound planning procedures. Master Plans, Comprehensive Plans, and zoning ordinances can promote improved water quality by guiding the growth of a community away from sensitive areas and by restricting certain types of growth (industrial, for example) to areas that can support it without compromising water quality" (2000).

The principles included in Jurisdictional Urban Runoff Management Program item F.1.a. are based on findings by the SWRCB Urban Runoff Technical Advisory Committee. They incorporate basic measures which have been found to minimize pollutants in urban runoff from new development and redevelopment.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.1.a. in Order No. 2001-01 under the broad legal authority cited above.

F.1.b. Modify Development Project Approval Processes of the Jurisdictional Urban Runoff Management Program states the following:

> *Prior to project approval and issuance of local permits, Copermittees shall review each individual proposed project plan and require measures to ensure that pollutants and runoff from the development will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of receiving water quality objectives. Each Copermittee shall further ensure that all development will be in compliance with Copermittee storm water ordinances, local permits, all other applicable ordinances and requirements, and this Order.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.1. Land-Use Planning for New Development and Redevelopment Component of Order No. 2001-01.

Discussion: As discussed in Finding 18, incorporating post-construction BMPs into new development and redevelopment during project planning and approval is an effective means for controlling pollutants in urban runoff. US EPA finds review of development plans during the project approval process necessary, stating: "Proposed storm water management programs should include planning procedures for both during and after construction to implement control measures to ensure that pollution is reduced to the maximum extent practicable in areas of new development and redevelopment. Design criteria and performance standards may be used to assist in meeting this objective. Further, storm water management program goals should be reviewed during planning processes that guide development to appropriate locations and steer intensive land uses away from sensitive environmental areas. […] A municipality should describe how it plans to implement the proposed standards (e.g., through an ordinance requiring approval of storm water management programs, a review and approval process, and adequate enforcement)" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.1.b. in Order No. 2001-01 under the broad legal authority cited above.

F.1.b.(1). Conditions of Approval of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall include conditions of approval in local permits to ensure that pollutant discharges and runoff flows from development are reduced to the maximum extent practicable and that receiving water quality objectives are not violated throughout the life of the project. Such conditions shall, at a minimum:*
>
> *(a) Require project proponent to implement pollution prevention and source control BMPs for all development projects.*
> *(b) Require project proponent to implement site design/landscape characteristics where feasible which maximize infiltration, provide retention, slow runoff, and minimize impervious land coverage for all development projects.*
> *(c) Require project proponent to implement buffer zones for natural water bodies.*

(d) Require industrial applicants subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except Construction), (hereinafter General Industrial Permit), to provide evidence of coverage under the General Industrial Permit.

(e) Require project proponent to ensure its grading or other construction activities meet the provisions specified in Section F.2. of this Order.

(f) Require project proponent to ensure long-term maintenance of all post-construction BMPs in perpetuity.

(g) Require project proponent to ensure that the post-development runoff rates and velocities from a site do not exceed the pre-development runoff rates and velocities from the same site. Require project proponent to ensure that post-development runoff pollutants loads from a site have been reduced to the maximum extent practicable and do not cause or contribute to an exceedance of water quality objectives. Require project proponent to ensure that post-development runoff into a Clean Water Act section 303(d) water body containing any pollutant (for which the water body is already impaired) does not exceed pre-development levels (for those same pollutants).

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.1. Land-Use Planning for New Development and Redevelopment Component of Order No. 2001-01.

Discussion: Regarding conditions of approval in storm water permits, the US EPA finds that "Proposed storm water management programs should include planning procedures for both during and after construction to implement control measures to ensure that pollution is reduced to the maximum extent practicable in areas of new development and redevelopment. Design criteria and performance standards may be used to assist in meeting this objective" (1992). The US EPA further finds that "The municipality should consider storm water controls and structural controls in planning, zoning, and site or subdivision plan approval" (1992). In addition, US EPA states each Copermittee should "have an ordinance or other regulatory mechanism requiring the implementation of post-construction runoff controls […]" (2000).

Furthermore, in its Phase II Final Rule, US EPA requires small municipalities to "Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects […]" (1999). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule requirements for small municipalities are also applicable to larger municipalities such as the Copermittees.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.1.b.(1). in Order No. 2001-01 under the broad legal authority cited above.

F.1.b.(2). Standard Urban Storm Water Mitigation Plans (SUSMPs) of the Jurisdictional Urban Runoff Management Program states the following:

Within 365 days of adoption of this Order, the Copermittees shall collectively develop a model Standard Urban Storm Water Mitigation Plan (SUSMP) to reduce pollutants and runoff flows from all

new development and significant redevelopment projects falling under the priority project categories or locations listed in section F.1.b.(2)(a) below. Within 180 days of approval of the model SUSMP in the public process by the SDRWQCB, each Copermittee shall adopt its own local SUSMP, and amended ordinances consistent with the approved model SUSMP, and shall submit both (local SUSMP and amended ordinances) to the SDRWQCB.

Immediately following adoption of its local SUSMP, each Copermittee shall ensure that all new development and significant redevelopment projects falling under the priority project categories or locations listed in F.1.b.(2)(a) below meet SUSMP requirements. The SUSMP requirements shall apply to all priority projects or phases of priority projects, including those with approved tentative maps, which have not yet begun grading or construction activities.

(a) Priority Development Project Categories - SUSMP requirements shall apply to all new development and significant redevelopment projects falling under the priority project categories or locations listed below. Significant redevelopment is defined as the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where significant redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in section F.1.b.(2)(c) applies only to the addition, and not to the entire development.

i. Home subdivisions of 100 housing units or more. This category includes single-family homes, multi-family homes, condominiums, and apartments.

ii. Home subdivisions of 10-99 housing units. This category includes single-family homes, multi-family homes, condominiums, and apartments.

iii. Commercial developments greater than 100,000 square feet. This category is defined as any development on private land that is not for heavy industrial or residential uses where the land area for development is greater than 100,000 square feet. The category includes, but is not limited to: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; and other light industrial facilities.

iv. Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

v. Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet.

vi. All hillside development greater than 5,000 square feet. This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.

vii. Environmentally Sensitive Areas: All development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area, which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition. Environmentally

sensitive areas include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees. "Directly adjacent" means situated within 200 feet of the environmentally sensitive area. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely or predominantly of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

viii. Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff. Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

ix. Street, roads, highways, and freeways. This category includes any paved surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

x. Retail Gasoline Outlets. Retail Gasoline Outlet is defined as any facility engaged in selling gasoline.

(b) *BMP Requirements – The SUSMP shall include a list of recommended pollution prevention, source control, and structural treatment BMPs. The SUSMP shall require all new development and significant redevelopment projects falling under the above priority project categories or locations to implement a combination of BMPs selected from the recommended BMP list, including at a minimum (1) pollution prevention BMPs, (2) source control BMPs, and (3) structural treatment BMPs. The BMPs shall, at a minimum:*

i. Maintain pre-development peak storm water runoff discharge rates and velocities;
ii. Conserve natural areas;
iii. Minimize storm water pollutants of concern (through implementation of pollution prevention and source control BMPs). Identification of pollutants of concern should include consideration of any pollutants for which the development's receiving water bodies are listed as impaired under Clean Water Act section 303(d), any pollutant associated with the land use type of the development, any pollutant commonly associated with urban runoff, and increased runoff flow rate from the development and its potential downstream impacts;
iv. Remove pollutants of concern from urban runoff (through implementation of structural treatment BMPs);
v. Minimize directly connected impervious areas;
vi. Protect slopes and channels from eroding;
vii. Include storm drain stenciling and signage;
viii. Include properly designed outdoor material storage areas;
ix. Include properly designed trash storage areas;
x. Include proof of a mechanism for ongoing long-term BMP maintenance;
xi. Include additional water quality provisions applicable to individual priority project categories;
xii. Be designed to maximize their pollutant removal capabilities;
xiii. Be implemented as close to pollutant sources as possible and prior to runoff discharges into the MS4 or other receiving waters;
xiv. Ensure that post-development runoff does not contain pollutant loads which cause or contribute to an exceedance of water quality objectives or which have not been reduced to the maximum extent practicable; and

xv. Ensure that post-development runoff into a Clean Water Act section 303(d) water body containing any pollutant (for which the water body is already impaired) does not contain those same pollutants in levels exceeding pre-development levels.

(c) Numeric Sizing Criteria – The SUSMP shall require structural treatment BMPs to be implemented at all priority development projects. In addition to meeting the BMP requirements listed in item F.1.b.(2)(b) above, all structural treatment BMPs for a single priority development project shall collectively be sized to comply with the following numeric sizing criteria:

Volume

Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

i. The volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record (0.6 inch approximate average for the San Diego County area); or

ii. The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or

iii. The volume of annual runoff based on unit basin storage volume, to achieve 90% or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/Commercial, (1993); or

iv. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event;

OR

Flow

Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

i. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or

ii. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or

iii. The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

(d) Equivalent Numeric Sizing Criteria - The Copermittees may develop any equivalent numeric sizing criteria or performance-based standard for post-construction structural treatment BMPs as part of the model SUSMP. Such equivalent sizing criteria may be authorized for use in place of the above criteria. In the absence of development and subsequent authorization of such equivalent numeric sizing criteria, the above numeric sizing criteria requirement shall be implemented.

(e) Pollutants of Concern – As part of the model SUSMP, the Copermittees shall develop a procedure for pollutants of concern to be identified for each new development or significant redevelopment project. The procedure shall include, at a minimum, consideration of (1) receiving water quality (including pollutants for which receiving waters are listed as impaired under Clean Water Act section 303(d)); (2) land use type of the development project and pollutants associated with that land use type; (3) pollutants expected to be present on site; and (4) changes in flow rates and volumes resulting from the development project and sensitivity of receiving waters to changes in

flow rates and volumes.

(f) Implementation Process – As part of the model SUSMP, the Copermittees shall develop a process by which SUSMP requirements will be implemented. The process shall identify at what point in the planning process development projects will be required to meet SUSMP requirements. The process shall also include identification of the roles and responsibilities of various municipal departments in implementing the SUSMP requirements, as well as any other measures necessary for the implementation of SUSMP requirements.

(g) Restaurants Less than 5,000 Square Feet - New development and significant redevelopment restaurant projects where the land area development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirement F.1.b.(2)(c) above. A restaurant is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812).

(h) Waiver Provision – A Copermittee may provide for a project to be waived from the requirement of implementing structural treatment BMPs (F.1.b.(2)(c)) if infeasibility can be established. A waiver of infeasibility shall only be granted by a Copermittee when all available structural treatment BMPs have been considered and rejected as infeasible. Copermittees shall notify the SDRWQCB within 5 days of each waiver issued and shall include the name of the person granting each waiver.

As part of the model SUSMP, the Copermittees shall develop a program to require project proponents who have received waivers to transfer the savings in cost, as determined by the Copermittee(s), to a storm water mitigation fund. This program shall be implemented by all Copermittees which choose to provide waivers. Funds shall only be used on projects to improve urban runoff quality within the watershed of the waived project. The waiver program shall, at a minimum, identify:

- *i. The entity or entities that will manage the storm water mitigation fund (i.e., assume full responsibility for)*
- *ii. The range and types of acceptable projects for which mitigation funds may be expended;*
- *iii. The entity or entities that will assume full responsibility for each mitigation project including its successful completion*
- *iv. How the dollar amount of fund contributions will be determined.*

(i) Infiltration and Groundwater Protection – At a minimum, use of infiltration structural treatment BMPs shall meet the following conditions:

- *i. Use of infiltration structural treatment BMPs shall not cause or contribute to an exceedance of groundwater water quality objectives.*
- *ii. Urban runoff shall undergo pretreatment such as sedimentation or filtration prior to infiltration.*
- *iii. All dry weather flows shall be diverted from infiltration devices.*
- *iv. Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used.*
- *v. Infiltration structural treatment BMPs shall be adequately maintained to maximize pollutant removal capabilities.*
- *vi. The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet.*
- *vii. The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, and infiltration rate) which are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses.*
- *viii. Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater*

average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries; and other high threat to water quality land uses and activities as designated by each Copermittee.

ix. Infiltration structural BMPs shall be located a minimum of 100 feet horizontally from any water supply wells.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.1. Land-Use Planning for New Development and Redevelopment Component of Order No. 2001-01.

California Water Code Section 13267 provides that "the regional board may require that any person who has discharged […] shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires."

Discussion: Copermittees must utilize planning procedures to reduce the discharge of pollutants from new development and redevelopment to the maximum extent practicable. This is necessary due to the potential for new development to increase the volume, flow velocity, and pollutant load of urban runoff (see Findings 4 and 5). As the SWRCB Urban Runoff Technical Advisory Committee (TAC) states, "Urban development often results in impacts to the land and consequently the water bodies adjacent to the land. The two major changes that result from urbanization are changes in stream hydrology and an increase in pollutant loading." To alleviate these potential negative impacts on receiving waters, each Copermittee must develop and implement a Standard Urban Runoff Mitigation Plan for various categories of development.

General Information on SUSMPs

The Federal NPDES regulations (40 CFR 122.26(d)(2)(iv)(A)(2)) have required Copermittees since 1990 to utilize "planning procedures including a 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." The current Municipal Storm Water Permit for San Diego County and Cities (Order No. 90-42) was issued before the promulgation of these regulations. Its references and requirements for new development and significant redevelopment are therefore nondescript, despite the presence of requirements for new development and significant redevelopment in the Federal NPDES regulations. Due to this lack of clarification regarding urban runoff management requirements for development in Order No. 90-42, development projects have typically proceeded with minimal measures to reduce the impacts of urban runoff coming from the projects.

Since the requirements of Order No. 90-42 regarding development are vague and have been largely ineffective, Order No. 2001-01 contains the SUSMP requirements, which are more prescriptive in order to ensure that adequate measures are taken to address urban runoff from development. The SWRCB

Urban Runoff Technical Advisory Committee supports development of plans such as SUSMPs, stating that "The TAC recommends that communities of all sizes implement programs […] to address control of urban runoff pollution from new development and construction." US EPA further recommends design criteria (such as numeric sizing criteria) and performance standards for post-construction BMPs at development sites (1992). The increased specificity of the SUSMP requirements is also in line with US EPA Interim Permitting Approach guidance, which states that first-round permit BMPs should be expanded or better-tailored where necessary in subsequent permits to attain water quality standards (1996). In light of the continued impacts of urban runoff on receiving waters, the expanded BMP requirements of the SUSMPS are necessary to protect those receiving waters. As stated in the SWRCB's August 24, 2000 Draft Order on the appeal of the Los Angeles Regional Water Quality Control Board's (LARWQCB's) SUSMP action, "In the context of the entire effort required by the permit, the development controls can be seen as preventing the existing situation from becoming worse."

Comparison with LARWQCB Process

The SUSMP requirements (and their associated numeric sizing criteria) included in Order No. 2001-01 are highly controversial and have been widely discussed. While the SDRWQCB has followed the LARWQCB's lead in including SUSMP requirements in its Draft Municipal Storm Water Permit, it is important to note the differences between the approaches of the two regional boards. In its Municipal Storm Water Permit, the LARWQCB included requirements for its Copermittees to develop SUSMPs to address urban runoff from development. The requirements included general guidelines for the development of a plan (SUSMP) for post-construction BMP implementation at development project sites. The Los Angeles area Copermittees developed a model SUSMP and submitted it to the LARWQCB for approval. The LARWQCB then added details and requirements (including the numeric sizing criteria requirement) to their Copermittees' model SUSMP before approval. While the SWRCB has tentatively found in a draft order that the LARWQCB acted appropriately, the addition of details and requirements to the Copermittees' model SUSMP was strongly contested.

The SDRWQCB has had the advantage of observing the SUSMP process the LARWQCB has undergone. In order to minimize potential conflicts, the SDRWQCB is inserting sufficient detail and requirements (such as numeric sizing criteria) up front in its Municipal Storm Water Permit, as opposed to adding the detail and requirements at a later date after the permit has been adopted. This will reduce the potential for unexpected requirements and allow for expanded discourse with interested parties on the subject. In addition, the SDRWQCB has already held a public hearing and a workshop on the subject of SUSMPs, with several other hearings and workshops on SUSMPs and the permit planned for the future.

The SDRWQCB has also been able to use the LARWQCB process to help clarify various issues regarding SUSMPs. For example, tentative findings in the SWRCB's draft order on the appeal of the LARWQCB's actions have been incorporated into Order No. 2001-01. The SDRWQCB has used the definition for "significant redevelopment" as it was included in the SWRCB's draft order. Tentative SUSMP guidance included in the SWRCB's draft order regarding

environmentally sensitive areas[93], discretionary/non-discretionary projects, and a waiver funding requirement has also been used by the SDRWQCB to clarify applicable SUSMP requirements. Included here is a brief summary of the SWRCB's draft order.

Summary of SWRCB Draft Order on the Appeal of LARWQCB's Standard Urban Storm Water Mitigation Plan (SUSMP) Requirement for New Development

The State Water Resources Control Board (SWRCB) has issued a draft order on the subject of the appeal of the Los Angeles Regional Water Quality Control Board's (LARWQCB's) Standard Urban Storm Water Mitigation Plan (SUSMP) requirement for new development and significant redevelopment. The SUSMP requirement was prescribed for municipalities by the LARWQCB under the Municipal Storm Water Permit for the Los Angeles Region. In general, the SUSMP requirement called for municipalities to require certain categories of development projects to implement post-construction best management practices (BMPs) on site which would treat, filter, or infiltrate urban runoff generated by the development project. In particular, the SUSMPs provided that municipalities must ensure that post-construction BMPs for the categories of new development meet a specific numeric sizing criteria. The numeric sizing criteria required that post-construction BMPs for the categories of development be a specific size to effectively retain urban runoff pollutants and control urban runoff flows.

The SUSMP requirements were appealed to the SWRCB by many parties on several grounds. The petitioners for the appeal included approximately 24 municipalities (out of a total of approximately 80 municipalities), building industry representatives, and the Western States Petroleum Association. The principal contentions of the appeal included the following: (1) The LARWQCB failed to follow various proper procedural requirements in adopting the SUSMPs; (2) The SUSMPs (and numeric sizing criteria) did not properly apply the "maximum extent practicable" standard; (3) The LARWQCB failed to show that the SUSMPs are cost-effective and that the benefits to be obtained outweigh the costs; (4) Implementation of the SUSMP requirements posed a threat to groundwater; and (5) Various details of the SUSMP requirements were unclear and needed to be clarified/improved.

Regarding the procedural concerns of the appeal, if adopted the order would find that the LARWQCB complied with the necessary procedural requirements. Procedural requirements the order would find the LARWQCB to be in compliance with in adopting the SUSMPs include the Municipal Storm Water Permit for the Los Angeles Region, the Administrative Review Process, the Administrative Procedure Act, the California Environmental Quality Act (CEQA), and Constitutional provisions on state mandates.

On the controversial issue of post-construction BMPs and numeric sizing criteria, if adopted the SWRCB order would find that it is appropriate for the LARWQCB to require post-construction BMPs for new development and significant

[93] The definition of "environmentally sensitive area" in Order No. 2001-01 includes Areas of Special Biological Significance (ASBS). These areas are designated by the Regional Boards and SWRCB in Water Quality Control Plans.

redevelopment. The SWRCB order would also find that the numeric sizing criteria for post-construction BMPs is a correct interpretation of the "maximum extent practicable" standard. As a basis for the tentative finding on numeric sizing criteria, the SWRCB order would refer to United States Environmental Protection Agency (US EPA) guidance documents, which explain that expanded or better-tailored BMPs should be required in second-round storm water permits, where necessary, to provide for the attainment of water quality standards. While citing the number of water bodies impaired by urban runoff in the region, the SWRCB order would find the expansion of BMP requirements to include numeric sizing criteria to be appropriate.

The SWRCB order, if adopted, would also deny the appeal that an adequate cost-benefit analysis for SUSMPs was not performed by the LARWQCB. The order would determine that the LARWQCB did not have to demonstrate that the water quality benefits of SUSMPs outweigh the costs. However, the order would find that the LARWQCB did evaluate the cost of SUSMP implementation. It would also further find that the one or two percent of total development cost incurred from SUSMP implementation is reasonable, especially in light of the amount of impervious surface in Los Angeles County and the impacts on impaired water bodies.

The SWRCB order would also find that the LARWQCB adequately considered the potential for groundwater contamination stemming from implementation of the SUSMP requirements. The draft order states "The Regional Board did consider the potential impacts to groundwater from infiltration, and included appropriate limitations and guidance on its use as a BMP. These provisions will ensure adequate protection of groundwater from any adverse impacts due to infiltration."

With regards to the clarification/improvement of various SUSMP requirements, the SWRCB order, if adopted, would make several changes to the SUSMP document:

- Numeric sizing criteria would not be applied to retail gasoline outlets (RGOs). The SWRCB draft order cites the already heavy regulation of RGOs during construction, as well as feasibility and safety issues as the reasons for this proposed exemption. All other SUSMP requirements would continue to be applied to RGOs, however.
- "Significant redevelopment" would be defined as the creation or addition of at least 5,000 square feet of impervious surfaces to an already existing site. Also, where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development is not subject to the SUSMPs, the numeric sizing criteria would apply only to the addition, and not the entire development.
- "Environmentally sensitive areas" would be deleted from the development categories to which SUSMPs apply because they were poorly defined, with no minimum size limits. The SWRCB draft order states that this issue can be refined and addressed in a future re-issuance of the municipal storm water permit, however.
- SUSMP requirements would be limited to applying to discretionary projects only. The SWRCB draft order states that applying the requirements to non-discretionary projects is not consistent with the permit. However, the draft

order further states that the LARWQCB may consider expanding development controls to non-discretionary projects in a future re-issuance of the permit.

- The waiver funding requirement would be deleted from the SUSMP. This proposed requirement provided that the project proponent transfer their cost savings (resulting from receiving a waiver from the requirement to meet numeric sizing criteria) to a storm water mitigation fund. The draft order deletes this requirement due the lack of a management structure for such a fund. Again, the draft order states that the LARWQCB may want to revisit the issue during the future re-issuance of the permit.

October 5, 2000 SWRCB Final Decision on the Appeal of the LARWQCB's SUSMP Requirements

At its October 5, 2000 hearing, the SWRCB made its final decision regarding the LARWQCB's SUSMP requirements. Essentially, the final decision upheld the tentative findings of the SWRCB draft order on SUSMPs. While the final order has not yet been issued, the hearing made it evident that the final decision would include two significant changes to the draft order, however. With regards to retail gasoline outlets, the SWRCB upheld its tentative decision to exempt retail gasoline outlets from the numeric sizing criteria requirement of the LARWQCB SUSMP at this time. However, the SWRCB further found that numeric sizing criteria requirements could be applied to retail gasoline outlets in future permits, provided that proper justification for the numeric sizing criteria requirement is presented. The SWRCB also clarified its support for regional approaches to the management of urban runoff from new development. The SWRCB noted that regional BMP approaches are not precluded as a means for complying with the SUSMP requirements, provided that the regional approaches are approved by the regional board.

Categories of Development

The categories of development to which SUSMPs apply are based on their potential to cause impairment to receiving water bodies. The various categories of development generally either result in large increases in impervious area or are potential significant sources of pollutants. Many of the categories of development have also historically been found by the SDRWQCB and the Copermittees to have mismanagement of urban runoff. As discussed in Findings 4 and 5, these changes in urban runoff volume, velocity, and pollutant load resulting from new development and redevelopment can cause significant receiving water quality degradation. To minimize this relatively high potential for receiving water degradation, a plan to meet SUSMP requirements must be developed and implemented.

One category of development to which SUSMPs are proposed to apply which has generated considerable discussion is retail gasoline outlets. At its October 5, 2000 public hearing on the appeal of the LARWQCB's SUSMP requirements, the SWRCB finalized its decision on whether the SUSMP numeric sizing criteria requirement is to apply to retail gasoline outlets. As discussed above, the SWRCB found that retail gasoline outlets could be required to meet the numeric sizing criteria requirement, provided that adequate justification for the requirement is presented. Given the predominant impervious surfaces of most retail gasoline outlets, new retail gasoline outlets significantly increase the flow volumes, rates,

and velocities of urban runoff coming from the sites to above pre-development levels. As noted in Findings 4 and 5, increased runoff flow volumes, rates, and velocities can cause significant receiving water degradation. Furthermore, the pervasive presence of automobiles at retail gasoline outlets provides a significant source of pollutants to the sites. Similar to parking lots, runoff from retail gasoline outlets can be high in heavy metals and petroleum products. Retail gasoline outlets are a well defined source of urban storm water pollutants that impair receiving waters.[94]

Much debate has been devoted to the potential infeasibility of implementing structural BMPs at retail gasoline outlets. Some BMPs may pose a threat to groundwater quality or may pose a safety risk due to potential combustion resulting from gasoline entering them. With regards to infiltration BMPs which may pose a threat to groundwater quality, the SDRWQCB agrees that infiltration BMPs should not be implemented at retail gasoline outlets. This does not preclude the use of other types of BMPs, however. Many other BMPs such as underground filters, treatment-trains, and catch basin inserts are available for implementation at retail gasoline outlets.

The risk from combustion from gasoline entering BMPs has also been mentioned as a concern. This concern ignores the fact that oil-water separators and other pretreatment BMPs have been implemented at retail gasoline outlets for many years without significant problems. Considering the volatile nature of gasoline, the potential risk from combustion should be negligible, since gasoline would most likely volatilize before flowing into any BMP. Irregardless, any concern over combustion risk exhibits the need for structural BMP implementation at retail gasoline outlets; the same gasoline that which would purportedly pose a risk of combustion would also pose an environmental risk to receiving waters if no structural BMPs were in place.

While its possible some structural BMPs may need to be precluded from use at retail gasoline outlets due to the above concerns, other structural BMPs may be applicable for implementation at retail gasoline outlets. For example, treatment-train BMPs such as StormFilters are effective in reducing soluble metal concentrations commonly found in urban runoff from retail gasoline outlets. Furthermore, catch-basin inserts have been found by a USEPA funded study to be effective in removing debris, sediment, and oil from retail gasoline outlet urban runoff without causing backup.[95] Clearly, out of the many structural BMPs available today, a some BMPs are applicable for application at retail gasoline outlets.

Other SDRWQCB SUSMP Resources

As mentioned above, SUSMPs (and the numeric sizing criteria provision in particular) have been discussed extensively. Additional information can be obtained in the SDRWQCB's *Staff Report for Standard Urban Storm Water*

[94] Los Angeles Regional Water Quality Control Board. 2000. Regional Board Comment on Proposed Order. Cites USEPA funded study conducted by County of Sacramento as identifying heavy metals in significant concentrations in urban runoff from gas stations.

[95] Rogue River National Wet Weather Demonstration Project. 1999. Evaluation of On-Line Media Filters in the Rouge River Watershed. RPO-NPS-TPM59.00.

Mitigation Plans and Numerical Sizing Criteria for Best Management Practices, the SDRWQCB's *Supplemental Information for Public Workshop on Numeric Sizing Criteria for Post-Construction BMPs for New and Re-Development,* and the SDRWQCB's *Draft Responses to Comments Received at Numeric Sizing Criteria Public Workshop II Held April 13, 2000.* These documents are available at www.swrcb.ca.gov/rwqcb9/Programs/Storm_Water/storm_water.html. The SDRWQCB documents available on the website include reference lists of documents and programs which can provide extensive guidance and examples on implementation of programs addressing urban runoff from new development and significant redevelopment.

For a discussion on storm water infiltration and groundwater protection, see the discussion for Finding 35 above.

The SDRWQCB has discretion to require Standard Urban Runoff Mitigation Plans in Jurisdictional Urban Runoff Management Program item F.1.b.(2). of Order No. 2001-01 under the broad and specific legal authority cited above.

F.1.c. Revise Environmental Review Processes Including CEQA Checklists of the Jurisdictional Urban Runoff Management Program states the following:

Revise current environmental review processes and California Environmental Quality Act (CEQA) initial study checklists to include requirements for evaluation of water quality effects and identification of appropriate mitigation measures. The CEQA initial study checklist shall include questions addressing increased pollutants and flows from the proposed project such as:

(a) Would the proposed project result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).
(b) Would the proposed project result in significant alteration of receiving water quality during or following construction?
(c) Would the proposed project result in increased impervious surfaces and associated increased runoff?
(d) Would the proposed project create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?
(e) Would the proposed project result in increased erosion downstream?
(f) Is the project tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list? If so, will it result in an increase in any pollutant for which the water body is already impaired?
(g) Is the project tributary to other environmentally sensitive areas? If so, will it exacerbate already existing sensitive conditions?
(h) Would the proposed project have a potentially significant environmental impact on surface water quality, to either marine, fresh, or wetland waters?
(i) Would the proposed project have a potentially significant adverse impact on ground water quality?
(j) Will the proposed project cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?
(k) Will the project impact aquatic, wetland, or riparian habitat?

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) generally applies to all directives under Jurisdictional Urban Runoff Management

Program item F.1. Land-Use Planning for New Development and Redevelopment Component of Order No. 2001-01.

Discussion: Consideration of the effects of new development and redevelopment on water quality during project approval processes will help ensure that potential water quality problems resulting from the development are identified and addressed. The US EPA finds that "Proposed storm water management programs should include planning procedures for both during and after construction to implement control measures to ensure that pollution is reduced to the maximum extent practicable in areas of new development and redevelopment. Design criteria and performance standards may be used to assist in meeting this objective" (1992). The US EPA further finds that "The municipality should consider storm water controls and structural controls in planning, zoning, and site or subdivision plan approval" (1992). The SWRCB Urban Runoff Technical Advisory Committee advises that the Copermittees' CEQA initial study checklists be revised to include consideration of water quality effects from new development or redevelopment. The questions included in Jurisdiction Urban Runoff Management Program item F.1.c. are based on questions recommended by the Technical Advisory Committee. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.1.c. in Order No. 2001-01 under the broad legal authority cited above.

F.1.d. Conduct Education Efforts Focused on New Development and Redevelopment of the Jurisdictional Urban Runoff Management Program states the following:

(1) Internal: Municipal Staff

Each Copermittee shall implement an education program to ensure that its planning and development review staffs have an understanding of:

(a) *Federal, state, and local water quality laws and regulations applicable to development projects;*
(b) *The connection between land use decisions and short and long term water quality impacts (i.e., impacts from land development and urbanization); and*
(c) *How impacts to receiving water quality resulting from development can be minimized (i.e., through implementation of various source control and structural BMPs).*

(2) External: Project Applicants, Developers, Contractors, Property Owners

As early in the planning and development process as possible, each Copermittee shall implement a program to educate project applicants, developers, contractors and property owners on the following topics:

(a) *Federal, state, and local water quality laws and regulations applicable to development projects;*
(b) *Required federal, state, and local permits pertaining to water quality;*
(c) *Water quality impacts of urbanization; and*
(d) *Methods for minimizing the impacts of development on receiving water quality.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.1. Land-Use Planning for New Development and Redevelopment Component of Order No. 2001-01.

Discussion: Training of municipal planning and development review staff is a critical aspect of an urban runoff management program. As discussed in Finding 18, development and implementation of urban runoff control measures as early in the project planning process as possible is an effective means (in terms of both cost and performance) for minimizing the impacts of urban runoff to receiving waters. Municipal planning and development review staff are well-positioned to ensure that water quality considerations are incorporated into development projects in the early planning stages. With adequate training, municipal planning and development review staff can require implementation of BMPs early in the project planning process, thereby minimizing the urban runoff impacts of development in a cost effective manner. US EPA supports training of municipal staff when it identifies "training for appropriate employees" as a measurable goal of an urban runoff management program (2000).

Education on storm water planning issues for the public sector involved with development is equally critical. When the public sector has knowledge of storm water issues and regulations, it is more likely to incorporate storm water planning in the development and redevelopment process. In this manner, implementation of measures to address storm water issues will be included in development plans, saving time and money for the developer and the municipality. The SWRCB Urban Runoff Technical Advisory Committee finds that Copermittees should "Establish an education/information dissemination program that includes such things as: brochures to distribute to developers and contractors at permit counters and by mail; reference and training manuals for planners, engineers, inspectors, developers, contractors; and training and information exchange workshops."

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.1.d. in Order No. 2001-01 under the broad legal authority cited above.

F.2. CONSTRUCTION COMPONENT

In addition to the underlying broad legal authority citations listed above in section VII. of this Fact Sheet/Technical Report, the following specific legal authority item also generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01. Other specific legal authority items applicable only to distinct directives of Jurisdictional Urban Runoff Management Program item F.2. are provided as necessary.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) provides that the proposed management program include "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."

F.2. Construction Component of the Jurisdictional Urban Runoff Management Program states the following:

> *The Copermittees shall implement a Construction Component of its Jurisdictional URMP to reduce pollutants in runoff from construction sites during all construction phases. At a minimum the construction component shall address:*
>
> *F.2.a. Pollution Prevention*
> *F.2.b. Grading Ordinance Update*
> *F.2.c. Modify Construction and Grading Approval Process*
> *F.2.d. Source Identification*
> *F.2.e. Threat to Water Quality Prioritization*
> *F.2.f. BMP Implementation*
> *F.2.g. Inspection of Construction Sites*
> *F.2.h. Enforcement Measures for Construction Sites*
> *F.2.i. Reporting of Non-compliant Sites*
> *F.2.j. Education Focused on Construction Activities*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

Discussion: CWA sections 402(p)(3)(B)(ii-iii) requires each Copermittee to prohibit non-storm water discharges into its MS4 and to reduce the discharge of pollutants to the maximum extent practicable for all urban land uses. The purpose of these two broad requirements is to minimize the short and long-term impacts of urban runoff on receiving water quality. Land used for construction activities is clearly identified in the federal regulations as one of several high priority land uses from which pollutants in urban runoff discharges must be reduced to the maximum extent practicable by each Copermittee. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) requires the development of a proposed management program to reduce the discharge of pollutants in storm water to the maximum extent practicable. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) requires that this program include components which address construction sites and activities.

Natural erosion processes are accelerated when existing protective cover is removed during construction. Suspended sediments constitute the largest mass of pollutant loadings to surface waters. As discussed in Finding 19, the primary source of these sediments is construction sites. Sediments from construction site erosion can be effectively reduced in urban runoff by the application of a wide range of BMPs, which emphasize pollution prevention and source control and are supplemented by treatment control BMPs. For these reasons, each Copermittee must develop and implement a Construction Component which utilizes BMPs to control pollutants in runoff generated from construction sites.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.2 in Order No. 2001-01 under broad legal authority cited above.

F.2.a. Pollution Prevention (Construction) of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall implement pollution prevention methods in its Construction Component and shall require its use by construction site owners, developers, contractors, and other responsible parties.*
>
> Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).
>
> Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.
>
> Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(1) provides that the proposed management program include "A description of procedures for site planning which incorporate consideration of potential water quality impacts."
>
> Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(2) provides that the proposed management program include "A description of requirements for nonstructural and structural best management practices."
>
> Discussion: Each Copermittee must develop a program to reduce the discharge of pollutants in storm water from construction sites to the maximum extent practicable. In order to achieve this level of pollution reduction, BMPs must be implemented. As discussed in Finding 12, pollution prevention (the reduction or elimination of pollutant generation at its source) is an essential aspect of BMPs. By limiting the generation of pollutants, less pollutants are available to be washed from construction sites, resulting in reduced pollutant loads in storm water discharges from these sites. In addition, there is no need to control or treat pollutants which are not initially generated. Furthermore, pollution prevention BMPs are generally more cost effective than removal of pollutants by treatment facilities or cleanup of contaminated media. In the Pollution Prevention Act of 1990, Congress established a national policy that emphasizes pollution prevention over control and treatment. Since pollution prevention is an effective and efficient means for reducing pollutant loads in storm water runoff, pollution prevention methods are an important aspect of BMPs to be included in the Construction Component of the Jurisdictional URMP. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.4.a in Order No. 2001-01 under the broad and specific legal authority cited above.

F.2.b. Grading Ordinance Update (Construction) of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall review and update its grading ordinances as necessary for compliance with its storm water ordinances and this Order. The updated grading ordinance shall require pollution prevention, source control, and structural treatment BMPs to be implemented during all construction activities, including for example:*
>
> *(1) Erosion prevention;*
> *(2) Seasonal restrictions on grading;*
> *(3) Slope stabilization requirements;*

(4) Phased grading;
(5) Revegetation as early as feasible;
(6) Preservation of natural hydrologic features;
(7) Preservation of riparian buffers and corridors;
(8) Maintenance of all source control and structural treatment BMPs; and
(9) *Retention of sediment and other construction pollutants on site..*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(1) provides that the proposed management program include "A description of procedures for site planning which incorporate consideration of potential water quality impacts."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(2) provides that the proposed management program include "A description of requirements for nonstructural and structural best management practices."

Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(A) provides that each Copermitee must demonstrate that it can 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 site of industrial activity."

Federal NPDES regulation 40 CFR 122.26(b)(14) provides that "The following categories of facilities are considered to be engaging in 'industrial activity' for the purposes of this subsection: […] (x) Construction activity including cleaning, grading and excavation activities […]."

Discussion: Copermittees must reduce pollutant discharges in storm water from construction sites to the maximum extent practicable. In order to achieve this level of pollution reduction, BMPs must be implemented. An effective means for ensuring BMP implementation at construction sites is through the development and implementation of grading ordinances which require pollution prevention, source control, and structural treatment BMPs. Updated grading ordinances which adequately address water quality considerations will provide Copermittees with the necessary legal authority to require effective BMPs at construction sites.

The US EPA suggests that local ordinance be used to require implementation of BMPs, stating that "A description of the local erosion and sediment control law or ordinance is needed to satisfy this requirement [i.e., Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(2)]" (1992). Regarding Copermittee approval of construction activities, the US EPA further states that "applicants must propose site review and approval procedures that address sediment and erosion controls, storm water management, and other appropriate measures. Approvals should be clearly

tied to commitments to implement structural and nonstructural BMPs during the construction process" (1992).

Furthermore, in its Phase II Final Rule, US EPA requires small municipalities to develop and implement for construction sites "An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance […]" (1999). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule requirements for small municipalities are also applicable to larger municipalities such as the Copermittees.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.2.b in Order No. 2001-01 under the broad and specific legal authority cited above.

F.2.c. Modify Construction and Grading Approval Process (Construction) of the Jurisdictional Urban Runoff Management Program states the following:

Prior to approval and issuance of local construction and grading permits, each Copermittee shall review all individual proposed construction and grading plans and require measures to ensure that pollutants from the site will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of water quality objectives. Each Copermittee shall further ensure that all grading and construction activities will be in compliance with applicable Copermittee ordinances (e.g., storm water, grading, construction, etc.) and other applicable requirements, including this Order.

(1) Conditions of Approval

Include conditions of approval in local grading and construction permits to ensure that pollutant discharges are reduced to the maximum extent practicable and water quality objectives are not violated during the construction phase. Such conditions shall include for example:

(a) Require project proponent to develop and implement a plan to manage storm water and non-storm water discharges from the site at all times;
(b) Require project proponent to coincide grading with seasonal dry weather periods;
(c) Require project proponent to emphasize erosion prevention as the most important measure for keeping sediment on site during construction;
(d) Require project proponent to utilize sediment controls as a supplement to erosion prevention for keeping sediment on-site during construction, and never as the single or primary method;
(e) Require project proponent to minimize areas that are cleared and graded to only the portion of the site that is necessary for construction;
(f) Require project proponent to minimize exposure time of disturbed soil areas;
(g) Require project proponent to temporarily stabilize and reseed disturbed soil areas as rapidly as possible;
(h) Require project proponent to permanently revegetate or landscape as early as feasible;
(i) Require project proponent to stabilize all slopes; and
(j) *Require project proponents subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities, (hereinafter General Construction Permit), to provide evidence of existing coverage under the General Construction Permit.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(1) provides that the proposed management program include "A description of procedures for site planning which incorporate consideration of potential water quality impacts."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(2) provides that the proposed management program include "A description of requirements for nonstructural and structural best management practices."

Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(A) provides that each Copermitee must demonstrate that it can 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 site of industrial activity."

Federal NPDES regulation 40 CFR 122.26(b)(14) provides that "The following categories of facilities are considered to be engaging in 'industrial activity' for the purposes of this subsection: […] (x) Construction activity including cleaning, grading and excavation activities […]."

Discussion: As discussed in Finding 16, since each Copermittee approves and issues construction and grading permits, and discharges from construction and grading activities enter its MS4, each Copermittee is responsible for the pollutant discharges resulting from construction and grading activities. Each Copermittee must ensure that pollutant discharges from construction and grading activities are reduced to the maximum extent practicable and do not result in degradation of receiving waters. An effective means for achieving this is to develop conditions of approval for grading and construction permits which require measures to minimize pollutant discharges. The US EPA recommends approval processes which consider water quality impacts, stating that approval process requirements should "include phasing development to coincide with seasonal dry periods, minimizing areas that are cleared and graded to only the portion of the site that is necessary for construction, exposing areas for the briefest period possible, and stabilizing and reseeding disturbed areas rapidly after construction activity is completed" (1992). Other suggested construction and grading conditions of approval listed in this item are based on SWRCB Urban Runoff Technical Advisory Committee recommendations.

During approval and issuance of grading and construction permits, each Copermittee must review construction and grading plans to ensure that the conditions of approval are met. US EPA states that to determine if a construction site is in compliance with construction and grading ordinances and permits, the "MS4 operator should review the site plans submitted by the construction site operator before ground is broken" (2000). Furthermore, in its Phase II Final Rule, US EPA requires small municipalities to develop and implement for construction sites "Procedures for site plan review which incorporate consideration of potential water quality impacts" (1999). Due to the greater water quality concerns generally

experienced by larger municipalities, Phase II Final Rule requirements for small municipalities are also applicable to larger municipalities such as the Copermittees.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.2.c in Order No. 2001-01 under the broad and specific legal authority cited above.

F.2.d. Source Identification (Construction) of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall annually develop and update, prior to the rainy season, a watershed based inventory of all construction sites within its jurisdiction regardless of site size or ownership. This requirement is applicable to all construction sites regardless of whether the construction site is subject to the California statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities (hereinafter General Construction permit), or other individual NPDES permit. The use of an automated database system, such as Geographical Information System (GIS) is highly recommended, but not required.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(3) provides that the proposed management program include "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."

Discussion: In order to prohibit non-storm water discharges, reduce construction pollutant sources to the maximum extent practicable, and ensure that adequate BMPs are implemented, Copermittees must first identify all of the construction sites within their jurisdiction. The construction sites are to be inventoried on a watershed basis in order to help with prioritization of the sites. For example, construction sites which are found to be located in a watershed with impaired receiving waters for sediment should be considered a high priority for BMP implementation, inspections, and enforcement. The US EPA requires that all construction sites be addressed (and therefore inventoried), stating: "All construction sites, regardless of size, must be addressed by the municipality. To begin to identify these sites, the applicant should obtain lists of construction site operators that are covered by general or individual storm water NPDES permits from the NPDES permitting authority. However, construction sites not covered by a storm water discharge permit also need to be addressed by the municipality. The best way to identify these construction sites and implement an effective BMP program to reduce pollutants in their runoff is through the site planning process" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.4.d in Order No. 2001-01 under the broad and specific legal authority cited above.

F.2.e. Threat to Water Quality Prioritization (Construction) of the Jurisdictional Urban Runoff Management Program states the following:

> *(1) To establish priorities for construction oversight activities under this Order, the Copermittee shall prioritize each watershed based inventory (developed pursuant to F.2.d. above) by threat to water quality. Each construction site shall be classified as high, medium, or low threat to water quality. In evaluating threat to water quality each Copermittee shall consider (1) soil erosion potential; (2) site slope; (3) project size and type; (4) sensitivity of receiving water bodies; (5) proximity to receiving water bodies; (6) non-storm water discharges; and (7) any other relevant factors.*
>
> (2) *A high priority construction site shall at a minimum be defined as a site meeting any one of the following criteria or equivalent criteria:*
>
> *(a) 50 acres or more;*
> *(b) Grading will occur during the wet season;*
> *(c) Highly erosive soils;*
> *(d) Hillside development; and*
> (e) *Tributary to a Clean Water Act section 303(d) impaired water body or other environmentally sensitive area (as defined in section F.1.b.(2)(a)vii of this Order).*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(3) provides that the proposed management program include "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."

Discussion: As discussed in Finding 19, construction sites are high risk areas for pollutant discharges to storm water. Development of an inventory of construction sites within a watershed will help identify potential sources of pollutants in storm water. By assessing information provided in the inventory (such as site topography and site proximity to receiving waters), sites can be prioritized by threat to water quality. Those sites which pose the greatest threat can then be targeted for inspection and monitoring. This will allow for limited inspection and monitoring time to be most effective.

The types of construction sites identified as high priority in this item are identified as such due to their high potential for erosion and impacting receiving waters. These types of construction sites are generally large, requiring grading of a large area, resulting in a large area of disturbed earth which is susceptible to erosion. Hillside construction is also high priority, due to its susceptibility to slope erosion. Any construction sites tributary to a CWA section 303(d) waterbody are also high priority due to their potential to further degrade those waterbodies. US EPA supports this type of prioritization, stating that municipalities should "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" (2000).

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.2.e in Order No. 2001-01 under the broad and specific legal authority cited above.

F.2.f.(1), F.2.f.(2), and F.2.f.(3) BMP Implementation (Construction) of the Jurisdictional Urban Runoff Management Program state the following:

> *(1) Each Copermittee shall designate a set of minimum BMPs for high, medium, and low threat to water quality construction sites (as determined under section F.2.e). BMPs are to be implemented year round.*
>
> *(2) Each Copermittee shall implement, or require the implementation of, the designated minimum BMPs (based upon the site's threat to water quality rating) at each construction site within its jurisdiction year round. If particular minimum BMPs are infeasible at any specific site, each Copermittee shall implement, or require the implementation of, other equivalent BMPs. Each Copermittee shall also implement or require any additional site specific BMPs as necessary to comply with this Order, including BMPs which are more stringent than those required under the statewide General Construction Permit.*
>
> (3) *Each Copermittee shall implement, or require the implementation of, BMPs year round; however, BMP implementation requirements can vary based on wet and dry seasons.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(2) provides that the proposed management program include "A description of requirements for nonstructural and structural best management practices."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(3) provides that the proposed management program include "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."

Discussion: Copermittees must reduce the discharge of pollutants in storm water from construction sites to the maximum extent practicable. To achieve this level of pollutant reduction, BMPs must be implemented (see Finding 11). Designation of a set of minimum BMPs for high, medium, and low threat construction sites will help ensure that appropriate BMPs are implemented at construction sites. These minimum BMPs will also serve as guidance as to the level of water quality protection required.

Regarding designation of BMPs to be implemented, the US EPA states that "the proposed management program should describe requirements for nonstructural

and structural BMPs that operators of construction activities that discharge to MS4s must meet" (1992). While minimum BMPs will be required at all construction sites, implementation of particular BMPs will be site specific in order to address various conditions at different sites. Regarding site specific BMPs, the US EPA states "Appropriate structural and nonstructural control requirements will vary by project. Project type, size, and duration, as well as soil composition, site slope, and proximity to sensitive receiving waters will determine the appropriate structural and nonstructural BMPs" (1992).

In order to comply with Order No. 2001-01 requirements, implemented BMPs may need to be more stringent than those required under the statewide General Construction Permit. The US EPA implies that local sediment and erosion control requirements may be more stringent than statewide General Construction Permit requirements when it states that "construction sites covered under NPDES permit regulations must indicate whether they are in compliance with State and local sediment and erosion control plans" (1992).

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program items F.2.f.(1-3) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.2.f.(4) BMP Implementation (Construction) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement, or require implementation of, additional controls for construction sites tributary to CWA section 303(d) impaired water bodies, coastal lagoons, or other sensitive water bodies as necessary to comply with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.44(d)(1)(i) requires NPDES permits to include limitations to "control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

Discussion: CWA section 303(d) water bodies are impaired water bodies which are not achieving the water quality objectives necessary to protect their beneficial uses. As discussed in Finding 3, urban runoff discharges from MS4s are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. Since discharges which cause or contribute to an exceedance of water quality standards are prohibited (see section C.1. of Order No. 2001-01), any discharges to CWA section 303(d) waterbodies of pollutants for which the waterbody is impaired are prohibited. Therefore, construction sites and

activities tributary to these water bodies must implement additional controls to ensure that they are not discharging the pollutants which are causing or contributing to the impairment of these water bodies.

With regards to coastal lagoons and other sensitive water bodies, additional controls are needed to protect these valuable and unique resources. In their Nonpoint Source Program Strategy and Implementation Plan, the SWRCB and California Coastal Commission support additional controls for critical coastal areas, stating "the State will seek to attain and maintain applicable water quality standards, and protect waters threatened by land uses, or by substantial expansion of existing land uses, by implementing additional management measures."

Furthermore, US EPA supports additional controls for construction sites tributary to impaired or sensitive water bodies, stating "The proximity and sensitivity of the receiving water to which the construction site discharges is an important consideration. For construction sites that discharge to receiving waters that do not support their designated use or other waters of special concern, additional construction site controls are probably warranted and should be strongly considered" (1992).

The SDRWQCB has the discretion to require Jurisdictional Urban Runoff Program item F.2.f.(4) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.2.g. Inspection of Construction Sites (Construction) of the Jurisdictional Urban Runoff Management Program item F.4.g states the following:

(1) Each Copermittee shall conduct construction site inspections for compliance with its ordinances (grading, storm water, etc.), permits (construction, grading, etc.), and this Order. Inspections shall include review of site erosion control and BMP implementation plans.

(2) Each Copermittee shall establish inspection frequencies and priorities as determined by the threat to water quality prioritization described in F.2.e above. During the wet season (i.e., October 1 through April 30 of each year), each Copermittee shall inspect, at a minimum, each High Priority construction site, either:

(a) Weekly
OR
(b) Monthly for any site that the responsible Copermittee certifies in a written statement to the SDRWQCB all of the following (certified statements may be submitted to the SDRWQCB at any time for one or more sites):

i. Copermittee has record of construction site's Waste Discharge Identification Number (WDID#) documenting construction site's coverage under the statewide General Construction Permit; and
ii. Copermittee has reviewed the constructions site's Storm Water Pollution Prevention Plan (SWPPP); and
iii. Copermittee finds SWPPP to be in compliance with all local ordinances, permits, and plans; and
iv. Copermittee finds that the SWPPP is being properly implemented on site.

At a minimum, Medium and Low Priority construction sites shall be inspected by Copermittees twice during the wet season. All construction sites shall be inspected by the Copermittees as needed during the dry season (i.e., May 1 through September 30 of each year).

(3) Based upon site inspection findings, each Copermittee shall implement all follow-up actions necessary to comply with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(3) provides that the proposed management program include "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."

Discussion: As discussed in Finding 24, inspections provide a necessary means by which Copermittees can evaluate compliance with their ordinances. Inspections are especially important at high risk areas for pollutant discharges, such as industrial and construction sites. To ensure that BMPs are properly installed, US EPA states MS4 operators should "develop procedures for site inspection and enforcement of control measures to deter infractions" (2000). Regarding inspections, US EPA further finds "Inspections give the MS4 operator an opportunity to provide additional guidance and education, issue warnings, or assess penalties" (2000).

Construction site inspections shall be conducted to determine compliance with applicable ordinances and permits, including Order No. 2001-01. To this effect, the US EPA finds that "Site inspections are expected to be the primary enforcement mechanism by which erosion and sediment controls are maintained" (1992). When inspections result in findings of noncompliance, follow-up by the Copermittee to ensure compliance is necessary. The US EPA states "Effective inspection and enforcement requires […] intervention by the municipal authority to correct violations" (1992).

Construction site inspection frequencies are to be based on threat to water quality prioritization. US EPA supports this, stating that site inspection procedures should "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" (2000). For example, construction sites which are considered a high threat to water quality are to be given a high priority for inspection. This will allow for limited inspection and monitoring time to be most effective. Weekly to monthly inspection of high threat sites is necessary due to the dynamic nature of construction activities. Medium and low threat construction sites can be inspected less frequently, due to their reduced risk of negatively impacting receiving waters. Review of SWPPPs can be one effective tool for determining frequency of site inspections. Construction sites which effectively implement the measures of a comprehensive SWPPP may not need to be inspected as frequently as less diligent sites.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.2.g in Order No. 2001-01 under the broad and specific legal authority cited above.

F.2.h. Enforcement of Construction Sites (Construction) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall enforce its ordinances (grading, storm water, etc.) and permits (construction, grading, etc.) at all construction sites as necessary to maintain compliance with this Order. Copermittee ordinances or other regulatory mechanisms shall include sanctions to ensure compliance. Sanctions shall include for example: Non-monetary penalties, fines, bonding requirements, and/or permit denials for non-compliance.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(3) provides that the proposed management program include "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."

Discussion: Each Copermittee must develop grading and storm water ordinances under its Jurisdictional Urban Runoff Management Program. As discussed in Finding 24, when a Copermittee determines a violation of its grading or storm water ordinance, it must pursue correction of the violation. A critical aspect of the correction of violations is enforcement of ordinances. Enforcement increases the probability of correction of a violation. The US EPA supports development of enforceable ordinances and permits when it states "applicants must describe proposed regulatory programs to reduce pollutants in storm water runoff from construction sites to the MS4" (1992). The US EPA supports enforcement of these ordinances and permits at construction sites when it states "Effective inspection and enforcement requires […] penalties to deter infractions and intervention by the municipal authority to correct violations. Enforcement mechanisms […] also must be described" (1992).

Furthermore, in its Phase II Final Rule, US EPA requires small municipalities to develop and implement "An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance […]" (1999). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule requirements for small municipalities are also applicable to larger municipalities such as the Copermittees.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.2.h of Order No. 2001-01 under the broad and specific legal authority cited above.

F.2.i. Reporting of Non-compliant Sites (Construction) of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall provide oral notification to the SDRWQCB of non-compliant sites within its jurisdiction within 24 hours of the incidence of noncompliance, as required under section R.1 (and B.7 of Attachment C) of this Order. Such oral notification shall be followed up by a written report to be submitted to the SDRWQCB within 5 days of the incidence of non-compliance as required under section R.1 (and B.7 of Attachment C) of this Order. Sites are considered non-compliant when one or more violations of local ordinances, permits, plans, or this Order exist on the site.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

California Water Code section 13267 provides that "the regional board may require than any person who has discharged […] shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires."

Federal NPDES regulation 40 CFR 122.44(l)(6) states "The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of non-compliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance."

Discussion: Follow-up with non-compliant construction sites is essential to ensure that the site has taken adequate corrective measures to achieve compliance. To help ensure that compliance has been achieved, the Copermittees shall report non-compliant industrial sites to the SDRWQCB. The SDRWQCB can then participate in follow-up efforts to assure that the construction site is in compliance. Notification of non-compliance is common to all NPDES permits under Federal NPDES regulation 40 CFR 122.44(l)(6). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.b.(7) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.2.j. Education Focused on Construction Activities (Construction) of the Jurisdictional Urban Runoff Management Program states the following:

> *(1) Internal: Municipal Staff*
>
> > *Each Copermittee shall implement an education program to ensure that its construction, building, and grading review staffs and inspectors have an understanding of:*

(a) *Federal, state, and local water quality laws and regulations applicable to construction and grading activities.*
(b) *The connection between construction activities and water quality impacts (i.e., impacts from land development and urbanization).*
(c) *How erosion can be prevented.*
(d) *How impacts to receiving water quality resulting from construction activities can be minimized (i.e., through implementation of various source control and structural BMPs).*
(e) *Applicable topics listed in section F.4. of this Order.*

(2) External: Project Applicants, Contractors, Developers, Property Owners, and other Responsible Parties

Each Copermittee shall implement an education program to ensure that project applicants, contractors, developers, property owners, and other responsible parties have an understanding of the topics outlined in section F.2.i.1. above of this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.2. Construction Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(4) provides that the proposed management program include "A description of appropriate educational and training measures for construction site operators."

Discussion: As discussed in Finding 23, implementation of an education program is an important best management practice for construction sites and activities. The SWRCB Technical Advisory Committee "recognizes that education with an emphasis on pollution prevention is the fundamental basis for solving nonpoint source pollution problems." The TAC points out several target communities for education efforts, including "Government: Educate agencies and officials to achieve better communication, consistency, collaboration, and coordination at the federal, state and local levels" and "Development Community: Educate the development community, including developers, contractors, architects, and local government planners, engineers, and inspectors, on nonpoint source pollution problems associated with development and redevelopment and construction activities and involve them in problem definitions and solutions."

The US EPA also supports education efforts for parties involved in construction, stating "technical information on how to incorporate storm water management with erosion and sediment control and other BMP training courses are recommended for municipal employees and construction site operators."

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.2.j. in Order No. 2001-01 under the broad and specific legal authority cited above.

F.3. EXISTING DEVELOPMENT COMPONENT

F.3. Existing Development Component of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall minimize the short and long-term impacts on receiving water quality from all types of existing development.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Discussion: CWA sections 402(p)(3)(B)(ii-iii) require each Copermittee to prohibit non-storm water discharges into its MS4 and to reduce the discharge of pollutants to the maximum extent practicable for all urban land uses. The purpose of these two broad requirements is to minimize the short and long-term impacts of urban runoff on receiving water quality. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3 of Order No. 2001-01 under the broad legal authority cited above.

F.3.a. MUNICIPAL (EXISTING DEVELOPMENT)

In addition to the underlying broad legal authority citations listed above in section VII. of this Fact Sheet/Technical Report, the following specific legal authority items also generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01. Other specific legal authority items applicable only to distinct directives of Jurisdictional Urban Runoff Management Program item F.3.a. are provided as necessary.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(1) provides that the proposed management program include "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(3) provides that the proposed management program include "A description 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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(4) provides that the proposed management program include "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(5) provides that the proposed management program include "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(6) provides that the proposed management program include "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."

F.3.a. Municipal (Existing Development) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement a Municipal (Existing Development) Component to prevent or reduce pollutants in runoff from all municipal land use areas and activities. At a minimum the municipal component shall address:

F.3.a.(1) Pollution Prevention
F.3.a.(2) Source Identification
F.3.a.(3) Threat to Water Quality Prioritization
F.3.a.(4) BMP Implementation
F.3.a.(5) Maintenance of Municipal Separate Storm Sewer System
F.3.a.(6) Management of Pesticides, Herbicides, and Fertilizers
F.3.a.(7) Inspection of Municipal Areas and Activities
F.3.a.(8) Enforcement of Municipal Areas and Activities

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Discussion: CWA sections 402(p)(3)(B)(ii-iii) requires each Copermittee to prohibit non-storm water discharges into its MS4 and to reduce the discharge of pollutants to the maximum extent practicable for all urban land uses. The purpose of these two broad requirements is to minimize the short and long-term impacts of urban runoff on receiving water quality. Land used for municipal activities is clearly identified in the federal regulations as one of several high priority land uses from which pollutants in urban runoff discharges must be reduced to the maximum extent practicable by each Copermittee. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) requires the development of a proposed management program to reduce the discharge of pollutants in storm water to the maximum extent practicable. Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1) and 40 CFR 122.26 (d)(2)(iv)(A)(3-6) require that this program include components which address municipal areas and activities.

US EPA targets municipal areas and activities "to help ensure a reduction in the amount and type of pollution that (1) collects on streets, parking lots, open spaces, and storage and vehicle maintenance areas and is discharged into local

waterways; and (2) results from actions such as environmentally damaging land development and flood management practices or poor maintenance of storm sewer systems" (2000). To reduce pollutant discharges from municipal areas and activities to the maximum extent practicable, BMPs must be implemented. Therefore, a municipal existing development component requiring BMPs must be developed and implemented as part of each Copermittee's Jurisdictional URMP.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3.a in Order No. 2001-01 under the broad legal authority cited above.

F.3.a.(1) Pollution Prevention (Municipal) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement pollution prevention methods in its Municipal (Existing Development) Component and shall require its use by appropriate municipal departments and personnel.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Discussion: Each Copermittee must develop a program to reduce the discharge of pollutants to and from the MS4 to the maximum extent practicable for all urban land uses and activities, including municipal areas and activities. In order to achieve this level of pollution reduction, BMPs must be implemented. Pollution prevention, the reduction or elimination of pollutant generation at its source, is an essential aspect of BMPs. By limiting the generation of pollutants, less pollutants are available to be washed from municipal areas and activities, resulting in reduced pollutant loads in storm water discharges from these areas and activities. In addition, there is no need to control or treat pollutants which are not initially generated. Furthermore, pollution prevention BMPs are generally more cost effective than removal of pollutants by treatment facilities or cleanup of contaminated media. In the Pollution Prevention Act of 1990, Congress established a national policy that emphasizes pollution prevention over control and treatment. Since pollution prevention is an effective and efficient means for reducing pollutant loads in storm water runoff, pollution prevention methods are an important aspect of BMPs to be included in the municipal existing development component. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3.a.(1) in Order No. 2001-01 under the broad legal authority cited above.

F.3.a.(2) Source Identification (Municipal) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall develop, and update annually, a watershed based inventory of the name, address (if applicable), and description of all municipal land use areas and activities which generate

pollutants. The use of an automated database system, such as Geographical Information System (GIS) is highly recommended when applicable, but not required.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Discussion: In order to prohibit non-storm water discharges, reduce municipal pollutant sources to the maximum extent practicable, and ensure that adequate BMPs are implemented, Copermittees must first identify all of the municipal areas and pollutant source activities within their jurisdiction. The municipal areas and pollutant source activities are to be inventoried on a watershed basis in order to help with prioritization of the sites. For example, municipal pollutant sources which are found to be located in a watershed with impaired receiving waters should be considered a high priority for BMP implementation, inspections, and monitoring. Regarding municipal pollutant source inventories, the US EPA states "The first step is to identify facilities that handle municipal waste and summarize their operations" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3.a.(2) of Order No. 2001-01 under the broad legal authority cited above.

F.3.a.(3)(a) Threat to Water Quality Prioritization (Municipal) of the Jurisdictional Urban Runoff Management Program states the following:

To establish priorities for oversight of municipal areas and activities required under this Order, each Copermittee shall prioritize each watershed inventory in F.3.a.(2) above by threat to water quality and update annually. Each municipal area and activity shall be classified as high, medium, or low threat to water quality. In evaluating threat to water quality each Copermittee shall consider (1) type of municipal area or activity; (2) materials used; (3) wastes generated; (4) pollutant discharge potential; (5) non-storm water discharges; (6) size of facility or area; (7) proximity to receiving water bodies; (8) sensitivity of receiving water bodies; and (9) any other relevant factors.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Discussion: Many municipal pollutant sources pose a high risk for pollutant discharges to storm water. By assessing information provided in the municipal pollutant source inventory (such as principal pollutants used or services provided by a municipal facility), sites can be prioritized by threat to water quality. Those sites which pose the greatest threat can then be targeted for BMP implementation, inspection, and monitoring. This will allow for limited resources

to be most effective in reducing pollutant discharges from municipal sources. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3.a.(3)(a) in Order No. 2001-01 under the broad legal authority cited above.

F.3.a.(3)(b) Threat to Water Quality Prioritization (Municipal) of the Jurisdictional Urban Runoff Management Program states the following:

At a minimum, the high priority municipal areas and activities shall include the following:

i Roads, Streets, Highways, and Parking Facilities.

ii Flood Management Projects and Flood Control Devices.

iii Areas and activities tributary to a Clean Water Act section 303(d) impaired water body or other environmentally sensitive area (as defined in section F.1.b.(2)(a)vii of this Order).

iv Municipal Waste Facilities.

- *Active or closed municipal landfills;*
- *Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems;*
- *Municipal separate storm sewer systems;*
- *Incinerators;*
- *Solid waste transfer facilities;*
- *Land application sites;*
- *Uncontrolled sanitary landfills;*
- *Corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles;*
- *Sites for disposing and treating sewage sludge; and*
- *Hazardous waste treatment, disposal, and recovery facilities;*

v *Other municipal areas and activities that the Copermittee determines may contribute a significant source pollutant load to the MS4.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Discussion: Identification of high priority municipal pollutant areas and activities allows for limited pollution reduction resources to be most effective. Targeting high priority municipal areas and activities for BMP implementation, inspection, and monitoring provides the greatest reduction in risk of degrading receiving waters per expenditure.

Items (i), (ii), and (iv) above are considered to be high priority sources since they are specifically addressed in Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(3-5). Regarding roads, highways, and parking facilities, the US EPA states “Road maintenance practices, especially snow management and road repair, and traffic are significant sources of pollutants in storm water discharges. […] Municipal equipment yards and maintenance shops that support road maintenance activities can also be significant sources of pollutants” (1992). Regarding flood management projects and flood control devices, the US EPA

states “Storm water management devices and structures that focus solely on water quantity are usually not designed to remove pollutants, and may sometimes harm aquatic habitat and aesthetic values” (1992). Regarding municipal waste facilities, the US EPA states “Applicants must describe programs that identify measures to monitor and reduce pollutants in storm water discharges from facilities that handle municipal waste, including sewage sludge. […] The types of facilities that should be included are: active or closed municipal waste landfills; publicly owned treatment works, including water and wastewater treatment plants; incinerators; municipal solid waste transfer facilities; land application sites; uncontrolled sanitary landfills; maintenance and storage yards for waste transportation fleets and equipment; sites for disposing or treating sludge from municipal treatment works; and other treatment, storage, or disposal facilities for municipal waste” (1992).

Areas and activities included in item (iii) are considered high priority due to their location in relation to CWA section 303(d) water bodies. Pollutant loading of these water bodies must be avoided to aid in their recovery and ensure against their further degradation. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3.a.(3)(b) in Order No. 2001-01 under the broad legal authority cited above.

F.3.a.(4)(a) and F.3.a.(4)(b) BMP Implementation (Municipal) of the Jurisdictional Urban Runoff Management Program state the following:

> *(a) Each Copermittee shall designate a set of minimum BMPs for high, medium, and low threat to water quality municipal areas and activities (as determined under section F.3.a.(3)). The designated minimum BMPs for high threat to water quality municipal areas and activities shall be area or activity specific as appropriate.*
>
> *(b) Each Copermittee shall implement, or require the implementation of, the designated minimum BMPs (based upon the threat to water quality rating) at each municipal area or activity within its jurisdiction. If particular minimum BMPs are infeasible for any specific area or activity, each Copermittee shall implement, or require implementation of other equivalent BMPs. Each Copermittee shall also implement any additional BMPs as are necessary to comply with this Order.*
>
> *i. Each Copermittee shall evaluate feasibility of retrofitting existing structural food control devices and retrofit where needed.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Discussion: Copermittees must reduce the discharge of pollutants to the MS4 to the maximum extent practicable. In order to achieve this level of pollution reduction in storm water discharges from municipal areas and activities, BMPs must be implemented. To ensure that adequate BMPs are utilized for various municipal areas and activities, each Copermittee shall designate and implement a

set of minimum BMPs for high, medium, and low threat to water quality municipal areas and activities. The designated minimum BMPs will provide guidance as to the level of water quality protection required for various municipal areas and activities.

The US EPA recommends that Copermittees include in the proposed management program BMP measures for addressing municipal area and activities. Regarding public street, road, or highway BMPs, the US EPA states that "proposed management programs must include a description of practices for operation and maintenance of public streets, roads, and highways, and procedures for reducing the impact of runoff from these areas on receiving waters. […] Pollutants from traffic can be minimized by using nonstructural controls (e.g., traffic reduction and improved traffic management), structural controls (e.g., traditional and innovative BMPs), and changing maintenance activities" (1992).

Regarding flood management projects, the US EPA finds that flood management projects can be harmful to receiving waters, stating that "Storm water management devices and structures that focus solely on water quantity are usually not designed to remove pollutants, and may sometimes harm aquatic habitat and aesthetic values" (1992). As flood control structures and other elements of the MS4 age and retrofitting becomes necessary, opportunities for water quality improvements arise. Conveyance systems which take water quality consideration into account (such as grassed swales, vegetated detention ponds, etc.) can often cost less to construct than traditional concrete systems. Evaluation of the applicability of such systems during retrofitting must occur to ensure that pollutants in urban runoff are reduced to the maximum extent practicable. The US EPA supports utilizing BMPs for pollution reduction in flood management projects, stating that "The proposed management program must demonstrate that flood management projects take into account the effects on the water quality of receiving water bodies. […] Opportunities for pollutant reduction should be considered" (1992).

Regarding municipal waste facility BMPs, the US EPA states that "Procedures to evaluate, inspect, monitor, and establish control measures for municipal waste sites over the term of the NPDES permit should be described" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3.a.(4)(a) in Order No. 2001-01 under the broad legal authority cited above.

F.3.a.(4)(c) BMP Implementation (Municipal) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement, or require implementation of, any additional controls for municipal areas and activities tributary to Clean Water Act section 303(d) impaired water bodies, coastal lagoons, or other environmentally sensitive areas necessary to comply with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)

(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.44(d)(1)(i) requires NPDES permits to include limitations to "control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

Discussion: CWA section 303(d) water bodies are water bodies which are not achieving the water quality objectives necessary to protect their beneficial uses. As discussed in Finding 3, urban runoff discharges from MS4s are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. Since discharges which cause or contribute to an exceedance of water quality standards must be controlled and are prohibited (see section C.1. of Order No. 2001-01), discharges to CWA section 303(d) waterbodies of pollutants for which the waterbody is impaired must be controlled and are prohibited. Therefore, municipal areas and activities tributary to these water bodies must implement additional controls to ensure that they are not discharging the pollutants which are causing or contributing to the impairment of these water bodies.

With regards to coastal lagoons and other sensitive water bodies, additional controls are needed to protect these valuable and unique resources. In their Nonpoint Source Program Strategy and Implementation Plan, the SWRCB and California Coastal Commission support additional controls for critical coastal areas, stating "the State will seek to attain and maintain applicable water quality standards, and protect waters threatened by land uses, or by substantial expansion of existing land uses, by implementing additional management measures."

The SDRWQCB has the discretion to require Jurisdictional Urban Runoff Program item F.3.a.(4)(c) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.3.a.(5) Maintenance of Municipal Separate Storm Sewer System (Municipal) of the Jurisdictional Urban Runoff Management Program states the following:

(a) Each Copermittee shall implement a schedule of maintenance activities at all structural controls designed to reduce pollutant discharges to or from its MS4s and related drainage structures.

(b) Each Copermittee shall implement a schedule of maintenance activities for the municipal separate storm sewer system.

(c) The maintenance activities must, at a minimum, include:

i. Inspection and removal of accumulated waste (e.g. sediment, trash, debris and other pollutants) between May 1 and September 30 of each year;

ii. Additional cleaning as necessary between October 1 and April 30 of each year;

iii. Record keeping of cleaning and the overall quantity of waste removed;

iv. Proper disposal of waste removed pursuant to applicable laws;

v. *Measures to eliminate waste discharges during MS4 maintenance and cleaning activities.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Discussion: Maintenance is critical to the successful implementation of every URMP. The US EPA finds that "Lack of maintenance often limits the effectiveness of storm water structural controls such as detention/retention basins and infiltration devices. […] The proposed program should provide for maintenance logs and identify specific maintenance activities for each class of control, such as removing sediment from retention ponds every five years, cleaning catch basins annually, and removing litter from channels twice a year. If maintenance activities are scheduled infrequently, inspections must be scheduled to ensure that the control is operating adequately. In cases where scheduled maintenance is not appropriate, maintenance should be based on inspections of the control structure or frequency of storm events. If maintenance depends on the results of inspections or if it occurs infrequently, the applicant must provide an inspection schedule. The applicant should also identify the municipal department(s) responsible for the maintenance program" (1992). The maintenance schedule included in this item is based on the above US EPA recommendations. This maintenance schedule will help ensure that structural controls are in adequate condition to be effective year round but especially at the beginning of and throughout the rainy season.

Maintenance of municipal facilities, control structures, and the MS4 is considered so essential by US EPA that the requirement to conduct a maintenance program is specifically directed in both the Phase I and Phase II storm water regulations. In both cases, the maintenance programs must include a training component and have the ultimate goal of preventing pollutant runoff from municipal operations. Municipal activities should set a good example for all non-municipal personnel and the public.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.a.(5) in Order No. 2001-01 under the broad legal authority cited above.

F.3.a.(6) Management of Pesticides, Herbicides, and Fertilizers (Municipal) of the Jurisdictional Urban Runoff Management Program states the following:

The Copermittees shall implement BMPs to reduce the contribution of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers from municipal areas and activities to MS4s. Important municipal areas and activities include all municipal facilities, public rights-of-way, parks, recreational facilities, golf courses, cemeteries, botanical or zoological gardens and exhibits, landscaped areas, etc.

Such BMPs shall include, at a minimum: (1) educational activities, permits, certifications and other measures for municipal applicators and distributors; (2) integrated pest management measures that rely on non-chemical solutions; (3) the use of native vegetation; (4) schedules for irrigation and chemical application; and (5) the collection and proper disposal of unused pesticides, herbicides, and fertilizers.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Discussion: Regarding the municipal use of pesticides, herbicides, and fertilizers, the US EPA finds that "The proposed program should include educational measures for the public and commercial applicators, and should include integrated pest management measures that rely on non-chemical solutions to pest control. The program should also describe how educational materials will be developed and distributed. Applicants are encouraged to consider providing information for the collection and proper disposal of unused pesticides, herbicides, and fertilizers, or to establish their own program. […] In addition, applicants must include a discussion of controls for the application of pesticides, herbicides, and fertilizers in public rights-of-way and at municipal facilities. Planting low-maintenance vegetation, such as perennial ground covers, reduces pesticide and herbicide use. Native vegetation is often preferable because there is less need to apply fertilizers and herbicides, and to perform other forms of maintenance, such as mowing" (1992). Based on these US EPA recommendations, the SDRWQCB included Jurisdictional Urban Runoff Management Program item F.3.a.(6) in Order No. 2001-01. The SDRWQCB has discretion to include Jurisdictional Urban Runoff Management Program item F.3.a.(6) in Order No. 2001-01 under the broad legal authority cited above.

F.3.a.(7) Inspection of Municipal Areas and Activities (Municipal) of the Jurisdictional Urban Runoff Management Program states the following:

At a minimum, each Copermittee shall inspect high priority municipal areas and activities annually. Based upon site inspection findings, each Copermittee shall implement all follow-up actions necessary to comply with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Discussion: The USEPA finds that the municipal areas and activities listed in section F.3.a.(3) of Order No. 2001-01 can be a significant source of pollutants in urban runoff (see Discussion for F.3.a.(3) above). Since these municipal areas and activities can be a significant source of pollutants, annual inspections are necessary to ensure that proper measures are being undertaken to reduce pollutant discharges to the maximum extent practicable. The USEPA supports inspections of municipal areas and activities, stating "Applicants must describe programs that identify measures to monitor and reduce pollutants in storm water discharges from facilities that handle municipal waste, including sewage sludge. […] The types of facilities that should be included are: active or closed municipal waste landfills; publicly owned treatment works, including water and wastewater treatment plants; incinerators; municipal solid waste transfer facilities; land application sites; uncontrolled sanitary landfills; maintenance and storage yards for waste transportation fleets and equipment; sites for disposing or treating sludge from municipal treatment works; and other treatment, storage, or disposal facilities for municipal waste" (1992). The USEPA further states that "Procedures to evaluate, inspect, monitor, and establish control measures for municipal waste sites over the term of the NPDES permit should be described" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3.a.(7) in Order No. 2001-01 under the broad legal authority cited above.

F.3.a.(8) Enforcement of Municipal Areas and Activities (Municipal) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall enforce its storm water ordinance for all municipal areas and activities as necessary to maintain compliance with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(1,3,4,5, and 6) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.a. Municipal (Existing Development) of Order No. 2001-01.

Discussion: When a Copermittee determines a violation of its storm water ordinance, it must pursue correction of the violation. A critical aspect of the correction of violations is enforcement of ordinances. Enforcement increases the probability of correction of a violation. Regarding inspection and enforcement measures, the US EPA states "Effective inspection and enforcement requires […] penalties to deter infractions and intervention by the municipal authority to correct violations. Enforcement mechanisms […] also must be described" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3.a.(8) in Order No. 2001-01 under the broad legal authority cited above.

F.3.b. INDUSTRIAL (EXISTING DEVELOPMENT)

In addition to the underlying broad legal authority citations listed above in section VII. of this Fact Sheet/Technical Report, the following specific legal authority items also generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01. Other specific legal authority items applicable only to distinct directives of Jurisdictional Urban Runoff Management Program item F.3.b. are provided as necessary.

> Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(C) provides that the proposed management program include "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."
>
> Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(C)(1) provides that the Copermittee must "identify priorities and procedures for inspections and establishing and implementing control measures for such discharges."

F.3.b. Industrial (Existing Development) for the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall implement an Industrial (Existing Development) Component to reduce pollutants in runoff from all industrial sites. At a minimum the industrial component shall address:*
>
> *F.3.b.(1) Pollution Prevention*
> *F.3.b.(2) Source Identification*
> *F.3.b.(3) Threat to Water Quality Prioritization*
> *F.3.b.(4) BMP Implementation*
> *F.3.b.(5) Monitoring of Industrial Sites*
> *F.3.b.(6) Inspection of Industrial Sites*
> *F.3.b.(7) Enforcement Measures for Industrial Sites*
> *F.3.b.(8) Reporting of Non-compliant Sites*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(C) and 40 CFR 122.26(d)(2)(iv)(C)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01.

Discussion: CWA sections 402(p)(3)(B)(ii-iii) require each Copermittee to prohibit non-storm water discharges into its MS4 and to reduce the discharge of pollutants to the maximum extent practicable for all urban land uses. The purpose of these two broad requirements is to minimize the short and long-term impacts of urban runoff on receiving water quality. Land used for industrial activities is clearly identified in the federal regulations as one of several high priority land uses from which pollutants in urban runoff discharges must be reduced to the maximum

extent practicable by each Copermittee. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) requires the development of a proposed management program to reduce the discharge of pollutants in storm water to the maximum extent practicable. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(C) requires that this program include a component which addresses industrial sites.

Due to their numerous potential pollutant sources, industrial sites are relatively high risk areas for pollutant discharges to storm water. In order to control the discharge of pollutants from industrial sites to the maximum extent practicable, implementation of BMPs is necessary. As discussed in Finding 12, BMPs effectively reduce pollutants in urban runoff by emphasizing pollution prevention and source controls, followed by treatment controls. The industrial existing development component will provide a program for the development and implementation of BMPs to address pollutants in storm water discharges from industrial sites. The US EPA supports such a program, stating "NPDES permits for MS4s will establish responsibilities for municipal system operators to control pollutants from industrial storm water discharged through their system" (1992).

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3.b. in Order No. 2001-01 under the broad legal authority cited above.

F.3.b.(1) Pollution Prevention (Industrial) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement pollution prevention methods in its Industrial (Existing Development) Component and shall require its use by industry.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(C) and 40 CFR 122.26(d)(2)(iv)(C)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01.

Discussion: Each Copermittee must develop a program to reduce the discharge of pollutants to and from its MS4 to the maximum extent practicable for all urban land uses, including industrial land uses. In order to achieve this level of pollution reduction, BMPs must be implemented. Pollution prevention, the reduction or elimination of pollutant generation at its source, is an essential aspect of BMPs. By limiting the generation of pollutants, less pollutants are available to be washed from industrial sites, resulting in reduced pollutant loads in storm water discharges from these sites. In addition, there is no need to control or treat pollutants which are not initially generated. Furthermore, pollution prevention BMPs are generally more cost effective than removal of pollutants by treatment facilities or cleanup of contaminated media. In the Pollution Prevention Act of 1990, Congress established a national policy that emphasizes pollution prevention over control and treatment. Since pollution prevention is an effective and efficient means for reducing pollutant loads in storm water runoff, pollution prevention methods are an

important aspect of BMPs to be included in the industrial existing development component. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.a in Order No. 2001-01 under the broad legal authority cited above.

F.3.b.(2) Source Identification (Industrial) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall develop and update annually a watershed based inventory of all industrial sites within its jurisdiction regardless of site ownership. This requirement is applicable to all industrial sites regardless of whether the industrial site is subject to the California statewide General NPDES Permit for Storm Water Discharges Associated With Industrial Activities, Except Construction (hereinafter General Industrial Permit) or other individual NPDES permit.

The inventory shall include the following minimum information for each industrial site: name; address; and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. The use of an automated database system, such as Geographical Information System (GIS) is highly recommended, but not required.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(C) and 40 CFR 122.26(d)(2)(iv)(C)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(ii) provides that the Copermittee "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."

Discussion: Due to their numerous potential pollutant sources, industrial sites are high risk areas for pollutant discharges to storm water. In order to prohibit non-storm water discharges, reduce industrial pollutant sources to the maximum extent practicable, and ensure that adequate BMPs are implemented, each Copermittee must first identify all industrial sites within their jurisdiction. Development of an inventory of industrial sites within a watershed will help identify potential industrial sources of pollutants in storm water. By assessing information provided in the inventory (such as principal products, services provided, and location), sites with the highest risk to receiving water quality can be identified, and priority for inspection, monitoring, and enforcement can be placed on those sites. By focusing inspection and monitoring on high priority sites, the effectiveness of limited inspection and monitoring resources can be maximized. The SDRWQCB has discretion to require inventories of industrial sites in Jurisdictional Urban Runoff Program item F.3.b of Order No. 2001-01 under the broad and specific legal authority above.

F.3.b.(3) Threat to Water Quality Prioritization (Industrial) of the Jurisdictional Urban Runoff Management Program states the following:

> *(a) To establish priorities for industrial oversight activities under this Order, the Copermittee shall prioritize each watershed based inventory in F.3.b.(2) above by threat to water quality and update annually. Each industrial site shall be classified as high, medium, or low threat to water quality. In evaluating threat to water quality each Copermittee shall consider (1) type of industrial activity (SIC Code); (2) materials used in industrial processes; (3) wastes generated; (4) pollutant discharge potential; (5) non-storm water discharges; (6) size of facility; (7) proximity to receiving water bodies; (8) sensitivity of receiving water bodies; (9) whether the industrial site is subject to the statewide General Industrial Permit; and (10) any other relevant factors.*
>
> (b) *At a minimum the high priority industrial sites shall include industrial facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA); industrial facilities tributary to a Clean Water Act section 303(d) impaired water body or other environmentally sensitive area (as defined in section F.1.b.(2)(a)(vii of this Order); facilities subject to the statewide General Industrial Permit; and all other industrial facilities that the Copermittee determines are contributing significant pollutant loading to its MS4, regardless of whether such facilities are covered under the statewide General Industrial Permit or other NPDES permit.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(C) and 40 CFR 122.26(d)(2)(iv)(C)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(ii) provides that the Copermittee "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."

Discussion: Due to their numerous pollutant sources, industrial sites are high risk areas for pollutant discharges to storm water. Development of an inventory of industrial sites within a watershed will help identify potential sources of pollutants in urban runoff. By assessing information provided in the inventory (such as principal products or services provided by the facility), sites can be prioritized by threat to water quality. Those sites which pose the greatest threat can then be targeted for inspection and monitoring. This will allow for limited inspection and monitoring time to be most effective. Regarding industrial site priority designation, the US EPA states that "When municipalities develop criteria for identifying additional priority industrial facilities, they are advised to consider, at a minimum:

- The type of industrial activity (SIC codes can help characterize the type of industrial activity);
- The use and management of chemicals or raw products at the facility and the likelihood that storm water discharge from the site will be contaminated; and

- The size and location of the facility in relation to sensitive watersheds" (1992).

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.b.(3) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.3.b.(4)(a) and F.3.b.(4)(b) BMP Implementation (Industrial) of the Jurisdictional Urban Runoff Management Program states the following:

(a) *Each Copermittee shall designate a set of minimum BMPs for high, medium, and low threat to water quality industrial sites (as determined under section F.3.b.(3)). The designated minimum BMPs for high threat to water quality industrial sites shall be industry and site specific as appropriate.*

(b) *Each Copermittee shall implement, or require the implementation of, the designated minimum BMPs (based upon the site's threat to water quality rating) at each industrial site within its jurisdiction. If particular minimum BMPs are infeasible at any specific site, each Copermittee shall implement, or require implementation of, other equivalent BMPs. Each Copermittee shall also implement or require any additional site specific BMPs as necessary to comply with this Order including BMPs which are more stringent than those required under the statewide General Industrial Permit.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(C) and 40 CFR 122.26(d)(2)(iv)(C)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01.

Discussion: Copermittees must reduce the discharge of pollutants to the MS4 from industrial sites to the maximum extent practicable. In order to achieve this level pollution reduction in storm water discharges from industrial sites, BMPs must be designated and implemented. To ensure that adequate BMPs are utilized at the industrial sites, each Copermittee shall designate and require implementation of a set of minimum BMPs for high, medium, and low threat to water quality industrial sites. The designated minimum BMPs will provide guidance on level of water quality protection required. The US EPA recommends that Copermittees provide BMP guidance to industrial facilities, stating "the applicant should suggest procedures for requiring pollutant control measures in runoff from priority industrial facilities. Applicants should provide information to the industrial facilities that discharge to the MS4s and industry-specific guidance on appropriate control measures that industries discharging to the systems should follow" (1992).

In order to adequately protect receiving water quality and allow Copermittees to meet their permit responsibilities under Order No. 2001-01, additional BMPs may be required, including BMPs more stringent than those required under the state wide General Industrial Permit. Regarding additional BMP requirements of this type, the US EPA finds that "nothing in the Federal regulations would prohibit the municipality from requiring additional controls beyond the permit requirements for industrial activities. For this reason, the EPA recommends that municipal

applicants incorporate a provision in the proposed storm water management program that allows the municipality to require priority industrial facilities to implement the controls necessary for the municipality to meet its permit responsibilities" (1992).

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program items F.3.b.(4)(a) and F.3.b.(4)(b) in Order No. 2001-01 under the broad legal authority cited above.

F.3.b.(4)(c) BMP Implementation (Industrial) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement, or require implementation of, additional controls for industrial sites tributary to CWA Section 303(d) impaired water bodies, coastal lagoons, or other environmentally sensitive areas as necessary to comply with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(C) and 40 CFR 122.26(d)(2)(iv)(C)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.44(d)(1)(i) requires NPDES permits to include limitations to "control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

Discussion: CWA section 303(d) water bodies are water bodies which are not achieving the water quality objectives necessary to protect their beneficial uses. As discussed in Finding 3, urban runoff discharges from MS4s are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. Since discharges which cause or contribute to an exceedance of water quality standards must be controlled and are also prohibited (see section C.1. of Order No. 2001-01), discharges to CWA section 303(d) water bodies of pollutants for which the waterbody is impaired must be controlled and prohibited. Therefore, municipal areas and activities tributary to these water bodies must implement additional controls to ensure that they are not discharging the pollutants which are causing or contributing to the impairment of these water bodies.

Regarding coastal lagoons and other sensitive water bodies, additional controls are needed to protect these valuable and unique resources. In their Nonpoint Source Program Strategy and Implementation Plan, the SWRCB and California Coastal Commission support additional controls for critical coastal areas, stating "the State will seek to attain and maintain applicable water quality standards, and protect waters threatened by land uses, or by substantial expansion of existing land uses, by implementing additional management measures."

The SDRWQCB has the discretion to require Jurisdictional Urban Runoff Program item F.3.b.(4)(c) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.3.b.(5) Monitoring of Industrial Sites (Industrial) of the Jurisdictional Urban Runoff Management Program item F.3.e. states the following:

(a) Each Copermittee shall conduct, or require industry to conduct, a monitoring program for runoff from each high threat to water quality industrial site (identified in F.3.b.(3) above).

(b) At a minimum, the monitoring program shall provide quantitative data from two storm events per year on the following constituents:

i. Any pollutant listed in effluent guidelines subcategories where applicable;
ii. Any pollutant for which an effluent limit has been established in an existing NPDES permit for the facility;
iii. Oil and grease or Total Organic Carbon (TOC);
iv. pH;
v. Total suspended solids (TSS);
vi. Specific conductance; and
vii. *Toxic chemicals and other pollutants that are likely to be present in storm water discharges.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(C) and 40 CFR 122.26(d)(2)(iv)(C)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(C)(2) provides that the proposed management program shall "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, BOD_5 , TSS, total phosphorus, total Kjeldhal nitrogen, nitrate plus nitrite nitrogen, and any information on discharges required under 40 CFR 122.21(g)(7)(iii) and (iv)."

Discussion: The purpose of the monitoring program is to provide the information needed by each Copermittee to assess the effectiveness of its Industrial BMP Program. Quantitative data is required for two storm events per year in order to identify potential trends and/or anomalies in the data. The Copermittee may be able to obtain this monitoring information from some industrial sites by requesting submittal of the Annual Reports required under the General Industrial Storm Water Permit. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.b.(5) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.3.b.(6) Inspection of Industrial Sites (Industrial) of the Jurisdictional Urban Runoff Management Program states the following:

> *(a) Each Copermittee shall conduct industrial site inspections for compliance with its ordinances, permits, and this Order. Inspections shall include review of BMP implementation plans.*
>
> *(b) Each Copermittee shall establish inspection frequencies and priorities as determined by the threat to water quality prioritization described in F.3.b.(3) above. Each Copermittee shall inspect high priority industrial sites, at a minimum:*
>
> *i. Annually*
>
> ***OR***
>
> *ii. Bi-annually for any site that the responsible Copermittee certifies in a written statement to the SDRWQCB all of the following (certified statements may be submitted to the SDRWQCB at any time for one or more sites):*
>
> - *Copermittee has record of industrial site's Waste Discharge Identification Number (WDID#) documenting industrial site's coverage under the statewide General Industrial Permit; and*
> - *Copermittee has reviewed the industrial site's Storm Water Pollution Prevention Plan (SWPPP); and*
> - *Copermittee finds SWPPP to be in compliance with all local ordinances, permits, and plans; and*
> - *Copermittee finds that the SWPPP is being properly implemented on site.*
>
> *Each Copermittee shall inspect medium and low threat to water quality industrial sites as needed.*
>
> *(c) Based upon site inspection findings, each Copermittee shall implement all follow-up actions necessary to comply with this Order.*
>
> *(d) To the extent that the SDRWQCB has conducted an inspection of a high priority industrial site during a particular year, the requirement for the responsible Copermittee to inspect this site during the same year will be satisfied.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(C) and 40 CFR 122.26(d)(2)(iv)(C)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01.

Discussion: Routine inspections provide an effective means by which Copermittees can evaluate compliance with their ordinances. Inspections are especially important at high risk areas for pollutant discharges, such as industrial and construction sites. Industrial site inspection frequencies are to be based on threat to water quality prioritization. For example, industrial sites which are considered a high threat to water quality are to be given a high priority for inspection. This allows for limited inspection resources to be most effective. Annual or bi-annual inspection of high threat sites is necessary to ensure that changes to the site which may be detrimental to water quality are identified and addressed.

Review of a facility's Storm Water Pollution Prevention Plan (SWPPP) can be an effective tool in inspecting the facility's storm water controls. The US EPA recommends that municipalities review SWPPPs during inspections when it states "Municipalities are urged to evaluate pollution prevention plans and discharge monitoring data collected by the industrial facility to ensure that the facility is in compliance with its NPDES storm water permit. Site inspections should include (1) an evaluation of the pollution prevention plan and any other pertinent documents, and (2) an onsite visual inspection of the facility to evaluate the potential for discharges of contaminated storm water from the site and to assess the effectiveness of the pollution prevention plan" (1992).

Regarding industrial site inspections, the US EPA finds that "The proposed management program should describe the inspection procedures that will be followed.[…] Proposed management programs should address minimum frequency for routine inspections. For example, how often, how much of the site, and how long an inspection may take are appropriate to explain in this proposed management program component. Applicants should also describe procedures for conducting inspections and provide an inspector's checklist" (1992). The US EPA also finds that follow-up actions are to be implemented based upon site inspection findings: "The results of inspection may be used as a basis for requiring storm water management controls and enhanced pollution prevention measures" (1992).

Due to the large number of industrial sites within the region, sites which have been inspected by the SDRWQCB do not need to be re-inspected by a Copermittee within the same year. This practice will increase collaboration between the SDRWQCB and the Copermittees for industrial site inspections. Collaboration between the SDRWQCB and the Copermittees can provide for more efficient and effective overall inspection of industrial sites within the region. Regarding collaboration for inspection of industrial sites, US EPA states "The storm water regulations envision that NPDES permitting authorities and municipal operators will cooperate to develop programs to monitor and control pollutants in storm water discharges to municipal systems from various sites that handle waste and certain industrial facilities" (1992).

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.b.(6) in Order No. 2001-01 under the broad legal authority cited above.

F.3.b.(7) Enforcement of Industrial Sites (Industrial) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall enforce its storm water ordinance at all industrial sites as necessary to maintain compliance with this Order. Copermittee ordinances or other regulatory mechanisms shall include sanctions to ensure compliance. Sanctions shall include for example: Non-monetary penalties, fines, bonding requirements, and/or permit denials for non-compliance.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(C) and 40 CFR 122.26(d)(2)(iv)(C)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(A) provides that each Copermittee must demonstrate that it can 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 site of industrial activity."

Discussion: The Copermittee is ultimately responsible for discharges to and from their MS4. Each Copermittee must therefore develop and enforce storm water ordinances in order reduce pollutant discharges to the MS4 to the maximum extent practicable and comply with its permit responsibilities. These ordinances must be applied at all industrial sites to ensure that pollutant discharges to the MS4 are reduced to the maximum extent practicable and permit requirements are met. To this effect, the US EPA "recommends that municipal applicants incorporate a provision in the proposed management program that allows the municipality to require priority industrial facilities to implement the controls necessary for the municipality to meet its permit responsibilities" (1992). Regarding enforcement at industrial sites, the US EPA further states "The municipality, as a permittee, is responsible for compliance with its permit and must have authority to implement the conditions in its permit. To comply with its permit, a municipality must have the authority to hold dischargers accountable for their contributions to separate storm sewers" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.b.(7) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.3.b.(8) Reporting of Non-compliant Sites (Industrial) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall provide oral notification to the SDRWQCB of non-compliant sites within its jurisdiction within 24 hours of the incidence of noncompliance, as required under section R.1 (and B.7 of Attachment C) of this Order. Such oral notification shall be followed up by a written report to be submitted to the SDRWQCB within 5 days of the incidence of non-compliance as required under section R.1 (and B.7 of Attachment C) of this Order. Sites are considered non-compliant when one or more violations of local ordinances, permits, plans, or this Order exist on the site.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(C) and 40 CFR 122.26(d)(2)(iv)(C)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.3.b. Industrial (Existing Development) of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(A) provides that each Copermitee must demonstrate that it can 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 site of industrial activity."

Federal NPDES regulation 40 CFR 122.44(l)(6) states "The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of non-compliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance."

Discussion: Follow-up with non-compliant industrial sites is essential to ensure that the site has taken adequate corrective measures to achieve compliance. To help ensure that compliance has been achieved, the Copermittees shall report non-compliant industrial sites to the SDRWQCB. The SDRWQCB can then participate in follow-up efforts to assure that the industrial site is in compliance. The US EPA supports this type of collaboration when it states "the municipality will help EPA and authorized NPDES states: […] Inspect and monitor industrial facilities to verify that the industries discharging storm water to the municipal systems are in compliance with their NPDES storm water permit, if required" (1992). Notification of non-compliant sites is a common requirement of all NPDES permits under Federal NPDES regulation 40 CFR 122.44(l)(6). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.b.(7) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.3.c. COMMERCIAL (EXISTING DEVELOPMENT)

In addition to the underlying broad legal authority citations listed above in section VII. of this Fact Sheet/Technical Report, the following specific legal authority item also generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.c. Commercial (Existing Development) of Order No. 2001-01. Other specific legal authority items applicable only to distinct directives of Jurisdictional Urban Runoff Management Program item F.3.c. are provided as necessary.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) provides that the Copermittee develop a proposed management program which includes "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."

F.3.c. Commercial (Existing Development) of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall implement a Commercial (Existing Development) Component to reduce pollutants in runoff from commercial sites. At a minimum the commercial component shall address:*
>
> > *F.3.c.(1) Pollution Prevention*
> > *F.3.c.(2) Source Identification*
> > *F.3.c.(3) BMP Implementation*
> > *F.3.c.(4) Inspection of Commercial Sites and Sources*
> > *F.3.c.(5) Enforcement Measures for Commercial Sites and Sources*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.c. Commercial (Existing Development) of Order No. 2001-01.

Discussion: CWA sections 402(p)(3)(B)(ii-iii) require each Copermittee to prohibit non-storm water discharges into its MS4 and to reduce the discharge of pollutants to the maximum extent practicable for all urban land uses. The purpose of these two broad requirements is to minimize the short and long-term impacts of urban runoff on receiving water quality. Land used for commercial activities is clearly identified in the federal regulations as one of several high priority land uses from which pollutants in urban runoff discharges must be reduced to the maximum extent practicable by each Copermittee. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) requires the development of a proposed management program to reduce the discharge of pollutants in storm water to the maximum extent practicable. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) requires that this program include a component which addresses commercial sites and sources.

Commercial sites and sources have the potential to be significant sources of pollutants in urban runoff. To reduce the discharge of pollutants in urban runoff from commercial sites to the maximum extent practicable, BMPs must be implemented. As discussed in Finding 12, BMPs effectively reduce pollutants in urban runoff by emphasizing pollution prevention and source controls, followed by treatment controls. The commercial existing development component will provide a program for the development and implementation of BMPs to address pollutants in storm water discharges from commercial sites and activities.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.c. in Order No. 2001-01 under the broad legal authority cited above.

F.3.c.(1) Pollution Prevention (Commercial) of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall implement pollution prevention methods in its Commercial (Existing Development) Component and shall require its use by commerce.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.c. Commercial (Existing Development) of Order No. 2001-01.

Discussion: Each Copermittee must develop a program to reduce the discharge of pollutants to and from its MS4 to the maximum extent practicable. In order to achieve this level of pollution reduction, BMPs must be implemented. As discussed in Finding 12, pollution prevention (the reduction or elimination of pollutant generation at its source) is an essential aspect of BMP programs. By limiting the generation of pollutants, less pollutants are available to be washed from commercial sites and sources, resulting in reduced pollutant loads in storm water discharges from these sites and sources. In addition, there is no need to control or treat pollutants which are not initially generated. Furthermore, pollution prevention BMPs are generally more cost effective than removal of pollutants by treatment facilities or cleanup of contaminated media. In the Pollution Prevention Act of 1990, Congress established a national policy that emphasizes pollution prevention over control and treatment. Since pollution prevention is an effective and efficient means for reducing pollutant loads in storm water runoff, pollution prevention methods are an important aspect of BMPs to be included in the commercial existing development component of the Jurisdictional URMP. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.c.(1) in Order No. 2001-01 under the broad legal authority cited above.

F.3.c.(2) Source Identification (Commercial) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall develop and update annually an inventory of the following high priority threat to water quality commercial sites/sources:

(a) Automobile mechanical repair, maintenance, fueling, or cleaning;
(b) Airplane mechanical repair, maintenance, fueling, or cleaning;
(c) Boat mechanical repair, maintenance, fueling, or cleaning;
(d) Equipment repair, maintenance, fueling, or cleaning;
(e) Automobile & other vehicle body repair or painting;
(f) Mobile automobile or other vehicle washing;
(g) Automobile (or other vehicle) parking lots and storage facilities;
(h) Retail or wholesale fueling;
(i) Pest control services;
(j) Eating or drinking establishments;
(k) Mobile carpet, drape or furniture cleaning;
(l) Cement mixing or cutting;
(m) Masonry;
(n) Painting and Coating;
(o) Botanical or zoological gardens and exhibits;
(p) Landscaping;
(q) Nurseries and greenhouses;
(r) Golf courses, parks and other recreational areas/facilities;
(s) Cemeteries;
(t) Pool and fountain cleaning;
(u) Marinas;
(v) Port-a-Potty servicing;

(w) *Other commercial sites/sources that the Copermittee determines may contribute a significant pollutant load to the MS4; and*
(x) *Any commercial site or source tributary to a Clean Water Act section 303(d) impaired water body or other environmentally sensitive area (as defined in F.1.b(2)(a)vii of this Order).*

The use of an automated database system, such as Geographical Information System (GIS) is highly recommended, but not required.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.c. Commercial (Existing Development) of Order No. 2001-01.

Discussion: In order to prohibit non-storm water discharges, reduce commercial pollutant sources to the maximum extent practicable, and ensure that adequate BMPs are implemented, Copermittees must first identify all high priority threat to water quality commercial pollutant sources. Based on the number of complaints received by the SDRWQCB and the Copermittees, the types of commercial sites and activities listed in item F.3.c.(2) are potential high risk areas for pollutant discharges to storm water. The sites and activities are identified as such due to their frequent use of substances often found to be present as pollutants in urban runoff, combined with frequent mismanagement of runoff from the sites and activities. Therefore, development of an inventory of these commercial sites within a watershed will help identify the location of potential sources of pollutants in storm water. Pollutants found to be present in receiving waters can then be traced to the sites which frequently use such substances. In this manner an inventory of commercial sites can help in targeting commercial sites for inspection, monitoring, and potential enforcement. This will allow for limited inspection, monitoring, and enforcement time to be most effective. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.c.(2) in Order No. 2001-01 under the broad legal authority cited above.

F.3.c.(3)(a) and F.3.c.(3)(b) BMP Implementation (Commercial) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall designate a set of minimum BMPs for the high priority threat to water quality commercial sites/sources (listed above in section F.3.c.(2)). The designated minimum BMPs for the high threat to water quality commercial sites shall be source and site specific as appropriate.

Each Copermittee shall implement, or require the implementation of, the designated minimum BMPs at each high priority threat to water quality commercial site/source within its jurisdiction. If particular minimum BMPs are infeasible for any specific site/source, each Copermittee shall implement, or require the implementation of, other equivalent BMPs. Each Copermittee shall also implement or require any additional site specific BMPs as necessary to comply with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.c. Commercial (Existing Development) of Order No. 2001-01.

Discussion: Copermittees must reduce the discharge of pollutants in storm water from commercial sites and activities to the maximum extent practicable. To achieve this level of pollutant reduction, BMPs must be implemented (see Finding 11). Designation of a set of minimum BMPs for high threat commercial sites will help ensure that appropriate BMPs are implemented at the sites. These minimum BMPs will also serve as guidance as to the level of water quality protection required. While minimum BMPs will be required at all high threat commercial sites, implementation of particular minimum BMPs will be site and source specific in order to address different conditions at various sites. BMPs to be implemented must comply with Order No. 2001-01. As such, additional site specific BMPs may be necessary to comply with other aspects of Order 2001-01. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program items F.3.c.(3)(a) and F.3.c.(3)(b) in Order No. 2001-01 under the broad legal authority cited above.

F.3.c.(3)(c) BMP Implementation (Commercial) of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement, or require implementation of, additional controls for commercial sites tributary to CWA section 303(d) impaired water bodies, coastal lagoons, or other environmentally sensitive areas as necessary to comply with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.c. Commercial (Existing Development) of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.44(d)(1)(i) requires NPDES permits to include limitations to "control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

Discussion: CWA section 303(d) water bodies are water bodies which are not achieving the water quality objectives necessary to protect their beneficial uses. As discussed in Finding 3, urban runoff discharges from MS4s are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. Since discharges which cause or contribute to an exceedance of water quality standards must be controlled and are also prohibited (see section C.1. of Order No. 2001-01), discharges to CWA section 303(d) water bodies of pollutants for which the waterbody is impaired must be controlled and prohibited. Therefore, commercial sites and activities tributary to these water bodies must implement additional controls to ensure that they are not discharging the pollutants which are causing or contributing to the impairment of these water bodies.

Regarding coastal lagoons and other sensitive water bodies, additional controls are needed to protect these valuable and unique resources. In their Nonpoint Source Program Strategy and Implementation Plan, the SWRCB and California Coastal Commission support additional controls for critical coastal areas, stating "the State will seek to attain and maintain applicable water quality standards, and protect waters threatened by land uses, or by substantial expansion of existing land uses, by implementing additional management measures."

The SDRWQCB has the discretion to require Jurisdictional Urban Runoff Program item F.3.c.(3)(c) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.3.c.(4) Inspection of Commercial Sites and Sources (Commercial) and F.3.c.(5) Enforcement of Commercial Sites and Sources (Commercial) of the Jurisdictional Urban Runoff Management Program state the following:

Each Copermittee shall inspect high priority commercial sites and sources as needed. Based upon site inspection findings, each Copermittee shall implement all follow-up actions necessary to comply with this Order.

Each Copermittee shall enforce its storm water ordinance for all commercial sites and sources as necessary to maintain compliance with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.c. Commercial (Existing Development) of Order No. 2001-01.

Discussion: BMPs must be implemented for commercial sites and activities to reduce the discharge of pollutants from the sites and activities to the maximum extent practicable. Inspection of commercial sites is necessary to ensure that implemented BMPs are adequate. As discussed in Finding 24, inspections provide a necessary means by which Copermittees can evaluate compliance with their ordinances and requirements of Order No. 2001-01. Inspections are especially important for high risk commercial sites and activities, such as commercial sites and activities where urban runoff is not properly managed. If inspections identify noncompliance conditions, enforcement of storm water ordinance is also necessary to ensure adequate BMP implementation. Regarding inspection and enforcement measures, the US EPA states "Effective inspection and enforcement requires […] penalties to deter infractions and intervention by the municipal authority to correct violations. Enforcement mechanisms […] also must be described" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program items F.3.c.(4) and F.3.c.(5) in Order No. 2001-01 under the broad legal authority cited above.

F.3.d. RESIDENTIAL (EXISTING DEVELOPMENT)

In addition to the underlying broad legal authority citations listed above in section VII. of this Fact Sheet/Technical Report, the following specific legal authority item also generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.d. Residential (Existing Development) of Order No. 2001-01. Other specific legal authority items applicable only to distinct directives of Jurisdictional Urban Runoff Management Program item F.3.d. are provided as necessary.

> Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) provides that the Copermittee develop a proposed management program which includes "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."

F.3.d. Residential (Existing Development) of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall implement a Residential (Existing Development) Component to prevent or reduce pollutants in runoff from all residential land use areas and activities. At a minimum the residential component shall address:*
>
> *F.3.d.(1) Pollution Prevention*
> *F.3.d.(2) Threat to Water Quality Prioritization*
> *F.3.d.(3) BMP Implementation*
> *F.3.d.(4) Enforcement of Residential Areas and Activities*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.d. Residential (Existing Development) of Order No. 2001-01.

Discussion: CWA sections 402(p)(3)(B)(ii-iii) require each Copermittee to prohibit non-storm water discharges into its MS4 and to reduce the discharge of pollutants to the maximum extent practicable for all urban land uses. The purpose of these two broad requirements is to minimize the short and long-term impacts of urban runoff on receiving water quality. Land used for residential activities is clearly identified in the federal regulations as one of several high priority land uses from which pollutants in urban runoff discharges must be reduced to the maximum extent practicable by each Copermittee. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) requires the development of a proposed management program to reduce the discharge of pollutants in storm water to the maximum extent practicable. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) requires that this program include a component which addresses residential areas and activities.

Residential areas and activities have the potential to be significant sources of pollutants in urban runoff. To reduce the discharge of pollutants in urban runoff

from residential areas and activities to the maximum extent practicable, BMPs must be implemented. As discussed in Finding 12, BMPs effectively reduce pollutants in urban runoff by emphasizing pollution prevention and source controls, followed by treatment controls. The residential existing development component will provide a program for the development and implementation of BMPs to address pollutants in storm water discharges from residential areas and activities.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.c. in Order No. 2001-01 under the broad legal authority cited above.

F.3.d.(1) Pollution Prevention (Residential) for the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall include pollution prevention methods in its Residential (Existing Development) Component and shall encourage their use by all residents.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.d. Residential (Existing Development) of Order No. 2001-01.

Discussion: Each Copermittee must develop a program to reduce the discharge of pollutants to and from its MS4 to the maximum extent practicable. In order to achieve this level of pollution reduction, BMPs must be implemented. As discussed in Finding 12, pollution prevention (the reduction or elimination of pollutant generation at its source) is an essential aspect of BMP programs. By limiting the generation of pollutants, less pollutants are available to be washed from residential areas and activities, resulting in reduced pollutant loads in storm water discharges from these areas and activities. In addition, there is no need to control or treat pollutants which are not initially generated. Furthermore, pollution prevention BMPs are generally more cost effective than removal of pollutants by treatment facilities or cleanup of contaminated media. In the Pollution Prevention Act of 1990, Congress established a national policy that emphasizes pollution prevention over control and treatment. Since pollution prevention is an effective and efficient means for reducing pollutant loads in storm water runoff, pollution prevention methods are an important aspect of BMPs to be included in the residential existing development component of the Jurisdictional URMP. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.d.(1) in Order No. 2001-01 under the broad legal authority cited above.

F.3.d.(2) Threat to Water Quality Prioritization (Residential) for the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall identify high priority residential areas and activities. At a minimum, these shall include:

- *Automobile repair and maintenance;*
- *Automobile washing;*
- *Automobile parking;*

- *Home and garden care activities and product use (pesticides, herbicides, and fertilizers);*
- *Disposal of household hazardous waste (e.g., paints, cleaning products);*
- *Disposal of pet waste;*
- *Disposal of green waste;*
- *Any other residential source that the Copermittee determines may contribute a significant pollutant load to the MS4; and*
- *Any residence tributary to a Clean Water Act section 303(d) impaired water body or other environmentally sensitive area (as defined in F.1.b.(2)(a)vii of this Order).*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.d. Residential (Existing Development) of Order No. 2001-01.

Discussion: The above residential areas and activities are identified as high priority threats to water quality due to their wide distribution, their association with pollutants of concern in urban runoff, and their historical mismanagement of associated urban runoff. Identification of high priority residential areas and activities will help focus BMP implementation efforts on these areas and activities. By focusing efforts on high priority areas and activities, the greatest potential for water quality improvements will result. Therefore, limited Copermittee staff time will be focused where it can be most effective. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.d.(2) in Order No. 2001-01 under the broad legal authority cited above.

F.3.d.(3)(a) and F.3.d.(3)(b) BMP Implementation (Residential) for the Jurisdictional Urban Runoff Management Program state the following:

(a) Each Copermittee shall designate a set of minimum BMPs for high threat to water quality residential areas and activities (as required under section F.3.d.(2)). The designated minimum BMPs for high threat to water quality municipal areas and activities shall be area or activity specific.

(b) Each Copermittee shall require implementation of the designated minimum BMPs for high threat to water quality residential areas and activities. If particular minimum BMPs are infeasible for any specific site/source, each Copermittee shall require implementation of other equivalent BMPs. Each Copermittee shall also implement, or require implementation of, any additional BMPs as are necessary to comply with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.d. Residential (Existing Development) of Order No. 2001-01.

Discussion: Copermittees must reduce the discharge of pollutants in storm water from residential areas and activities to the maximum extent practicable. To achieve this level of pollutant reduction, BMPs must be implemented (see Finding 11). Designation of a set of minimum BMPs for high threat residential

areas and activities will help ensure that appropriate BMPs are implemented. These minimum BMPs will also serve as guidance as to the level of water quality protection required. While minimum BMPs will be required for all high threat residential areas and activities, implementation of particular minimum BMPs will be site and source specific in order to address different conditions for various areas and activities. BMPs to be implemented must comply with Order No. 2001-01. As such, additional site specific BMPs may be necessary to comply with other aspects of Order 2001-01. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program items F.3.d.(3)(a) and F.3.d.(3)(b) in Order No. 2001-01 under the broad legal authority cited above.

F.3.d.(3)(c) BMP Implementation (Residential) for the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement, or require implementation of, any additional controls for residential areas and activities tributary to CWA Section 303(d) impaired water bodies, coastal lagoons, or other environmentally sensitive areas as necessary to comply with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.d. Residential (Existing Development) of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.44(d)(1)(i) requires NPDES permits to include limitations to "control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

Discussion: CWA section 303(d) water bodies are water bodies which are not achieving the water quality objectives necessary to protect their beneficial uses. As discussed in Finding 3, urban runoff discharges from MS4s are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. Since discharges which cause or contribute to an exceedance of water quality standards must be controlled and are also prohibited (see section C.1. of Order No. 2001-01), discharges to CWA section 303(d) water bodies of pollutants for which the waterbody is impaired must be controlled and prohibited. Therefore, residential areas and activities tributary to these water bodies must implement additional controls to ensure that they are not discharging the pollutants which are causing or contributing to the impairment of these water bodies.

Regarding coastal lagoons and other sensitive water bodies, additional controls are needed to protect these valuable and unique resources. In their Nonpoint Source Program Strategy and Implementation Plan, the SWRCB and California Coastal Commission support additional controls for critical coastal areas, stating "the State will seek to attain and maintain applicable water quality standards, and

protect waters threatened by land uses, or by substantial expansion of existing land uses, by implementing additional management measures."

The SDRWQCB has the discretion to require Jurisdictional Urban Runoff Program item F.3.d.(3)(c) in Order No. 2001-01 under the broad and specific legal authority cited above.

F.3.d.(4) Enforcement of Residential Areas and Activities (Residential) for the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall enforce its storm water ordinance for all residential areas and activities as necessary to maintain compliance with this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.3.d. Residential (Existing Development) of Order No. 2001-01.

Discussion: As discussed in Finding 24, enforcement of storm water ordinances, permits, and plans is an essential aspect of a Jurisdictional URMP. Enforcement measures increase the probability that non-compliance situations will not occur or will be corrected. Regarding enforcement measures, the US EPA states "Effective inspection and enforcement requires […] penalties to deter infractions and intervention by the municipal authority to correct violations. Enforcement mechanisms […] also must be described" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.d.(4) in Order No. 2001-01 under the broad legal authority cited above.

F.4. EDUCATION COMPONENT

F.4. Education Component of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement an Education Component using all media as appropriate to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment. At a minimum the education component shall address the following target communities:

- *Municipal Departments and Personnel*
- *Construction Site Owners and Developers*
- *Industrial Owners and Operators*
- *Commercial Owners and Operators*
- *Residential Community, General Public, and School Children*
- *Quasi-Governmental Agencies/Districts (i.e., educational institutions, water districts, sanitation districts, etc.)*

F.4.a. All Target Communities

At a minimum the Education Program for each target audience shall contain information on the following topics where applicable:

- *State and Federal water quality laws*
- *Requirements of local municipal permits and ordinances (e.g., storm water and grading ordinances and permits)*
- *Impacts of urban runoff on receiving waters*
- *Watershed concepts (i.e., stewardship, connection between inland activities and coastal problems, etc.)*
- *Distinction between MS4s and sanitary sewers*
- *Importance of good housekeeping (e.g., sweeping impervious surfaces instead of hosing)*
- *Pollution prevention and safe alternatives*
- *Household hazardous waste collection*
- *Recycling*
- *BMPs: Site specific, structural and source control*
- *BMP maintenance*
- *Non-storm water disposal alternatives (e.g., all wash waters)*
- *Pet and animal waste disposal*
- *Proper solid waste disposal (e.g., garbage, tires, appliances, furniture, vehicles)*
- *Equipment and vehicle maintenance and repair*
- *Public reporting mechanisms*
- *Green waste disposal*
- *Integrated pest management*
- *Native vegetation*
- *Proper disposal of boat and recreational vehicle waste*
- *Traffic reduction, alternative fuel use*
- *Water conservation*

F.4.b. Municipal, Construction, Industrial, Commercial, and Quasi-Governmental (educational institutions, water districts, sanitation districts) Communities

In addition to the topics listed in F.4.a. above, the Municipal, Construction, Industrial, Commercial, and Quasi-Governmental (Educational Institutions, Water Districts, Sanitation Districts) Communities shall also be educated on the following topics where applicable:

- *Basic urban runoff training for all personnel*
- *Additional urban runoff training for appropriate personnel*
- *Illicit Discharge Detection and Elimination observations and follow-up during daily work activities*
- *Lawful disposal of catchbasin and other MS4 cleanout wastes*
- *Water quality awareness for Emergency/First Responders*
- *California's Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except Construction).*
- *California's Statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities*
- *SDRWQCB's General NPDES Permit for Groundwater Dewatering*
- *401 Water Quality Certification by the SDRWQCB*
- *Statewide General NPDES Utility Vault Permit (NPDES No. CAG990002)*
- *SDRWQCB Waste Discharge Requirements for Dredging Activities*
- *Local requirements beyond statewide general permits*
- *Federal, state and local water quality regulations that affect development projects*
- *Water quality impacts associated with land development*
- *Alternative materials & designs to maintain peak runoff values*
- *How to conduct a storm water inspection*
- *Potable water discharges to the MS4*
- *Dechlorination techniques*
- *Hydrostatic testing*
- *Spill response, containment, & recovery*
- *Preventive maintenance*
- *How to do your job and protect water quality*

F.4.c. Residential, General Public, School Children Communities

In addition to the topics listed in F.4.a. above, the Residential, General Public, and School Children Communities shall be educated on the following topics where applicable:

- *Public reporting information resources*
- *Residential and charity car-washing*
- *Community activities (e.g., "Adopt a Storm Drain, Watershed, or Highway" Programs, citizen monitoring, creek/beach cleanups, environmental protection organization activities, etc.)*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(6) provides that the proposed management program include "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(6) provides that the proposed management program include "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(4) provides that the proposed management program include "A description of appropriate educational and training measures for construction site operators."

Discussion: As discussed in Finding 23, implementation of an Education Component is a critical best management practice and an important aspect of the Jurisdictional URMP. The SWRCB Technical Advisory Committee "recognizes that education with an emphasis on pollution prevention is the fundamental basis for solving nonpoint source pollution problems." The US EPA finds that "An informed and knowledgeable community is critical to the success of a storm water management program since it helps ensure the following:

> Greater support for the program as the public gains a greater understanding of the reasons why it is necessary and important. […]
>
> Greater compliance with the program as the public becomes aware of the personal responsibilities expected of them and others in the community, including the individual actions they can take to protect or improve the quality of area waters" (2000).

Regarding target audiences, US EPA states "The public education program should use a mix of appropriate local strategies to address the viewpoints and concerns of a variety of audiences and communities, including minority and disadvantaged

communities, as well as children" (2000). The target communities included in Education item 7 are based on recommendations of the TAC, which states:

"Target Audiences should include:

1. Government: Educate government agencies and officials to achieve better communication, consistency, collaboration, and coordination at the federal, state and local levels.
2. K-12/Youth Groups: Establish statewide education programs, including curricula, on watershed awareness and nonpoint source pollution problems and solutions, based on a state lead role building upon and coordinating with existing local programs.
3. Development Community: Educate the development community, including developers, contractors, architects, and local government planners, engineers, and inspectors, on nonpoint source pollution problems associated with development and redevelopment and construction activities and involve them in problem definitions and solutions.
4. Business and Industrial Groups."

The required topics to be covered in the Education Component are based on topics of concern as discussed by the US EPA (1992) and the SWRCB Technical Advisory Committee. Additional education topics were also added based on the number of complaints received by the SDRWQCB and the Copermittees for various topics of concern.

US EPA identifies measurable goals for urban runoff education programs, including such goals as creation of a website, halting dumping of grease and other pollutants into the storm drain by a certain percentage of restaurants, and detecting a percent reduction in litter or animal waste in discharges (2000).

The SDRWQCB has the discretion to require item F.4 of the Jurisdictional URMP in Order No. 2001-01 under the broad and specific legal authority cited above.

F.5. ILLICIT DISCHARGE DETECTION AND ELIMINATION COMPONENT

In addition to the underlying broad legal authority citations listed above in section VII. of this Fact Sheet/Technical Report, the following specific legal authority items also generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge and Detection Elimination Component of Order No. 2001-01. Other specific legal authority items applicable only to distinct directives of Jurisdictional Urban Runoff Management Program item F.5. are provided as necessary.

Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) provides that the proposed management program "shall be based on a description of a program, including a schedule, to detect and remove (or require the discharger to the municipal storm sewer to obtain a separate NPDES permit for) illicit discharges and improper disposal into the storm sewer."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(1) provides that the Copermittee include in its proposed management program "a program, including inspections, to implement and enforce an ordinance, orders or similar means to

prevent illicit discharges to the municipal storm sewer system." This regulation excludes prohibition of those non-storm water discharges listed in Section B.1 of Order 2001-01.

F.5. Illicit Discharge Detection and Elimination Component of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement an Illicit Discharge Detection and Elimination Component containing measures to actively seek and eliminate illicit discharges and connections. At a minimum the Illicit Discharge Detection and Elimination Component shall address:

F.5.a	*Illicit Discharges and Connections*
F.5.b	*Dry Weather Analytical Monitoring*
F.5.c	*Investigation / Inspection and follow-up*
F.5.d	*Elimination of Illicit Discharges and Connections*
F.5.e	*Enforce Ordinance*
F.5.f	*Prevent and Respond To Sewage Spills (Including from Private Laterals) and Other Spills*
F.5.g	*Facilitate Public Reporting of Illicit Discharges and Connections – Public Hotline*
F.5.h	*Facilitate Disposal of Used Oil and Toxic Materials*
F.5.i	*Limit Infiltration From Sanitary Sewer to MS4*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) and 40 CFR 122.26(d)(2)(iv)(B)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge Detection and Elimination Component of Order No. 2001-01.

Discussion: Illicit discharges and connections can constitute a significant portion of urban runoff discharges from MS4s. US EPA states "A study conducted in 1987 in Sacramento, California, found that almost one-half of the water discharged from a local MS4 was not directly attributable to precipitation runoff. A significant portion of these dry weather flows were from illicit and/or inappropriate discharges and connections to the MS4" (2000).

MS4 discharges attributable to illicit discharges and connections can be a significant source of pollutant loading to receiving waters. The NURP study concluded that the quality of urban runoff can be adversely impacted by illicit discharges and connections (US EPA, 1983). Furthermore, US EPA states that illicit discharges and connections result in "untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic wildlife and human health" (2000).

For these reasons, CWA section 402(p)(3)(B)(ii) requires each Copermittee to prohibit non-storm water discharges into its MS4. The detection and elimination of illicit discharges and connections is also clearly identified in the federal regulations as a high priority (40 CFR 122.26(d)(2)(iv)(B) and 122.26(d)(2)(iv)(B)(1)). As

guidance for detecting and eliminating illicit discharges and connections, the US EPA suggests "The proposed management program must include a description of inspection procedures, orders, ordinances, and other legal authorities necessary to prevent illicit discharges to the MS4" (1992).

The SDRWQCB has the discretion to require Jurisdictional Urban Runoff Management Program item F.5 in Order 2001-01 under the broad legal authority cited above.

F.5.a. Illicit Discharges and Connections of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement a program to actively seek and eliminate illicit discharges and connections into its MS4. The program shall address all types of illicit discharges and connections excluding those non-storm water discharges not prohibited by the Copermittee in accordance with Section B. of this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) and 40 CFR 122.26(d)(2)(iv)(B)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge Detection and Elimination Component of Order No. 2001-01.

Discussion: See discussion for F.5 Illicit Discharge Detection and Elimination Component above.

F.5.b. Dry Weather Analytical Monitoring of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall conduct dry weather analytical monitoring of MS4 outfalls within its jurisdiction to detect illicit discharges and connections in accordance with Attachment E of this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) and 40 CFR 122.26(d)(2)(iv)(B)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge Detection and Elimination Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(2) provides that the Copermittee include in its proposed management program "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."

Discussion: Since illicit discharges and connections can be significant sources of pollutants in urban runoff, and can cause receiving water degradation, the

locations of all illicit discharges and connections need to be identified. An effective means for achieving this is analytical monitoring of dry weather urban runoff flows. By analytically monitoring dry weather urban runoff, results of the analytical monitoring can be used to identify locations potentially impacted by illicit discharges or connections. If results indicate that an illicit discharge or connection may be present, then follow-up procedures can be followed to pinpoint the source of the illicit discharge or connection. Once the illicit discharge or connection source is identified, steps may be taken to eliminate the discharge or connection. In this manner, dry weather analytical monitoring of urban runoff can lead to the elimination of illicit discharges and connections and the reduction of pollutants in urban runoff. The SDRWQCB has the discretion to require Jurisdictional Urban Runoff Management Program item F.5.b in Order No. 2001-01 under the broad and specific legal authority cited above.

F.5.c. Investigation/Inspection and Follow-up of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall investigate and inspect any portion of the MS4 that, based on dry weather analytical monitoring results or other appropriate information, indicates a reasonable potential of illegal discharges, illicit connections, or other sources of non-storm water (including non-prohibited discharge(s) identified in Section B. of this Order). Each Copermittee shall establish criteria to identify portions of the system where such follow-up investigations are appropriate.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) and 40 CFR 122.26(d)(2)(iv)(B)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge Detection and Elimination Component of Order No. 2001-01.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(3) provides that the Copermittee include in its proposed management program "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."

Discussion: The quality of urban runoff can be adversely impacted by illicit discharges and connections (US EPA, 1983). Elimination of these sources of pollutants can therefore result in a dramatic improvement in the quality of urban runoff discharges from MS4s, which in turn can result in improved receiving water quality. If field screening results indicate the presence of illicit discharges to the MS4, that portion of the MS4 must be investigated to eliminate the illicit discharge and prevent further potential degradation of receiving waters. To determine when follow-up procedures should be undertaken, US EPA states "Applicants should propose criteria to identify portions of the system where follow-up investigations are appropriate" (1992).

Procedures to investigate priority locations for illicit connections include sampling for such constituents as fecal coliform, fecal streptococcus, surfactants (MBAS),

residual chlorine, flourides and potassium, inspection of the storm sewer system, use of remote-control cameras, on-site inspections and dye testing at priority or suspect facilities, and additional discharge monitoring to pinpoint pollutant sources.

The SDRWQCB has the discretion to require Jurisdictional Urban Runoff Management Program item F.5.c in Order No. 2001-01 under the broad and specific legal authority cited above.

F.5.d. Elimination of Illicit Discharges and Connections of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall eliminate all detected illicit discharges, discharge sources, and connections immediately.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) and 40 CFR 122.26(d)(2)(iv)(B)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge Detection and Elimination Component of Order No. 2001-01.

Water Quality Control Plan for the San Diego Basin Waste Discharge Prohibition 8 states "Any discharge to a storm water conveyance system that is not entirely composed of 'storm water' is prohibited unless authorized by the Regional Board." California Water Code Section 13263(a) provides that waste discharge requirements prescribed by the SDRWQCB implement the Basin Plan.

Discussion: Under CWA section 402(p)(3)(B)(ii) and Water Quality Control Plan for the San Diego Basin Waste Discharge Prohibition 8 non-storm water discharges are prohibited. By definition, illicit discharges and connections are non-storm water discharges. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B) also requires illicit discharges and connections to be detected and removed. Therefore, any detected illicit discharges or connections must be eliminated. US EPA supports elimination of detected illicit discharges and connections when it states "Once the source is identified, the offending discharger should be notified and directed to correct the problem. Education efforts and working with the discharger can be effective in resolving the problem before taking legal action." The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.5.d in Order No. 2001-01 under the broad and specific legal authority cited above.

F.5.e. Enforce Ordinances of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall implement and enforce its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Each Copermittee shall also implement and enforce its ordinance, orders, or other legal authority to eliminate detected illicit discharges and connections to it MS4.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) and 40 CFR 122.26(d)(2)(iv)(B)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge Detection and Elimination Component of Order No. 2001-01.

Discussion: To prevent and eliminate illicit discharges and connections, the Copermittee must implement and enforce its ordinance, orders, or other legal authority over illicit discharges and connections. The US EPA states that this "proposed management program component should describe how the prohibition on illicit discharges will be implemented and enforced. The description could include a schedule and allocation of staff and resources. A direct linkage should exist between this program component and the adequate legal authority requirements for the ordinances and orders to effectively implement the prohibition of illicit discharges" (1992). The SDRWQCB has the discretion to require Jurisdictional Urban Runoff Management Program item F.5.e in Order 2001-01 under the broad legal authority cited above.

F.5.f. Prevent and Respond to Sewage and Other Spills of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall prevent, respond to, contain and clean up all sewage and other spills that may discharge into its MS4 from any source (including private laterals). Spill response teams shall prevent entry of spills into the MS4 and contamination of surface water, ground water and soil to the maximum extent practicable. Each Copermittee shall coordinate spill prevention, containment and response activities throughout all appropriate departments, programs and agencies to ensure maximum water quality protection at all times.

Each Copermittee shall develop and implement a mechanism whereby it is notified of all sewage spills from private laterals into its MS4. Each Copermittee shall prevent, respond to, contain and clean up sewage from any such notification.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) and 40 CFR 122.26(d)(2)(iv)(B)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge Detection and Elimination Component of Order No. 2001-01.

Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B)(4) provides that the Copermittee include in its proposed management program "a description of procedures to prevent, contain, and respond to spills that may discharge into the municipal separate storm sewer."

Discussion: Sewage and other spills frequently enter the MS4, to be carried and discharged to receiving waters. Such spills into and from the MS4 can severely impair receiving water quality and pose a significant threat to public health. To avoid these negative impacts, the proposed management program must describe

procedures that the Copermittee will implement to prevent, contain, and respond to spills that may discharge into the MS4. The US EPA states "The goal of a spill prevention program is to reduce the frequency and extent of spills of hazardous materials which can cause water quality impairment. Spill containment programs may establish minimum chemical storage and handling requirements, require users to submit prevention and control plans, and ensure site inspections. […] Spill response teams should attempt to prevent or minimize contamination of surface water, groundwater, and soil. Spill response programs often require a coordinated response from a number of municipal departments. Municipalities should describe how response procedures within these programs attempt to mitigate potential pollutant discharges to surface waters and the MS4" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.5.f in Order No. 2001-01 under the broad and specific legal authority cited above.

F.5.g. Facilitate Public Reporting of Illicit Discharges and Connections – Public Hotline of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall promote, publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s. Each Copermittee shall facilitate public reporting through development and operation of a public hotline. Public hotlines can be Copermittee-specific or shared by Copermittees. All storm water hotlines shall be capable of receiving reports in both English and Spanish 24 hours per day/ seven days per week. Copermittees shall respond to and resolve each reported incident. All reported incidents, and how each was resolved, shall be summarized in each Copermittee's individual Jurisdictional URMP Annual Report.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) and 40 CFR 122.26(d)(2)(iv)(B)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge Detection and Elimination Component of Order No. 2001-01.

Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B)(4) provides that the Copermittee include in its proposed management program "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."

Discussion: Regarding public reporting of illicit discharges or water quality impacts associated with discharges from MS4s, the US EPA states "Timely reporting by the public of improper disposal and illicit discharges are critical components of programs to control such sources. To enhance public awareness, programs may include setting up a public information hotline number, educating school students, community and volunteer watchdog groups, using inserts into utility bills, and newspaper, radio, and television announcements to inform the public about what to look for and how to report incidents" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.5.g in Order No. 2001-01 under the broad and specific legal authority cited above.

F.5.h. Facilitate Disposal of Used Oil and Toxic Materials of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall facilitate the proper management and disposal of used oil, toxic materials, and other household hazardous wastes. Such facilitation shall include educational activities, public information activities, and establishment of collection sites operated by the Copermittee or a private entity. Curbside collection of household hazardous wastes is encouraged.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) and 40 CFR 122.26(d)(2)(iv)(B)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge Detection and Elimination Component of Order No. 2001-01.

Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B)(6) provides that the Copermittee include in its proposed management program "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."

Discussion: The US EPA states "If private individuals find the proper disposal of used oil or toxic materials difficult, incidents of improper disposal (such as into the MS4) increase" (1992). Therefore Copermittees are required to propose a program component that will facilitate the proper disposal of used oil and toxics from households by establishing municipally operated collection sites, or ensuring that privately operated collections sites are available. The US EPA suggests this program component "should describe outreach plans to handlers of used oil and to the public, and operating plans for oil and household waste collection programs" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.5.h in Order No. 2001-01 under the broad and specific legal authority cited above.

F.5.i. Limit Infiltration from Sanitary Sewer to MS4 of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall implement controls and measures to limit infiltration of seepage from municipal sanitary sewers to MS4s. Such controls shall include overall sanitary sewer and MS4 system surveys and thorough, routine preventive maintenance of both.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B) and 40 CFR 122.26(d)(2)(iv)(B)(1) generally apply to all directives under Jurisdictional Urban Runoff Management Program item F.5. Illicit Discharge Detection and Elimination Component of Order No. 2001-01.

Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(B)(4) provides that the Copermittee include in its proposed management program "a description of

controls to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewer systems where necessary."

Discussion: Regarding seepage from sanitary sewers, the US EPA states "Raw sewage can seep from sanitary sewage collection systems through leaks and cracks in aging pipes, poorly constructed manholes and joints, and main breaks. Sewage from a leaky sanitary system can flow to storm sewers or contaminate ground water supplies. Interaction between sanitary sewers and separate storm sewers may occur at manholes and where sanitary sewer laterals and storm sewer trenches cross. Separate storm sewers and sanitary sewers may share the same trench, which is generally filled with very porous material such as gravel" (1992). When raw sewage enters the storm water system, it can reach receiving waters untreated, posing a threat to water quality and public health. In order to prevent this condition, the SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.5.i in Order No. 2001-01 under the broad and specific legal authority cited above.

F.6. PUBLIC PARTICIPATION COMPONENT

F.6. Public Participation Component of the Jurisdictional Urban Runoff Management Program states the following:

Each Copermittee shall incorporate a mechanism for public participation in the implementation of the Jurisdictional URMP.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Discussion: Public participation can be an important tool for strengthening an urban runoff management program. US EPA strongly supports public participation when it states "An active and involved community is crucial to the success of a storm water management program because it allows for:

Broader public support since citizens who participate in the development and decision making process are partially responsible for the program and, therefore, may be less likely to raise legal challenges to the program and more likely to take an active role in its implementation;

Shorter implementation schedules due to fewer obstacles in the form of public and legal challenges and increased sources in the form of citizen volunteers;

A broader base of expertise and economic benefits since the community can be a valuable, and free, intellectual resource; and

A conduit to other programs as citizens involved in the storm water program development process provide important cross-connections and relationships with other community and government programs. This benefit is particularly valuable when trying to implement a storm water program on a watershed basis, as encouraged by EPA" (2000).

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.6 in Order No. 2001-01 under the broad legal authority cited above.

F.7. ASSESSMENT OF JURISDICTIONAL URMP EFFECTIVENESS COMPONENT

F.7. Assessment of Jurisdictional URMP Effectiveness Component of the Jurisdictional Urban Runoff Management Program states the following:

a. *As part of its individual Jurisdictional URMP, each Copermittee shall develop a long-term strategy for assessing the effectiveness of its individual Jurisdictional URMP. The long-term assessment strategy shall identify specific direct and indirect measurements that each Copermittee will use to track the long-term progress of its individual Jurisdictional URMP towards achieving improvements in receiving water quality. Methods used for assessing effectiveness shall include for example surveys, pollutant loading estimations, and receiving water quality monitoring. The long-term strategy shall also discuss the role of monitoring data in substantiating or refining the assessment.*

b. *As part of its individual Jurisdictional URMP Annual Report, each Copermittee shall include an assessment of the effectiveness of its Jurisdictional URMP using the direct and indirect assessment measurements and methods developed in its long-term assessment strategy.*

c. *Individual Jurisdictional URMP Annual Reports shall also include each Copermittees' self-assessment of its "status of compliance" with this Order. Specifically, each Annual Report shall specify its self-assessment of its "percent compliance with each component of its Jurisdictional URMP" (sections F.1.-F.8.), as well as the Copermittees' self-assessment of its "overall percent compliance" with this Order in its entirety.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(v) provides that the Copermittees must include "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." Under Federal NPDES regulation 40 CFR 122.42(c) applicants must provide annual reports on the progress of their storm water management programs.

Discussion: Regarding the assessment of the effectiveness of URMPs, the US EPA states that "At a minimum, applicants must submit estimated reductions in pollutant loads expected to result from implemented controls and describe known impacts of storm water controls on groundwater" (1992). The US EPA suggests that the assessments include direct and indirect measurements of effectiveness, stating that "Reductions in pollutant loads due to the implementation and maintenance of structural controls provide direct measurements of the effectiveness of the storm water management program. In addition, EPA encourages applicants to go beyond the minimum requirement and assess the effectiveness of their storm water management program through other direct measurements as well as indirect measurements" (1992). The US EPA also recommends that monitoring data be used to substantiate or refine the

assessment, suggesting that "the estimated removal efficiencies can be refined through the monitoring program. […] Throughout the permit term, the municipality must submit refinements to its assessment or additional direct measurements of program effectiveness in its annual report" (1992). Finally, the US EPA suggests that the assessment be used for long-term assessment of progress when it states "The applicant should use direct measurements of program effectiveness as it begins to assess its long-term progress in improving water quality through storm water management practices. […] [A]pplicants are encouraged to use direct measurements of program effectiveness, such as annual pollutant loads, event mean concentrations, and seasonal pollutant loadings, to begin to estimate long-term trends" (1992). The SDRWQCB has discretion to require Jurisdiction Urban Runoff Management Program item F.7 in Order No. 2001-01 under the broad and specific legal authority cited above.

F.8. FISCAL ANALYSIS COMPONENT

F.8. Fiscal Analysis Component of the Jurisdictional Urban Runoff Management Program states the following:

> *Each Copermittee shall secure the resources necessary to meet the requirements of this Order. As part of its individual Jurisdictional URMP, each Copermittee shall develop a strategy to conduct a fiscal analysis of its urban runoff management program in its entirety. In order to demonstrate sufficient financial resources to implement the conditions of this Order, each Copermittee shall conduct an annual fiscal analysis as part of its individual Jurisdictional URMP Annual Report. This analysis shall, for each fiscal year covered by this Order, evaluate the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities of the Copermittee's urban runoff management program. Such analysis shall include a description of the source(s) of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(vi) provides that "[The Copermittee must submit] 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."

Discussion: A fiscal analysis can be an important planning tool. The US EPA finds that "examining the levels of proposed spending and funding allows the permitting authority to gauge the ability of the applicant to implement the program and predict its effectiveness. The fiscal analysis also will help the [SDRWQCB] determine whether the applicant has met the statutory requirement of reducing the discharge of pollutants to the MS4 to the maximum extent practicable. Finally, the estimates help the applicant evaluate the feasibility and cost-effectiveness of its program" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management item F.8 in Order No. 2001-01 under the broad and specific legal authority cited above.

G. IMPLEMENTATION OF JURISDICTIONAL URMP

G. Implementation of Jurisdictional URMP states the following:

> *Each Copermittee shall have completed full implementation of all requirements of the Jurisdictional URMP section of this Order no later than **180 days after adoption** of this Order, with the exception of the requirements included in the Land-Use Planning for New Development and Redevelopment Component of the Jurisdictional URMP section of this Order. Each Copermittee shall have completed full implementation of all requirements of the Land-Use Planning for New Development and Redevelopment Component of the Jurisdictional URMP section of this Order no later **than 365 days after adoption** of this Order.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Discussion: The requirements of the NPDES regulations for urban runoff have been in place for many years. Falling under these regulations, the Copermittees should currently be implementing adequate urban runoff programs to be in compliance with the regulations. The requirements in Order No. 2001-01 are based on the NPDES regulations; therefore, the vast majority of the requirements in Order No. 2001-01 should already be implemented by the Copermittees. For this reason, implementation schedules of 180 days and 365 days should be more than adequate to meet the requirements of Order No. 2001-01. The SDRWQCB has discretion to require Implementation of Jurisdictional URMP item G. in Order No. 2001-01 under the broad legal authority cited above.

H. SUBMITTAL OF JURISDICTIONAL URMP DOCUMENT

H. Submittal of Jurisdictional URMP Document states the following:

> *The written account of the overall program to be conducted by each Copermittee within its jurisdiction during the five-year life of this Order is referred to as the "Jurisdictional URMP Document".*
>
> 1. *Individual – Each Copermittee shall submit to the Principal Permittee an individual Jurisdictional URMP document which describes all activities it is undertaking to implement the requirements of each component of the Jurisdictional URMP section F. of this Order. Individual Jurisdictional URMP documents shall be submitted in two parts.*
>
>   a. *The first submittal of the individual Jurisdictional URMP document shall address the requirements of the entire Jurisdictional URMP section of this Order, with the exception of the Land-Use Planning for New Development and Redevelopment Component (i.e., sections F.2. – F.8.) At a minimum, the first submittal of the individual Jurisdictional URMP document shall contain the following information for the following components:*
>
>   (1) *Construction Component*
>
>   (a) *Which pollution prevention methods will be required for implementation and how they will be required*
>   (b) *Updated grading ordinances*
>   (c) *A description of the modified construction and grading approval process*
>   (d) *Updated conditions of approval in local grading and construction permits*
>   (e) *A completed watershed based inventory of all construction sites*
>   (f) *A completed prioritization of all construction sites based on threat to water quality*
>   (g) *Which BMPs will be implemented, or required to be implemented, for each priority category*

(h) How BMPs will be implemented, or required to be implemented, for each priority category
(i) Planned inspection frequencies for each priority category
(j) Methods for inspection
(k) A description of enforcement mechanisms and how they will be used
(l) A description of how non-compliant sites will be identified and the process for notifying the SDRWQCB, including a list of current non-compliant sites
(m) A description of the construction education program and how it will be implemented

(2) Municipal (Existing Development) Component

(a) Which pollution prevention methods will be required for implementation and how they will be required
(b) A completed watershed based inventory of all municipal land use areas and activities
(c) A completed prioritization of all municipal areas and activities based on threat to water quality
(d) Which BMPs will be implemented, or required to be implemented, for each priority category
(e) How BMPs will be implemented, or required to be implemented, for each priority category
(f) Municipal maintenance activities and schedules
(g) Planned inspection frequencies for the high priority category
(h) Methods for inspection
(i) A description of enforcement mechanisms and how they will be used

(3) Industrial (Existing Development) Component

(a) Which pollution prevention methods will be required for implementation and how they will be required
(b) A completed watershed based inventory of all industrial sites
(c) A completed prioritization of all industrial sites based on threat to water quality
(d) Which BMPs will be implemented, or required to be implemented, for each priority category
(e) How BMPs will be implemented, or required to be implemented, for each priority category
(f) A description of the monitoring program to be conducted, or required to be conducted
(g) Planned inspection frequencies for each priority category
(h) Methods for inspection
(i) A description of enforcement mechanisms and how they will be used
(j) A description of how non-compliant sites will be identified and the process for notifying the SDRWQCB, including a list of current non-compliant sites

(4) Commercial (Existing Development) Component

(a) Which pollution prevention methods will be required for implementation and how they will be required
(b) A completed watershed based inventory of high priority commercial sites
(c) Which BMPs will be implemented, or required to be implemented, for high priority sites
(d) How BMPs will be implemented, or required to be implemented, for high priority sites
(e) Planned inspection frequencies for high priority sites
(f) Methods for inspection
(g) A description of enforcement mechanisms and how they will be used

(5) Residential (Existing Development) Component

(a) Which pollution prevention methods will be encouraged for implementation and how they will be encouraged
(b) A completed inventory of high priority residential areas and activities

(c) Which BMPs will be implemented, or required to be implemented, for high priority areas and activities
(d) How BMPs will be implemented, or required to be implemented, for high priority areas and activities
(e) A description of enforcement mechanisms and how they will be used

(6) Education Component

(a) A description of the content, form, and frequency of education efforts for each target community

(7) Illicit Discharges Detection and Elimination Component

(a) A description of the program to actively seek and eliminate illicit discharges and connections
(b) A description of dry weather analytical monitoring to be conducted to detect illicit discharges and connections (see Attachment E)
(c) A description of investigation and inspection procedures to follow-up on dry weather analytical monitoring results or other information which indicate potential for illicit discharges and connections
(d) A description of procedures to eliminate detected illicit discharges and connections
(e) A description of enforcement mechanisms and how will they be used
(f) A description of methods to prevent, respond to, contain, and clean up all sewage (including spills from private laterals) and other spills in order to prevent entrance into the MS4
(g) A description of the mechanism to receive notification of spills from private laterals
(h) A description of efforts to facilitate public reporting of illicit discharges and connections, including a public hotline
(i) A description of efforts to facilitate proper disposal of used oil and other toxic materials
(j) A description of controls and measures to be implemented to limit infiltration of seepage from sanitary sewers to MS4s
(k) A description of routine preventive maintenance activities on the sanitary system and MS4

(8) Public Participation Component

(a) A description of how public participation will be included in the implementation of the Jurisdictional URMP

(9) Assessment of Jurisdictional URMP Effectiveness Component

(a) A description of strategies to be used for assessing the long-term effectiveness of the individual Jurisdictional URMP.

(10) Fiscal Analysis Component

(a) A description of the strategy to be used to conduct a fiscal analysis of the urban runoff management program.

b. The second submittal of the individual Jurisdictional URMP document shall address the requirements of the Land-Use Planning for New Development and Redevelopment Component of the Jurisdictional URMP section F.1. of this Order. At a minimum, the second submittal of the individual Jurisdictional URMP document shall contain the following information for the following components:

(1) General Plan or equivalent plan revisions, specifying water protection policies
(2) Conditions of project approval in local development permits
(3) Participation efforts conducted in the development of the Model SUSMP
(4) Environmental review processes and CEQA initial study checklist revisions

(5) A description of the planning education program and how it will be implemented

c. Each Copermittee shall submit to the Principal Permittee each part of its individual Jurisdictional URMP document by the dates specified by the Principal Permittee.

d. In addition to submittal of the two parts of the Jurisdictional URMP document, each Copermittee shall submit to the SDRWQCB its own adopted local SUSMP consistent with the approved Model SUSMP, as described in section F.1.b.(2). of this Order. Each Copermittee's own local SUSMP, along with its amended ordinances, shall be submitted to the SDRWQCB within 180 days of the SDRWQCB's approval of the Model SUSMP.

2. Unified – The Principal Permittee shall submit the unified Jurisdictional URMP document to the SDRWQCB. The unified Jurisdictional URMP document shall be submitted in two parts.

*a. The first unified Jurisdictional URMP document submittal shall address the requirements of the entire Jurisdictional URMP sections F.2 – F.8. of this Order, with the exception of the Land-Use Planning for New Development and Redevelopment Component. The first unified Jurisdictional URMP document submittal shall contain a section covering common activities conducted collectively by the Copermittees, to be written by the Principal Permittee, and the twenty individual Jurisdictional URMP documents. The Principal Permittee shall submit the first unified Jurisdictional URMP document to the SDRWQCB within **180 days of adoption** of this Order.*

*b. The second unified Jurisdictional URMP document submittal shall address the requirements of the Land-Use Planning for New Development and Redevelopment Component of the Jurisdictional URMP section of this Order. The second unified Jurisdictional URMP document submittal shall contain a section covering common activities conducted collectively by the Copermittees, to be written by the Principal Permittee, and the twenty individual Jurisdictional URMP documents. As part of the second unified Jurisdictional URMP document, the Principal Permittee shall be responsible for the development and writing of a stand alone Model SUSMP document meeting the requirements of section F.1.b.(2). of this Order. The Principal Permittee shall submit the second unified Jurisdictional URMP document, including the Model SUSMP, to the SDRWQCB within **365 days of adoption** of this Order.*

3. Universal Reporting Requirements

All individual and unified Jurisdictional URMP document submittals shall include an executive summary, introduction, conclusion, recommendations, and signed certified statement.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: California Water Code section 13267 provides that "the regional board may require than any person who has discharged […] shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires."

Discussion: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv) require each Copermittee to develop and implement an urban runoff management program. The SDRWQCB must assess the urban runoff management program to ensure that it is adequate to prohibit non-storm water discharges and reduce pollutant discharges to and from the MS4 to the maximum extent practicable. In order for the SDRWQCB to assess the urban runoff management program, each Copermittee must submit to the SDRWQCB a description of their program. The description must detail all activities the Copermitee is undertaking to implement the

requirements of each component of the Jurisdictional URMP section of Order No. 2001-01.

The submittal schedule of 180 and 365 days for Jurisdictional URMP documents is designed to provide each Copermittee some time to develop its Jurisdictional URMP. However, this time is limited since the Jurisdictional URMP requirements are based on NPDES regulations which have been in place for many years. The vast majority of the requirements in the Jurisdictional URMP should already be implemented by each Copermittee. Therefore, the provided submittal schedule should be more than adequate for each Copermittee to rework its Jurisdictional URMP to meet the Jurisdictional URMP requirements of Order No. 2001-01.

Compilation of the individual Jurisdictional URMP documents into a unified Jurisdictional URMP document by the Principal Permittee will ease the effort needed to assess and digest the information contained in the documents. The Principal Permittee's provision of a summary covering common activities conducted collectively by the Copermittees will provide a useful overview of urban runoff management efforts within the County of San Diego. This type of compilation of the Copermittees' documents has been recommended by the Copermittees in the past.

The SDRWQCB has discretion to require Submittal of Jurisdictional URMP Document item H. in Order No. 2001-01 under the broad and specific legal authority cited above.

I. SUBMITTAL OF JURISDICTIONAL URMP ANNUAL REPORT

I. Submittal of Jurisdictional URMP Annual Report states the following:

1. *Individual - Each individual Jurisdictional URMP Annual Report shall be a documentation of the activities conducted by each Copermittee during the past annual reporting period. Each Jurisdictional URMP Annual Report shall, at a minimum, contain the following:*

   a. *Comprehensive description of all activities conducted by the Copermittee to meet all requirements of each component of the Jurisdictional URMP section of this Order;*
      - *F.1. Land-Use Planning for New Development and Redevelopment Component*
      - *F.2. Construction Component*
      - *F.3. Existing Development Component (Including Municipal, Industrial, Commercial, Residential, and Education)*
      - *F.4. Education Component*
      - *F.5. Illicit Discharge Detection and Elimination Component*
      - *F.6. Public Participation Component*
      - *F.7. Assessment of Jurisdictional URMP Effectiveness Component*
      - *F.8. Fiscal Analysis Component*

   b. *Each Copermittee's accounting of all:*
      - *(1) Reports of illicit discharges and how each was resolved (indicating referral source);*
      - *(2) Inspections conducted;*
      - *(3) Enforcement actions taken; and*
      - *(4) Education efforts.*

   c. *Public participation mechanisms utilized during the Jurisdictional URMP implementation process;*

   d. *Proposed revisions to the Jurisdictional URMP;*

e. A summary of all urban runoff related data not included in the annual monitoring report (e.g., special investigations);

f. Annual expenditures from previous year and budget for upcoming year;

g. Identification of management measures proven to be effective in reducing urban runoff pollutants and flow;

h. Identification of management measures proven to be ineffective in reducing urban runoff pollutants and flow;

i. Identification of water quality improvements or degradation; and

j. Self-assessment of Copermittees' "percent compliance with each component of its Jurisdictional URMP" and "overall percent compliance with this Order" in its entirety.

*2. Unified - The unified Jurisdictional URMP Annual Report shall contain a section covering common activities conducted collectively by the Copermittees, to be written by the Principal Permittee, and the twenty individual Jurisdictional URMP Annual Reports. Each Copermittee shall submit to the Principal Permittee an individual Jurisdictional URMP Annual Report by the date specified by the Principal Permittee. The Principal Permittee shall submit a unified Jurisdictional URMP to the SDRWQCB by **January 31, 2002 and every January 31 thereafter**. The reporting period for these annual reports shall be the previous fiscal year. For example, the report submitted January 31, 2002 shall cover the reporting period July 1, 2000 to June 30, 2001.*

3. Universal Reporting Requirements

All individual and unified Jurisdictional URMP submittals shall include an executive summary, introduction, conclusion, recommendations, and signed certified statement.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.42(c) requires that "The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer system that has been designated by the director under § 122.26(a)(1)(v) of this part must submit an annual report by the anniversary of the date of the issuance of the permit for such system. The report shall include: (1) The status of implementing the components of the storm water management program that are established as permit conditions; (2) Proposed changes to the storm water management program that are established as permit condition. Such proposed changes shall be consistent with § 122.26(d)(2)(iii) of this part; (3) Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under § 122.26(d)(2)(iv) and (d)(2)(v) of this part; (4) A summary of data, including monitoring data, that is accumulated throughout the reporting year; (5) Annual expenditures and budget for year following each annual report; (6) A summary describing the number and nature of enforcement actions, inspections, and public education programs; (7) Identification of water quality improvements or degradation."

Discussion: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv) require each Copermittee to develop and implement an urban runoff management program. The SDRWQCB must assess the urban runoff management program to ensure that it is adequate to prohibit non-storm water discharges and reduce pollutant

discharges to and from the MS4 to the maximum extent practicable. In order for the SDRWQCB to assess the urban runoff management program, each Copermittee must submit to the SDRWQCB an annual report describing all of the activities it undertook to meet the requirements of the Jurisdictional URMP section of Order No. 2001-01.

The Jurisdictional URMP Annual Reports can also be useful tools for the Copermittees. They provide a focus to review, update, or revise the URMPs on an annual basis. Successful and unsuccessful measures can be identified, helping to focus efforts on areas or issues which provide the greatest results. Areas or issues which have received insufficient efforts can also be identified and improved.

The SDRWQCB has the discretion to require Submittal of Jurisdictional URMP Annual Report item I. in Order No. 2001-01 under the broad and specific legal authority cited above.

J. WATERSHED URBAN RUNOFF MANAGEMENT PROGRAM

J.1. Watershed Urban Runoff Management Program states the following:

Each Copermittee shall collaborate with other Copermittees within its watershed(s) as shown in Table 4. below to identify and mitigate the highest priority water quality issues/pollutants in the watershed(s).

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Discussion: Urban runoff does not follow municipality boundaries, and often travels through many municipalities while flowing towards receiving waters. The actions of various municipalities within a watershed regarding urban runoff can therefore have a cumulative impact upon shared receiving waters. Due to the interrelated nature of urban runoff management, Copermittee collaboration is necessary to minimize shared receiving water quality degradation (see Finding 31). Copermittee collaboration of this type focuses water quality protection on watersheds, which is effective because it "more clearly identif[ies] critical areas and practices which need to be targeted for pollution prevention and corrective actions" (SDRWQCB, 1994). The highest priority water quality issues/pollutants in each watershed can be identified and addressed, providing the greatest water quality improvements for the amount of effort. The SWRCB Urban Runoff Technical Advisory Committee recommends Copermittee collaboration for watershed based water quality protection, stating "Municipal permits should have watershed specific components." The SDRWQCB has discretion to require Watershed Urban Runoff Management Program item J.1. in Order No. 2001-01 under the broad legal authority cited above.

J.2. Watershed Urban Runoff Management Program states the following:

Each Copermittee shall collaborate with all other Copermittees discharging urban runoff into the same watershed to develop and implement a Watershed Urban Runoff Management Program (Watershed URMP) for the respective watershed. Each Watershed URMP shall, at a minimum

contain the following:

a. *An accurate map of the watershed (preferably in Geographical Information System [GIS] format) that identifies all receiving waters (including the Pacific Ocean); all Clean Water Act section 303(d) impaired receiving waters (including the Pacific Ocean); land uses; MS4s, major highways; jurisdictional boundaries; and inventoried commercial, construction, industrial, municipal sites, and residential areas.*

b. *An assessment of the water quality of all receiving waters in the watershed based upon (1) existing water quality data; and (2) annual watershed water quality monitoring that satisfies the watershed monitoring requirements of Attachment B;*

c. *An identification and prioritization of major water quality problems in the watershed caused or contributed to by MS4 discharges and the likely source(s) of the problem(s);*

d. *An implementation time schedule of short and long-term recommended activities (individual and collective) needed to address the highest priority water quality problem(s). For this section, "short-term activities" shall mean those activities that are to be completed during the life of this Order and "long-term activities" shall mean those activities that are to be completed beyond the life of this Order;*

e. *An identification of the Copermittee(s) responsible for implementing each recommended activity, including time schedule for implementation;*

f. *A mechanism for public participation throughout the entire watershed URMP process;*

g. *A watershed based education program;*

h. *A mechanism to facilitate collaborative "watershed-based" (i.e., natural resource-based) land use planning with neighboring local governments in the watershed;*

i. *An implementation schedule for collaborative watershed-based land use planning to begin no later than January 2005.*

j. *A long-term strategy for assessing the effectiveness of the Watershed URMP. The long-term assessment strategy shall identify specific direct and indirect measurements that will track the long-term progress of Watershed URMP towards achieving improvements in receiving water quality. Methods used for assessing effectiveness shall include for example: surveys, pollutant loading estimations, and receiving water quality monitoring. The long-term strategy shall also discuss the role of monitoring data in substantiating or refining the assessment.*

Table 4. Copermittees by Watershed

RESPONSIBLE COPERMITTEE(S)	***WATERSHED URBAN RUNOFF MANAGEMENT PROGRAM***	***HYDROLOGIC UNIT OR AREA***	***MAJOR RECEIVING WATER BODIES***
1. County of San Diego	*Santa Margarita River*	*Santa Margarita HU (902.00)*	*Santa Margarita River and Estuary, Pacific Ocean*
1. City of Escondido ***2. City of Oceanside*** *3. City of Vista* *4. County of San Diego*	*San Luis Rey River*	*San Luis Rey HU (903.00)*	*San Luis Rey River and Estuary, Pacific Ocean*
1. City of Carlsbad ***2. City of Encinitas*** *3. City of Escondido* *4. City of Oceanside* *5. City of San Marcos* *6. City of Solana Beach* *7. City of Vista* *8. County of San Diego*	*Carlsbad*	*Carlsbad HU (904.00)*	*Batiquitos Lagoon* *San Elijo Lagoon* *Agua Hedionda Lagoon* *Buena Vista Lagoon* *and Tributary Streams* *Pacific Ocean*
1. City of Del Mar ***2. City of Escondido*** *3. City of Poway*	*San Dieguito River*	*San Dieguito HU (905.00)*	*San Dieguito River and Estuary* *Pacific Ocean*

RESPONSIBLE COPERMITTEE(S)	***WATERSHED URBAN RUNOFF MANAGEMENT PROGRAM***	***HYDROLOGIC UNIT OR AREA***	***MAJOR RECEIVING WATER BODIES***
4. City of San Diego *5. City of Solana Beach* *6. County of San Diego*			
1. City of Del Mar ***2. City of Poway*** *3. City of San Diego* *4. County of San Diego*	*Peñasquitos*	*Miramar Reservoir HA (906.10)* *Poway HA (906.20)*	*Los Peñasquitos Creek* *Los Peñasquitos Lagoon* *Pacific Ocean*
1. City of San Diego	*Mission Bay*	*Scripps HA (906.30)* *Miramar HA(906.40)* *Tecolote HA (906.50)*	*Mission Bay* *Pacific Ocean*
1. City of El Cajon *2. City of La Mesa* *3. City of Poway* *4. City of San Diego* *5. City of Santee* *6. County of San Diego*	*San Diego River*	*San Diego HU (907.00)*	*San Diego River* *Pacific Ocean*
1. City of Chula Vista *2. City of Coronado* *3. City of El Cajon* *4. City of Imperial Beach* *5. City of La Mesa* *6. City of Lemon Grove* *7. City of National City* *8. City of San Diego* *9. County of San Diego* ***10. San Diego Unified Port District***	*San Diego Bay*	*Pueblo San Diego HU (908.00)* *Sweetwater HU (909.00)* *Otay HU (910.00)*	*San Diego Bay* *Sweetwater River* *Otay River* *Pacific Ocean*
1. City of Imperial Beach *2. City of San Diego* *3. County of San Diego*	*Tijuana River*	*Tijuana (911.00)*	*Tijuana River and Estuary* *Pacific Ocean*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Discussion: Management of urban runoff on a watershed basis is recommended by the SWRCB and the SDRWQCB. The SWRCB Urban Runoff Technical Advisory Committee (TAC) defines watershed based water quality protection as "the prevention/control of pollution and management of human activities in a geographically or other defined drainage area to protect, restore, and/or enhance the natural resources and beneficial uses within the watershed." The TAC recommends that "All NPDES permits and Waste Discharge Requirements should be considered for reissuance on a watershed basis." The SDRWQCB also recommends watershed based water quality protection, stating in its Basin Plan that "public agencies and private organizations concerned with water resources have come to recognize that a comprehensive evaluation of pollutant contributions on a watershed scale is the only way to realistically assess cumulative impacts and formulate workable strategies to truly protect our water resources. Both water pollution and habitat degradation problems can best be solved by following a basin-wide approach." The SDRWQCB has therefore required development of Watershed URMPs by the Copermittees. The various Watershed URMPs to be developed are based on Hydrologic Units or Areas defined by the SWRCB.

Development and implementation of Watershed URMPs will provide for more effective receiving water quality protection. Watershed URMPs provide for

threatened or impaired receiving waters, including their pollutants or concern, to be identified. The entire watershed for the receiving water can then be assessed, allowing for critical areas and practices to be targeted for corrective actions. Known sources of pollutants of concern can be investigated for potential water quality impacts. Problem areas can then be addressed, leading to eventual improvements in receiving water quality. Management of urban runoff on a watershed basis allows for specific water quality problems to be targeted so that efforts result in maximized water quality improvements.

Regarding watershed-based land-use planning, see the discussion of Finding 30.

The SDRWQCB has discretion to require Watershed Urban Runoff Management Program item J.2. in Order No. 2001-01 under the broad legal authority cited above.

K. IMPLEMENTATION OF WATERSHED URMP

K. Implementation of Watershed URMP states the following:

Each Copermittee shall have completed full implementation of all requirements of the Watershed URMP section of this Order no later than January 31, 2003.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Discussion: As discussed above in section J.2, the SDRWQCB finds watershed based urban runoff management to be an effective means for managing urban runoff. Watershed based urban runoff management focuses on the most pressing water quality concerns, so that management efforts result in the greatest water quality improvements. The SDWQCB is seeking to expand watershed based urban runoff management, including the potential for reissuance of municipal storm water permits on a watershed basis. In order to work towards this goal, the SDRWQCB is requiring implementation of Watershed URMPs by the Copermittees. The SWRCB Urban Runoff Technical Advisory Committee supports watershed management of urban runoff, stating "Municipal permits should have watershed specific components" and "All NPDES permits and Waste Discharge Requirements should be considered for reissuance on a watershed basis." The SDRWQCB foresees the shift to extensive watershed management of urban runoff to be gradual; it is therefore providing the Copermittees with several years before Watershed URMP implementation is required. The SDRWQCB has discretion to require Watershed Urban Runoff Management Program item K. in Order No. 2001-01 under the broad legal authority cited above.

L. SUBMITTAL OF WATERSHED URMP DOCUMENT

L. Submittal of Watershed URMP Document states the following:

The written account of the overall watershed program to be conducted by each Copermittee during the remaining life of this Order is referred to as the "Watershed URMP Document". The Watershed URMP is conducted concurrently with the Jurisdictional URMP.

1. *Watershed Specific - Each Watershed Specific URMP document shall state how the member Copermittees within each watershed will develop and implement the requirements of the Watershed URMP section J. of this Order. The Copermittees responsible for each of the nine Watershed URMPs are specified in Table 4. above. The Lead Watershed Copermittee for each watershed is highlighted. Each Lead Watershed Copermittee shall be responsible for producing its respective Watershed URMP document, as well as for coordination and meetings amongst all member watershed Copermittees. Each Lead Watershed Copermittee is further responsible for the submittal of the Watershed URMP document to the Principal Permittee by the date specified by the Principal Permittee.*

   a. *Each Watershed specific URMP document shall include:*

      (1) *A completed watershed map*
      (2) *A water quality assessment and watershed monitoring needed*
      (3) *Prioritization of water quality problems*
      (4) *Recommended activities (short and long term)*
      (5) *Individual Copermittee implementation responsibilities and time schedules for implementation*
      (6) *A description of watershed public participation mechanisms*
      (7) *A description of watershed education mechanisms*
      (8) *A description of the mechanism and implementation schedule for watershed-based land use planning*
      (9) *A strategy for assessing the long-term effectiveness of the Watershed URMP*

2. *Unified - The unified Watershed URMP document shall contain a section covering common activities conducted collectively by the Copermittees, to be written by the Principal Permittee, and the nine Watershed Specific URMP documents. The Principal Permittee shall submit the unified Watershed URMP document to the SDRWQCB by* ***January 31, 2003****.*

3. *Universal Reporting Requirements*

   All individual and unified Watershed URMP submittals shall include an executive summary, introduction, conclusion, recommendations, and signed certified statement.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: California Water Code section 13267 provides that "the regional board may require than any person who has discharged […] shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires."

Discussion: Order No. 200-128 requires each Copermittee to participate in the development and implementation of applicable Watershed URMPs under Federal NPDES regulation 40 CFR 122.26(d)(2)(iv). The SDRWQCB must assess the Watershed URMPs to ensure that they are adequate to assess and address the specific water quality problems within each watershed. In order for the SDRWQCB to assess the Watershed URMPs, descriptions of the Watershed URMPs must be submitted to the SDRWQCB. The descriptions must detail all activities the applicable Copermittees are undertaking to implement the requirements of Watershed URMP section of Order No. 2001-01.

The submittal schedule for Watershed URMP documents is designed to provide the Copermittees adequate time to develop their Watershed URMPs. Several years are provided for the Copermittees to shift the focus of their urban runoff management efforts from a jurisdictional basis to a watershed basis. The provided

submittal schedule should be more than adequate for the Copermittees to collaborate for the development and implementation of Watershed URMPs.

Compilation of the specific Watershed URMP documents into a unified Watershed URMP document by the Principal Permittee will ease the effort needed to assess and digest the information contained in the documents. The Principal Permittee's provision of a summary covering common activities conducted collectively by the Copermittees will provide a useful overview of watershed efforts within the County of San Diego. This type of compilation of the Copermittees' documents has been recommended by the Copermittees in the past.

The SDRWQCB has discretion to require Submittal of Watershed URMP Document item L. in Order No. 2001-01 under the broad and specific legal authority cited above.

M. SUBMITTAL OF WATERSHED URMP ANNUAL REPORT

M. Submittal of Watershed URMP Annual Report states the following:

1. *Watershed Specific - Each Watershed Specific URMP Annual Report shall be a documentation of the activities conducted by watershed member Copermittees during the previous annual reporting period to meet the requirements of all components of the Watershed URMP section of this Order. Each Watershed URMP Annual Report shall, at a minimum, contain the following:*

    a. *Comprehensive description of all activities conducted by the watershed member Copermittees to meet all requirements of each component of Watershed URMP section J. of this Order;*

    b. *Public participation mechanisms utilized during the Watershed URMP implementation process;*

    c. *Mechanism for watershed based land use planning;*

    d. *Assessment of effectiveness of Watershed URMP;*

    e. *Proposed revisions to the Watershed URMP;*

    f. *A summary of watershed effort related data not included in the annual monitoring report (e.g., special investigations);*

    g. *Identification of water quality improvements or degradation;*

2. *Unified - The Unified Watershed URMP Annual Report shall contain a section covering common activities conducted collectively by the Copermittees, to be written by the Principal Permittee, and the nine Watershed Specific URMP Annual Reports. Each Lead Watershed Copermittee shall submit to the Principal Permittee a Watershed Specific URMP Annual Report by the date specified by the Principal Permittee. The Principal Permittee shall submit the Unified Watershed URMP Annual Report to the SDRWQCB by January 31, 2004 and every January 31 thereafter. The reporting period for these annual reports shall be the previous fiscal year. For example, the report submitted January 31, 2004 shall cover the reporting period July 1, 2002 to June 30, 2003.*

3. *Universal Reporting Requirements*

    All individual and unified Watershed URMP submittals shall include an executive summary, introduction, conclusion, recommendations, and signed certified statement.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: California Water Code section 13267 provides that "the regional board may require than any person who has discharged […] shall furnish, under penalty of perjury, technical or monitoring reports which the regional board requires."

Federal NPDES regulation 40 CFR 122.42(c) requires that "The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer system that has been designated by the director under § 122.26(a)(1)(v) of this part must submit an annual report by the anniversary of the date of the issuance of the permit for such system. The report shall include: (1) The status of implementing the components of the storm water management program that are established as permit conditions; (2) Proposed changes to the storm water management program that are established as permit condition. Such proposed changes shall be consistent with § 122.26(d)(2)(iii) of this part; (3) Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under § 122.26(d)(2)(iv) and (d)(2)(v) of this part; (4) A summary of data, including monitoring data, that is accumulated throughout the reporting year; (5) Annual expenditures and budget for year following each annual report; (6) A summary describing the number and nature of enforcement actions, inspections, and public education programs; (7) Identification of water quality improvements or degradation."

Discussion: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv) require the Copermittees to develop and implement urban runoff management programs, of which the Watershed URMPs are a part. The SDRWQCB must assess the Watershed URMPs to ensure that they are adequate to assess and address the specific water quality problems within each watershed. In order for the SDRWQCB to assess the Watershed URMPs, the Copermittees must submit to the SDRWQCB annual reports describing all of the activities undertaken to meet the requirements of the Watershed URMP section of Order No. 2001-01.

The Watershed URMP Annual Reports can also be useful tools for the Copermittees. They provide a focus to review, update, or revise the URMPs on an annual basis. Successful and unsuccessful measures can be identified, helping to focus efforts on areas or issues which provide the greatest results. Areas or issues which have received insufficient efforts can also be identified and improved.

The SDRWQCB has the discretion to require Submittal of Watershed URMP Annual Report item M. in Order No. 2001-01 under the broad and specific legal authority cited above.

N. ALL COPERMITTEE COLLABORATION

N. All Copermittee Collaboration states the following:

1. *Each Copermittee shall collaborate with all other Copermittees regulated under this Order to address common issues, promote consistency among Jurisdictional Urban Runoff*

Management Programs (Jurisdictional URMPs) and Watershed Urban Runoff Management Programs (Watershed URMPs), and to plan and coordinate activities required under this Order.

a. *Management Structure - All Copermittees shall jointly execute and submit to the SDRWQCB no later than **180** days after adoption of this Order, a Memorandum of Understanding, Joint Powers Authority, or other instrument of formal agreement which at a minimum provides a management structure for the following:*

- *Designation of joint responsibilities;*
- *Cost sharing (monitoring, education, fees, common equipment purchase, etc.);*
- *Decision making;*
- *Watershed activities;*
- *Information management of data and reports, including the requirements under this Order; and*
- *Any and all other collaborative arrangements for compliance with this Order.*

b. *All Copermittees shall jointly develop a standardized format(s) for all reports required under this Order (e.g., annual reports, monitoring reports, fiscal analysis reports, and program effectiveness reports, etc.). The standardized reporting format(s) shall be used by all Copermittees and shall include protocols for electronic reporting. The Principal Permittee shall submit the standardized format(s) to the SDRWQCB no later **than 180 days after adoption** of this Order.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(D) provides that "[The Copermittee must demonstrate that it can control] through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system."

Discussion: Storm water runoff does not follow municipality boundaries, and often travels through many municipalities while flowing towards receiving waters. Municipalities' actions towards storm water can therefore have a cumulative impact upon shared receiving waters. Due to the interrelated nature of storm water management, Copermittee collaboration is necessary.

Copermittee collaboration results in more effective storm water management, while also aiding the process of complying with permit requirements. For example, formal agreements between Copermittees can help define Copermittee roles and ensure that all permit requirements are addressed. Agreements can also be made to share the costs necessary to maintain compliance with the permit. In addition, designation of a Principal Permittee, through which reporting tasks can be coordinated, provides for standardization and compilation of required reports, thereby easing reporting efforts. This in turn improves digestion and assessment of report information, making the reports more useful to the Copermittees, which in turn can result in more effective urban runoff management.

The US EPA recommends Copermittee collaboration when it suggests "Coapplicants […] may use interjurisdictional agreements to show adequate legal authority and to ensure planning, coordination, and the sharing of the resource burden of permit compliance. When more than one entity is submitting an

application for a MS4 (either as coapplicants or as individual applicants for different parts of a system), the role of each party must be well defined. Each applicant or coapplicant must show the ability to fulfill its responsibilities, including legal authority for the separate storm sewers it owns or operates" (1992).

The SDRWQCB has discretion to require All Copermittee Collaboration item N. in Order 2001-01 under the broad and specific legal authority cited above.

O. PRINCIPAL PERMITTEE RESPONSIBILITIES

O. Principal Permittee Responsibilities states the following:

The Principal Permittee shall be the City of San Diego. The Principal Permittee shall, at a minimum:

1. *Serve as liaison between the Copermittees and the SDRWQCB on general permit issues.*

2. *Ensure coordination of permit activities among the Copermittees and facilitate collaboration on the development and implementation of programs required under this Order;*

3. *Integrate individual Copermittee documents and reports required under this Order into single unified documents and reports for submittal to the SDRWQCB as described below. If a reporting date falls on a non-working day or State Holiday, then the report is to be submitted on the following working day.*

   a. *Unified Jurisdictional URMP Document – The Principal Permittee shall submit the unified Jurisdictional URMP document to the SDRWQCB. The first part of the unified Jurisdictional URMP document (as described in section H.2.a.) shall be submitted within **180 days of adoption** of this Order. The second part of the unified Jurisdictional URMP document (as described in section H.2.b.) shall be submitted **within 365 days of adoption** of this Order.*

      The Principal Permittee shall be responsible for producing the sections of the unified Jurisdictional URMP document submittals covering common activities conducted by the Copermittees. As part of the second unified Jurisdictional URMP document submittal, the Principal Permittee shall be responsible for the development and writing of a stand alone Model SUSMP document meeting the requirements of section F.1.b.(2). of this Order. The Principal Permittee shall also be responsible for collecting and assembling the individual Jurisdictional URMP document submittals covering the activities conducted by each individual Copermittee.

   b. *Unified Jurisdictional URMP Annual Reports – The Principal Permittee shall submit unified Jurisdictional URMP Annual Reports to the SDRWQCB by January 31 of each year, beginning on **January 31, 2002**. The reporting period for these annual reports shall be the previous fiscal year. For example, the report submitted January 31, 2002 shall cover the reporting period July 1, 2000 to June 30, 2001.*

      The Principal Permittee shall be responsible for producing the section of the unified Jurisdictional URMP Annual Reports covering common activities conducted by the Copermittees. The Principal Permittee shall also be responsible for collecting and assembling the individual Jurisdictional URMP Annual Reports covering the activities conducted by each individual Copermittee.

   c. *Unified Watershed URMP Document – The Principal Permittee shall submit the unified Watershed URMP document to the SDRWQCB by **January 31, 2003**. The Principal Permittee shall be responsible for producing the section of the unified Watershed URMP document covering common activities conducted by the Copermittees. The Principal Permittee shall also be responsible for collecting and assembling the watershed specific*

Watershed URMP documents covering the activities conducted by each individual Copermittee.

*d. Unified Watershed URMP Annual Report - The Principal Permittee shall submit unified Watershed URMP Annual Reports to the SDRWQCB by January 31 of each year, beginning on **January 31, 2004**. The reporting period for these annual reports shall be the previous fiscal year. For example, the report submitted January 3, 2004 shall cover the reporting period July 1, 2002 to June 30, 2003.*

The Principal Permittee shall be responsible for producing the section of the unified Watershed URMP Annual Reports covering common activities conducted by the Copermittees. The Principal Permittee shall also be responsible for collecting and assembling the watershed specific Watershed URMP Annual Reports covering the activities conducted by each individual Copermittee.

e. Receiving Waters Monitoring and Reporting Program - The Principal Permittee shall be responsible for the writing and submittal of the Previous Monitoring and Future Recommendations Report. The report shall be submitted to the SDRWQCB within 180 days of adoption of this Order.

f. Receiving Waters Monitoring and Reporting Program - The Principal Permittee shall be responsible for the development and writing of the Receiving Waters Monitoring Program as it is outlined in Attachment B. The Principal Permittee shall submit the Receiving Waters Monitoring Program to the SDRWQCB within 180 days of adoption of this Order.

g. Receiving Waters Monitoring and Reporting Program - The Principal Permittee shall submit the Receiving Waters Monitoring Annual Report to the SDRWQCB on January 31 of each year, beginning on January 31, 2002.

h. Formal Agreements/Standardized Formats - The Principal Permittee shall submit to the SDRWQCB, within 180 days of adoption of this Order, a formal agreement between the Copermittees which provides a management structure for meeting the requirements of this Order (as described in section N.1.a.). The Principal Permittee shall submit to the SDRWQCB, within 180 days of adoption of this Order, standardized formats for all reports and documents required under this Order.

i. Dry Weather Analytical Monitoring - The Principal Permittee shall collectively submit the Copermittees' dry weather analytical monitoring maps and procedures to the SDRWQCB within 180 days of adoption of this Order.

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Federal NPDES regulation 40 CFR 122.26(a)(3)(iii)(C) provides that "A regional authority may be responsible for submitting a permit application."

Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(D) provides that "[The Copermittee must demonstrate that it can control] through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system."

Discussion: Intergovernmental coordination is necessary in urban runoff management, given the transitory nature of urban runoff problems. A Principal Permittee will facilitate intergovernmental coordination, which will improve the development, implementation, and effectiveness of urban runoff management efforts within the region. One way in which a Principal Permittee will improve

urban runoff management efforts is through the coordination of reporting tasks. This provides for the standardization and compilation of required reports, which in turn increases the ease with which report information can be digested and assessed. Standardized documents provide for easier assessment and application of report data, making reports more useful for Copermittees, which can result in more effective storm water management. The SDRWQCB has discretion to require Principal Permittee Responsibilities item O. in Order No. 2001-01 under the broad and specific legal authority cited above.

P. RECEIVING WATERS MONITORING AND REPORTING PROGRAM

P. Receiving Waters Monitoring and Reporting Program states the following:

1. *Pursuant to California Water Code section 13267, each Copermittee shall comply with Monitoring and Reporting Program for No. 2001-01 contained in **Attachment B** of this Order.*

2. *Each Copermittee shall also comply with standard provisions, reporting requirements, and notifications contained in **Attachment C** of this Order.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Copermittees must conduct a comprehensive monitoring program as required under Federal NPDES regulations 40 CFR 122.26(d)(2)(iii). Standard provisions, reporting requirements, and notifications included in Attachment C are consistent to all NPDES permits and are generally found in Federal NPDES regulation 40 CFR 122.41 (Federal NPDES regulation citations are provided in the Attachment).

Discussion: A comprehensive monitoring program is an important aspect of an urban runoff management program. The primary objectives of the monitoring program include, but are not limited to: 1) assessing compliance with Order No. 2001-01; 2) measuring the effectiveness of Urban Runoff Management Plans; 3) assessing the chemical, physical, and biological impacts to receiving waters resulting from urban runoff; and 4) assessing the overall health and evaluating long-term trends in receiving water quality. The monitoring and reporting requirements in Attachment B and C address this need for a comprehensive, flexible, iterative monitoring approach that is focused on compliance issues relevant to the different conditions existing in each watershed covered under this permit. A number of monitoring tools and approaches are available to achieve the objectives of this compliance oriented monitoring program. Order No. 2001-01 may be modified for a specified period of time to direct the Copermittees to participate in comprehensive regional monitoring activities conducted in the Southern California Bight during the term of the permit. This provision is consistent with other NPDES permits issued by the SDRWCB. Such participation maximizes scientific and financial resources using a wide ranging and cost-effective monitoring design to assess the chemical, physical and biological impacts of urban runoff on receiving waters throughout the Southern California Bight.

Using data collected from a monitoring program, urban runoff management efforts can be prioritized, helping limited resources be most effective in improving receiving water quality. For example, a monitoring program can provide data that can allow for specific receiving waters and watersheds to be targeted for urban runoff management efforts based on their need. Particular pollutants and their sources can also be identified and targeted using monitoring data. In addition, monitoring data can be useful in assessing the effectiveness of an urban runoff management program. Successful efforts that have resulted in receiving water quality improvements can be analyzed for application elsewhere, while areas that need greater efforts can also be identified. In general, a comprehensive monitoring program can supply a wealth of data that can be used in a wide range of applications for improving water quality.

The following is a discussion of each of the principal aspects of the proposed monitoring program required in Attachment B of Order No. 2001-01:

I. Previous Monitoring and Future Recommendations Report

The San Diego Copermittees have conducted wet weather monitoring since 1993. In addition, numerous other studies have been conducted in the Southern California Bight that bear on the issue of impacts to receiving waters resulting from municipal storm water discharge. The Receiving Waters Monitoring Program should be based on a sound understanding of storm water issues and the results of previous monitoring efforts to avoid duplicative or unproductive monitoring and to ensure that the data collected is the most scientifically valid and useful as practicable.

II. Receiving Waters Monitoring Program – Year Round

The objective of this program includes, but is not limited to, discharge characterization, source identification, and assessment of the chemical, physical, and biological impacts to receiving waters resulting from municipal urban runoff discharges.

A. Urban Stream Bioassessment Monitoring.
Bioassessment is the direct measurement of the biological and physical condition of receiving waters, such as rivers and streams, using benthic macroinvertebrates. This methodology utilizes in situ biological endpoints as an integrative measure of receiving water integrity. Because bioassessment focuses on living systems as integrators of cumulative impacts resulting from water quality degradation, it defines the ecological risks resulting from urban runoff that are as important to human health and well-being as the more obvious threats of toxic pollution or pathogens. Bioassessment not only identifies that an impact has occurred, but also measures the affect of the impact and tracks recovery when control or restoration measures have been taken.

B. Long-Term Mass Loading Monitoring
Wet weather monitoring by the Copermittees has focused on estimations of pollutant loadings in storm water runoff. Although this approach has drawbacks, it continues to represent the best long-term trend assessment

of pollutant discharges to receiving waters from municipal storm water sewer systems.

C. Coastal Storm Drain Outfall Monitoring.
One of the primary impacts to coastal receiving waters is the loss of recreational beneficial uses resulting from urban runoff. This component of the monitoring program is meant to be integrated and coordinated with similar monitoring programs to address this issue.

D. Ambient Bay, Lagoon, and Coastal Receiving Water Monitoring
This monitoring program component addresses the overall health of the receiving waters and assesses the impact on these water bodies from urban runoff. The Copermittees will develop a specific program for each bay, lagoon, and coastal area that integrates measures of the physical, chemical, and biological conditions of the water bodies as a function of urban runoff.

E. Toxic Hot Spots Monitoring in San Diego Bay
The Copermittees will develop a program to address the issue of the effects of urban runoff on toxic hot spots within San Diego Bay.

The SDRWQCB has discretion to require Receiving Waters Monitoring and Reporting Program item P. in Order No. 2001-01 under the broad and specific legal authority cited above.

Q. TASKS AND SUBMITTAL SUMMARY

Q. Tasks and Submittal Summary states the following:

The tasks and submittals required under this Order are summarized in Tables 5 and 6 below:

Table 5. Task Summary

Task No.	*Task*	*Permit Section*	*Completion Date*	*Frequency*
1	*Identify discharges not to be prohibited and BMPs required for treatment of discharges not prohibited*	*B.3.*	*180 days after adoption of Order*	*One Time*
2	*Examine field screening results to identify water quality problems resulting from non-prohibited non-storm water discharges, including follow-up of problems*	*B.5*	*January 31, 2002*	*Annually*
3	*Notify SDRWQCB of discharges causing or contributing to an exceedance of water quality standards*	*C.2.a.*	*Immediate*	*As Needed*
4	*Establish adequate legal authority to control pollutant discharges into and from MS4*	*D.1.*	*90 days after adoption of Order*	*One Time*
5	*Revise General Plan to incorporate water quality and watershed protection principles*	*F.1.a.*	*365 days after adoption of Order*	*One Time*
6	*Include conditions of approval in local permits*	*F.1.b.(1).*	*365 days after adoption of Order*	*One Time*
7	*Develop Model SUSMP*	*F.1.b.(2).*	*365 days after adoption of Order*	*One Time*
8	*Develop and adopt individual local SUSMP and amended ordinances*	*F.1.b.(2).*	*180 days after approval of Model SUSMP by SDRWQCB*	*One Time*
9	*Implement individual jurisdictional SUSMP*	*F.1.b.(2).*	*180 days after approval of Model*	*Continuous*

			SUSMP by SDRWQCB	
10	*Revise environmental review processes and CEQA checklists*	*F.1.c.(1).*	*365 days after adoption of Order*	*One Time*
11	*Conduct education program for municipal planning and development review staff, project applicants, developers, contractors, and property owners*	*F.1.d.(1). and F.1.d.(2).*	*365 days after adoption of Order*	*Ongoing*
12	*Implement all requirements of Construction Component of Jurisdictional URMP*	*F.2.a. – F.2.h.*	*180 days after adoption of Order*	*Ongoing*
13	*Notify SDRWQCB of non-compliant construction sites*	*F.2.i*	*Within 24 hours of incidence of noncompliance*	*As Needed*
14	*Implement all requirements of Municipal Existing Development Component of Jurisdictional URMP*	*F.3.a.(1). – F.3.a.(8).*	*180 days after adoption of Order*	*Ongoing*
15	*Implement all requirements of Industrial Existing Development Component of Jurisdictional URMP*	*F.3.b.(1) – F.3.b.(8)*	*180 days after adoption of Order*	*Ongoing*
16	*Notify SDRWQCB of non-compliant industrial sites*	*F.3.b.8*	*Within 24 hours of incidence of noncompliance*	*As Needed*
17	*Implement all requirements of Commercial Existing Development Component of Jurisdictional URMP*	*F.3.c.(1) – F.3.c.(5)*	*180 days after adoption of Order*	*Ongoing*
18	*Implement all requirements of Residential Existing Development Component of Jurisdictional URMP*	*F.3.d.(1) – F.3.d.(3)*	*180 days after adoption of Order*	*Ongoing*
19	*Implement all requirements of Education Component of Jurisdictional URMP*	*F.4.a. – F.4.c.*	*180 days after adoption of Order*	*Ongoing*
20	*Implement all requirements of Illicit Connections/Illegal Discharges Component of Jurisdictional URMP*	*F.5.a. – F.5.i.*	*180 days after adoption of Order*	*Ongoing*
21	*Implement all requirements of Public Participation Component of Jurisdictional URMP*	*F.6.*	*180 days after adoption of Order*	*Ongoing*
22	*Develop strategy for assessment of Jurisdictional URMP effectiveness*	*F.7.a.*	*180 days after adoption of Order*	*One Time*
23	*Assess Jurisdictional URMP effectiveness*	*F.7.b.*	*January 31, 2002*	*Annually*
24	*Develop strategy for fiscal analysis of urban runoff management program*	*F.8.*	*180 days after adoption of Order*	*One Time*
25	*Conduct fiscal analysis of urban runoff management program in entirety*	*F.8.*	*January 31, 2002*	*Annually*
26	*Develop and implement Watershed URMP*	*J.2.*	*January 31, 2003*	*Ongoing*
27	*Execute formal agreement which provides management structure for meeting Order requirements*	*N.1.a.*	*180 days after adoption of Order*	*One Time*
28	*Develop standardized formats for all required reports of this Order*	*N.1.b.*	*180 days after adoption of Order*	*One Time*
29	*Develop Previous Monitoring and Future Recommendations Report*	*Attachment B*	*180 days after adoption of Order*	*One Time*
30	*Develop Receiving Waters Monitoring Program*	*Attachment B*	*180 days after adoption of Order*	*One Time*
31	*Implement Receiving Waters Monitoring Program*	*Attachment B*	*180 days after adoption of Order*	*Continuous*
32	*Develop dry weather analytical monitoring map and procedures*	*Attachment E*	*180 days after adoption of Order*	*One Time*
33	*Conduct dry weather analytical monitoring*	*Attachment E*	*January 31, 2002*	*Annually*
34	*Complete NPDES applications for issuance of renewal watershed based permits*	*Attachment C*	*At least 180 days prior to expiration of Order*	*One Time*
35	*Notify SDRWQCB of any incidence of non-compliance with this Order*	*R1, B.7 of Attachment C*	*Within 24 hours of incidence of non-compliance*	*As Needed*

Table 6. Submittal Summary

Submittal No.	Submittal	Permit Section	Completion Date	Frequency
1	Submit identification of discharges not to be prohibited and BMPs required for treatment of discharges not prohibited	B.3.	180 days after adoption of Order	One Time
2	Report on discharges causing or contributing to an exceedance of water quality standards, including description of BMP implementation	C.2.a.	With individual Jurisdictional URMP Annual Reports	As Needed
3	Submit Certified Statement of Adequate Legal Authority	D.2.	90 days after adoption of Order	One Time
4	Submit certified statement if particular high priority construction sites are to be inspected monthly rather than weekly in the rainy season	F.2.g.(2).	180 days after adoption of Order and as needed thereafter	As Needed
5	Submit report on non-compliant construction sites	F.2.i.	Within 5 Days of incidence of non-compliance	As Needed
6	Submit report on non-compliant industrial sites	F.3.b.7.	Within 5 days of incidence of non compliance	As Needed
7	Submit to Principal Permittee first part of individual Jurisdictional URMP document covering requirements for all Components, excluding the Land-Use for New Development and Redevelopment Component	H.1.a.	Prior to 180 days after adoption of Order (Principal Permittee specifies date of submittal)	One Time
8	Submit to Principal Permittee second part of individual Jurisdictional URMP document covering Land-Use Planning for New Development and Redevelopment Component requirements	H.1.b.	Prior to 365 days after adoption of Order (Principal Permittee specifies date of submittal)	One Time
9	Principal Permittee shall submit to SDRWQCB first part of unified Jurisdictional URMP document covering requirements for all Components, excluding the Land-Use for New Development and Redevelopment Component	H.2.a.	180 days after adoption of Order	One Time
10	Principal Permittee shall submit to SDRWQCB second part of unified Jurisdictional URMP document covering Land-Use Planning for New Development and Redevelopment Component requirements, including Model SUSMP	H.2.b.	365 days after adoption of Order	One Time
11	Submit to SDRWQCB local SUSMP and amended ordinances	F.1.b.(2). and H.1.d.	180 days after approval of Model SUSMP	One Time
12	Submit to Principal Permittee individual Jurisdictional URMP Annual Report	I.1.	Prior to January 31, 2002 (Principal Permittee specifies date of submittal)	Annually
13	Principal Permittee shall submit 1st unified Jurisdictional URMP Annual Report to SDRWQCB	I.2.	January 31, 2002	One Time and Annually Thereafter
14	Submit to Principal Permittee Watershed Specific URMP document	L.1.	Prior to January 31, 2003 (Principal Permittee specifies date of submittal)	One Time
15	Principal Permittee shall submit unified Watershed Specific URMP document to SDRWQCB	L.2.	January 31, 2003	One Time
16	Principal Permittee shall submit 2nd unified Jurisdictional URMP Annual Report to SDRWQCB	I.2.	January 31, 2003	One Time
17	Submit to Principal Permittee Watershed Specific URMP Annual Report	M.1.	Prior to January 31, 2004 (Principal	Annually

			Permittee specifies date of submittal)	
18	*Principal Permittee shall submit 1st unified Watershed Specific URMP Annual Report to SDRWQCB*	*M.2.*	*January 31, 2004*	*One Time and Annually Thereafter*
19	*Principal Permittee shall submit 3rd unified Jurisdictional URMP Annual Report to SDRWQCB*	*I.2.*	*January 31, 2004*	*One Time*
20	*Principal Permittee shall submit 2nd unified Watershed Specific URMP Annual Report to SDRWQCB*	*M.2.*	*January 31, 2005*	*One Time*
21	*Principal Permittee shall submit 4th unified Jurisdictional URMP Annual Report to SDRWQCB*	*I.2.*	*January 31, 2005*	*One Time*
22	*Principal Permittee shall submit 3rd unified Watershed Specific URMP Annual Report to SDRWQCB*	*M.2.*	*January 31, 2006*	*One Time*
23	*Principal Permittee shall submit 5th unified Jurisdictional URMP Annual Report to SDRWQCB*	*I.2.*	*January 31, 2006*	*One Time*
24	*Principal Permittee shall submit formal agreement between Copermittees which provides management structure for meeting Order requirements*	*N.1.a.*	*180 days after adoption of Order*	*One Time*
25	*Principal Permittee shall submit standardized formats for all reports required under this Order*	*N.1.b.*	*180 days after adoption of Order*	*One Time*
26	*Principal Permittee submits Previous Monitoring and Future Recommendations Report to SDRWQCB*	*Attachment B*	*180 days after adoption of Order*	*One Time*
27	*Principal Permittee submits Receiving Waters Monitoring Program document to SDRWQCB*	*Attachment B*	*180 days after adoption of Order*	*One Time*
28	*Principal Permittee submits Receiving Waters Monitoring Annual Report to SDRWQCB*	*Attachment B*	*January 31, 2002*	*Annually*
29	*Submit to Principal Permittee dry weather analytical monitoring map and procedures*	*Attachment E*	*Prior to 180 days after adoption of Order*	*One Time*
30	*Principal Permittee submits collective dry weather analytical monitoring maps and procedures*	*Attachment E*	*180 days after adoption of Order*	*One Time*
31	*Submit to Principal Permittee dry weather analytical monitoring results as part of individual Jurisdictional URMP Annual Report*	*Attachment E*	*Prior to January 31, 2002, as part of individual Jurisdictional URMP Annual Report*	*Annually*
32	*Principal Permittee shall submit NPDES applications for issuance of renewal watershed based permits*	*Attachment C*	*At least 180 days prior to expiration of this Order*	*One Time*
33	*Submit reports of any incidence of non-compliance with this Order*	*R.1, B.7 of Attachment C*	*Within 5 days of incidence of non compliance*	*As Needed*

Discussion: See the legal authority citations and discussions of the applicable permit sections.

R. STANDARD PROVISIONS, REPORTING REQUIREMENTS AND NOTIFICATIONS

R. Standard Provisions, Reporting Requirements and Notifications states the following:

1. *Each Copermittee shall comply with Standard Provisions, Reporting Requirements, and Notifications contained in **Attachment C** of this Order. This includes 24 hour/5day reporting requirements for any instance of non-compliance with this Order as described in section B.7 of*

Attachment C.

2. *All plans, reports and subsequent amendments submitted in compliance with this Order shall be implemented immediately (or as otherwise specified) and shall be an enforceable part of this Order upon submission to the SDRWQCB. All submittals by Copermittees must be adequate to implement the requirements of this Order.*

Broad Legal Authority: CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv).

Specific Legal Authority: Standard provisions, reporting requirements, and notifications included in Attachment C are consistent to all NPDES permits and are generally found in Federal NPDES regulation 40 CFR 122.41 (Federal NPDES regulation citations are provided in the Attachment).

Federal NPDES regulation 40 CFR 122.44(l)(6) states "The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of non-compliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance."

Discussion: Implementation of plans, reports, and subsequent amendments by the Copermittees is an important requirement of Order No. 2001-01. Many of the requirements of Order No. 2001-01 rely upon the Copermittees' development and implementation of plans and programs. Without implementation, plans and programs will not improve water quality. For this reason, the plans must be implemented and shall be enforceable upon submission to the SDRWQCB. Incidences of noncompliance with the requirements of this Order must be reported to the SDRWCB within 24 hours, as required for all NPDES permits under Federal NPDES regulation 40 CFR 122.44(l)(6). The SDRWQCB has discretion to require Standard Provisions, Reporting Requirements and Notifications item R. in Order No. 2001-01 under the broad and specific legal authority cited above.

VIII. REFERENCES

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Attachment 1

NPDES Municipal Storm Water Permit Justifications

Copermittee	Large or Medium MS4?	Contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the U.S[1]?
Carlsbad	Yes, by interrelationship[2] to Escondido, Oceanside, & Co. of San Diego.	Yes, Pacific Ocean Shoreline, Buena Vista Creek HA 904.20; Pine Street (Carlsbad), Carlsbad Village Pkwy (Carlsbad); Agua Hedionda Lagoon; and Buena Vista Lagoon;
Chula Vista	Yes, by population.[3]	Yes, San Diego Bay Shoreline, Telegraph HSA 909.11; Chula Vista Marina.
Coronado	No.	Yes, Pacific Ocean Shoreline, Coronado HA 910.10; North Beach, Loma Avenue, Pine Street, Sunset Park (Coronado); San Diego Bay, Near Coronado Bridge;
Del Mar	Yes, by interrelationship[2] to City of San Diego & Co. of San Diego.	Yes, Pacific Ocean Shoreline, San Dieguito HU 905.00; Del Mar (Anderson Canyon), San Dieguito Lagoon Mouth.
El Cajon	Yes, by interrelationship[2] to City of San Diego & Co. of San Diego.	Yes, Pacific Ocean Shoreline, San Diego HU 907.00, San Diego River Mouth, (Ocean Beach).
Encinitas	Yes, by interrelationship[2] to Escondido, Oceanside, & Co. of San Diego.	Yes, Pacific Ocean Shoreline, San Marcos HA 904.50; Moonlight State Beach.
Escondido	Yes, by population.[3]	No.
Imperial Beach	Yes, by interrelationship[2] to Chula Vista, City of San Diego & Co. of San Diego.	Yes, Pacific Ocean Shoreline, Tijuana HU 911.00; Tijuana River; and Tijuana River Estuary.
La Mesa	Yes, by interrelationship[2] to Chula Vista, City of San Diego & Co. of San Diego.	Yes, Pacific Ocean Shoreline, San Diego HU 907.00, San Diego River Mouth, (Ocean Beach); and Chollas Creek.
Lemon Grove	Yes, by interrelationship[2] to Chula Vista, City of San Diego & Co. of San Diego.	Yes, Chollas Creek.
National City	Yes, by interrelationship[2] to Chula Vista, City of San Diego & Co. of San Diego.	Yes, San Diego Bay, San Diego Naval Station; Seventh Street Channel; North of 24th Street Marine Terminal;
Oceanside	Yes, by population.[3]	Yes, Pacific Ocean Shoreline, San Luis Rey HU 903.00, San Luis Rey Rivermouth; Guajome Lake; Pacific Ocean Shoreline, Loma Alta Creek Mouth; and Loma Alta Slough.
Poway	Yes, by interrelationship[1] to City of San Diego & Co. of San Diego.	Yes, Pacific Ocean Shoreline, San Dieguito HU 905.00; Del Mar (Anderson Canyon), San Dieguito Lagoon Mouth; Mission Bay; and Los Penasquitos Lagoon.
San Diego, City	Yes, by population.[3]	Yes, see Attachment 2, 1998 Clean Water Act Section 303(d) List, specifically San Dieguito WMA, Mission Bay WMA, San Diego River WMA, San Diego Bay WMA, and Tijuana River WMA.
San Diego, Co.	Yes, by population.[3]	Yes, see Attachment 2, 1998 Clean Water Act Section 303(d) List, all WMAs.
San Diego Unified Port Dist.	Yes, by interrelationship[2] to Chula Vista, City of San Diego & Co. of San Diego.	Yes, see Attachment 2, 1998 Clean Water Act Section 303(d) List, specifically San Diego Bay WMA and Tijuana River WMA.
San Marcos	Yes, by interrelationship[2] to Escondido, Oceanside, & Co. of San Diego.	Yes, Agua Hedionda Lagoon.
Santee	Yes, by interrelationship[2] to City of San Diego & Co. of San Diego.	Yes, Pacific Ocean Shoreline, San Diego HU 907.00, San Diego River Mouth, (Ocean Beach).
Solana Beach	Yes, by interrelationship[2] to Escondido, Oceanside, City of San Diego & Co. of San Diego.	Yes, San Elijo Lagoon; and Pacific Ocean Shoreline, Escondido Creek HA 904.60, Solana Beach, San Elijo Lagoon.
Vista	Yes, by interrelationship[2] to Escondido, Oceanside & Co. of San Diego.	Yes, Buena Vista Lagoon; Pacific Ocean Shoreline, Buena Vista Creek HA 904.20, Pine Street, Carlsbad Village Pkwy; and Agua Hedionda Lagoon.

[1] See Attachment 2, 1998 Clean Water Act Section 303(d) List.

[2] See 40 CFR 122.26(b)(4)(iii) and (7)(iii).

[3] See Attachment 3, Copermittee Populations.

Attachment 2 1998 Clean Water Act Section 303(d) Impaired Waterbody List

Waterbody [1]	Watershed Management Area	HU, HA, or HSA [2]	Total Size [3]	Non Support [4]	Partially Support [5]	Exceeds Standard [6]	Sources [7]	Impairment [8]	Beneficial Uses [9]	TMDL Priority [10]	Level [11]	Start [12]	End [13]
Aliso Creek	Aliso Creek WMA	901.13	7.2 mi			1 mi	Point/ Nonpoint	Coliform	Rec-1, Rec-2	Medium	1	7/97	7/01
Aliso Creek, mouth of	Aliso Creek WMA	901.13	0.3 ac			0.3 ac	Point/ Nonpoint	Coliform	Rec-1, Rec-2	Medium	1	7/97	7/01
Pacific Ocean Shoreline, Aliso Beach HSA 901.13; Aliso Beach	Aliso Creek WMA	901.13	1 mi		0.01 mi		Point/ Nonpoint	Coliform	Rec-1, Rec-2	Medium	1	7/97	7/01
Agua Hedionda Lagoon	Carlsbad WMA	904.31	320 ac		5 ac		Point/ Nonpoint	Sediment	Aquatic life	Medium	3	7/04	7/07
						5 ac	Point/ Nonpoint	Coliform	Rec-1, Rec-2	Low	2	7/99	7/09
					5 ac		Point/ Nonpoint	Coliform	Shellfish harvest	Low	2	7/99	7/09
Buena Vista Lagoon	Carlsbad WMA	904.21	350 ac		350 ac		Point/ Nonpoint	Sediment	Aquatic life	Medium	3	7/04	7/07
					150 ac		Point/ Nonpoint	Nutrients	Aquatic life	Low	3	7/04	7/07
						350 ac	Point/ Nonpoint	Coliform	Rec-1, Rec-2	Low	2	7/99	7/09
Loma Alta Slough	Carlsbad WMA	904.10	8 ac	8 ac			Nonpoint	Eutrophication	Aquatic life	Low	2	7/99	7/09
						8 ac	Nonpoint	Coliform	Rec-1, Rec-2	Low	2	7/99	7/09
Pacific Ocean Shoreline, Loma Alta HA 904.10; Loma Alta Creek Mouth	Carlsbad WMA	904.10	1.5 mi	0.01 to 1 mi*			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/99	7/09
Pacific Ocean Shoreline, Buena Vista Creek HA 904.20; Pine Street (Carlsbad), Carlsbad Village Pkwy (Carlsbad)	Carlsbad WMA	904.20	2.2 mi	0.02 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/99	7/09
Pacific Ocean Shoreline, San Marcos HA 904.50; Moonlight State Beach	Carlsbad WMA	904.50	5.8 mi	0.01 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/99	7/09
Pacific Ocean Shoreline, Escondido Creek HA 904.60; Solana Beach, San Elijo Lagoon	Carlsbad WMA	904.60	3.0 mi	0.02 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/99	7/09

Waterbody [1]	Watershed Management Area	HU, HA, or HSA [2]	Total Size [3]	Non Support [4]	Partially Support [5]	Exceeds Standard [6]	Sources [7]	Impairment [8]	Beneficial Uses [9]	TMDL Priority [10]	Level [11]	Start [12]	End [13]
San Elijo Lagoon	Carlsbad WMA	904.61	330 ac	330 ac			Point/ Nonpoint	Eutrophication	Aquatic life	Low	2	7/99	7/09
					150 ac		Point/ Nonpoint	Sediment	Aquatic life	Medium	3	7/04	7/07
						150 ac	Point/ Nonpoint	Coliform	Rec-1,Rec-2, Shellfish harvest, Fish consumption	Low	2	7/99	7/09
Famosa Slough	Mission Bay WMA	906.40	28 ac		28 ac		Nonpoint	Eutrophication	Aquatic life	Medium	3	7/05	7/08
Los Penasquitos Lagoon	Mission Bay WMA	906.10	385 ac	385 ac			Point/ Nonpoint	Sediment	Aquatic life	Medium	3	7/05	7/08
Mission Bay	Mission Bay WMA	906.30	1540 ac	1 ac			Point/ Nonpoint	Eutrophication, Lead	Aquatic life	Medium	3	7/05	7/08
		906.40 906.50		1540 ac			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/99	7/09
Pacific Ocean Shoreline, Scripps HA 906.30, El Paseo Grande, Del Oro, Vallecitos, Avenida de la Playa, Coast Blvd, Children's Pool, Ravina, Vista de la Playa, Bonair, Playa del Norte, Palomar (La Jolla); Tourmaline, Grand Avenue (Pacific Beach)	Mission Bay WMA	906.30	13 mi	0.13 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/99	7/09
Tecolote Creek	Mission Bay WMA	906.50	6 mi		6 mi		Point/ Nonpoint	Stormwater (Cadmium, Copper, Lead, Zinc, Toxicity)	Aquatic life	Medium	3	7/05	7/08
						6 mi	Point/ Nonpoint	Coliform	Rec-1, Rec-2	Low	2	7/99	7/09
Chollas Creek	San Diego Bay WMA	908.22	4.8 mi		1 mi		Point/ Nonpoint	Stormwater (Cadmium, Copper, Lead, Zinc, Toxicity)	Aquatic life	High	1	1/98	7/03
						1 mi	Point/ Nonpoint	Coliform	Rec-1, Rec-2	Low	2	7/99	7/09

Waterbody [1]	Watershed Management Area	HU, HA, or HSA [2]	Total Size [3]	Non Support [4]	Partially Support [5]	Exceeds Standard [6]	Sources [7]	Impairment [8]	Beneficial Uses [9]	TMDL Priority [10]	Level [11]	Start [12]	End [13]
Pacific Ocean Shoreline, Coronado HA 910.10; North Beach, Loma Avenue, Pine Street, Sunset Park (Coronado)	San Diego Bay WMA	910.00	10.2 mi	.04 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/99	7/09
San Diego Bay; Near Sub Base	San Diego Bay WMA	900.00	12000 ac	16 ac			Point/ Nonpoint	Benthic community degradation*, Toxicity*	Aquatic life	High	1	1/98	7/03
San Diego Bay; Shelter Island Yacht Basin	San Diego Bay WMA	900.00	12000 ac			50 ac	Point/ Nonpoint	Dissolved copper	Aquatic life	High	1	1/98	7/03
San Diego Bay; Near Grape Street	San Diego Bay WMA	900.00	12000 ac	7 ac			Point/ Nonpoint	Benthic community degradation*, Toxicity*	Aquatic life	High	1	1/98	7/03
San Diego Bay; Downtown Piers	San Diego Bay WMA	900.00	12000 ac	10 ac			Point/ Nonpoint	Benthic community degradation*, Toxicity*	Aquatic life	High	1	1/98	7/03
San Diego Bay; Near Switzer Creek	San Diego Bay WMA	900.00	12000 ac	6 ac			Point/ Nonpoint	Benthic community degradation*, Toxicity*	Aquatic life	High	1	1/98	7/03
San Diego Bay; Near Coronado Bridge	San Diego Bay WMA	900.00	12000 ac	30 ac			Point/ Nonpoint	Benthic community degradation*, Toxicity*	Aquatic life	High	1	1/98	7/03
San Diego Bay; Near Chollas Creek	San Diego Bay WMA	900.00	12000 ac	14 ac			Point/ Nonpoint	Benthic community degradation*, Toxicity*	Aquatic life	High	1	1/98	7/03
San Diego Bay; San Diego Naval Station	San Diego Bay WMA	900.00	12000 ac	76 ac			Point/ Nonpoint	Benthic community degradation*, Toxicity*	Aquatic life	High	1	1/98	7/03
San Diego Bay; Seventh Street Channel	San Diego Bay WMA	900.00	12000 ac	9 ac			Point/ Nonpoint	Benthic community degradation*, Toxicity*	Aquatic life	High	1	1/98	7/03

Waterbody [1]	Watershed Management Area	HU, HA, or HSA [2]	Total Size [3]	Non Support [4]	Partially Support [5]	Exceeds Standard [6]	Sources [7]	Impairment [8]	Beneficial Uses [9]	TMDL Priority [10]	Level [11]	Start [12]	End [13]
San Diego Bay; North of 24th Street Marine Terminal	San Diego Bay WMA	900.00	12000 ac	10 ac			Point/ Nonpoint	Benthic community degradation*, Toxicity*	Aquatic life	High	1	1/98	7/03
San Diego Bay Shoreline, Lindbergh HSA 908.21; G St, B St Pier	San Diego Bay WMA	908.21	8.7 mi	0.2 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2	Low	2	7/99	7/09
San Diego Bay Shoreline, Telegraph HSA 909.11; Chula Vista Marina	San Diego Bay WMA	909.11	0.5 mi	0.01 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2	Low	2	7/99	7/09
Pacific Ocean Shoreline, San Diego HU 907.00, San Diego River Mouth, (Ocean Beach)	San Diego River WMA	907.00	1.4 mi	0.02 to 0.5 mi*			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/99	7/09
Pacific Ocean Shoreline, San Dieguito HU 905.00; Del Mar (Anderson Canyon), San Dieguito Lagoon Mouth	San Dieguito River WMA	905.00	3.0 mi	0.02 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/99	7/09
Pacific Ocean Shoreline, Laguna Beach HSA 901.12; Laguna Beach, Irvine Cove-Riveria, Heisler Park -North, Main Beach (large), Laguna Ave, Cleo Street, Bluebird Canyon Road, Ocean Way, Dumond Dr, Lagunita/ Blue Lagoon, South Coast Hwy at Hospital, West St,	San Juan Creek WMA	901.12	2.5 mi		0.15 mi		Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/00	7/10
1000 Steps, Table Rock													
Pacific Ocean Shoreline, Dana Point HSA 901.14, Salt Creek (large), Salt Creek Service Rd, Dana Strand, North Beach Creek, Capo Beach	San Juan Creek WMA	901.14	6.5 mi		0.06 mi		Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/00	7/10
Pacific Ocean Shoreline, Lower San Juan HSA 901.27; San Juan Creek (large)	San Juan Creek WMA	901.3	1 mi		0.02 mi		Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/00	7/10

Waterbody [1]	Watershed Management Area	HU, HA, or HSA [2]	Total Size [3]	Non Support [4]	Partially Support [5]	Exceeds Standard [6]	Sources [7]	Impairment [8]	Beneficial Uses [9]	TMDL Priority [10]	Level [11]	Start [12]	End [13]
Pacific Ocean Shoreline, San Clemente HA 901.30; Poche Beach (large), Pico Drain (large), El Portal Stairs, Mariposa, Linda Lane, South Linda Lane, Lifeguard Headquarters, Trafalgar Canyon, Under Pier, La Ladera, Riveria Beach, Salem Tressel,	San Juan Creek WMA	901.30	7 mi		0.15 mi		Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/00	7/10
Cypress Shores													
San Juan Creek, Lower	San Juan Creek WMA	901.20	3.4 mi			1 mi	Point/ Nonpoint	Coliform	Rec-1, Rec-2	Low	2	7/00	7/10
San Juan Creek, Mouth	San Juan Creek WMA	901.20	2 ac			2 ac	Point/ Nonpoint	Coliform	Rec-1, Rec-2	Low	2	7/00	7/10
Guajome Lake	San Luis Rey River WMA	903.11	25 ac	25 ac			Point/ Nonpoint	Eutrophication	Aquatic life	Medium	3	7/08	7/11
Pacific Ocean Shoreline, San Luis Rey HU 903.00; San Luis Rey River Mouth	San Luis Rey River WMA	903.00	1 mi	0.01 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Shellfish harvest	Low	2	7/99	7/09
Rainbow Creek	Santa Margarita River WMA	902.20	11 mi	5 mi			Point/ Nonpoint	Rec-1, Rec-2, Eutrophication	Aquatic life	High	1	7/98	7/00
Santa Margarita Lagoon	Santa Margarita River WMA	902.11	268 ac	1 ac			Point/ Nonpoint	Eutrophication	Aquatic life, Rec-1, Rec-2	High	2	7/96	7/05
Pacific Ocean Shoreline, Tijuana HU 911.00; Tijuana	Tijuana River WMA	911.00	3.2 mi	3.2 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2	Low	2	7/98	7/11
River			3.2 mi		3.2 mi		Point/ Nonpoint	Coliform	Shellfish harvest, Fish consumption	Low	2	7/98	7/11
Tijuana River	Tijuana River WMA	911.11	7 mi	7 mi			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Fish consumption	Low	2	7/98	7/11
				7 mi			Point/ Nonpoint	Eutrophication, Low dissolved oxygen, Solids, Trace metals, Synthetic organics, Pesticides	Aquatic life	Low	3	7/98	7/11

Waterbody [1]	Watershed Management Area	HU, HA, or HSA [2]	Total Size [3]	Non Support [4]	Partially Support [5]	Exceeds Standard [6]	Sources [7]	Impairment [8]	Beneficial Uses [9]	TMDL Priority [10]	Level [11]	Start [12]	End [13]
				7 mi			Point/ Nonpoint	Eutrophication, Trash, Pesticides, Synthetic organics, Trace metals	Fish consumption	Low	3	7/98	7/11
Tijuana River Estuary	Tijuana River WMA	911.11	150 ac		1 ac		Point/ Nonpoint	Nickel, Thallium, Lead, Pesticides, Eutrophication, Trash	Aquatic life	Low	3	7/98	7/11
				1 ac			Point/ Nonpoint	Pesticides	Fish consumption	Low	3	7/98	7/11
				150 ac			Point/ Nonpoint	Coliform	Rec-1, Rec-2, Fish consumption, Shellfish harvest	Low	2	7/98	7/11

Attachment 3

Copermittee Populations (1990 U.S. Census Bureau)

Copermittee	Population
Carlsbad	63,126
Chula Vista	135,163
Coronado	26,540
Del Mar	4,860
El Cajon	88,693
Encinitas	55,386
Escondido	108,635
Imperial Beach	26,512
La Mesa	52,931
Lemon Grove	23,984
National City	54,249
Oceanside	128,398
Poway	43,516
San Diego, City	1,110,549
San Diego, County	398,764
San Diego Unified Port District	0
San Marcos	38,974
Santee	52,902
Solana Beach	12,962
Vista	71,872

Attachment 4

Discussion of Municipal Storm Water Permitting and the Watershed Approach

Municipal Storm Water Requirements, Order No. 2001-01

Under the municipal storm water requirements, municipalities are responsible for pollutant discharges into and out of storm water conveyance systems from land uses within their jurisdiction and watershed. This responsibility is based in large part on land use and permitting authority, and underscores the direct link between land use decisions and the resulting long-term water quality consequences of those decisions. Accordingly, the municipal storm water requirements require municipalities to impose controls on existing and future development as necessary to reduce pollutant discharges. A critical requirement of your municipal storm water requirements is to obtain and enforce your legal authorities (i.e., local ordinances, permits) as necessary to maintain (or restore) your compliance with your municipal storm water requirements.

Municipal storm water requirements also specifically direct permittees to prohibit illicit discharges[96] from entering into their storm water conveyance systems. This means requirements to detect (actively seek out) polluted runoff entering your system, identify the source(s) causing the problem, and eliminate the problem(s).

SDRWQCB's Watershed Approach

The term "watershed approach" can mean different things to different people. It often involves several agencies, organizations, and communities addressing numerous environmental concerns. When the SDRWQCB defines a watershed approach, as it has

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[96] The term "illicit discharge" is defined in the federal storm water regulations at 40 CFR 122.26 in very board terms. An illicit discharge is any discharge which is not composed entirely of "storm water". Storm water is one of two components of "urban runoff". Urban runoff is the correct term for any and all flows in a municipal storm water conveyance system. Storm water is defined as any flow that originated from precipitation only. Non-storm water is the "catch-all" phrase referring to all flows in the system that originated from any source other than precipitation.

Technically, uncontaminated rainwater is the only "allowable" flow in the storm water conveyance system. As a practical matter, we are currently assuming a rather lenient enforcement position against municipalities for discharging precipitation that has picked up urban pollutants. We have however assumed a much more aggressive enforcement position against municipalities that have failed to enforce their own legal authorities or implement appropriate source control and structural best management practices (BMPs) to the maximum extent practicable. Such BMPs must effectively reduce or eliminate pollutants that would otherwise be available for transport to receiving waters by precipitation. The SDRWQCB has also taken a much more stringent view of runoff originating from sources other than precipitation (e.g., excess irrigation, car washing, etc.) which convey urban pollutants. Such non-storm water flows are prohibited under the municipal storm water requirements. In all cases, the SDRWQCB looks to see if the responsible municipality(s) have truly demonstrated a "good faith" and thorough effort to find, reduce or eliminate pollutants, and their sources. Such good faith efforts must include enforcement of local ordinances and permits, education efforts that are focused on pollutant(s) of concern, and implementation of effective source control and structural BMPs. These efforts should concentrate on man-made, man-accelerated, or "controllable" sources, rather than on uncontrollable sources (e.g., focus on eliminating pet waste rather than wild animal waste).

in the document entitled "Watershed Management Approach for the San Diego Region,"[97] it is limiting its concerns exclusively to water quality issues.

The SDRWQCB's watershed approach considers each geographic watershed (or subwatershed) as a whole and seeks to identify and mitigate all sources of pollutants (both point and non-point sources) throughout the watershed which contribute to the impairment of common downstream receiving waters. This definition emphasizes the important contribution (of pollutants and flow) from "inland sources" to "coastal problems", such as those that have historically plagued San Diego are Beaches. Like the municipal storm water requirements, one of the most important steps in the SDRWQCB's watershed effort is the identification and elimination of the sources causing such water quality impairments.

A word about what a watershed approach is "not" is also in order. The SDRWQCB's (or any one else's) watershed approach is not: a reduction in the responsibility or authority of the SDRWQCB; an abdication of responsibility or authority by the SDRWQCB; a reduction in the tools at the disposal of the SDRWQCB; or a reduction in or limit on the discretion of the SDRWQCB.

Nexus Between Municipal Storm Water Permit and Watershed Approach

The municipal storm water requirements and the SDRWQCB's watershed approach are fully consistent with each other. Both have the same overall objectives and both direct many of the same specific actions; for example identification and elimination sources of pollutants. The municipal storm water requirements is a traditional regulatory measure. The "watershed approach" is, at the moment, largely a non-regulatory measure.

It is important to understand that regulatory and non-regulatory measures are not mutually exclusive. The premise that the watershed approach "contrasts" with regulation is incorrect. The best way to explain the relationship between the two is to say that a "watershed approach" includes, (but is not limited to) regulation. Waste discharge requirements may or may not include a watershed effort. A community watershed effort often involves issues beyond the scope of complying with waste discharge requirements, but compliance with applicable requirements is always an essential component of any watershed effort. Furthermore, because urban runoff pollution is inextricably linked to cumulative pollutants in runoff contributed by all sources in a watershed, it makes a great deal of sense that permittees would choose to implement the requirements of the municipal storm water permit in the context of a watershed approach. However, whether or not you choose to use a watershed approach to do so, it is each permittees responsibility to comply with the municipal storm water requirements.

In addition to fully supporting a watershed approach for protecting water quality, our agency is in a gradual process of shifting our regulatory efforts towards a watershed (rather than programmatic[98]) basis. This means that in the future waste discharge requirements may be issued on a watershed basis. At this time, a few waste discharge

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97 "Watershed Management Approach for the San Diego Region"; Sixth version (draft). Regional Water Quality Control Board, San Diego Region; January 7, 2000.

98 Our office is currently organized into discrete program units e.g., ground water unit, surface water unit, storm water unit, landfill unit, etc.

requirements “encourage” required activities to be conducted on a watershed basis. In the future, it is likely that waste discharge requirements will “require” that activities be conducted on a watershed basis by all dischargers within the watershed in order to address common water quality problems. The fact that many watershed efforts today are voluntary, but may soon be required under waste discharge requirements, illustrates the “three-tiered” watershed approach described in the SDRWQCB’s “Watershed Management Approach for the San Diego Region”. The three-tiered concept embodies the gradual shift from “tier one” stakeholder driven voluntary watershed efforts to “tier three” efforts mandated by waste discharge requirements.

To the extent that a watershed stakeholder is also subject to waste discharge requirements, a tier one, or voluntary watershed effort can only exist in conjunction with, and acknowledgment of, the mandatory requirements of the waste discharge requirements. This is the current situation for San Diego area Copermittees. It is the responsibility of the SDRWQB to ensure that you are complying with your municipal storm water requirements and to the extent that you are not, to take appropriate enforcement action.

Attachment 5

for

Fact Sheet/Technical Report for San Diego Municipal Storm Water Permit
(Order No. 2001-01)

Underline/Strikeout Version of San Diego Municipal Storm Water Permit

This version of the permit exhibits changes to the permit (in underline/strikeout format) not found in the main text of the Fact Sheet/Technical Report.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

TENTATIVE ORDER NO. 2001-01

NPDES NO. CAS0108758

WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF URBAN RUNOFF FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s) DRAINING THE WATERSHEDS OF THE COUNTY OF SAN DIEGO, THE INCORPORATED CITIES OF SAN DIEGO COUNTY, AND THE SAN DIEGO UNIFIED PORT DISTRICT

The California Regional Water Quality Control Board, San Diego Region (hereinafter SDRWQCB), finds that:

1. **COPERMITTEES ARE DISCHARGERS OF URBAN RUNOFF:** Each of the persons in Table 1 below, hereinafter called Copermittees or dischargers, owns or operates a municipal separate storm sewer system (MS4), through which it discharges urban runoff into waters of the United States within the San Diego Region. These MS4s fall into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) a small MS4 that is "interrelated" to a medium or large MS4; or (3) an MS4 which contributes to a violation of a water quality standard; or (4) an MS4 which is a significant contributor of pollutants to waters of the United States.

Table 1. Municipal Copermittees

1.	City of Carlsbad	11.	City of National City
2.	City of Chula Vista	12.	City of Oceanside
3.	City of Coronado	13.	City of Poway
4.	City of Del Mar	14.	City of San Diego
5.	City of El Cajon	15.	City of San Marcos
6.	City of Encinitas	16.	City of Santee
7.	City of Escondido	17.	City of Solana Beach
8.	City of Imperial Beach	18.	City of Vista
9.	City of La Mesa	19.	County of San Diego
10.	City of Lemon Grove	20.	San Diego Unified Port District

2. **URBAN RUNOFF IS A "WASTE" AND A "POINT SOURCE DISCHARGE OF POLLUTANTS":** Urban runoff is a waste, as defined in the California Water Code, that contains pollutants and adversely affects the quality of the waters of the State. The discharge of urban runoff from an MS4 is a "discharge of pollutants from a point source" into waters of the United States as defined in the Clean Water Act.

3. **URBAN DEVELOPMENT AND RUNOFF CAUSES RECEIVING WATER DEGRADATION:** Urban runoff discharges from MS4s are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. As runoff flows over urban areas, it picks up harmful pollutants such as pathogens, sediment (resulting from human activities), fertilizers, pesticides, heavy metals, and petroleum products. These pollutants often become dissolved or suspended in urban runoff and are conveyed and discharged to receiving waters,

such as streams, lakes, lagoons, bays, and the ocean without treatment. Once in receiving waters, these pollutants harm aquatic life primarily through toxicity and habitat degradation. Furthermore, the pollutants can enter the food chain and may eventually enter the tissues of fish and humans.

There is a strong direct correlation between "urbanization" and "impacts to receiving water quality". In general, the more heavily developed the area, the greater the impacts to receiving waters from urban runoff.

These impacts especially threaten environmentally sensitive areas (such as Clean Water Act section 303(d) impaired water bodies, areas designated as Areas of Special Biological Significance, water bodies designated with the RARE beneficial use, and preserves containing receiving waters designated under the Multi Species Conservation Program within the Cities and County of San Diego). Such environmentally sensitive areas have a much lower capacity to withstand pollutants shocks than might be acceptable in the general circumstance. In essence, urban development that is ordinarily insignificant in its impact on the environment may, in a particularly sensitive environment, be significant.

4. **URBAN DEVELOPMENT INCREASES POLLUTANT LOAD, VOLUME, AND VELOCITY OF RUNOFF:** During urban development two important changes occur. First, natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops, and parking lots. Natural vegetated soil can both absorb rainwater and remove pollutants providing a very effective natural purification process. Because pavement and concrete can neither absorb water nor remove pollutants, the natural purification characteristics of the land are lost.

   Secondly, urban development creates new pollution sources as human population density increases and brings with it proportionately higher levels of car emissions, car maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, trash, etc. which can either be washed or directly dumped into the MS4.

   As a result of these two changes, the runoff leaving the developed urban area is significantly greater in volume, velocity and pollutant load than the pre-development runoff from the same area.

   The significance of the impacts of urban development on receiving waters is determined by the scope of the project, such as the size of the project, the project land-use type, etc. Large projects (such as commercial developments greater than 100,000 square feet, home subdivisions greater than 10 units, and streets, roads, highways, and freeways) generally have large amounts of impervious surface, and therefore have greater potential to significantly impact receiving waters by increasing erosion (through increased peak flow rates, flow velocities, flow volumes, and flow durations) than smaller projects. Projects of particular land use types also have greater potential to significantly impact receiving waters due to the presence of typically large amounts of pollutants on site or an increased potential for pollutants to move off site (such as automotive repair shops, restaurants, parking lots, streets, roads, highways, and freeways, hillside development, and retail gasoline outlets).

5. **WATER QUALITY DEGRADATION INCREASES WITH PERCENT IMPERVIOUSNESS:** The increased volume and velocity of runoff from developed urban areas greatly accelerates the erosion of downstream natural channels. Numerous studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving water quality. Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as a 10% conversion from

natural to impervious surfaces. (Developments of medium density single family homes range between 25 to 60% impervious). Today "% impervious coverage" is believed to be a reliable indicator and predictor of the water quality degradation expected from planned new development.

6. **URBAN RUNOFF IS A HUMAN HEALTH THREAT:** Urban runoff contains pollutants, which threaten human health. Human illnesses have been clearly linked to recreating (i.e., swimming, surfing, etc.) near storm drains flowing to coastal beach waters. Such flows from urban areas often result in the posting or closure of local beaches.

   Pollutants transported to receiving waters by urban runoff can also enter the food chain. Once in the food chain they can "bioaccumulate" in the tissues of invertebrates (e.g., mussels, oysters, and lobsters) and fish which may be eventually consumed by humans. Furthermore, some pollutants are also known to "biomagnify". This phenomenon can result in pollutant concentrations in the body fat of top predators that are millions of times greater than the concentrations in the tissues of their lower trophic (food chain) counterparts or in ambient waters.

7. **POLLUTANT TYPES:** The most common categories of pollutants in urban runoff include total suspended solids, sediment (due to anthropogenic activities); pathogens (e.g., bacteria, viruses, protozoa); heavy metals (e.g., copper, lead, zinc and cadmium); petroleum products and polynuclear aromatic hydrocarbons; synthetic organics (e.g., pesticides, herbicides, and PCBs); nutrients (e.g., nitrogen and phosphorus fertilizers), oxygen-demanding substances (decaying vegetation, animal waste), and trash.

8. **URBAN STREAMS AS AN MS4 COMPONENT:** Historic and current development make use of natural drainage patterns and features as conveyances for urban runoff. Urban streams used in this manner are part of the municipalities MS4 regardless of whether they are natural, man-made, or partially modified features. In these cases, the urban stream is both an MS4 and a receiving water.

9. **URBAN RUNOFF CAUSES BENEFICIAL USE IMPAIRMENT**: Individually and in combination, the discharge of pollutants and increased flows from MS4s can cause or threaten to cause a condition of pollution (i.e., unreasonable impairment of water quality for designated beneficial uses), contamination, or nuisance. The discharge of pollutants from MS4s can cause the concentration of pollutants to exceed applicable receiving water quality objectives and impair or threaten to impair designated beneficial uses.

10. **COPERMITTEES IMPLEMENT URBAN RUNOFF MANAGEMENT PROGRAMS (URMPs):** Copermittee implementation of Urban Runoff Management Programs (URMPs) designed to reduce discharges of pollutants and flow into and from MS4s to the maximum extent practicable (MEP) can protect receiving water quality by promoting attainment of water quality objectives necessary to support designated beneficial uses. To be most effective, URMPs must contain both structural and non-structural best management practices (BMPs).

11. **BEST MANAGEMENT PRACTICES (BMPs):** Pollutants can be effectively reduced in urban runoff by the application of a combination of pollution prevention, source control, and treatment control BMPs. Source control BMPs (both structural and non-structural) minimize the contact between pollutants and flows (e.g., rerouting run-on around pollutant sources or keeping pollutants on-site and out of receiving waters). Treatment control (or structural) BMPs remove pollutants from urban runoff. Where feasible, use of BMPs which utilize natural processes should be assessed. These types of BMPs, such as grassy swales and constructed wetlands, can frequently be as effective as less natural BMPs, while providing additional benefits such as

aesthetics and habitat.

12. **POLLUTION PREVENTION**: Pollution prevention, the initial reduction/elimination of pollutant generation at its source, is the best "first line of defense" for Copermittees and should be used in conjunction with source control and treatment control BMPs. Pollutants that are never generated do not have to be controlled or treated. Encouragement during planning processes of the use of pollution prevention BMPs can be an effective means for pollution prevention BMPs to be implemented, through such methods as education, landscaping, etc.

13. **RECEIVING WATER LIMITATIONS:** Compliance with receiving water limits based on applicable water quality objectives is necessary to ensure that MS4 discharges will not cause or contribute to violations of water quality objectives and the creation of conditions of pollution.

14. **RECEIVING WATER LIMITATION COMPLIANCE STRATEGY**: Implementation of BMPs cannot ensure attainment of receiving water quality objectives under all circumstances; some BMPs may not prove to be as effective as anticipated. An iterative process of BMP development, implementation, monitoring, and assessment is necessary to assure that an Urban Runoff Management Program is sufficiently comprehensive and effective to achieve compliance with receiving water quality objectives.

15. **COPERMITTEES' RESPONSIBILITY FOR ILLICIT DISCHARGES FROM THIRD PARTIES:** As operators of MS4s, the Copermittees cannot passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to the waters of the United States, the operator of an MS4 that does not prohibit and/or control discharges into its system essentially accepts responsibility ~~"title"~~ for those discharges.

16. **COPERMITTEES' RESPONSIBILITY BASED ON LAND USE AUTHORITY**: Utilizing their land use authority, Copermittees authorize and ~~profit~~ realize benefits from the urban development which generates the pollutants and runoff that impair receiving waters. Since the Copermittees utilize their legal authority to authorize urbanization, they must also exercise their legal authority to ensure that the resulting increased pollutant loads and flows do not further degrade receiving waters.

17. THREE PHASES OF URBAN DEVELOPMENT: Urban development has three major phases: (1) land use planning for new development; (2) construction; and (3) the "use" or existing development phase. Because the Copermittees authorize, permit, and profit from each of these phases, and because each phase has a profound impact on water quality, the Copermittees have commensurate responsibilities to protect water quality during each phase.

In other words, Copermittees are held responsible for the short and long-term water quality consequences of their land use planning, construction, and existing development decisions.

18. **PLANNING PHASE FOR NEW DEVELOPMENT**: Because land use planning and zoning is where urban development is conceived, it is the phase in which the greatest and most cost-effective opportunities to protect water quality exists. When a Copermittee incorporates policies and principles designed to safeguard water resources into its General Plan and development project approval processes, it has taken a far-reaching step towards the preservation of local water resources for future generations.

19. **CONSTRUCTION PHASE**: Construction activities are a significant cause of receiving water impairment. Siltation is currently the largest cause of river impairment in the United States. Sediment runoff rates from construction sites greatly exceed natural erosion rates of undisturbed lands causing siltation and impairment of receiving waters. In addition to requiring

implementation of the full range of BMPs, an effective construction runoff program must include local plan review, permit conditions, field inspections, and enforcement.

20. **EXISTING DEVELOPMENT:** The Copermittees' wet weather monitoring results collected during the past decade, as well as volumes of other references in the literature today, confirm substantial pollutant loads to receiving waters in runoff from existing urban development. Implementation of jurisdictional and watershed URMPs, which include extensive controls on existing development, can reduce pollutant loadings over the long term.

21. **CHANGES NEEDED**: Because the urbanization process is a direct and leading cause of water quality degradation in this Region, fundamental changes to existing policies and practices about urban development are needed if the beneficial uses of San Diego's natural water resources are to be protected.

22. **DUAL REGULATION OF INDUSTRIAL AND CONSTRUCTION SITES:** Discharges of runoff from industrial and construction sites in this Region are subject to dual (state and local) regulation. (1) All industries and construction sites are subject to the local permits, plans, and ordinances of the municipal jurisdiction in which it is located. Pursuant to this Order, local (storm water, grading, construction, and use) permits, plans, and ordinances must (a) prohibit the discharge of pollutants and non-storm water into the MS4; and (b) require the routine use of BMPs to reduce pollutants in site runoff. (2) Many industries and construction sites are also subject to regulation under the statewide General Industrial Storm Water Permit or statewide General Construction Storm Water Permit[1]. These statewide general permits are adopted by the State Water Resources Control Board and enforced by the nine Regional Water Quality Control Boards throughout California. Like the Copermittees' local permits and ordinances, the statewide General Industrial and Construction Permits also (a) prohibit the discharge of pollutants and non-storm water; and (b) require the routine use of BMPs to reduce pollutants in site runoff.

    Recognizing that both authorities share a common goal, the federal storm water regulations at 40 CFR 122.26 (and its preamble) call for the dual system to ensure the most effective oversight of industrial and construction site discharges. Under this dual system, each municipal Copermittee is responsible for enforcing its local permits, plans, and ordinances within its jurisdiction. Similarly, the SDRWQCB is responsible for enforcing both statewide general permits and this Order within the San Diego Region.

23. **EDUCATION:** Education is the foundation of every effective URMP and the basis for changes in behavior at a societal level. Education of municipal planning, inspection, and maintenance department staffs is especially critical to ensure that in-house staffs understand how their activities impact water quality, how to accomplish their jobs while protecting water quality, and their specific roles and responsibilities for compliance with this Order. Public education, designed to target various urban land users and other audiences, is also essential to inform the public of how individual actions impact receiving water quality and how these impacts can be minimized.

24. **ENFORCING LOCAL LEGAL AUTHORITY**: Enforcement of local urban runoff related ordinances, permits, and plans is an essential component of every URMP and is specifically

[1] The "statewide General Industrial Storm Water Permit" refers to State Water Resources Control Board Water Quality Order No. 97-03-DWQ National Pollutant Discharge Elimination System General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities. The "statewide General Construction Storm Water Permit" refers to State Water Resources Control Board Order No. 99-08-DWQ National Pollutant Discharge Elimination System General Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity.

required in the federal storm water regulations and this Order. Routine inspections provide an effective means by which Copermittees can evaluate compliance with their permits and ordinances. Inspections are especially important at high-risk areas for pollutant discharges such as industrial and construction sites.

When industrial or construction site discharges occur in violation of local permits and ordinances, the SDRWQCB looks ~~first~~ to the municipality that has authorized the discharge for appropriate actions (typically education followed by enforcement where education has been unsuccessful). ~~If the municipality has demonstrated a good faith effort to educate and enforce but remains unsuccessful, the SDRWQCB will then step in to enforce the applicable statewide general permit. If the municipality has not demonstrated a good faith enforcement effort, the SDRWQCB may initiate enforcement action against both the industrial or construction discharger (under the statewide general permit), as well as against the authorizing municipal Copermittee for violations of this Order.~~ Each Copermittee must also provide ~~the first level of~~ enforcement against illegal discharges from other land uses it has authorized, such as commercial and residential developments.

25. **PUBLIC PARTICIPATION:** Public participation during the URMP development process is necessary to ensure that all stakeholder interests and a variety of creative solutions are considered.

26. **TOXICITY**: Urban runoff discharges from MS4s often contain pollutants that cause toxicity, (i.e., adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies). The water quality objectives for toxicity provided in the Water Quality Control Plan, San Diego Basin, Region 9, (Basin Plan), state in part *"All waters shall be free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life….The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge…"* Urban runoff discharges from MS4s are considered toxic when (1) the toxic effect observed in an acute toxicity test exceeds zero Toxic Units Acute (TUa=0); or (2) the toxic effect observed in a chronic toxicity test exceeds one Toxic Unit Chronic (TUc=1).

27. **FOCUS ON MAN-MADE POLLUTANTS AND FLOWS:** The focus of this Order is on the control of urban runoff pollutants and flows which are either generated or accelerated by human activities. This Order is not meant to control background or naturally occurring pollutants and flows.

28. COMMON WATERSHEDS AND CWA SECTION 303(d) IMPAIRED WATERS: The Copermittees discharge urban runoff into lakes, drinking water reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within ten of the eleven hydrologic units (watersheds) comprising the San Diego Region as shown in Table 2 below. During its downstream course, urban runoff is conveyed through lined and unlined (natural, manmade, and partially modified) channels, all of which are defined as components of the Copermittees' MS4.

Some of the receiving water bodies, which receive or convey urban runoff discharges, have been designated as impaired by the SDRWQCB and USEPA in 1998 pursuant to Clean Water Act section 303(d). Also shown below are the watershed management areas (WMAs) as defined in the SDRWQCB report, Watershed Management Approach, January 2000.

Table 2. Watershed Management Areas (WMAs)

SDRWQCB WATERSHED MANAGEMENT AREA (WMA)	HYDROLOGIC UNIT(S)	MAJOR SURFACE WATER BODIES	303(d) POLLUTANT(S) OF CONCERN OR WATER QUALITY EFFECT	COPERMITTEES
Santa Margarita River	Santa Margarita (902.00)	Santa Margarita River and Estuary, Pacific Ocean	1. Coliform Bacteria 2. Nutrients	1. County of San Diego
San Luis Rey River	San Luis Rey (903.00)	San Luis Rey River and Estuary, Pacific Ocean	1. Coliform Bacteria 2. Nutrients	1. City of Escondido 2. City of Oceanside 3. City of Vista 4. County of San Diego
Carlsbad	Carlsbad (904.00)	Batiquitos Lagoon San Elijo Lagoon Agua Hedionda Lagoon Buena Vista Lagoon And Tributary Streams Pacific Ocean	1. Coliform Bacteria 2. Nutrients 3. Sediment	1. City of Carlsbad 2. City of Encinitas 3. City of Escondido 4. City of Oceanside 5. City of San Marcos 6. City of Solana Beach 7. City of Vista 8. County of San Diego
San Dieguito River	San Dieguito (905.00)	San Dieguito River and Estuary, Pacific Ocean	1. Coliform Bacteria	1. City of Del Mar 2. City of Escondido 3. City of Poway 4. City of San Diego 5. City of Solana Beach 6. County of San Diego
Mission Bay	Peñasquitos (906.00)	Los Peñasquitos Lagoon Mission Bay, Pacific Ocean	1. Coliform Bacteria 2. Metals 3. Nutrients 4. Sediment	1. City of Del Mar 2. City of Poway 3. City of San Diego 4. County of San Diego
San Diego River	San Diego (907.00)	San Diego River, Pacific Ocean	1. Coliform Bacteria	1. City of El Cajon 2. City of La Mesa 3. City of Poway 4. City of San Diego 5. City of Santee 6. County of San Diego
San Diego Bay	Pueblo San Diego (908.00) Sweetwater (909.00) Otay (910.00)	San Diego Bay Sweetwater River Otay River Pacific Ocean	1. Coliform Bacteria 2. Metals 3. Toxicity 4. Benthic Community Degradation	1. City of Chula Vista 2. City of Coronado ~~3. City of El Cajon~~ 43. City of Imperial Beach 54. City of La Mesa 65. City of Lemon Grove 76. City of National City 87. City of San Diego 98. County of San Diego 109.San Diego Unified Port District
Tijuana River	Tijuana (911.00)	Tijuana River and Estuary Pacific Ocean	1. Coliform Bacteria 2. Low Dissolved Oxygen 3. Metals 4. Nutrients 5. Pesticides 6. Synthetic Organics 7. Total Dissolved Solids 8. Trash	1. City of Imperial Beach 2. City of San Diego 3. County of San Diego

29. **CUMULATIVE POLLUTANT LOAD CONTRIBUTIONS:** Because they are interconnected, each MS4 within a watershed contributes to the cumulative pollutant loading, volume, and velocity of urban runoff and the ensuing degradation of downstream receiving water bodies. Accordingly, inland

MS4s contribute to coastal impairments.

30. LAND USE PLANNING ON A WATERSHED SCALE: Because urban runoff does not recognize political boundaries, "watershed-based" land use planning (pursued collaboratively by neighboring local governments) can greatly enhance the protection of shared natural water resources. Such planning enables multiple jurisdictions to work together to plan for both development and resource conservation that can be environmentally as well as economically sustainable.

31. **INTERGOVERNMENTAL COORDINATION:** Within their common watersheds it is essential for the Copermittees to coordinate their water quality protection and land use planning activities to achieve the greatest protection of receiving water bodies. Copermittee coordination with other watershed stakeholders, especially Caltrans and the Department of Defense, is also critical.

Establishment of a management structure, within which the Copermittees subject to this Order, will fund and coordinate those aspects of their joint obligations will promote implementation of Urban Runoff Management Programs on a watershed and regional basis in the most cost effective manner.

32. **WASTE REMOVAL:** Waste and pollutants which are deposited and accumulate in MS4 drainage structures will be discharged from these structures to waters of the United States unless they are removed. These discharges may cause or contribute to, or threaten to cause or contribute to, a condition of pollution in receiving waters. Once removed, such accumulated wastes must be characterized and lawfully disposed.

33. TOXIC HOT SPOTS: Urban runoff is a significant contributor to the creation and persistence of Toxic Hot Spots in San Diego Bay. California Water Code section 13395 requires regional boards to reevaluate waste discharge requirements (WDRs) associated with toxic hot spots. The State Water Resources Control Board (SWRCB) adopted the Consolidated Toxic Hot Spot Cleanup Plan in June 1999. The Plan states: "The reevaluation [of WDRs associated with toxic hot spots] shall consist of (1) an assessment of the WDRs that may influence the creation or further pollution of the known toxic hot spot, (2) an assessment of which WDRs need to be modified to improve environmental conditions at the known toxic hot spot, and (3) a schedule for completion of any WDR modifications deemed appropriate."

34. CHANGING THE STORM WATER MANAGEMENT APPROACH: In contrast to the conventional "conveyance" approach, a more natural approach to storm water management seeks to filter and infiltrate runoff by allowing it to flow slowly over permeable vegetated surfaces. By "preserving and restoring the natural hydrologic cycle", filtration and infiltration can greatly reduce the volume/peak rate, velocity, and pollutant loads of urban runoff. The greatest opportunities for changing from a "conveyance" to a more natural management approach occur during the land use planning and zoning processes and when new development projects are under early design.

35. **INFILTRATION AND POTENTIAL GROUNDWATER CONTAMINATION:** Any drainage feature that infiltrates runoff poses some risk of potential groundwater contamination. Although dependent on several factors, the risks typically associated with ~~the~~ properly managed infiltration of runoff (especially from residential land use areas) are not significant. The risks associated with infiltration can be managed by many techniques, including (1) designing landscape drainage features that promote infiltration of runoff, but do not "inject" runoff (injection bypasses the natural processes of filtering and transformation that occur in the soil); (2) taking reasonable steps to prevent the illegal disposal of wastes; and (3) ensuring that each drainage feature is adequately maintained in

perpetuity. Minimum conditions needed to protect groundwater are specified in section F.1.b. of this Order.

36. **VECTOR CONTROL:** Certain BMPs implemented or required by municipalities for urban runoff management may create a habitat for vectors (e.g. mosquitoes and rodents) if not properly designed or maintained. Close collaboration and cooperative effort between municipalities and local vector control agencies and the State Department of Health Services during the development and implementation of the Urban Runoff Management Programs is necessary to minimize nuisances and public health impacts resulting from vector breeding.

37. **LEGAL AUTHORITY:** This Order is based on the federal Clean Water Act, the Porter-Cologne Water Quality Control Act (Division 7 of the Water Code, commencing with Section 13000), applicable state and federal regulations, all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the State Water Resources Control Board, the Regional Water Quality Control Plan (Basin Plan) adopted by the Regional Board, the California Toxics Rule, and the California Toxics Rule Implementation Plan.

38. **TOTAL MAXIMUM DAILY LOADS (TMDLs):** 40 CFR 122.44 (d)(vii)(B) requires that NPDES permits contain effluent limitations that are consistent with waste load allocations developed under a TMDL. Several TMDLs are being developed in the San Diego Region for impaired waterbodies that receive Copermittees' discharge. Once these TMDLs are approved by the SDRWQCB and USEPA, Copermitees' discharge of urban runoff into an impaired waterbody will be subject to load allocations established by the TMDLs.

39. **ANTIDEGRADATION:** Conscientious implementation of URMPs that satisfy the requirements contained in this Order will reduce the likelihood that discharges from MS4s will cause or contribute to unreasonable degradation of the quality of receiving waters. Therefore, this Order is in conformance with SWRCB Resolution No. 68-16 and the federal antidegradation policy described in 40 CFR 131.12.

~~38.~~40. **CEQA:** The issuance of waste discharge requirements for the discharge of urban runoff from MS4s to waters of the United States is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, § 21000 et seq.) in accordance with the CWC § 13389.

~~39.~~41. **PUBLIC NOTICE:** The SDRWQCB has notified the Copermittees, all known interested parties, and the public of its intent to consider adoption of an order prescribing waste discharge requirements that would serve to renew an NPDES permit for the existing discharge of urban runoff.

~~39.~~42. PUBLIC HEARING: The SDRWQCB has, at a public meeting on **December 13, 2000,** held a public hearing and heard and considered all comments pertaining to the terms and conditions of this Order.

IT IS HEREBY ORDERED that the Copermittees, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations adopted thereunder, shall each comply with the following:

A. PROHIBITIONS -- DISCHARGES

1. Discharges into and from MS4s in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance (as defined in CWC § 13050), in waters of the state are

prohibited.

2. Discharges from MS4s which cause or contribute to exceedances of receiving water quality objectives for surface water or groundwater are prohibited.

3. Discharges into and from MS4s containing pollutants which have not been reduced to the maximum extent practicable (MEP) are prohibited.

4. Applicable to New Development and ~~Significant~~ Redevelopment ~~Only~~:
~~Post-development runoff which is greater in peak rate or velocity than pre-development runoff from the same site is prohibited.~~ Post-development runoff containing pollutants loads which cause or contribute to an exceedance of receiving water quality objectives or which have not been reduced to the maximum extent practicable is prohibited. ~~Discharges of post-development runoff into a Clean Water Act section 303(d) water body containing any pollutant (for which the water body is already impaired) in levels exceeding predevelopment levels (for those same pollutants) is prohibited.~~

5. In addition to the above prohibitions, discharges from MS4s are subject to all Basin Plan prohibitions cited in **Attachment A** to this Order.

B. PROHIBITIONS -- NON-STORM WATER DISCHARGES

1. Each Copermittee shall effectively prohibit **all** types of non-storm water discharges into its Municipal Separate Storm Sewer System (MS4) unless such discharges are either authorized by a separate NPDES permit; or not prohibited in accordance with B.2. and B.3. below.

2. Pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1), the following categories of non-storm water discharges need only be prohibited from entering an MS4 if such categories of discharges are identified by the Copermittee as a significant source of pollutants to waters of the United States:

   a. Diverted stream flows;
   b. Rising ground waters;
   c. Uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to MS4s;
   d. Uncontaminated pumped ground water;
   e. Foundation drains;
   f. Springs;
   g. Water from crawl space pumps;
   h. Footing drains;
   i. Air conditioning condensation;
   j. Flows from riparian habitats and wetlands;
   k. Water line flushing;
   l. Landscape irrigation;
   m. Discharges from potable water sources other than water main breaks;
   n. Irrigation water;
   o. Lawn watering;
   p. Individual residential car washing; and
   q. Dechlorinated swimming pool discharges.

3. When a discharge category above is identified as a significant source of pollutants to waters of the United States, the Copermittee shall either:

   a. Prohibit the discharge category from entering its MS4; ***OR***

   b. Not prohibit the discharge category and implement, or require the responsible party(ies) to implement, BMPs which will reduce pollutants to the MEP; ***AND***

   c. For each discharge category not prohibited, the Copermittee shall submit the following information to the SDRWQCB within **365 ~~180~~ days** of adoption of this Order:

      (1) The non-storm water discharge category listed above which the Copermittee elects not to prohibit; and

      (2) The BMP(s) for each discharge category listed above which the Copermittee will implement, or require the responsible party(ies) to implement, to prevent or reduce pollutants to the MEP.

4. **Fire Fighting Flows:** ~~BMPs must be implemented to reduce pollutants from non-emergency fire fighting flows (i.e., flows from controlled or practice blazes) identified by the Copermittee to be significant sources of pollutants to waters of the United States.~~ Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. As part of the Jurisdictional URMP, each Copermittee shall develop and implement a program within 365 days of adoption of this Order to reduce pollutants from non-emergency fire fighting flows (i.e., flows from controlled or practice blazes and maintenance activities) identified by the Copermittee to be significant sources of pollutants to waters of the United States.

5. **Dry Weather Analytical Monitoring and Non-Storm Water Discharges:** Each Copermittee shall examine all dry weather analytical monitoring results collected in accordance with section F.5. and Attachment E of this Order to identify water quality problems which may be the result of any non-prohibited discharge category(ies) identified above in Non-Storm Water Discharges to MS4s Prohibition B.2. Follow-up investigations shall be conducted as necessary to identify and control any non-prohibited discharge category(ies) listed above. Non-prohibited discharges listed in B.2. above which contain pollutants which cannot be reduced to insignificant levels ~~the maximum extent practicable~~ by the implementation of BMPs shall be prohibited on a categorical or case by case basis.

C. RECEIVING WATER LIMITATIONS

1. Discharges from MS4s that cause or contribute to the violation of water quality standards (designated beneficial uses and water quality objectives developed to protect beneficial uses) are prohibited.

2. Each Copermittee shall comply with Part C.1. of this Order through timely implementation of control measures and other actions to reduce pollutants in urban runoff discharges in accordance with the Jurisdictional Urban Runoff Management Program (Jurisdictional URMP) and other requirements of this Order including any modifications. The Jurisdictional URMP shall be designed to achieve compliance with Part C.1. of this Order. If exceedance(s) of water quality standards persist notwithstanding implementation of the URMP and other requirements of this Order, the Copermittee shall assure compliance with Part C.1. of this Order by complying with the following procedure:

a. Upon a determination by either the Copermittee or the SDRWQCB that MS4 discharges are causing or contributing to an exceedance of an applicable water quality standard, the Copermittee shall promptly notify and thereafter submit a report to the SDRWQCB that describes BMPs that are currently being implemented and additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of water quality standards. The report may be incorporated in the annual update to the Jurisdictional URMP unless the SDRWQCB directs an earlier submittal. The report shall include an implementation schedule. The SDRWQCB may require modifications to the report;

b. Submit any modifications to the report required by the SDRWQCB within 30 days of notification;

c. Within 30 days following approval of the report described above by the SDRWQCB, the Copermittee shall revise its Jurisdictional URMP and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required;

d. Implement the revised Jurisdictional URMP and monitoring program in accordance with the approved schedule.

So long as the Copermittee has complied with the procedures set forth above and are implementing the revised Jurisdictional URMP, the Copermittee does not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the SDRWQCB to do so.

3. Nothing in this section shall prevent the SDRWQCB from enforcing any provision of this Order while the Copermittee prepares and implements the above report.

D. LEGAL AUTHORITY

1. Each Copermittee shall establish, maintain, and enforce adequate legal authority to control pollutant discharges **into** and **from** its MS4 through ordinance, statute, permit, contract or similar means. This legal authority must, at a minimum, authorize the Copermittee to:

   a. Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity **to** its MS4 and control the quality of runoff **from** industrial and construction sites. This requirement applies both to industrial and construction sites which have coverage under the statewide general industrial or construction storm water permits, as well as to those sites which do not. Grading ordinances shall be upgraded and enforced as necessary to comply with this Order.

   b. Prohibit **all** identified illicit discharges not otherwise allowed pursuant to section B.2 including but not limited to:

      (1) Sewage;

(2) Discharges of wash water resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities;

(3) Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility including motor vehicles, cement-related equipment, and port-a-potty servicing, etc.;

(4) Discharges of wash water from mobile operations such as mobile automobile washing, steam cleaning, power washing, and carpet cleaning, etc.;

(5) Discharges of wash water from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, and residential areas including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.;

(6) Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;

(7) Discharges of pool or fountain water containing chlorine, biocides, or other chemicals; discharges of pool or fountain filter backwash water;

(8) Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related wastes; and

(9) Discharges of food-related wastes (e.g., grease, fish processing, and restaurant kitchen mat and trash bin wash water, etc.).

c. Prohibit and eliminate illicit connections to the MS4;

d. Control the discharge of spills, dumping, or disposal of materials other than storm water to its MS4;

e. Require compliance with conditions in Copermittee ordinances, permits, contracts or orders (i.e., hold dischargers to its MS4 accountable for their contributions of pollutants and flows);

f. Utilize enforcement mechanisms to require compliance with Copermittee storm water ordinances, permits, contracts, or orders;

g. Control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Copermittees. ~~(~~Control of the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements with ~~and~~ other owners of the MS4 such as Caltrans or Department of Defense is encouraged.~~)~~;

h. Carry out all inspections, surveillance, and monitoring necessary to determine compliance and noncompliance with local ordinances and permits and with this Order, including the prohibition on illicit discharges to the MS4. This means the Copermittee must have authority to enter, sample, inspect, review and copy records, and require regular reports from industrial facilities discharging into its MS4, including construction sites; and

i. Require the use of best management practices (BMPs) to prevent or reduce the discharge of pollutants to MS4s.

2. Within ~~90~~ **180 days** of adoption of this Order, each Copermittee shall provide to the SDRWQCB a statement certified by its chief legal counsel that the Copermittee has adequate legal authority to implement and enforce each of the requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and this Order. This statement shall include:

a. Identification of all departments within the jurisdiction that conduct urban runoff related activities, and their roles and responsibilities under this Order. Include an up to date organizational chart specifying these departments and key personnel.

b. Citation of urban runoff related ordinances and the reasons they are enforceable;

c. Identification of the local administrative and legal procedures available to mandate compliance with urban runoff related ordinances and therefore with the conditions of this Order;

d. Description of how these ordinances are implemented and appealed; and

e. Description of whether the municipality can issue administrative orders and injunctions or if it must go through the court system for enforcement actions.

E. TECHNOLOGY BASED STANDARDS

Each Copermittee shall implement, or require implementation of, best management practices to ensure that the following pollutant discharges **into** and **from** its MS4 are reduced to the applicable technology based standard as specified below:

Table 3. Technology Based Standards[2]

POLLUTANT DISCHARGE FROM	DESCRIPTION	APPLICABLE PERFORMANCE STANDARD
Industrial Activity owned by the Copermittee	Categorical Industry in 40 CFR 122.26	BAT/BCT (pursuant to Statewide General Industrial

[2] Pursuant to this Order, each Copermittee shall ensure that pollutants in runoff from industrial and construction sites within its jurisdiction have been reduced to the MEP standard before entering its MS4. The industrial and construction site dischargers themselves however must ensure that pollutants in runoff leaving their sites have been reduced to the BAT/BCT standard pursuant to either the statewide General Industrial or Construction Storm Water Permit. Runoff from industrial and construction sites owned by municipalities and subject to either the General Industrial or Construction Storm Water Permits, must meet the BAT/BCT standard.

POLLUTANT DISCHARGE FROM	DESCRIPTION	APPLICABLE PERFORMANCE STANDARD
		Permit)
Industrial Activity	All other industry	MEP
Construction Activity owned by the Copermittee	Greater than or Equal to 5 Acres (or less than 5 acres and Part of a Larger Common Plan of Sale or Development)	BAT/BCT (pursuant to Statewide General Construction Permit)
Construction Activity	All Other construction	MEP
Other Sources	All Other Land Use Activities	MEP
MS4s	All discharges from MS4s	MEP

F. JURISDICTIONAL URBAN RUNOFF MANAGEMENT PROGRAM`

Each Copermittee shall take appropriate actions to reduce discharges of pollutants and runoff flow during each of the three major phases of urban development, i.e., the planning, construction, and existing development (or use) phases.

Each Copermittee shall implement a Jurisdictional Urban Runoff Management Program (Jurisdictional URMP) that contains the components shown below as described in Sections F.1. through F.8:

F.1. Land-Use Planning for New Development and Redevelopment Component
F.2. Construction Component
F.3. Existing Development Component
- **a. Municipal**
- **b. Industrial**
- **c. Commercial**
- **d. Residential**

F.4. Education Component
F.5. Illicit Discharge Detection and Elimination Component
F.6. Public Participation Component
F.7. Assessment of Jurisdictional URMP Effectiveness Component
F.8. Fiscal Analysis Component

F.1. Land-Use Planning for New Development and Redevelopment Component

Each Copermittee shall minimize the short and long-term impacts on receiving water quality from new development and redevelopment. In order to reduce pollutants and runoff flows from new development and redevelopment to the maximum extent practicable, each Copermittee shall at a minimum:

F.1.a ~~Revise~~ Assess General Plan
F.1.b Modify Development Project Approval Processes
F.1.c Revise Environmental Review Processes ~~Including CEQA Checklists~~
F.1.d Conduct Education Efforts Focused on New Development and Redevelopment

F.1.a. ~~Revise~~ Assess General Plan

Each Copermittee's General Plan or equivalent plan (e.g., Comprehensive, Master, or Community Plan) shall include ~~incorporate~~ water quality and watershed protection principles and policies ~~into the General Plan or equivalent plan (e.g., Comprehensive, Master, or Community Plan)~~ to direct land-use decisions and require implementation of consistent water quality protection measures for ~~all~~ development projects. ~~These principles and policies shall be designed to protect natural water bodies, reduce impervious land coverage, slow runoff, and where feasible, maximize opportunities for infiltration of rainwater into soil.~~ As part of its Jurisdictional Urban Runoff Management Program document, each Copermittee shall provide a workplan with time schedule detailing any changes to its General Plan regarding water quality and watershed protection. Examples of ~~Such~~ water quality and watershed protection principles and policies ~~shall~~ to be considered include the following~~for example~~:

(1) Minimize the amount of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible slow runoff and maximize on-site infiltration of runoff.

(2) Implement pollution prevention methods supplemented by pollutant source controls and treatment. Use small collection strategies located at, or as close as possible to, the source (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into an MS4.

(3) Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. Encourage land acquisition of such areas.

(4) Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges.

(5) Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. Require incorporation of structural and non-structural BMPs to mitigate the projected increases in pollutant loads and flows.

(6) Avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss.

(7) Reduce pollutants associated with vehicles and increasing traffic resulting from development. Coordinate local traffic management reduction efforts with the San Diego County Congestion Management Plan.

(8) Implement the San Diego Association of Government's (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy.

~~(9)For new development and significant redevelopment only: The post-development runoff rates and velocities from a site shall not exceed the pre-development runoff rates and velocities from the same site.~~ Post-development runoff from a site shall not contain pollutant loads which cause or contribute to an exceedance of~~r~~ receiving water quality objectives or which have not been reduced to the maximum extent practicable. ~~Post-development runoff discharges into a Clean Water Act section 303(d) water body shall not contain any~~

~~pollutant (for which the water body is already impaired) in levels exceeding pre-development levels (for those same pollutants).~~

F.1.b. Modify Development Project Approval Processes

Prior to project approval and issuance of local permits, Copermittees shall require each ~~review each individual~~ proposed project ~~plan and require~~ to implement measures to ensure that pollutants and runoff from the development will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of receiving water quality objectives. Each Copermittee shall further ensure that all development will be in compliance with Copermittee storm water ordinances, local permits, all other applicable ordinances and requirements, and this Order.

(1) Development Project Requirements ~~Conditions of Approval~~

Each Copermittee shall include development project requirements ~~conditions of approval~~ in local permits to ensure that pollutant discharges and runoff flows from development are reduced to the maximum extent practicable and that receiving water quality objectives are not violated throughout the life of the project. Such requirements ~~conditions~~ shall, at a minimum:

(a) Require project proponent to implement ~~pollution prevention and~~ source control BMPs for all applicable development projects.
(b) Require project proponent to implement site design/landscape characteristics where feasible which maximize infiltration, provide retention, slow runoff, and minimize impervious land coverage for all development projects.
(c) Require project proponent to implement buffer zones for natural water bodies, where feasible. Where buffer zone implementation is infeasible, require project proponent to implement other buffers such as trees, lighting restrictions, access restrictions, etc.
(d) Require industrial applicants subject to California's statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except Construction), (hereinafter General Industrial Permit), to provide evidence of coverage under the General Industrial Permit.
(e) Require project proponent to ensure its grading or other construction activities meet the provisions specified in Section F.2. of this Order.
(f) Require project proponent to provide proof of a mechanism which will ensure ongoing long-term maintenance of all structural post-construction BMPs ~~in perpetuity~~.
(g) ~~Require project proponent to ensure that the post-development runoff rates and velocities from a site do not exceed the pre-development runoff rates and velocities from the same site. Require project proponent to ensure that post-development runoff pollutants loads from a site have been reduced to the maximum extent practicable and do not cause or contribute to an exceedance of water quality objectives. Require project proponent to ensure that post-development runoff into a Clean Water Act section 303(d) water body containing any pollutant (for which the water body is already impaired) does not exceed pre-development levels (for those same pollutants).~~

(2) Standard Urban Storm Water Mitigation Plans (SUSMPs)

Within 365 days of adoption of this Order, the Copermittees shall collectively develop a model Standard Urban Storm Water Mitigation Plan (SUSMP) to reduce pollutants and runoff flows from all new development and significant redevelopment projects falling under the priority project categories or locations listed in section F.1.b.(2)(a) below. Within 180

days of approval of the model SUSMP in the public process by the SDRWQCB, each Copermittee shall adopt its own local SUSMP, and amended ordinances consistent with the approved model SUSMP, and shall submit both (local SUSMP and amended ordinances) to the SDRWQCB.

Immediately following adoption of its local SUSMP, each Copermittee shall ensure that all new development and significant redevelopment projects falling under the priority project categories or locations listed in F.1.b.(2)(a) below meet SUSMP requirements. The SUSMP requirements shall apply to all priority projects or phases of priority projects~~, including those with approved tentative maps,~~ which have not yet begun grading or construction activities. If a Copermittee determines that lawful prior approval of a project exists, whereby application of SUSMP requirements to the project is infeasible, SUSMP requirements need not apply to the project. Where feasible, the Copermittees shall utilize the 18 month SUSMP implementation period to ensure that projects undergoing approval processes include application of SUSMP requirements in their plans.

(a) *Priority Development Project Categories - SUSMP requirements shall apply to all new development and significant redevelopment projects falling under the priority project categories or locations listed below.* Significant redevelopment is defined as the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where significant redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in section F.1.b.(2)(c) applies only to the addition, and not to the entire development.

i. *Home subdivisions of 100 housing units or more*. This category includes single-family homes, multi-family homes, condominiums, and apartments.

ii. *Home subdivisions of 10-99 housing units*. This category includes single-family homes, multi-family homes, condominiums, and apartments.

iii. *Commercial developments greater than 100,000 square feet.* This category is defined as any development on private land that is not for heavy industrial or residential uses where the land area for development is greater than 100,000 square feet. The category includes, but is not limited to: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; commercial airfields; and other light industrial facilities.

iv. *Automotive repair shops.* This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

v. *Restaurants*. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet.

vi. *All hillside development greater than 5,000 square feet.* This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where

the development will grade on any natural slope that is twenty-five percent or greater.

vii. *Environmentally Sensitive Areas: All development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area (where discharges from the development or redevelopment will enter receiving waters within the environmentally sensitive area), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition.* Environmentally sensitive areas include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other equivalent environmentally sensitive areas which have been identified by the Copermittees. "Directly adjacent" means situated within 200 feet of the environmentally sensitive area. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely ~~or predominantly~~ of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

viii. *Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff*. Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.

ix. *Street, roads, highways, and freeways.* This category includes any paved surface which is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.

x. *Retail Gasoline Outlets.* Retail Gasoline Outlet is defined as any facility engaged in selling gasoline.

(b) BMP Requirements – The SUSMP shall include a list of recommended ~~pollution prevention,~~ source control~~,~~ and structural treatment BMPs. The SUSMP shall require all new development and significant redevelopment projects falling under the above priority project categories or locations to implement a combination of BMPs selected from the recommended BMP list, including at a minimum ~~(1) pollution prevention~~

~~BMPs,~~ (1~~2~~) source control BMPs~~,~~ and (2~~3~~) structural treatment BMPs. The BMPs shall, at a minimum:

i. Control the ~~Maintain~~ post~~re~~-development peak storm water runoff discharge rates and velocities to maintain or reduce pre-development downstream erosion, and to protect stream habitat;
ii. Conserve natural areas where feasible;
iii. Minimize storm water pollutants of concern in urban runoff from the new development or significant redevelopment (through implementation of ~~pollution prevention and~~ source control BMPs). Identification of pollutants of concern should include at a minimum consideration of any pollutants for which water bodies receiving the development's runoff ~~receiving water bodies~~ are listed as impaired under Clean Water Act section 303(d), any pollutant associated with the land use type of the development, and any pollutant commonly associated with urban runoff~~, and increased runoff flow rate from the development and its potential downstream impacts~~;
iv. Remove pollutants of concern from urban runoff (through implementation of structural treatment BMPs);
v. Minimize directly connected impervious areas where feasible;
vi. Protect slopes and channels from eroding;
vii. Include storm drain stenciling and signage;
viii. Include properly designed outdoor material storage areas;
ix. Include properly designed trash storage areas;
x. Include proof of a mechanism, to be provided by the project proponent or Copermittee, which will ensure ~~for~~ ongoing long-term structural BMP maintenance;
xi. Include additional water quality provisions applicable to individual priority project categories;
xii. Be correctly designed so as to remove pollutants to the maximum extent practicable~~to maximize their pollutant removal capabilities~~;
xiii. Be implemented ~~as~~ close to pollutant sources, when feasible, ~~as possible~~ and prior to ~~runoff~~ discharging~~es~~ into ~~the MS4 or other~~ receiving waters supporting beneficial uses;
xiv. Ensure that post-development runoff does not contain pollutant loads which cause or contribute to an exceedance of water quality objectives or which have not been reduced to the maximum extent practicable; and
~~xv. Ensure that post-development runoff into a Clean Water Act section 303(d) water body containing any pollutant (for which the water body is already impaired) does not contain those same pollutants in levels exceeding pre-development levels.~~

(c) Numeric Sizing Criteria – The SUSMP shall require structural treatment BMPs to be implemented for ~~at~~ all priority development projects. All structural treatment BMPs shall be located so as to infiltrate, filter, or treat the required runoff volume or flow prior to its discharge to any receiving waterbody supporting beneficial uses. Structural treatment BMPs may be shared by multiple new development projects as long as construction of any shared structural treatment BMPs is completed prior to the use of any new development project from which the structural treatment BMP will receive runoff.

In addition to meeting the BMP requirements listed in item F.1.b.(2)(b) above, all

structural treatment BMPs for a single priority development project shall collectively be sized to comply with the following numeric sizing criteria:

Volume

Volume-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

i. The volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record (0.6 inch approximate average for the San Diego County area);[3] or

ii. The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998); or

iii. The volume of annual runoff based on unit basin storage volume, to achieve 90% or more volume treatment by the method recommended in California Stormwater Best Management Practices Handbook – Industrial/Commercial, (1993); or

iv. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85th percentile 24-hour runoff event;[4]

OR

Flow

Flow-based BMPs shall be designed to mitigate (infiltrate, filter, or treat) either:

i. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour; or

ii. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or

iii. The maximum flow rate of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant

[3] This volume is not a single volume to be applied to all of San Diego County. The size of the 85th percentile storm event is different for various parts of the ~~c~~County. The Copermittees are encouraged to calculate the 85th percentile storm event for each of their jurisdictions using local rain data pertinent to their particular jurisdiction. ~~T~~(the 0.6 inch standard is a rough average for the ~~c~~County and should only be used where appropriate rain data is not available). In addition, isopluvial maps contained in the County of San Diego Hydrology Manual may be used to extrapolate rainfall data to areas where insufficient data exists in order to determine the volume of the local 85th percentile storm event in such areas. Where the Copermittees will use isopluvial maps to determine the 85th percentile storm event in areas lacking rain data, the Copermittees shall describe their method for using isopluvial maps in the model and local SUSMPs.

[4] Under this volume criteria, hourly rainfall data may be used to calculate the 85th percentile storm event, where each storm event is identified by its separation from other storm events by at least six hours of no rain. Where the Copermittees may use hourly rainfall data to calculate the 85th percentile storm event, the Copermittees shall describe their method for using hourly rainfall data to calculate the 85th percentile storm event in the model and local SUSMPs.

loads and flows as achieved by mitigation of the 85th percentile hourly rainfall intensity multiplied by a factor of two.

(d) Equivalent Numeric Sizing Criteria - The Copermittees may develop, as part of the model SUSMP, any equivalent method for calculating the volume or flow which must be mitigated (i.e., any equivalent method for calculating numeric sizing criteria) by ~~or performance-based standard for~~ post-construction structural treatment BMPs ~~as part of the model SUSMP.~~ Such equivalent sizing criteria may be authorized by the SDRWQCB for use in place of the above criteria. In the absence of development and subsequent authorization of such equivalent numeric sizing criteria, the above numeric sizing criteria requirement shall be implemented.

(e) Pollutants or Conditions of Concern – As part of the model SUSMP, the Copermittees shall develop a procedure for pollutants or conditions of concern to be identified for each new development or significant redevelopment project. The procedure shall include, at a minimum, consideration of (1) receiving water quality (including pollutants for which receiving waters are listed as impaired under Clean Water Act section 303(d)); (2) land use type of the development project and pollutants associated with that land use type; (3) pollutants expected to be present on site; ~~and~~ (4) changes in storm water discharge flow rates, velocities, durations, ~~and~~ volumes resulting from the development project;

and (5) sensitivity of receiving waters to changes in storm water discharge flow rates, velocities, durations, and volumes.

(f) Implementation Process – As part of the model SUSMP, the Copermittees shall develop a process by which SUSMP requirements will be implemented. The process shall identify at what point in the planning process development projects will be required to meet SUSMP requirements. The process shall also include identification of the roles and responsibilities of various municipal departments in implementing the SUSMP requirements, as well as any other measures necessary for the implementation of SUSMP requirements.

(g) Restaurants Less than 5,000 Square Feet - New development and significant redevelopment restaurant projects where the land area development is less than 5,000 square feet shall meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirement F.1.b.(2)(c) ~~above~~and peak flow rate requirement F.1.b(2)(b)(i). A restaurant is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812).

(h) Waiver Provision – A Copermittee may provide for a project to be waived from the requirement of implementing structural treatment BMPs (F.1.b.(2)(c)) if infeasibility can be established. A waiver of infeasibility shall only be granted by a Copermittee when all available structural treatment BMPs have been considered and rejected as infeasible. Copermittees shall notify the SDRWQCB within 5 days of each waiver issued and shall include the name of the person granting each waiver.

As part of the model SUSMP, the Copermittees shall develop a program to require project proponents who have received waivers to transfer the savings in cost, as determined by the Copermittee(s), to a storm water mitigation fund. This program shall be implemented by all Copermittees which choose to provide waivers. Funds shall only

be used on projects to improve urban runoff quality within the watershed of the waived project. The waiver program shall, at a minimum, identify:

i. The entity or entities that will manage the storm water mitigation fund (i.e., assume full responsibility for)
ii. The range and types of acceptable projects for which mitigation funds may be expended;
iii. The entity or entities that will assume full responsibility for each mitigation project including its successful completion
iv. How the dollar amount of fund contributions will be determined.

(i) Infiltration and Groundwater Protection – To protect groundwater quality, each Copermittee shall apply restrictions to the use of structural treatment BMPs which are designed to primarily function as infiltration devices (such as infiltration trenches and infiltration basins). Such restrictions shall ensure that the use of such infiltration structural treatment BMPs shall not cause or contribute to an exceedance of groundwater quality objectives. At a minimum, use of ~~infiltration~~ structural treatment BMPs which are designed to primarily function as infiltration devices shall meet the following conditions:[5]

~~i. Use of infiltration structural treatment BMPs shall not cause or contribute to an exceedance of groundwater water quality objectives.~~
~~ii.~~i. Urban runoff shall undergo pretreatment such as sedimentation or filtration prior to infiltration.
~~iii.~~ii. All dry weather flows shall be diverted from infiltration devices.
~~iv.~~iii. Pollution prevention and source control BMPs shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used.
~~v.~~iv. Infiltration structural treatment BMPs shall be adequately maintained so that they remove pollutants to the maximum extent practicable~~to maximize pollutant removal capabilities~~.
~~vi.~~v. The vertical distance from the base of any infiltration structural treatment BMP to the seasonal high groundwater mark shall be at least 10 feet. Where groundwater basins do not support beneficial uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained.
~~vii.~~vi. The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, and infiltration rate) which are adequate for proper infiltration durations and treatment of urban runoff for the protection of groundwater beneficial uses.
~~viii.~~vii. Infiltration structural treatment BMPs shall not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries; and other high threat to water quality land uses and activities as designated by each Copermittee.

[5] These conditions do not apply to structural treatment BMPs which allow incidental infiltration and are not designed to primarily function as infiltration devices (such as grassy swales, detention basins, vegetated buffer strips, constructed wetlands, etc.)

~~ix.~~viii. Infiltration structural BMPs shall be located a minimum of 100 feet horizontally from any water supply wells.

As part of the model and local SUSMPs, the Copermittees may develop alternative restrictions on the use of structural treatment BMPs which are designed to primarily function as infiltration devices.

(j) Downstream Erosion – As part of the model SUSMP and the local SUSMPs, the Copermittees shall develop criteria to ensure that discharges from new development and significant redevelopment maintain or reduce pre-development downstream erosion and protect stream habitat. At a minimum, criteria shall be developed to control peak storm water discharge rates and velocities in order to maintain or reduce pre-development downstream erosion and protect stream habitat. Storm water discharge volumes and durations should also be considered.

F.1.c. Revise Environmental Review Processes ~~Including CEQA Checklists~~

(1) To the extent feasible, the Copermittees shall ~~R~~revise their current environmental review processes ~~and California Environmental Quality Act (CEQA) initial study checklists~~ to include requirements for evaluation of water quality effects and identification of appropriate mitigation measures. ~~The CEQA initial study checklist shall include~~ The following questions are examples to be considered in addressing increased pollutants and flows from ~~the~~ proposed project~~s such as~~:

(a) Could ~~Would~~ the proposed project result in an increase in pollutant discharges to receiving waters? Consider water quality parameters such as temperature, dissolved oxygen, turbidity and other typical storm water pollutants (e.g., heavy metals, pathogens, petroleum derivatives, synthetic organics, sediment, nutrients, oxygen-demanding substances, and trash).
(b) Could ~~Would~~ the proposed project result in significant alteration of receiving water quality during or following construction?
(c) Could ~~Would~~ the proposed project result in increased impervious surfaces and associated increased runoff?
(d) Could ~~Would~~ the proposed project create a significant adverse environmental impact to drainage patterns due to changes in runoff flow rates or volumes?
(e) Could ~~Would~~ the proposed project result in increased erosion downstream?
(f) Is the project tributary to an already impaired water body, as listed on the Clean Water Act Section 303(d) list. If so, can ~~will~~ it result in an increase in any pollutant for which the water body is already impaired?
(g) Is project tributary to other environmentally sensitive areas? If so, can ~~will~~ it exacerbate already existing sensitive conditions?
(h) Could ~~Would~~ the proposed project have a potentially significant environmental impact on surface water quality, to either marine, fresh, or wetland waters?
(i) Could ~~Would~~ the proposed project have a potentially significant adverse impact on ground water quality?
(j) Could ~~Will~~ the proposed project cause or contribute to an exceedance of applicable surface or groundwater receiving water quality objectives or degradation of beneficial uses?
(j) (k) Can ~~Will~~ the project impact aquatic, wetland, or riparian habitat?

F.1.d. Conduct Education Efforts Focused on New Development and Redevelopment

(1) Internal: Municipal Staff and Others

Each Copermittee shall implement an education program to ensure that its planning and development review staffs (and Planning Boards and Elected Officials, if applicable) have an understanding of:

(a) Federal, state, and local water quality laws and regulations applicable to development projects;
(b) The connection between land use decisions and short and long-term water quality impacts (i.e., impacts from land development and urbanization); and
(c) How impacts to receiving water quality resulting from development can be minimized (i.e., through implementation of various source control and structural BMPs).

(2) External: Project Applicants, Developers, Contractors, Property Owners, Community Planning Groups

As early in the planning and development process as possible, each Copermittee shall implement a program to educate project applicants, developers, contractors, ~~and~~ property owners, and community planning groups on the following topics:

(a) Federal, state, and local water quality laws and regulations applicable to development projects;
(b) Required federal, state, and local permits pertaining to water quality;
(c) Water quality impacts of urbanization; and
(d) Methods for minimizing the impacts of development on receiving water quality.

F.2. Construction Component

Each Copermittee shall implement a Construction Component of its Jurisdictional URMP to reduce pollutants in runoff from construction sites during all construction phases. At a minimum the construction component shall address:

F.2.a. Pollution Prevention
F.2.b. Grading Ordinance Update
F.2.c. Modify Construction and Grading Approval Process
F.2.d. Source Identification
F.2.e. Threat to Water Quality Prioritization
F.2.f. BMP Implementation
F.2.g. Inspection of Construction Sites
F.2.h. Enforcement of Construction Sites
F.2.i. Reporting of Non-compliant Sites
F.2.j. Education Focused on Construction Activities

F.2.a. Pollution Prevention (Construction)

Each Copermittee shall implement pollution prevention methods in its Construction Component and shall require its use by construction site owners, developers, contractors, and other responsible parties, where appropriate.

F.2.b. Grading Ordinance Update (Construction)

Each Copermittee shall review and update its grading ordinances as necessary for compliance with its storm water ordinances and this Order. The updated grading ordinance shall require ~~pollution prevention, source control, and structural treatment~~ implementation of BMPs and other measures ~~to be implemented~~ during all construction activities, including the following BMPs and other measures or their equivalent~~for example~~:

(1) Erosion prevention;
(2) Seasonal restrictions on grading;
(3) Slope stabilization requirements;
(4) Phased grading;
(5) Revegetation as early as feasible;
(6) Preservation of natural hydrologic features;
(7) Preservation of riparian buffers and corridors;
(8) Maintenance of all source control and structural treatment BMPs; and
(9) Retention and proper management of sediment and other construction pollutants on site.

F.2.c Modify Construction and Grading Approval Process (Construction)

Prior to approval and issuance of local construction and grading permits, each Copermittee shall require ~~review~~ all individual proposed construction and grading projects to implement ~~plans and require~~ measures to ensure that pollutants from the site will be reduced to the maximum extent practicable and will not cause or contribute to an exceedance of water quality objectives. Each Copermittee shall further ensure that all grading and construction activities will be in compliance with applicable Copermittee ordinances (e.g., storm water, grading, construction, etc.) and other applicable requirements, including this Order.

(1) Construction and Grading Project Requirements ~~Conditions of Approval~~

Include construction and grading project requirements ~~conditions of approval~~ in local grading and construction permits to ensure that pollutant discharges are reduced to the maximum extent practicable and water quality objectives are not violated during the construction phase. Such requirements ~~conditions~~ shall include the following requirements or their equivalent~~for example~~:

(a) Require project proponent to develop and implement a plan to manage storm water and non-storm water discharges from the site at all times;
(b) Require project proponent to minimize grading during the wet season and coincide grading with seasonal dry weather periods to the extent feasible. If grading does occur during the wet season, require project proponent to implement additional BMPs for any rain events which may occur, as necessary for compliance with this Order;
(c) Require project proponent to emphasize erosion prevention as the most important measure for keeping sediment on site during construction;
(d) Require project proponent to utilize sediment controls as a supplement to erosion prevention for keeping sediment on-site during construction, and never as the single or primary method;
(e) Require project proponent to minimize areas that are cleared and graded to only the portion of the site that is necessary for construction;
(f) Require project proponent to minimize exposure time of disturbed soil areas;

(g) Require project proponent to temporarily stabilize and reseed disturbed soil areas as rapidly as possible;
(h) (h) Require project proponent to permanently revegetate or landscape as early as feasible;
(i) Require project proponent to stabilize all slopes; and
(j) Require project proponents subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities, (hereinafter General Construction Permit), to provide evidence of existing coverage under the General Construction Permit.

F.2.d. Source Identification (Construction)

Each Copermittee shall annually develop and update, prior to the rainy season, a watershed based inventory of all construction sites within its jurisdiction regardless of site size or ownership. This requirement is applicable to all construction sites regardless of whether the construction site is subject to the California statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities (hereinafter General Construction Permit), or other individual NPDES permit. The use of an automated database system, such as Geographical Information System (GIS) is highly recommended, but not required.

F.2.e. Threat to Water Quality Prioritization (Construction)

(1) To establish priorities for construction oversight activities under this Order, the Copermittee shall prioritize its watershed-based inventory (developed pursuant to F.2.d. above) by threat to water quality. Each construction site shall be classified as high, medium, or low threat to water quality. In evaluating threat to water quality each Copermittee shall consider (1) soil erosion potential; (2) site slope; (3) project size and type; (4) sensitivity of receiving water bodies; (5) proximity to receiving water bodies; (6) non-storm water discharges; and (7) any other relevant factors.

(2) A high priority construction site shall at a minimum be defined as a site meeting either ~~any one~~ of the following criteria or equivalent criteria:

(a) The site is 50 acres or more~~;~~ and grading will occur during the wet season; OR
~~(b)Grading will occur during the wet season;~~
~~Highly erosive soils;~~
~~Hillside development; and~~
(b) The site is (1) 5 acres or more and (2) ~~T~~tributary to a Clean Water Act section 303(d) ~~impaired~~ water body impaired for sediment or is within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an environmentally sensitive area (as defined in section F.1.b.(2)(a)vii of this Order).

F.2.f. BMP Implementation (Construction)

(1) Each Copermittee shall designate a set of minimum BMPs for high, medium, and low threat to water quality construction sites (as determined under section F.2.e). BMPs are to be implemented year round.

(2) Each Copermittee shall implement, or require the implementation of, the designated minimum BMPs (based upon the site's threat to water quality rating) at each construction site within its jurisdiction year round. If particular minimum BMPs are infeasible at any

specific site, each Copermittee shall implement, or require the implementation of, other equivalent BMPs. Each Copermittee shall also implement or require any additional site specific BMPs as necessary to comply with this Order, including BMPs which are more stringent than those required under the statewide General Construction Permit.

(3) Each Copermittee shall implement, or require the implementation of, BMPs year round; however, BMP implementation requirements can vary based on wet and dry seasons.

(4) Each Copermittee shall implement, or require implementation of, additional controls for construction sites tributary to Clean Water Act section 303(d) ~~impaired~~ water bodies impaired for sediment as necessary to comply with this Order. ~~,~~Each Copermittee shall implement, or require implementation of, additional controls for construction sites within or adjacent to or discharging directly to coastal lagoons~~,~~ or other receiving waters within environmentally sensitive areas (as defined in section F.1.b.(2)(a)(vii) of this Order) as necessary to comply with this Order.

F.2.g. Inspection of Construction Sites (Construction)

(1) Each Copermittee shall conduct construction site inspections for compliance with its ordinances (grading, storm water, etc.), permits (construction, grading, etc.), and this Order. Inspections shall include review of site erosion control and BMP implementation plans.

(2) Each Copermittee shall establish inspection frequencies and priorities as determined by the threat to water quality prioritization described in F.2.e above. During the wet season (i.e., October 1 through April 30 of each year), each Copermittee shall inspect, at a minimum, each High Priority construction site, either:

(a) Weekly
OR
(b) Monthly for any site that the responsible Copermittee certifies in a written statement to the SDRWQCB all of the following (certified statements may be submitted to the SDRWQCB at any time for one or more sites):

i. Copermittee has record of construction site's Waste Discharge Identification Number (WDID#) documenting construction site's coverage under the statewide General Construction Permit; and
ii. Copermittee has reviewed the constructions site's Storm Water Pollution Prevention Plan (SWPPP); and
iii. Copermittee finds SWPPP to be in compliance with all local ordinances, permits, and plans; and
iv. Copermittee finds that the SWPPP is being properly implemented on site.

At a minimum, Medium and Low Priority construction sites shall be inspected by Copermittees twice during the wet season. All construction sites shall be inspected by the Copermittees as needed during the dry season (i.e., May 1 through September 30 of each year).

(3) Based upon site inspection findings, each Copermittee shall implement all follow-up actions necessary to comply with this Order.

F.2.h. Enforcement of Construction Sites (Construction)

Each Copermittee shall enforce its ordinances (grading, storm water, etc.) and permits (construction, grading, etc.) at all construction sites as necessary to maintain compliance with this Order. Copermittee ordinances or other regulatory mechanisms shall include sanctions to ensure compliance. Sanctions shall include the following or their equivalent~~for example:~~ Non-monetary penalties, fines, bonding requirements, and/or permit denials for non-compliance.

F.2.i. Reporting of Non-compliant Sites (Construction)

Each Copermittee shall provide oral notification to the SDRWQCB of non-compliant sites that are determined to pose a threat to human or environmental health within its jurisdiction within 24 hours of the ~~incidence~~discovery of noncompliance, as required under section R.1 (and ~~B.7~~ B.6 of Attachment C) of this Order.

Each Copermittee shall develop and submit criteria by which to evaluate events of non-compliance to determine whether they pose a threat to human or environmental health. These criteria shall be submitted in the Jurisdictional Urban Runoff Management Program Document and Annual Reports for SDRWQCB review.

Such oral notification shall be followed up by a written report to be submitted to the SDRWQCB within 5 days of the incidence of non-compliance as required under section R.1 (and ~~B.7~~ B.6 of Attachment C) of this Order. Sites are considered non-compliant when one or more violations of local ordinances, permits, plans, or this Order exist on the site.

F.2.j. Education Focused on Construction Activities (Construction)

(1) Internal: Municipal Staff

Each Copermittee shall implement an education program to ensure that its construction, building, and grading review staffs and inspectors have an understanding of:

(a) Federal, state, and local water quality laws and regulations applicable to construction and grading activities.
(b) The connection between construction activities and water quality impacts (i.e., impacts from land development and urbanization).
(c) How erosion can be prevented.
(d) How impacts to receiving water quality resulting from construction activities can be minimized (i.e., through implementation of various source control and structural BMPs).
(e) Applicable topics listed in section F.4. of this Order.

(2) External: Project Applicants, Contractors, Developers, Property Owners, and other Responsible Parties

Each Copermittee shall implement an education program to ensure that project applicants, contractors, developers, property owners, and other responsible parties have an understanding of the topics outlined in section F.2.j.1. above of this Order.

F.3. Existing Development Component

Each Copermittee shall minimize the short and long-term impacts on receiving water quality from all types of existing development.

F.3.a. Municipal (Existing Development)

Each Copermittee shall implement a Municipal (Existing Development) Component to prevent or reduce pollutants in runoff from all municipal land use areas and activities. At a minimum the municipal component shall address:

F.3.a.(1) Pollution Prevention
F.3.a.(2) Source Identification
F.3.a.(3) Threat to Water Quality Prioritization
F.3.a.(4) BMP Implementation
F.3.a.(5) Maintenance of Municipal Separate Storm Sewer System
F.3.a.(6) Management of Pesticides, Herbicides, and Fertilizers
F.3.a.(7) Inspection of Municipal Areas and Activities
F.3.a.(8) Enforcement of Municipal Areas and Activities

F.3.a.(1) Pollution Prevention (Municipal)

Each Copermittee shall implement pollution prevention methods in its Municipal (Existing Development) Component and shall require its use by appropriate municipal departments and personnel, where appropriate.

F.3.a.(2) Source Identification (Municipal)

Each Copermittee shall develop, and update annually, a watershed based inventory of the name, address (if applicable), and description of all municipal land use areas and activities which generate pollutants. The use of an automated database system, such as Geographical Information System (GIS) is highly recommended when applicable, but not required.

F.3.a.(3) Threat to Water Quality Prioritization (Municipal)

(a) To establish priorities for oversight of municipal areas and activities required under this Order, each Copermittee shall prioritize each watershed inventory in F.3.a.2. above by threat to water quality and update annually. Each municipal area and activity shall be classified as high, medium, or low threat to water quality. In evaluating threat to water quality, each Copermittee shall consider (1) type of municipal area or activity; (2) materials used; (3) wastes generated; (4) pollutant discharge potential; (5) non-storm water discharges; (6) size of facility or area; (7) proximity to receiving water bodies; (8) sensitivity of receiving water bodies; and (9) any other relevant factors.

(b) At a minimum, the high priority municipal areas and activities shall include the following:

i. Roads, Streets, Highways, and Parking Facilities.
ii. Flood Management Projects and Flood Control Devices.
iii. Areas and activities tributary to a Clean Water Act section 303(d) impaired water body, where an area or activity generates pollutants for which the water

body is impaired. Areas and activities within or adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas (as defined in section F.1.b.(2)(a)vii of this Order).

iv. Municipal Waste Facilities.

- Active or closed municipal landfills;
- Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems;
- Municipal separate storm sewer systems;
- Incinerators;
- Solid waste transfer facilities;
- Land application sites;
- Uncontrolled sanitary landfills;
- Corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles;
- Sites for disposing and treating sewage sludge; and
- Hazardous waste treatment, disposal, and recovery facilities.

v. Other municipal areas and activities that the Copermittee determines may contribute a significant pollutant load to the MS4.

vi. Municipal airfields.

F.3.a.(4) BMP Implementation (Municipal)

(a) Each Copermittee shall designate a set of minimum BMPs for high, medium, and low threat to water quality municipal areas and activities (as determined under section F.3.a.(3)). The designated minimum BMPs for high threat to water quality municipal areas and activities shall be area or activity specific as appropriate.

(b) Each Copermittee shall implement, or require the implementation of, the designated minimum BMPs (based upon the threat to water quality rating) at each municipal area or activity within its jurisdiction. If particular minimum BMPs are infeasible for any specific area or activity, each Copermittee shall implement, or require implementation of other equivalent BMPs. Each Copermittee shall also implement any additional BMPs as are necessary to comply with this Order.

i. Each Copermittee shall evaluate feasibility of retrofitting existing structural flood control devices and retrofit where needed.

(c) Each Copermittee shall implement, or require implementation of, any additional controls for municipal areas and activities tributary to Clean Water Act section 303(d) impaired water bodies (where an area or activity generates pollutants for which the water body is impaired) as necessary to comply with this Order. Each Copermittee shall implement, or require implementation of, additional controls for municipal areas and activities within or directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas (as defined in section F.1.b.(2)(a)(vii) of this Order) as necessary to comply with this Order.

F.3.a.(5) Maintenance of Municipal Separate Storm Sewer System (Municipal)

(a) Each Copermittee shall implement a schedule of maintenance activities at all structural controls designed to reduce pollutant discharges to or from its MS4s and related

drainage structures.

(b) Each Copermittee shall implement a schedule of maintenance activities for the municipal separate storm sewer system.

(c) The maintenance activities must, at a minimum, include:

i. Inspection and removal of accumulated waste (e.g. sediment, trash, debris and other pollutants) between May 1 and September 30 of each year;

ii. Additional cleaning as necessary between October 1 and April 30 of each year;

iii. Record keeping of cleaning and the overall quantity of waste removed;

iv. Proper disposal of waste removed pursuant to applicable laws;

v. Measures to eliminate waste discharges during MS4 maintenance and cleaning activities.

F.3.a.(6) Management of Pesticides, Herbicides, and Fertilizers (Municipal)

The Copermittees shall implement BMPs to reduce the contribution of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers from municipal areas and activities to MS4s. Important municipal areas and activities include municipal facilities, public rights-of-way, parks, recreational facilities, golf courses, cemeteries, botanical or zoological gardens and exhibits, landscaped areas, etc.

Such BMPs shall include, at a minimum: (1) educational activities, permits, certifications and other measures for municipal applicators and distributors; (2) integrated pest management measures that rely on non-chemical solutions; (3) the use of native vegetation; (4) schedules for irrigation and chemical application; and (5) the collection and proper disposal of unused pesticides, herbicides, and fertilizers.

F.3.a.(7) Inspection of Municipal Areas and Activities (Municipal)

At a minimum, each Copermittee shall inspect high priority municipal areas and activities annually. Based upon site inspection findings, each Copermittee shall implement all follow-up actions necessary to comply with this Order.

F.3.a.(8) Enforcement of Municipal Areas and Activities (Municipal)

Each Copermittee shall enforce its storm water ordinance for all municipal areas and activities as necessary to maintain compliance with this Order.

F.3.b. Industrial (Existing Development)

Each Copermittee shall implement an Industrial (Existing Development) Component to reduce pollutants in runoff from all industrial sites. At a minimum the industrial component shall address:

F.3.b.(1) Pollution Prevention

F.3.b.(2) Source Identification
F.3.b.(3) Threat to Water Quality Prioritization
F.3.b.(4) BMP Implementation
F.3.b.(5) Monitoring of Industrial Sites
F.3.b.(6) Inspection of Industrial Sites
F.3.b.(7) Enforcement Measures for Industrial Sites
F.3.b.(8) Reporting of Non-compliant Sites

F.3.b.(1) Pollution Prevention (Industrial)

Each Copermittee shall implement pollution prevention methods in its Industrial (Existing Development) Component and shall require its use by industry, where appropriate.

F.3.b.(2) Source Identification (Industrial)

Each Copermittee shall develop and update annually a watershed-based inventory of all industrial sites within its jurisdiction regardless of site ownership. This requirement is applicable to all industrial sites regardless of whether the industrial site is subject the California statewide General NPDES Permit for Storm Water Discharges Associated With Industrial Activities, Except Construction (hereinafter General Industrial Permit) or other individual NPDES permit.

The inventory shall include the following minimum information for each industrial site: name; address; and a narrative description including SIC codes which best reflects the principal products or services provided by each facility. The use of an automated database system, such as Geographical Information System (GIS) is highly recommended, but not required.

F.3.b.(3) Threat to Water Quality Prioritization (Industrial)

(a) To establish priorities for industrial oversight activities under this Order, the Copermittee shall prioritize each watershed-based inventory in F.3.b.(2) above by threat to water quality and update annually. Each industrial site shall be classified as high, medium, or low threat to water quality. In evaluating threat to water quality each Copermittee shall consider (1) type of industrial activity (SIC Code); (2) materials used in industrial processes; (3) wastes generated; (4) pollutant discharge potential; (5) non-storm water discharges; (6) size of facility; (7) proximity to receiving water bodies; (8) sensitivity of receiving water bodies; (9) whether the industrial site is subject to the statewide General Industrial Permit; and (10) any other relevant factors.

(b) At a minimum the high priority industrial sites shall include industrial facilities that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA); industrial facilities tributary to a Clean Water Act section 303(d) impaired water body, where a facility generates pollutants for which the water body is impaired; industrial facilities within or directly adjacent to or discharging directly to coastal lagoons or other receiving waters within environmentally sensitive areas (as defined in section F.1.b.(2)(a)vii of this Order); facilities subject to the statewide

General Industrial Permit; and all other industrial facilities that the Copermittee determines are contributing significant pollutant loading to its MS4, regardless of whether such facilities are covered under the statewide General Industrial Permit or other NPDES permit.

F.3.b.(4) BMP Implementation (Industrial)

(a) Each Copermittee shall designate a set of minimum BMPs for high, medium, and low threat to water quality industrial sites (as determined under section F.3.b.(3)). The designated minimum BMPs for high threat to water quality industrial sites shall be industry and site specific as appropriate.

(b) Each Copermittee shall implement, or require the implementation of, the designated minimum BMPs (based upon the site's threat to water quality rating) at each industrial site within its jurisdiction. If particular minimum BMPs are infeasible at any specific site, each Copermittee shall implement, or require implementation of, other equivalent BMPs. Each Copermittee shall also implement or require any additional site specific BMPs as necessary to comply with this Order including BMPs which are more stringent than those required under the statewide General Industrial Permit.

(c) Each Copermittee shall implement, or require implementation of, additional controls for industrial sites tributary to Clean Water Act section 303(d) impaired water bodies~~,~~ (where a site generates pollutants for which the water body is impaired) as necessary to comply with this Order. Each Copermittee shall implement, or require implementation of, additional controls for industrial sites within or directly adjacent to or discharging directly to coastal lagoons~~,~~ or other receiving waters within environmentally sensitive areas (as defined in section F.1.b.(2)(a)(vii) of this Order) as necessary to comply with this Order.

F.3.b.(5) Monitoring of Industrial Sites (Industrial)

(a) Each Copermittee shall conduct, or require industry to conduct, a monitoring program for runoff from each high threat to water quality industrial site (identified in F.3.b.(3) above). Group monitoring by multiple industrial sites conducted under group monitoring programs approved by the State Water Resources Control Board is acceptable.

(b) At a minimum, the monitoring program shall provide quantitative data from two storm events per year on the following constituents:

i. Any pollutant listed in effluent guidelines subcategories where applicable;
ii. Any pollutant for which an effluent limit has been established in an existing NPDES permit for the facility;
iii. Oil and grease or Total Organic Carbon (TOC);
iv. pH;
v. Total suspended solids (TSS);
vi. Specific conductance; and
vii. Toxic chemicals and other pollutants that are likely to be present in storm water discharges.

F.3.b.(6) Inspection of Industrial Sites (Industrial)

(a) Each Copermittee shall conduct industrial site inspections for compliance with its ordinances, permits, and this Order. Inspections shall include review of BMP implementation plans.

(b) Each Copermittee shall establish inspection frequencies and priorities as determined by the threat to water quality prioritization described in F.3.b.(3) above. Each Copermittee shall inspect high priority industrial sites, at a minimum:

i. Annually

OR

ii. Bi-annually for any site that the responsible Copermittee certifies in a written statement to the SDRWQCB all of the following (certified statements may be submitted to the SDRWQCB at any time for one or more sites):

- Copermittee has record of industrial site's Waste Discharge Identification Number (WDID#) documenting industrial site's coverage under the statewide General Industrial Permit; and
- Copermittee has reviewed the industrial site's Storm Water Pollution Prevention Plan (SWPPP); and
- Copermittee finds SWPPP to be in compliance with all local ordinances, permits, and plans; and
- Copermittee finds that the SWPPP is being properly implemented on site.

Each Copermittee shall inspect medium and low threat to water quality industrial sites as needed.

(c) Based upon site inspection findings, each Copermittee shall implement all follow-up actions necessary to comply with this Order.

(d) To the extent that the SDRWQCB has conducted an inspection of a high priority industrial site during a particular year, the requirement for the responsible Copermittee to inspect this site during the same year will be satisfied.

F.3.b.(7) Enforcement of Industrial Sites (Industrial)

Each Copermittee shall enforce its storm water ordinance at all industrial sites as necessary to maintain compliance with this Order. Copermittee ordinances or other regulatory mechanisms shall include sanctions to ensure compliance. Sanctions shall include the following or their equivalent~~for example~~: Non-monetary penalties, fines, bonding requirements, and/or permit denials for non-compliance.

F.3.b.(8) Reporting of Non-compliant Sites (Industrial)

Each Copermittee shall provide oral notification to the SDRWQCB of non-compliant sites that are determined to pose a threat to human or environmental health within its jurisdiction within 24 hours of the ~~incidence~~discovery of noncompliance, as required under section R.1 (and ~~B.7~~ B.6 of Attachment C) of this Order.

Each Copermittee shall develop and submit criteria by which to evaluate events of non-compliance to determine whether they pose a threat to human or environmental health.

These criteria shall be submitted in the Jurisdictional Urban Runoff Management Program Document and Annual Reports for SDRWQCB review.

Such oral notification shall be followed up by a written report to be submitted to the SDRWQCB within 5 days of the incidence of non-compliance as required under section R.1(and ~~B.7~~ B.6 of Attachment C) of this Order. Sites are considered non-compliant when one or more violations of local ordinances, permits, plans, or this Order exist on the site.

F.3.c. Commercial (Existing Development)

Each Copermittee shall implement a Commercial (Existing Development) Component to reduce pollutants in runoff from commercial sites. At a minimum the commercial component shall address:

F.3.c.(1) Pollution Prevention
F.3.c.(2) Source Identification
F.3.c.(3) BMP Implementation
F.3.c.(4) Inspection of Commercial Sites and Sources
F.3.c.(5) Enforcement of Commercial Sites and Sources

F.3.c.(1) Pollution Prevention (Commercial)

Each Copermittee shall implement pollution prevention methods in its Commercial (Existing Development) Component and shall require its use by commerce, where appropriate.

F.3.c.(2) Source Identification (Commercial)

Each Copermittee shall develop and update annually an inventory of the following high priority threat to water quality commercial sites/sources~~:~~ listed below. (If any commercial site/source listed below is inventoried as an industrial site, as required under section F.3.b.(2) of this Order, it is not necessary to also inventory it as a commercial site/source).

(a) Automobile mechanical repair, maintenance, fueling, or cleaning;
(b) Airplane mechanical repair, maintenance, fueling, or cleaning;
(c) Boat mechanical repair, maintenance, fueling, or cleaning;
(d) Equipment repair, maintenance, fueling, or cleaning;
(e) Automobile and other vehicle body repair or painting;
(f) Mobile automobile or other vehicle washing;
(g) Automobile (or other vehicle) parking lots and storage facilities;
(h) Retail or wholesale fueling;
(i) Pest control services;
(j) Eating or drinking establishments;
(k) Mobile carpet, drape or furniture cleaning;
(l) Cement mixing or cutting;
(m) Masonry;

(n) Painting and coating;
(o) Botanical or zoological gardens and exhibits;
(p) Landscaping;
(q) Nurseries and greenhouses;
(r) Golf courses, parks and other recreational areas/facilities;
(s) Cemeteries;
(t) Pool and fountain cleaning;
(u) Marinas;
(v) Port-a-Potty servicing;
(w) Other commercial sites/sources that the Copermittee determines may contribute a significant pollutant load to the MS4; ~~and~~
(x) Any commercial site or source tributary to a Clean Water Act section 303(d) impaired water body, where the site or source generates pollutants for which the water body is impaired; and
(y) Any commercial site or source within or directly adjacent to or discharging directly to a coastal lagoon or other receiving water within an environmentally sensitive area (as defined in F.1.b(2)(a)vii of this Order).

The use of an automated database system, such as Geographical Information System (GIS) is highly recommended, but not required.

F.3.c.(3) BMP Implementation (Commercial)

(a) Each Copermittee shall designate a set of minimum BMPs for the high priority threat to water quality commercial sites/sources (listed above in section F.3.c.(2)). The designated minimum BMPs for the high threat to water quality commercial sites/sources shall be site and source specific as appropriate.

(b) Each Copermittee shall implement, or require the implementation of, the designated minimum BMPs at each high priority threat to water quality commercial site/source within its jurisdiction. If particular minimum BMPs are infeasible for any specific site/source, each Copermittee shall implement, or require the implementation of, other equivalent BMPs. Each Copermittee shall also implement or require any additional site specific BMPs as necessary to comply with this Order.

(c) Each Copermittee shall implement, or require implementation of, additional controls for commercial sites or sources tributary to Clean Water Act section 303(d) impaired water bodies~~,~~ (where a site or source generates pollutants for which the water body is impaired) as necessary to comply with this Order. Each Copermittee shall implement, or require implementation of, additional controls for commercial sites or sources within or directly adjacent to or discharging directly to coastal lagoons~~,~~ or other receiving waters within environmentally sensitive areas (as defined in section F.1.b.(2)(a)(vii) of this Order) as necessary to comply with this Order.

F.3.c.(4) Inspection of Commercial Sites and Sources (Commercial)

Each Copermittee shall inspect high priority commercial sites and sources as needed. Based upon site inspection findings, each Copermittee shall implement all follow-up actions necessary to comply with this Order.

F.3.c.(5) Enforcement of Commercial Sites and Sources (Commercial)

Each Copermittee shall enforce its storm water ordinance for all commercial sites and sources as necessary to maintain compliance with this Order.

F.3.d. Residential (Existing Development)

Each Copermittee shall implement a Residential (Existing Development) Component to prevent or reduce pollutants in runoff from all residential land use areas and activities. At a minimum the residential component shall address:

F.3.d.(1) Pollution Prevention
F.3.d.(2) Threat to Water Quality Prioritization
F.3.d.(3) BMP Implementation
F.3.d.(4) Enforcement of Residential Areas and Activities

F.3.d.(1) Pollution Prevention (Residential)

Each Copermittee shall include pollution prevention methods in its Residential (Existing Development) Component and shall encourage their use by ~~all~~ residents, where appropriate.

F.3.d.(2) Threat to Water Quality Prioritization (Residential)

Each Copermittee shall identify high priority residential areas and activities. At a minimum, these shall include:

- Automobile repair and maintenance;
- Automobile washing;
- Automobile parking;
- Home and garden care activities and product use (pesticides, herbicides, and fertilizers);
- Disposal of household hazardous waste (e.g., paints, cleaning products);
- Disposal of pet waste;
- Disposal of green waste;
- Any other residential source that the Copermittee determines may contribute a significant pollutant load to the MS4; ~~and~~
- Any residence tributary to a Clean Water Act section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- Any residence within or directly adjacent to or discharging directly to a coastal lagoon or other receiving waters within an environmentally sensitive area (as defined in F.1.b.(2)(a)vii of this Order).

F.3.d.(3) BMP Implementation (Residential)

(a) Each Copermittee shall designate a set of minimum BMPs for high threat to water quality residential areas and activities (as required under section F.3.d.(2)). The designated minimum BMPs for high threat to water quality municipal areas and activities shall be area or activity specific.

(b) Each Copermittee shall require implementation of the designated minimum BMPs for high threat to water quality residential areas and activities. If particular minimum BMPs are infeasible for any specific site/source, each Copermittee shall require implementation of other equivalent BMPs. Each Copermittee shall also implement, or require implementation of, any additional BMPs as are necessary to comply with this Order.

(c) Each Copermittee shall implement, or require implementation of, any additional controls for residential areas and activities tributary to Clean Water Act Section 303(d) impaired water bodies (where a residential area or activity generates pollutants for which the water body is impaired) as necessary to comply with this Order.~~,~~ Each Copermittee shall implement, or require implementation of, additional controls for residential areas within or directly adjacent to or discharging directly to coastal lagoons~~,~~ or other receiving waters within environmentally sensitive areas (as defined in section F.1.b.(2)(a)(vii) of this Order) as necessary to comply with this Order.

F.3.d.(4) Enforcement of Residential Areas and Activities (Residential)

Each Copermittee shall enforce its storm water ordinance for all residential areas and activities as necessary to maintain compliance with this Order.

F.4. Education Component

Each Copermittee shall implement an Education Component using all media as appropriate to (1) measurably increase the knowledge of the target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment. At a minimum the education component shall address the following target communities:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children
- Quasi-Governmental Agencies/Districts (i.e., educational institutions, water districts, sanitation districts, etc.)

F.4.a. All Target Communities

At a minimum the Education Program for each target audience shall contain information on the following topics where applicable:

- State and Federal water quality laws
- Requirements of local municipal permits and ordinances (e.g., storm water and grading ordinances and permits)
- Impacts of urban runoff on receiving waters
- Watershed concepts (i.e., stewardship, connection between inland activities and coastal problems, etc.)
- Distinction between MS4s and sanitary sewers

- Importance of good housekeeping (e.g., sweeping impervious surfaces instead of hosing)
- Pollution prevention and safe alternatives
- Household hazardous waste collection
- Recycling
- BMPs: Site specific, structural and source control
- BMP maintenance
- Non-storm water disposal alternatives (e.g., all wash waters)
- Pet and animal waste disposal
- Proper solid waste disposal (e.g., garbage, tires, appliances, furniture, vehicles)
- Equipment and vehicle maintenance and repair
- Public reporting mechanisms
- Green waste disposal
- Integrated pest management
- Native vegetation
- Proper disposal of boat and recreational vehicle waste
- Traffic reduction, alternative fuel use
- Water conservation

F.4.b. Municipal, Construction, Industrial, Commercial, and Quasi-Governmental (educational institutions, water districts, sanitation districts, etc.) Communities

In addition to the topics listed in F.4.a. above, the Municipal, Construction, Industrial, Commercial, and Quasi-Governmental (Educational Institutions, Water Districts, Sanitation Districts) Communities shall also be educated on the following topics where applicable:

- Basic urban runoff training for all personnel
- Additional urban runoff training for appropriate personnel
- Illicit Discharge Detection and Elimination observations and follow-up during daily work activities
- Lawful disposal of catchbasin and other MS4 cleanout wastes
- Water quality awareness for Emergency/First Responders
- California's Statewide General NPDES Permit for Storm Water Discharges Associated with Industrial Activities (Except Construction).
- California's Statewide General NPDES Permit for Storm Water Discharges Associated with Construction Activities
- SDRWQCB's General NPDES Permit for Groundwater Dewatering
- 401 Water Quality Certification by the SDRWQCB
- Statewide General NPDES Utility Vault Permit (NPDES No. CAG990002)
- SDRWQCB Waste Discharge Requirements for Dredging Activities
- Local requirements beyond statewide general permits
- Federal, state and local water quality regulations that affect development projects
- Water quality impacts associated with land development
- Alternative materials & designs to maintain peak runoff values
- How to conduct a storm water inspection
- Potable water discharges to the MS4
- Dechlorination techniques
- Hydrostatic testing
- Spill response, containment, & recovery
- Preventive maintenance
- How to do your job and protect water quality

F.4.c. Residential, General Public, School Children Communities

In addition to the topics listed in F.4.a. above, the Residential, General Public, and School Children Communities shall be educated on the following topics where applicable:

- Public reporting information resources
- Residential and charity car-washing
- Community activities (e.g., "Adopt a Storm Drain, Watershed, or Highway" Programs, citizen monitoring, creek/beach cleanups, environmental protection organization activities, etc.)

F.5. Illicit Discharge Detection and Elimination Component

Each Copermittee shall implement an Illicit Discharge Detection and Elimination Component containing measures to actively seek and eliminate illicit discharges and connections. At a minimum the Illicit Discharge Detection and Elimination Component shall address:

F.5.a Illicit Discharges and Connections
F.5.b Dry Weather Analytical Monitoring
F.5.c Investigation / Inspection and follow-up
F.5.d Elimination of Illicit Discharges and Connections
F.5.e Enforce Ordinance
F.5.f Prevent and Respond To Sewage Spills (Including from Private Laterals and Failing Septic Systems) and Other Spills
F.5.g Facilitate Public Reporting of Illicit Discharges and Connections – Public Hotline
F.5.h Facilitate Disposal of Used Oil and Toxic Materials
F.5.i Limit Infiltration From Sanitary Sewer to MS4

F.5.a. Illicit Discharges and Connections

Each Copermittee shall implement a program to actively seek and eliminate illicit discharges and connections into its MS4. The program shall address all types of illicit discharges and connections excluding those non-storm water discharges not prohibited by the Copermittee in accordance with Section B. of this Order.

F.5.b. Dry Weather Analytical Monitoring

Each Copermittee shall conduct dry weather analytical monitoring of MS4 outfalls within its jurisdiction to detect illicit discharges and connections in accordance with Attachment E of this Order.

F.5.c. Investigation / Inspection and Follow-Up

Each Copermittee shall investigate and inspect any portion of the MS4 that, based on dry weather analytical monitoring results or other appropriate information, indicates a reasonable potential for illicit discharges, illicit connections, or other sources of non-storm water (including non-prohibited discharge(s) identified in Section B. of this Order). Each Copermittee shall establish criteria to identify portions of the system where such follow-up investigations are appropriate.

F.5.d. Elimination of Illicit Discharges and Connections

Each Copermittee shall eliminate all detected illicit discharges, discharge sources, and connections immediately.

F.5.e. Enforce Ordinances

Each Copermittee shall implement and enforce its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4. Each Copermittee shall also implement and enforce its ordinance, orders, or other legal authority to eliminate detected illicit discharges and connections to it MS4.

F.5.f. Prevent and Respond to Sewage Spills (Including from Private Laterals and Failing Septic Systems) and Other Spills

Each Copermittee shall prevent, respond to, contain and clean up all sewage and other spills that may discharge into its MS4 from any source (including private laterals and failing septic systems). Spill response teams shall prevent entry of spills into the MS4 and contamination of surface water, ground water and soil to the maximum extent practicable. Each Copermittee shall coordinate spill prevention, containment and response activities throughout all appropriate departments, programs and agencies to ensure maximum water quality protection at all times.

Each Copermittee shall develop and implement a mechanism whereby it is notified of all sewage spills from private laterals and failing septic systems into its MS4. Each Copermittee shall prevent, respond to, contain and clean up sewage from any such notification.

F.5.g. Facilitate Public Reporting of Illicit Discharges and Connections - - Public Hotline

Each Copermittee shall promote, publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s. Each Copermittee shall facilitate public reporting through development and operation of a public hotline. Public hotlines can be Copermittee-specific or shared by Copermittees. All storm water hotlines shall be capable of receiving reports in both English and Spanish 24 hours per day / seven days per week. Copermittees shall respond to and resolve each reported incident. All reported incidents, and how each was resolved, shall be summarized in each Copermittee's individual Jurisdictional URMP Annual Report.

F.5.h. Facilitate Disposal of Used Oil and Toxic Materials

Each Copermittee shall facilitate the proper management and disposal of used oil, toxic materials, and other household hazardous wastes. Such facilitation shall include educational activities, public information activities, and establishment of collection sites operated by the

Copermittee or a private entity. Curbside collection of household hazardous wastes is encouraged.

F.5.i. Limit Infiltration From Sanitary Sewer to MS4/ Provide Preventive Maintenance of Both

Each Copermittee shall implement controls and measures to limit infiltration of seepage from

municipal sanitary sewers to MS4s through thorough, routine preventive maintenance of the MS4. Each Copermittee that operates both a municipal sanitary sewer system and a MS4 shall implement controls and measures to limit infiltration of seepage from the municipal sanitary sewers to the MS4s that shall include overall sanitary sewer and MS4 surveys and thorough, routine preventive maintenance of both. ~~Such controls shall include overall sanitary sewer and MS4 system surveys and thorough, routine preventive maintenance of both.~~

F.6. Public Participation Component

Each Copermittee shall incorporate a mechanism for public participation in the implementation of the Jurisdictional URMP.

F.7. Assessment of Jurisdictional URMP Effectiveness Component

a. As part of its individual Jurisdictional URMP, each Copermittee shall develop a long-term strategy for assessing the effectiveness of its individual Jurisdictional URMP. The long-term assessment strategy shall identify specific direct and indirect measurements that each Copermittee will use to track the long-term progress of its individual Jurisdictional URMP towards achieving improvements in receiving water quality. Methods used for assessing effectiveness shall include the following or their equivalent:~~for example~~ surveys, pollutant loading estimations, and receiving water quality monitoring. The long-term strategy shall also discuss the role of monitoring data in substantiating or refining the assessment.

b. As part of its individual Jurisdictional URMP Annual Report, each Copermittee shall include an assessment of the effectiveness of its Jurisdictional URMP using the direct and indirect assessment measurements and methods developed in its long-term assessment strategy.

~~c.Individual Jurisdictional URMP Annual Reports shall also include each Copermittees' self-assessment of its "status of compliance" with this Order. Specifically, each Annual Report shall specify its self-assessment of its "percent compliance with each component of its Jurisdictional URMP" (sections F.1.-F.8.), as well as the Copermittees' self-assessment of its "overall percent compliance" with this Order in its entirety.~~

F.8. Fiscal Analysis Component

Each Copermittee shall secure the resources necessary to meet the requirements of this Order. As part of its individual Jurisdictional URMP, each Copermittee shall develop a strategy to conduct a fiscal analysis of its urban runoff management program in its entirety. In order to demonstrate sufficient financial resources to implement the conditions of this Order, each Copermittee shall conduct an annual fiscal analysis as part of its individual Jurisdictional URMP Annual Report. This analysis shall, for each fiscal year covered by this Order, evaluate the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities of the Copermittee's urban runoff management program. Such analysis shall include a description of the source(s) of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.

G. IMPLEMENTATION OF JURISDICTIONAL URMP

Each Copermittee shall have completed full implementation of all requirements of the Jurisdictional URMP section of this Order no later than ~~**180**~~ **365 days after adoption** of this Order, except as stated as follows: Each Copermittee's local SUSMP must be implemented within 180 days of approval of the model SUSMP in the public process by the SDRWQCB. ~~with the exception of the requirements included in the Land-Use Planning for New Development and Redevelopment Component of the Jurisdictional URMP section of this Order. Each Copermittee shall have completed full implementation of all requirements of the Land-Use Planning for New Development and Redevelopment Component of the Jurisdictional URMP section of this Order no later than **365 days after adoption** of this Order.~~

H. SUBMITTAL OF JURISDICTIONAL URMP DOCUMENT

The written account of the overall program to be conducted by each Copermittee within its jurisdiction during the five-year life of this Order is referred to as the "Jurisdictional URMP Document".

~~1.~~Individual – Each Copermittee shall submit to the Principal Permittee(s) an individual Jurisdictional URMP document which describes all activities it has undertaken or is undertaking to implement the requirements of each component of the Jurisdictional URMP section F. of this Order. ~~Individual Jurisdictional URMP documents shall be submitted in two parts.~~

(a) ~~The first submittal of the individual Jurisdictional URMP document shall address the requirements of the entire Jurisdictional URMP section of this Order, with the exception of the Land-Use Planning for New Development and Redevelopment Component (i.e., sections F.2. – F.8.)~~ At a minimum, the ~~first submittal of the~~ individual Jurisdictional URMP document shall contain the following information for the following components:

(1) Construction Component

(a) Which pollution prevention methods will be required for implementation, and how and where they will be required
(b) Updated grading ordinances
(c) A description of the modified construction and grading approval process
(d) Updated construction and grading project requirements ~~conditions of approval~~ in local grading and construction permits
(e) A completed watershed-based inventory of all construction sites
(f) A completed prioritization of all construction sites based on threat to water quality
(g) Which BMPs will be implemented, or required to be implemented, for each priority category
(h) How BMPs will be implemented, or required to be implemented, for each priority category
(i) Planned inspection frequencies for each priority category
(j) Methods for inspection
(k) A description of enforcement mechanisms and how they will be used
(l) A description of how non-compliant sites will be identified and the process for notifying the SDRWQCB, including a list of current non-compliant sites
(m) A description of the construction education program and how it will be implemented

(2) Municipal (Existing Development) Component

(a) Which pollution prevention methods will be required for implementation, and how and where they will be required

(b) A completed watershed-based inventory of all municipal land use areas and activities
(c) A completed prioritization of all municipal areas and activities based on threat to water quality
(d) Which BMPs will be implemented, or required to be implemented, for each priority category
(e) How BMPs will be implemented, or required to be implemented, for each priority category
(f) Municipal maintenance activities and schedules
(g) Management strategy for pesticides, herbicides, and fertilizer use.
(h) Planned inspection frequencies for the high priority category
(i) Methods for inspection
(j) A description of enforcement mechanisms and how they will be used

(3) Industrial (Existing Development) Component

(a) Which pollution prevention methods will be required for implementation, and how and where they will be required
(b) A completed watershed-based inventory of all industrial sites
(c) A completed prioritization of all industrial sites based on threat to water quality
(d) Which BMPs will be implemented, or required to be implemented, for each priority category
(e) How BMPs will be implemented, or required to be implemented, for each priority category
(f) A description of the monitoring program to be conducted, or required to be conducted
(g) Planned inspection frequencies for each priority category
(h) Methods for inspection
(i) A description of enforcement mechanisms and how they will be used
(j) A description of how non-compliant sites will be identified and the process for notifying the SDRWQCB, including a list of current non-compliant sites

(4) Commercial (Existing Development) Component

(a) Which pollution prevention methods will be required for implementation, and how and where they will be required
(b) A completed watershed-based inventory of high priority commercial sites
(c) Which BMPs will be implemented, or required to be implemented, for high priority sites
(d) How BMPs will be implemented, or required to be implemented, for high priority sites
(e) Planned inspection frequencies for high priority sites
(f) Methods for inspection
(g) A description of enforcement mechanisms and how they will be used

(5) Residential (Existing Development) Component

(a) Which pollution prevention methods will be encouraged for implementation, and how and where they will be encouraged
(b) A completed inventory of high priority residential areas and activities
(c) Which BMPs will be implemented, or required to be implemented, for high priority areas and activities
(d) How BMPs will be implemented, or required to be implemented, for high priority areas and activities
(e) A description of enforcement mechanisms and how they will be used

(6) Education Component

(a) A description of the content, form, and frequency of education efforts for each target community

(7) Illicit Discharges Detection and Elimination Component

(a) A description of the program to actively seek and eliminate illicit discharges and connections
(b) A description of dry weather analytical monitoring to be conducted to detect illicit discharges and connections (see Attachment E)
(c) A description of investigation and inspection procedures to follow-up on dry weather analytical monitoring results or other information which indicate potential for illicit discharges and connections
(d) A description of procedures to eliminate detected illicit discharges and connections
(e) A description of enforcement mechanisms and how they will be used
(f) A description of methods to prevent, respond to, contain, and clean up all sewage (including spills from private laterals and failing septic systems) and other spills in order to prevent entrance into the MS4
(g) A description of the mechanism to receive notification of spills from private laterals
(h) A description of efforts to facilitate public reporting of illicit discharges and connections, including a public hotline
(i) A description of efforts to facilitate proper disposal of used oil and other toxic materials
(j) A description of controls and measures to be implemented to limit infiltration of seepage from sanitary sewers to MS4s
(k) A description of routine preventive maintenance activities on the sanitary system (where applicable) and the MS4

(8) Public Participation Component

(a) A description of how public participation will be included in the implementation of the Jurisdictional URMP

(9) Assessment of Jurisdictional URMP Effectiveness Component

(a) A description of strategies to be used for assessing the long-term effectiveness of the individual Jurisdictional URMP.

(10) Fiscal Analysis Component

(a) A description of the strategy to be used to conduct a fiscal analysis of the urban runoff management program.

(11) Land-Use Planning for New Development and Redevelopment Component

(a) Workplan for inclusion in General Plan (or equivalent plan) of water quality and watershed protection principles and policies
(b) Development project requirements in local development permits
(c) Participation efforts conducted in the development of the Model SUSMP
(d) Environmental review processes revisions

(e) A description of the planning education program and how it will be implemented

(12) Fire Fighting

(a) A description of a program to reduce pollutants from non-emergency fire fighting flows identified by the Copermittee to be significant sources of pollutants.

~~b. The second submittal of the individual Jurisdictional URMP document shall address the requirements of the Land-Use Planning for New Development and Redevelopment Component of the Jurisdictional URMP section F.1. of this Order. At a minimum, the second submittal of the individual Jurisdictional URMP document shall contain the following information for the following components:~~

~~(1) General Plan (or equivalent plan) revisions, specifying water protection policies~~
~~(2) Conditions of project approval in local development permits~~
~~(3) Participation efforts conducted in the development of the Model SUSMP~~
~~(4) Environmental review processes and CEQA initial study checklist revisions~~
~~(5) A description of the planning education program and how it will be implemented~~

c. Each Copermittee shall submit to the Principal Permittee(s) each part of its individual Jurisdictional URMP document by the dates specified by the Principal Permittee(s).

d. In addition to submittal of the ~~two parts of the~~ Jurisdictional URMP document, each Copermittee shall submit to the SDRWQCB its own adopted local SUSMP consistent with the approved Model SUSMP, as described in section F.1.b.(2). of this Order. Each Copermittee's own local SUSMP, along with its amended ordinances, shall be submitted to the SDRWQCB within 180 days of the SDRWQCB's approval of the Model SUSMP.

2. Unified – The Principal Permittee(s) shall submit the unified Jurisdictional URMP document to the SDRWQCB. The unified Jurisdictional URMP document shall be submitted in two parts (the collected Jurisdictional URMPs and the model SUSMP).

~~a.~~ The ~~first~~ unified Jurisdictional URMP document submittal shall address the requirements of the entire Jurisdictional URMP sections ~~F.2~~ F.1 – F.8. of this Order, with the exception of the local SUSMP requirements (which are to be implemented 180 days after approval of the model SUSMP by the SDRWQCB). ~~Land-Use Planning for New Development and Redevelopment Component.~~ The ~~first~~ unified Jurisdictional URMP document submittal shall contain a section covering common activities conducted collectively by the Copermittees, to be produced ~~written~~ by the Principal Permittee(s), and the twenty individual Jurisdictional URMP documents. The Principal Permittee(s) shall be responsible for the development and production of a stand alone Model SUSMP document meeting the requirements of section F.1.b.(2) of this Order. The Principal Permittee(s) shall submit the ~~first~~ unified Jurisdictional URMP document, including the Model SUSMP, to the SDRWQCB within **~~180~~ 365 days of adoption** of this Order.

~~b. The second unified Jurisdictional URMP document submittal shall address the requirements of the Land-Use Planning for New Development and Redevelopment Component of the Jurisdictional URMP section of this Order. The second unified Jurisdictional URMP document submittal shall contain a section covering common activities conducted collectively by the Copermittees, to be written by the Principal Permittee, and the twenty individual Jurisdictional URMP documents. As part of the second unified Jurisdictional URMP document, the Principal Permittee shall be responsible for the development and writing of a stand alone Model SUSMP document meeting~~

~~the requirements of section F.1.b.(2). of this Order. The Principal Permittee shall submit the second unified Jurisdictional URMP document, including the Model SUSMP, to the SDRWQCB within **365 days of adoption** of this Order.~~

3. Universal Reporting Requirements

All individual and unified Jurisdictional URMP document submittals shall include an executive summary, introduction, conclusion, recommendations, and signed certified statement. Each Copermittee shall submit its individual Jurisdictional Urban Runoff Management Program Document with a signed certified statement. The Principal Permittee(s) shall submit a signed certified statement referring to its individual Jurisdictional Urban Runoff Management Program Document, the section covering common activities conducted collectively by the Copermittees, and the Model SUSMP document meeting the requirements of section F.1.b.(2) of this Order as produced by the Principal Permittee(s).

I. SUBMITTAL OF JURISDICTIONAL URMP ANNUAL REPORT

1. Individual - Each individual Jurisdictional URMP Annual Report shall be a documentation of the activities conducted by each Copermittee during the past annual reporting period. Each Jurisdictional URMP Annual Report shall, at a minimum, contain the following:

   a. Comprehensive description of all activities conducted by the Copermittee to meet all requirements of each component of the Jurisdictional URMP section of this Order;

      F.1. Land-Use Planning for New Development and Redevelopment Component
      F.2. Construction Component
      F.3. Existing Development Component (Including Municipal, Industrial, Commercial, Residential, and Education)
      F.4. Education Component
      F.5. Illicit Discharge Detection and Elimination Component
      F.6. Public Participation Component
      F.7. Assessment of Jurisdictional URMP Effectiveness Component
      F.8. Fiscal Analysis Component

   b. Each Copermittee's accounting of all:
      (1) Reports of illicit discharges (i.e., complaints) and how each was resolved (indicating referral source);
      (2) Inspections conducted;
      (3) Enforcement actions taken; and
      (4) Education efforts conducted.

   c. Public participation mechanisms utilized during the Jurisdictional URMP implementation process;

   d. Proposed revisions to the Jurisdictional URMP;

   e. A summary of all urban runoff related data not included in the annual monitoring report (e.g., special investigations);

   ~~f.Annual expenditures from previous year and b~~Budget for upcoming year;

~~g. Identification of management measures proven to be effective in reducing urban runoff pollutants and flow;~~

~~h.~~g. Identification of management measures proven to be ineffective in reducing urban runoff pollutants and flow;

~~i~~h. Identification of water quality improvements or degradation; and

~~j Self-assessment of Copermittees' "percent compliance with each component of its Jurisdictional URMP" and "overall percent compliance with this Order" in its entirety.~~

2. Unified - The unified Jurisdictional URMP Annual Report shall contain a section covering common activities conducted collectively by the Copermittees, to be produced ~~written~~ by the Principal Permittee(s), and the twenty individual Jurisdictional URMP Annual Reports. Each Copermittee shall submit to the Principal Permittee(s) an individual Jurisdictional URMP Annual Report by the date specified by the Principal Permittee(s). The Principal Permittee(s) shall submit a unified Jurisdictional URMP Annual Report to the SDRWQCB by **January 31, ~~2002~~ 2003 and every January 31 thereafter.** The reporting period for these annual reports shall be the previous fiscal year. For example, the report submitted January 31, ~~2002~~ 2003 shall cover the reporting period July 1, 200~~1~~0 to June 30, ~~2001~~ 2002.

3. Universal Reporting Requirements

All individual and unified Jurisdictional URMP submittals shall include an executive summary, introduction, conclusion, recommendations, and signed certified statement. Each Copermittee shall submit its individual Jurisdictional Urban Runoff Management Program Annual Report with a signed certified statement. The Principal Permittee(s) shall submit a signed certified statement referring to its individual Jurisdictional Urban Runoff Management Program Annual Report and the section covering common activities conducted collectively by the Copermittees as produced by the Principal Permittee(s).

J. WATERSHED URBAN RUNOFF MANAGEMENT PROGRAM

1. Each Copermittee shall collaborate with other Copermittees within its watershed(s) as shown in Table 4. below to identify and mitigate the highest priority water quality issues/pollutants in the watershed(s).

2. Each Copermittee shall collaborate with all other Copermittees discharging urban runoff into the same watershed to develop and implement a Watershed Urban Runoff Management Program (Watershed URMP) for the respective watershed. Each Watershed URMP shall, at a minimum contain the following:

   a. An accurate map of the watershed (preferably in Geographical Information System [GIS] format) that identifies all receiving waters (including the Pacific Ocean); all Clean Water Act section 303(d) impaired receiving waters (including the Pacific Ocean); land uses; MS4s, major highways; jurisdictional boundaries; and inventoried commercial, construction, industrial, municipal sites, and residential areas.

   b. An assessment of the water quality of all receiving waters in the watershed based upon (1) existing water quality data; and (2) annual watershed water quality monitoring that satisfies the

watershed monitoring requirements of Attachment B ;

c. An identification and prioritization of major water quality problems in the watershed caused or contributed to by MS4 discharges and the likely source(s) of the problem(s);

d. An implementation time schedule of short and long-term recommended activities (individual and collective) needed to address the highest priority water quality problem(s). For this section, "short-term activities" shall mean those activities that are to be completed during the life of this Order and "long-term activities" shall mean those activities that are to be completed beyond the life of this Order;

e. An identification of the Copermittee(s) responsible for implementing each recommended activity, including the selection of the Lead Permittee(s) and the time schedule for implementation. In the event that a Lead Permittee is not selected and identified by the Copermittees in a watershed, the Copermittee identified in Table 4 as the Lead Permittee for that watershed shall be responsible for implementing the requirements of the Lead Permittee in that watershed by default;

f. A mechanism for public participation throughout the entire watershed URMP process;

g. A watershed based education program;

h. A mechanism to facilitate collaborative "watershed-based" (i.e., natural resource-based) land use planning with neighboring local governments in the watershed.

i. ~~An implementation schedule for collaborative watershed-based land use planning to begin no later than January 2005.~~

ij. Long-term strategy for assessing the effectiveness of the Watershed URMP. The long-term assessment strategy shall identify specific direct and indirect measurements that will track the long-term progress of Watershed URMP towards achieving improvements in receiving water quality. Methods used for assessing effectiveness shall include the following or their equivalent ~~for example~~: surveys, pollutant loading estimations, and receiving water quality monitoring. The long-term strategy shall also discuss the role of monitoring data in substantiating or refining the assessment.

Table 4. Copermittees by Watershed

RESPONSIBLE COPERMITTEE(S)	WATERSHED URBAN RUNOFF MANAGEMENT PROGRAM	HYDROLOGIC UNIT OR AREA	MAJOR RECEIVING WATER BODIES
1. County of San Diego	Santa Margarita River	Santa Margarita HU (902.00)	Santa Margarita River and Estuary, Pacific Ocean
1. City of Escondido **2. City of Oceanside** 3. City of Vista 4. County of San Diego	San Luis Rey River	San Luis Rey HU (903.00)	San Luis Rey River and Estuary, Pacific Ocean
1. City of Carlsbad **2. City of Encinitas** 3. City of Escondido 4. City of Oceanside 5. City of San Marcos	Carlsbad	Carlsbad HU (904.00)	Batiquitos Lagoon San Elijo Lagoon Agua Hedionda Lagoon Buena Vista Lagoon and Tributary Streams

RESPONSIBLE COPERMITTEE(S)	WATERSHED URBAN RUNOFF MANAGEMENT PROGRAM	HYDROLOGIC UNIT OR AREA	MAJOR RECEIVING WATER BODIES
6. City of Solana Beach 7. City of Vista 8. County of San Diego			Pacific Ocean
1. City of Del Mar 2. **City of Escondido** 3. City of Poway 4. City of San Diego 5. City of Solana Beach 6. County of San Diego	San Dieguito River	San Dieguito HU (905.00)	San Dieguito River and Estuary Pacific Ocean
1. City of Del Mar 2. City of Poway 3. City of San Diego 4. County of San Diego	Peñasquitos	Miramar Reservoir HA (906.10) Poway HA (906.20)	Los Peñasquitos Creek Los Peñasquitos Lagoon Pacific Ocean
1. City of San Diego	Mission Bay	Scripps HA (906.30) Miramar HA(906.40) Tecolote HA (906.50)	Mission Bay Pacific Ocean
1. City of El Cajon 2. City of La Mesa 3. City of Poway 4. City of San Diego 5. City of Santee 6. County of San Diego	San Diego River	San Diego HU (907.00)	San Diego River Pacific Ocean
1. City of Chula Vista 2. City of Coronado ~~3. City of El Cajon~~ ~~4~~3. City of Imperial Beach ~~5~~4. City of La Mesa ~~6~~5. City of Lemon Grove ~~7~~6. City of National City ~~8~~7. City of San Diego ~~9~~8. County of San Diego ~~10~~**9. San Diego Unified Port District**	San Diego Bay	Pueblo San Diego HU (908.00) Sweetwater HU (909.00) Otay HU (910.00)	San Diego Bay Sweetwater River Otay River Pacific Ocean
1. City of Imperial Beach 2. City of San Diego 3. County of San Diego	Tijuana River	Tijuana (911.00)	Tijuana River and Estuary Pacific Ocean

- The Lead Watershed Copermittee for each watershed is highlight

K. IMPLEMENTATION OF WATERSHED URMP

Each Copermittee shall have completed full implementation of all requirements of the Watershed URMP section of this Order no later than January 31, 2003 unless otherwise specified.

L. SUBMITTAL OF WATERSHED URMP DOCUMENT

The written account of the overall watershed program to be conducted by each Copermittee during the remaining life of this Order is referred to as the "Watershed URMP Document". The Watershed URMP

is conducted concurrently with the Jurisdictional URMP.[6]

1. Each Watershed Specific URMP document shall state how the member Copermittees within each watershed will develop and implement the requirements of the Watershed URMP section J. of this Order. The Copermittees responsible for each of the nine Watershed URMPs are specified in Table 4 above. The Lead Watershed Copermittee for each watershed is highlighted, unless a different Lead Watershed Copermittee is designated. Each Lead Watershed Copermittee shall be responsible for producing its respective Watershed URMP document, as well as for coordination and meetings amongst all member watershed Copermittees. Each Lead Watershed Copermittee is further responsible for the submittal of the Watershed URMP document to the Principal Permittee(s) by the date specified by the Principal Permittee(s).

    a. Each Watershed specific URMP document shall include:
        (1) A completed watershed map
        (2) A water quality assessment and watershed monitoring needed
        (3) Prioritization of water quality problems
        (4) Recommended activities (short and long term)
        (5) Individual Copermittee implementation responsibilities and time schedules for implementation
        (6) A description of watershed public participation mechanisms
        (7) A description of watershed education mechanisms
        (8) A description of the mechanism and implementation schedule for watershed-based land use planning
        (9) A strategy for assessing the long-term effectiveness of the Watershed URMP

2. Unified - The unified Watershed URMP document shall contain a section covering common activities conducted collectively by the Copermittees, to be produced ~~written~~ by the Principal Permittee(s), and the nine Watershed Specific URMP documents. The Principal Permittee(s) shall submit the unified Watershed URMP document to the SDRWQCB by **January 31, 2003.**

3. Universal Reporting Requirements.

    All individual and unified Watershed URMP submittals shall include an executive summary, introduction, conclusion, recommendations, and signed certified statement. Each Copermittee shall submit a signed certified statement covering its responsibilities in the specific Watershed URMP Document. The Principal Permittee(s) shall submit a signed certified statement referring to its specific Watershed URMP Document and the section covering common activities conducted collectively by the Copermittees as produced by the Principal Permittee(s).

M. SUBMITTAL OF WATERSHED URMP ANNUAL REPORT

1. Watershed Specific - Each Watershed Specific URMP Annual Report shall be a documentation of the activities conducted by watershed member Copermittees during the previous annual ~~-~~reporting

[6] As each Copermittee transitions from conducting its management program only within its jurisdiction to conducting it also throughout the entire watershed (with neighboring Copermittees), it is expected that many activities will continue on a jurisdictional level (e.g., enforcement of local ordinances and permits). Implementation of the Watershed URMP is not meant to replace, but to expand implementation of the Jurisdictional URMP. For this reason, it is necessary to report management activities on both levels. This can be accomplished either by submitting both a Jurisdictional URMP Annual Report and a Watershed URMP Annual Report or by submitting a single Watershed URMP Annual Report that contains two separate sections (i.e., watershed activities and jurisdictional activities). Information need only be reported once (to the extent something is covered in the Watershed URMP Annual Report, it need not be covered again the Jurisdictional URMP Annual Report).

period to meet the requirements of all components of the Watershed URMP section of this Order. Each Watershed URMP Annual Report shall, at a minimum, contain the following:

a. Comprehensive description of all activities conducted by the watershed member Copermittees to meet all requirements of each component of Watershed URMP section J. of this Order

b. Public participation mechanisms utilized during the Watershed URMP implementation process;
c. Mechanism for watershed based land use planning;
d. Assessment of effectiveness of Watershed URMP;
e. Proposed revisions to the Watershed URMP;
f. A summary of watershed effort related data not included in the annual monitoring report (e.g., special investigations); and
g. Identification of water quality improvements or degradation.

2. Unified - The Unified Watershed URMP Annual Report shall contain a section covering common activities conducted collectively by the Copermittees, to be produced ~~written~~ by the Principal Permittee(s), and the nine Watershed Specific URMP Annual Reports. Each Lead Watershed Copermittee shall submit to the Principal Permittee(s) a Watershed Specific URMP Annual Report by the date specified by the Principal Permittee(s). The Principal Permittee(s) shall submit the Unified Watershed URMP Annual Report to the SDRWQCB by January 31, 2004 and every January 31 thereafter. The reporting period for these annual reports shall be the previous fiscal year. For example, the report submitted January 31, 2004 shall cover the reporting period July 1, 2002 to June 30, 2003.

3. Universal Reporting Requirements

All individual and unified Watershed URMP submittals shall include an executive summary, introduction, conclusion, recommendations, and signed certified statement. Each Copermittee shall submit a signed certified statement covering its responsibilities in the specific Watershed URMP Annual Report. The Principal Permittee(s) shall submit a signed certified statement referring to its specific Watershed URMP Annual Report and the section covering common activities conducted collectively by the Copermittees as produced by the Principal Permittee(s).

N. ALL COPERMITTEE COLLABORATION

1. Each Copermittee shall collaborate with all other Copermittees regulated under this Order to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs (Jurisdictional URMPs) and Watershed Urban Runoff Management Programs (Watershed URMPs), and to plan and coordinate activities required under this Order

a. Management Structure - All Copermittees shall jointly execute and submit to the SDRWQCB no later than **~~180~~ 365 days after adoption** of this Order, a Memorandum of Understanding, Joint Powers Authority, or other instrument of formal agreement which at a minimum provides a management structure for the following:

- Designation of Joint Responsibilities
- Decision making
- Watershed activities;
- Information management of data and reports, including the requirements under this Order; and

- Any and all other collaborative arrangements for compliance with this Order.

b. All Copermittees shall jointly develop a standardized format(s) for all reports required under this Order (e.g., annual reports, monitoring reports, fiscal analysis reports, and program effectiveness reports, etc.). The standardized reporting format(s) shall be used by all Copermittees and shall include protocols for electronic reporting. The Principal Permittee(s) shall submit the standardized format(s) to the SDRWQCB no later than ~~**180**~~ **365 days after adoption** of this Order**.**

O. PRINCIPAL PERMITTEE RESPONSIBILITIES

~~The Principal Permittee shall be the City of San Diego.~~Within 90 days of adoption of this Order, the Copermittees shall designate the Principal Permittee(s) and notify the SDRWQCB of the name(s) of the Principal Permittee(s). The Principal Permittee(s) may require the Copermittees to reimburse the Principal Permittee(s) for reasonable costs incurred while performing coordination responsibilities and other related tasks. The Principal Permittee(s) shall, at a minimum:

1. Serve as liaison(s) between the Copermittees and the SDRWQCB on general permit issues.

2. ~~Ensure c~~Coordinat~~ion of~~ permit activities among the Copermittees and facilitate collaboration on the development and implementation of programs required under this Order;

3. Integrate individual Copermittee documents and reports required under this Order into single unified documents and reports for submittal to the SDRWQCB as described below. If a reporting date falls on a non-working day or State holiday, then the report is to be submitted on the following working day.

   a. Unified Jurisdictional URMP Document – The Principal Permittee(s) shall submit the unified Jurisdictional URMP document in its entirety (including the model SUSMP) to the SDRWQCB within 365 days of the adoption of this Order. ~~The first part of the unified Jurisdictional URMP document (as described in section H.2.a.) shall be submitted within **180 days of adoption** of this Order. The second part of the unified Jurisdictional URMP document (as described in section H.2.b.) shall be submitted within **365 days of adoption** of this Order.~~

      The Principal Permittee(s) shall be responsible for producing the sections of the unified Jurisdictional URMP document submittals covering common activities conducted by the Copermittees. ~~As part of the second unified Jurisdictional URMP document submittal, t~~The Principal Permittee(s) shall be responsible for the development and production ~~writing~~ of a stand alone Model SUSMP document meeting the requirements of section F.1.b.(2). of this Order. The Principal Permittee(s) shall also be responsible for collecting and assembling the individual Jurisdictional URMP document submittals covering the activities conducted by each individual Copermittee.

   b. Unified Jurisdictional URMP Annual Reports – The Principal Permittee(s) shall submit unified Jurisdictional URMP Annual Reports to the SDRWQCB by January 31 of each year, beginning on **January 31, ~~2002~~ 2003**. The reporting period for these annual reports shall be the previous fiscal year. For example, the report submitted January 31, ~~2002~~ 2003 shall cover the reporting period July 1, ~~2000~~ 2001 to June 30, ~~2001~~ 2002.

      The Principal Permittee(s) shall be responsible for producing the section of the unified Jurisdictional URMP Annual Reports covering common activities conducted by the

Copermittees. The Principal Permittee(s) shall also be responsible for collecting and assembling the individual Jurisdictional URMP Annual Reports covering the activities conducted by each individual Copermittee.

c. Unified Watershed URMP Document – The Principal Permittee(s) shall submit the unified Watershed URMP document to the SDRWQCB by **January 31, 2003**. The Principal Permittee(s) shall be responsible for producing the section of the unified Watershed URMP document covering common activities conducted by the Copermittees. The Principal Permittee(s) shall also be responsible for collecting and assembling the watershed specific Watershed URMP documents covering the activities conducted by each individual Copermittee.

d. Unified Watershed URMP Annual Report - The Principal Permittee(s) shall submit unified Watershed URMP Annual Reports to the SDRWQCB by January 31 of each year, beginning on **January 31, 2004**. The reporting period for these annual reports shall be the previous fiscal year. For example, the report submitted January 3, 2004 shall cover the reporting period July 1, 2002 to June 30, 2003.

The Principal Permittee(s) shall be responsible for producing the section of the unified Watershed URMP Annual Reports covering common activities conducted by the Copermittees. The Principal Permittee(s) shall also be responsible for collecting and assembling the watershed specific Watershed URMP Annual Reports covering the activities conducted by each individual Copermittee.

e. Receiving Waters Monitoring and Reporting Program - The Principal Permittee(s) shall be responsible for the production ~~writing~~ and submittal of the Previous Monitoring and Future Recommendations Report. The report shall be submitted to the SDRWQCB within 180 days of adoption of this Order.

f. Receiving Waters Monitoring and Reporting Program - The Principal Permittee(s) shall be responsible for the development and production ~~writing~~ of the Receiving Waters Monitoring Program as it is outlined in Attachment B. The Principal Permittee(s) shall submit the Receiving Waters Monitoring Program to the SDRWQCB within 180 days of adoption of this Order.

g. Receiving Waters Monitoring and Reporting Program - The Principal Permittee(s) shall submit the Receiving Waters Monitoring Annual Report to the SDRWQCB on January 31 of each year, beginning on January 31, ~~2002~~ 2003.

h. Formal Agreements/Standardized Formats - The Principal Permittee(s) shall submit to the SDRWQCB, within ~~180~~ 365 days of adoption of this Order, a formal agreement between the Copermittees which provides a management structure for meeting the requirements of this Order (as described in section N.1.a.). The Principal Permittee(s) shall submit to the SDRWQCB, within ~~180~~ 365 days of adoption of this Order, standardized formats for all reports and documents required under this Order.

i. Dry Weather Analytical Monitoring - The Principal Permittee(s) shall collectively submit the Copermittees' dry weather analytical monitoring maps and procedures to the SDRWQCB within ~~180~~ 365 days of adoption of this Order.

P. RECEIVING WATERS MONITORING AND REPORTING PROGRAM

1. Pursuant to California Water Code section 13267, each Copermittee shall comply with Monitoring and Reporting Program for No. 2001-01 contained in **Attachment B** of this Order.

2. Each Copermittee shall also comply with standard provisions, reporting requirements, and notifications contained in **Attachment C** of this Order.

Q. TASKS AND SUBMITTAL SUMMARY

The tasks and submittals required under this Order are summarized in Tables 5 and 6 below:

Table 5. Task Summary

Task No.	Task	Permit Section	Completion Date	Frequency
1	Identify discharges not to be prohibited and BMPs required for treatment of discharges not prohibited	B.3.	~~180~~ 365 days after adoption of Order	One Time
2	Examine field screening results to identify water quality problems resulting from non-prohibited non-storm water discharges, including follow-up of problems	B.5	January 31, ~~2002~~ 2003	Annually
3	Notify SDRWQCB of discharges causing or contributing to an exceedance of water quality standards	C.2.a.	Immediate	As Needed
4	Establish adequate legal authority to control pollutant discharges into and from MS4	D.1.	~~90~~ 180 days after adoption of Order	One Time
5	~~Revise~~ Assess General Plan to incorporate water quality and watershed protection principles	F.1.a.	365 days after adoption of Order	One Time
6	Include ~~conditions of approval~~ Development Project Requirements in local permits	F.1.b.(1).	365 days after adoption of Order	One Time
7	Develop Model SUSMP	F.1.b.(2).	365 days after adoption of Order	One Time
8	Develop and adopt individual local SUSMP and amended ordinances	F.1.b.(2).	180 days after approval of Model SUSMP by SDRWQCB	One Time
9	Implement individual jurisdictional SUSMP	F.1.b.(2).	180 days after approval of Model SUSMP by SDRWQCB	Continuous
10	Revise environmental review processes ~~and CEQA checklists~~	F.1.c.(1).	365 days after adoption of Order	One Time
11	Conduct education program for municipal planning and development review staff, project applicants, developers, contractors, community planning groups, and property owners	F.1.d.(1). And F.1.d.(2).	365 days after adoption of Order	Ongoing
12	Implement all requirements of Construction Component of Jurisdictional URMP	F.2.a. – ~~F.2.h~~ F.2.j.	~~180~~ 365 days after adoption of Order	Ongoing
13	Notify SDRWQCB of non-compliant construction sites that pose a threat to human or environmental health	F.2.i	Within 24 hours of incidence of noncompliance	As Needed
14	Implement all requirements of Municipal Existing Development Component of Jurisdictional URMP	F.3.a.(1). – F.3.a.(8).	~~180~~ 365 days after adoption of Order	Ongoing
15	Implement all requirements of Industrial	F.3.b.(1) –	~~180~~ 365 days after	Ongoing

	Existing Development Component of Jurisdictional URMP	F.3.b.(8)	adoption of Order	
16	Notify SDRWQCB of non-compliant industrial sites that pose a threat to human or environmental health	F.3.b.8	Within 24 hours of discovery ~~incidence~~ of noncompliance	As Needed
17	Implement all requirements of Commercial Existing Development Component of Jurisdictional URMP	F.3.c.(1) – F.3.c.(5)	~~180~~ 365 days after adoption of Order	Ongoing
18	Implement all requirements of Residential Existing Development Component of Jurisdictional URMP	F.3.d.(1) – ~~F.3.d.(3)~~ F.3.d.(4)	~~180~~ 365 days after adoption of Order	Ongoing
19	Implement all requirements of Education Component of Jurisdictional URMP	F.4.a. – F.4.c.	~~180~~ 365 days after adoption of Order	Ongoing
20	Implement all requirements of Illicit Discharge Detection and Elimination ~~Connections/Illegal Discharges~~ Component of Jurisdictional URMP	F.5.a. – F.5.i.	~~180~~ 365 days after adoption of Order	Ongoing
21	Implement all requirements of Public Participation Component of Jurisdictional URMP	F.6.	~~180~~ 365 days after adoption of Order	Ongoing
22	Develop strategy for assessment of Jurisdictional URMP effectiveness	F.7.a.	~~180~~ 365 days after adoption of Order	One Time
23	Assess Jurisdictional URMP effectiveness	F.7.b.	January 31, ~~2002~~ 2003	Annually
24	Develop strategy for fiscal analysis of urban runoff management program	F.8.	~~180~~ 365 days after adoption of Order	One Time
25	Conduct fiscal analysis of urban runoff management program in entirety	F.8.	January 31, ~~2002~~ 2003	Annually
26	Develop and implement Watershed URMP	J.2.	January 31, 2003	Ongoing
27	Execute formal agreement which provides management structure for meeting Order requirements	N.1.a.	~~180~~ 365 days after adoption of Order	One Time
28	Develop standardized formats for all required reports of this Order	N.1.b.	~~180~~ 365 days after adoption of Order	One Time
29	Develop Previous Monitoring and Future Recommendations Report	Attachment B	180 days after adoption of Order	One Time
30	Develop Receiving Waters Monitoring Program	Attachment B	180 days after adoption of Order	One Time
31	Implement Receiving Waters Monitoring Program	Attachment B	180 days after adoption of Order	Continuous
32	Develop dry weather analytical and field screening monitoring map and procedures	Attachment E	~~180~~ 365 days after adoption of Order	One Time
33	Conduct dry weather analytical and field screening monitoring	Attachment E	~~January 31, 2002~~ May 1, 2002	Annually
34	Complete NPDES applications for issuance of renewal watershed based permits	Attachment C	At least 180 days prior to expiration of Order	One Time
35	Notify SDRWQCB of any incidence of non-compliance with this Order that poses a threat to human or environmental health.	R.1, ~~B.7~~ B.6 of Attachment C	Within 24 hours of incidence of non-compliance	As Needed
36	Designate Principal Permittee and notify SDRWQCB	O.	180 days after adoption of the Order	One Time

Table 6. Submittal Summary

Submittal No.	Submittal	Permit Section	Completion Date	Frequency
1	Submit identification of discharges not to be prohibited and BMPs required for treatment of discharges not prohibited	B.3.	~~180~~ 365 days after adoption of Order	One Time
2	Report on discharges causing or contributing to an exceedance of water quality standards, including description of BMP implementation	C.2.a.	With individual Jurisdictional URMP Annual Reports	As Needed
3	Submit Certified Statement of Adequate Legal Authority	D.2.	~~90~~ 180days after adoption of Order	One Time
4	Submit certified statement if particular high priority construction sites are to be inspected monthly rather than weekly in the rainy season	F.2.g.(2).	~~180~~ 365 days after adoption of Order and as needed thereafter	As Needed
5	Submit report on non-compliant construction sites that pose a threat to human or environmental health.	F.2.i.	Within 5 Days of incidence of non-compliance	As Needed
6	Submit report on non-compliant industrial sites that pose a threat to human or environmental health.	~~F.3.b.7~~ F.3.b.8.	Within 5 days of incidence of non compliance	As Needed
7	Submit to Principal Permittee(s) ~~first part of~~ individual Jurisdictional URMP document covering requirements for all Components, ~~excluding the Land-Use for New Development and Redevelopment Component~~	H.1.a.	Prior to ~~180~~ 365 days after adoption of Order (Principal Permittee(s) specifies date of submittal)	One Time
8	~~Submit to Principal Permittee second part of individual Jurisdictional URMP document covering Land-Use Planning for New Development and Redevelopment Component requirements~~ (This space reserved).	~~H.1.b.~~	~~Prior to 365 days after adoption of Order (Principal Permittee specifies date of submittal)~~	~~One Time~~
9	Principal Permittee(s) shall submit to SDRWQCB ~~first part of~~ unified Jurisdictional URMP document covering requirements for all Components, including Model SUSMP ~~excluding the Land-Use for New Development and Redevelopment Component~~	H.2.a.	~~180~~ 365 days after adoption of Order	One Time
10	~~Principal Permittee shall submit to SDRWQCB second part of unified Jurisdictional URMP document covering Land-Use Planning for New Development and Redevelopment Component requirements, including Model SUSMP~~ (This space reserved).	~~H.2.b.~~	~~365 days after adoption of Order~~	~~One Time~~
11	Submit to SDRWQCB local SUSMP and amended ordinances	F.1.b.(2). and H.1.d.	180 days after approval of Model SUSMP	One Time
12	Submit to Principal Permittee(s) individual Jurisdictional URMP Annual Report	I.1.	Prior to January 31, ~~2002~~ 2003 (Principal Permittee(s) specifies date of	Annually

			submittal)	
13	Principal Permittee(s) shall submit 1st unified Jurisdictional URMP Annual Report to SDRWQCB	I.2.	January 31, ~~2002~~ 2003	One Time and Annually Thereafter
14	Submit to Principal Permittee(s) Watershed Specific URMP document	L.1.	Prior to January 31, 2003 (Principal Permittee(s) specifies date of submittal)	One Time
15	Principal Permittee(s) shall submit unified Watershed Specific URMP document to SDRWQCB	L.2.	January 31, 2003	One Time
16	Principal Permittee(s) shall submit 2nd unified Jurisdictional URMP Annual Report to SDRWQCB	I.2.	January 31, ~~2003~~ 2004	One Time
17	Submit to Principal Permittee(s) Watershed Specific URMP Annual Report	M.1.	Prior to January 31, 2004 (Principal Permittee(s) specifies date of submittal)	Annually
18	Principal Permittee(s) shall submit 1st unified Watershed Specific URMP Annual Report to SDRWQCB	M.2.	January 31, 2004	One Time and Annually Thereafter
19	Principal Permittee(s) shall submit 3rd unified Jurisdictional URMP Annual Report to SDRWQCB	I.2.	January 31, ~~2004~~ 2005	One Time
20	Principal Permittee(s) shall submit 2nd unified Watershed Specific URMP Annual Report to SDRWQCB	M.2.	January 31, 2005	One Time
21	Principal Permittee(s) shall submit 4th unified Jurisdictional URMP Annual Report to SDRWQCB	I.2.	January 31, ~~2005~~ 2006	One Time
22	Principal Permittee(s) shall submit 3rd unified Watershed Specific URMP Annual Report to SDRWQCB	M.2.	January 31, 2006	One Time
23	Principal Permittee(s) shall submit 5th unified Jurisdictional URMP Annual Report to SDRWQCB	I.2.	January 31, ~~2006~~ 2007	One Time
24	Principal Permittee(s) shall submit formal agreement between Copermittees which provides management structure for meeting Order requirements	N.1.a.	~~180~~ 365 days after adoption of Order	One Time
25	Principal Permittee(s) shall submit standardized formats for all reports required under this Order	N.1.b.	~~180~~ 365 days after adoption of Order	One Time
26	Principal Permittee(s) submits Previous Monitoring and Future Recommendations Report to SDRWQCB	Attachment B	180 days after adoption of Order	One Time
27	Principal Permittee(s) submits Receiving Waters Monitoring Program document to SDRWQCB	Attachment B	180 days after adoption of Order	One Time
28	Principal Permittee(s) submits Receiving Waters Monitoring Annual Report to SDRWQCB	Attachment B	January 31, ~~2002~~ 2003	Annually
29	Submit to Principal Permittee(s) dry weather analytical monitoring map and procedures	Attachment E	Prior to ~~180~~ 365 days after adoption of Order	One Time

30	Principal Permittee(s) submits collective dry weather analytical monitoring maps and procedures	Attachment E	~~180~~ 365 days after adoption of Order	One Time
31	Submit to Principal Permittee(s) dry weather analytical monitoring results as part of individual Jurisdictional URMP Annual Report	Attachment E	Prior to January 31, ~~2002~~ 2003, as part of individual Jurisdictional URMP Annual Report	Annually
32	Principal Permittee(s) shall submit NPDES applications for issuance of renewal watershed based permits	Attachment C	At least 180 days prior to expiration of this Order	One Time
33	Submit reports of any incidence of non-compliance with this Order that poses a threat to human or environmental health.	R.1, ~~B.7~~ B.6 of Attachment C	Within 5 days of incidence of non compliance	As Needed

R. STANDARD PROVISIONS, REPORTING REQUIREMENTS AND NOTIFICATIONS

1. Each Copermittee shall comply with Standard Provisions, Reporting Requirements, and Notifications contained in **Attachment C** of this Order. This includes 24 hour/5day reporting requirements for any instance of non-compliance with this Order as described in section ~~B.7~~ B.6 of Attachment C.

2. All plans, reports and subsequent amendments submitted in compliance with this Order shall be implemented immediately (or as otherwise specified) and shall be an enforceable part of this Order upon submission to the SDRWQCB. All submittals by Copermittees must be adequate to implement the requirements of this Order.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on ***February ~~14~~ 21, 2001.***

_____
John H. Robertus
Executive Officer

ATTACHMENT A

BASIN PLAN PROHIBITIONS

California Water Code Section 13243 provides that a Regional Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste, or certain types of waste is not permitted. The following discharge prohibitions are applicable to any person, as defined by Section 13050(c) of the California Water Code, who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

1. The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code Section 13050, is prohibited.

2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code Section 13264 is prohibited.

3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by an NPDES permit or a dredged or fill material permit (subject to the exemption described in California Water Code §13376) is prohibited.

4. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this Regional Board issues a NPDES permit authorizing such a discharge; the proposed discharge has been approved by the State Department of Health Services and the operating agency of the impacted reservoir; and the discharger has an approved fail-safe long-term disposal alternative.

5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the Regional Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.

6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the Regional Board.

7. The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the Regional Board.

8. Any discharge to a storm water conveyance system that is not composed entirely of "*storm water*" is prohibited unless authorized by the Regional Board. [The federal regulations, 40 CFR 122.26 (b) (13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40 CFR 122.26 (b) (2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities. [§122.26 amended at 56 FR 56553, November 5, 1991; 57 FR 11412, April 2, 1992].

9. The unauthorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited.

10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in California Water Code Section 13264, is prohibited.

11. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the state is prohibited.

12. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited.

13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the Regional Board.

14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the state or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.

15. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.

16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.

17. The discharge of treated sewage from vessels to portions of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.

18. The discharge of treated sewage from vessels, which do not have a properly functioning US Coast Guard certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep at mean lower low water (MLLW) is prohibited.

ATTACHMENT B

RECEIVING WATERS MONITORING AND REPORTING PROGRAM FOR ORDER NO. 2001-01

Countywide to Watershed Based Monitoring and Reporting Program
The primary objectives of the Receiving Waters Monitoring and Reporting Program include, but are not limited to: 1) assessing compliance with Order No. 2001-01; 2) measuring the effectiveness of Urban Runoff Management Plans; 3) assessing the chemical, physical, and biological impacts to receiving waters resulting from urban runoff; and 4) assessing the overall health and evaluating long-term trends in receiving water quality.

Like Order No. 2001-01 in general, the monitoring requirements below are intended to transition during the five-year permit period from a countywide approach to a watershed based approach. During the first two reporting periods [1] of this Order, this monitoring program shall be conducted and reported on the same countywide basis as previously conducted under Order No. 90-42. Specifically, all monitoring shall be conducted jointly by all Copermittees under a single contractor with countywide coordination.

Beginning with the third monitoring period of this Order (unless otherwise directed by the SDRWQCB Executive Officer) the design of the monitoring program will shift to a watershed based approach. The monitoring program~~shall continue to be conducted under a single contractor with countywide coordination. However, the monitoring program~~ design, implementation, analysis, assessment, and reporting shall be conducted on a watershed basis for each of the nine hydrologic units. Monitoring results shall be assessed and reported on a watershed basis as a single report by the Copermittees consisting of one common section and nine watershed sections. Monitoring, analysis, assessment, and reporting shall satisfy the requirements of specified below for each watershed as applicable.

Order No. 2001-01 may be modified by the SDRWQCB Executive Officer without further public notice to direct the Copermittees to participate in comprehensive regional monitoring activities in the Southern California Bight in lieu of specific Order 2001-01 receiving waters monitoring requirements during the term of this Order.

I. Previous Monitoring and Future Recommendations Report

The Copermittees shall collaborate to develop a "Previous Monitoring and Future Recommendations Report" that summarizes all previous wet weather monitoring results and recommends future monitoring activities including the possibility of participating in coordinated comprehensive regional monitoring in the Southern California Bight. The Principal Permittee shall be responsible for the writing of the report and submittal to the SDRWQCB within **180 days** of adoption of this Order. At a minimum, the report shall:

A. Summarize the cumulative findings of all previous wet weather monitoring;
B. Identify detectable trends in water quality data and receiving water quality, based on the cumulative previous wet weather monitoring findings;
C. Interpret the cumulative previous wet weather monitoring findings;
D. Draw conclusions regarding the cumulative previous wet weather monitoring findings;
E. Provide recommendations for future monitoring activities; and
F. Include an executive summary, introduction, conclusion, and summary of recommendations.

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[1] A reporting period is defined as October 1st to September 30th of any year. The first reporting period under this Order is October 1, ~~2000~~2001 to September 30, ~~2001.~~2002.

II. Receiving Waters Monitoring Program - - Year Round

Utilizing the findings of the "Previous Monitoring and Future Recommendations Report" discussed above, the Copermittees shall collaborate to develop, submit, conduct, and report on a year round countywide or watershed based Receiving Waters Monitoring Program[2]. The goals of both the countywide and watershed based Receiving Waters Monitoring Program shall be clearly stated. The Receiving Waters Monitoring Program goals shall focus on assessing compliance with this Order, achieving water quality objectives, protecting beneficial uses, and assessing the overall health and long-term water quality trends of receiving waters. For purposes of conducting the countywide or watershed based Receiving Waters Monitoring Program, the Copermittees are encouraged to collaborate with other agencies conducting similar monitoring, such as the Southern California Coastal Water Research Project (SCCWRP), the California Department of Fish and Game, or other municipalities in Southern California. Implementation of the countywide or watershed based Receiving Waters Monitoring Program shall begin within **180 days** of adoption of this Order. The countywide or watershed based Receiving Waters Monitoring Program shall include, at a minimum, the following components:

A. Urban Stream Bioassessment Monitoring
B. Long-term Mass Loading Monitoring
C. Coastal Storm Drain Outfall Monitoring
D. Ambient Bay, Lagoon, and Coastal Receiving Water Monitoring
E. Toxic Hot Spots Monitoring in San Diego Bay

A. <u>Urban Stream Bioassessment Monitoring</u>

1. The Copermittees shall collaborate to develop and implement an urban stream bioassessment monitoring program. At a minimum, the program shall consist of station identification, sampling, monitoring, and analysis of data for 20 bioassessment stations in order to determine the biological and physical integrity of urban streams within the County of San Diego. In addition to the urban stream bioassessment stations, three reference bioassessment stations shall be identified, sampled, monitored, and analyzed. The selection, sampling, monitoring, and analysis of bioassessment stations shall meet the following requirements:

   a. Each urban stream bioassessment station shall be selected using the following criteria. Each urban stream bioassessment station shall:
      (1) be located within the jurisdiction of a Copermittee; or
      (2) be located within one of the nine watersheds specified in Section J, Table 4 of this Order; and
      (3) be representative of urban stream conditions within one of the nine watersheds specified in Section J, Table 4 of this Order; and
      (4) meet the physical criteria of the California Stream Bioassessment Procedure[3]; and
      (5) to the extent feasible, coincide with the location of an already existing monitoring station used by the California Department of Fish and Game in the conduct of the SDRWQCB's Ambient Bioassessment Program.

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[2] During the first two years, monitoring and reporting will be conducted and reported on a countywide basis. Beginning in the third monitoring period of Order 2001-01, the monitoring and reporting program will shift to a watershed based approach.

[3] California Stream Bioassessment Procedure (Protocol Brief for Biological and Physical/Habitat Assessment in Wadeable Streams), California Department of Fish and Game – Aquatic Bioassessment Laboratory, May 1999.

b. Each bioassessment station shall be monitored twice annually, in May and October of each year, beginning in May 2001. A minimum of three replicate samples shall be collected at each station during each sampling event.

c. Sampling, laboratory, quality assurance, and analysis procedures shall follow the standardized procedures set forth in the California Department of Fish and Game's California Stream Bioassessment Procedure (CSBP). Analysis procedures shall include comparison between station mean values for various biological metrics. Sampling, laboratory, quality assurance, and analytical procedures shall follow the standardized "Non-Point Source Bioassessment Sampling Procedures" for professional bioassessment set forth in the CSBP. In the event that the CSBP "Point-Source Professional Bioassessment Procedure" is performed in place of the "Non Point Source Bioassessment Sampling Procedure," justification and documentation of the procedure shall be submitted with the report. Results of the Urban Stream Bioassessment Monitoring shall be reported annually as part of the overall Receiving Waters Monitoring and Reporting Program for Order No. 2001-01. Reporting of the bioassessment data shall follow the format of the San Diego Regional Water Quality Control Board 1999 Biological Assessment Annual Report[4]. The report shall include:

(1) All physical, chemical and biological data collected in the assessment;
(2) Photographic documentation of assessment and reference stations;
(3) Documentation of quality assurance and control procedures;
(4) Analysis that shall include calculation of the metrics used in both the CSBP and the 1999 Annual Report.
(5) The report shall provide interpretation for comparisons of mean biological and habitat assessment metric values between assessment and reference stations.
(6) Utilize a regional index of biological integrity as part of the analysis.
(7) Electronic data formatted to California Department of Fish and Game Aquatic Bioassessment Laboratory specifications for inclusion in the Statewide Access Bioassessment database.

d. A professional environmental laboratory shall perform all sampling, laboratory, quality assurance, and analytical procedures. While valuable, data collected by volunteer monitoring organizations shall not be submitted in place of professional assessments.

e. Reference stations shall be selected following the recommendations in the 1999 Annual Report, Hughes (1995)[5] and Barbour et. al. (1999)[6]. Reference stations shall be evaluated annually by the Copermittees for suitability and the results included in the annual report. New reference stations will be selected as needed by the Copermittees.

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4 San Diego Regional Water Quality Control Board ,1999 Biological Assessment Annual Report. A Water Quality Inventory Series: Biological and Physical/Habitat Assessment of California Water Bodies. California Department of Fish and Game Office of Spill Prevention and Response, Water Pollution Control Laboratory. December 1999.

5 Hughes, R. M. (1995) Defining Acceptable Biological Status by Comparing with Reference Conditions in Biological Assessment and Criteria: Tools for Water Resource Planning and Decision Making, Wayne S. Davis and Thomas P. Simon eds. Lewis Publishers, Boca Raton, LA.

6 Barbour, M.T. , J Gerritsen, B.D. Synder, and J.B. Stribling (1999) Rapid Bioassessment Protocols For Use in Streams and Wadeable Rivers: Periphyton, Benthic Macroinvertebrates, and Fish. Second Edition. EPA 841-B-99-002.

2. The Copermittees shall design and implement a program to conduct standardized toxicity testing at urban stream bioassessment stations where the bioassessment data indicates significant impairment. When findings indicate the presence of toxicity, a Toxicity Identification Evaluation (TIE) shall be conducted to determine the cause(s) of the toxicity.

B. Long-term Mass Loading Monitoring

For purposes of evaluating long-term trends, the Copermittees shall continue to monitor the five existing long-term mass loading stations as specified in Monitoring and Reporting Program No. 95-76 and amended by Technical Change Order Nos. 1-4. When findings indicate the presence of toxicity, a Toxicity Identification Evaluation (TIE) shall be conducted to determine the cause(s) of the toxicity.

C. Coastal Storm Drain Outfall Monitoring

The Copermittees shall collaborate to develop and implement a monitoring program for discharges of urban runoff from coastal storm drain outfalls. The program shall meet the following requirements:

1. The program shall include rationale and criteria for selection of storm drain outfalls to be monitored.

2. The program shall include collection of samples for analysis of total coliform, fecal coliform, and enterococci, in addition to any other indicators or pathogens identified by the Copermittees.

3. Samples shall be collected at both the storm drain outfall and in the surf zone (at ankle to knee water depths) directly in front of the outfall.

4. Samples shall be collected during both dry and wet weather periods.

5. Exceedances of public health standards for bacteria must be reported to the County Department of Public Health as soon as possible by the Copermittees.

D. Ambient Bay, Lagoon, and Coastal Receiving Water Monitoring

The Copermittees shall collaborate to develop and implement a program to assess the overall health of the receiving water and monitor the impact of urban runoff on ambient receiving water quality. This monitoring shall including San Diego Bay, Mission Bay, Oceanside Harbor, the Pacific Ocean coastline, coastal lagoons and estuaries, and all Clean Water Act section 303(d) water bodies or other environmentally sensitive areas as defined in F.1.b(2)(a)vii of this Order .

E. Toxic Hot Spots Monitoring in San Diego Bay

The Copermittees shall collaborate to develop and implement a program to assess the relative contribution of urban runoff on Toxic Hot Spots in San Diego Bay.

III. Submittal of Receiving Waters Monitoring Program Document

The Principal Permittee shall submit to the SDRWQCB the countywide or watershed based Receiving Waters Monitoring Program within **180 days** of adoption of this Order. The regional or watershed based Receiving Waters Monitoring Program shall describe how the Copermittees will meet the requirements of the components outlined in Section II of this Attachment.

IV. Submittal of Receiving Waters Monitoring Annual Reports

The Principal Permittee shall submit the Receiving Waters Monitoring Annual Report to the SDRWQCB on January 31 of each year, beginning on January 31, ~~2002.~~2003.

V. Monitoring Annual Report Requirements

A. Monitoring reports shall provide the data/results, methods of evaluating the data, graphical summaries of the data, and an explanation/discussion of the data for each monitoring program component listed above.

B. Monitoring reports shall include an analysis of the findings of each monitoring program component listed above. The analysis shall identify and prioritize water quality problems. Based on the identification and prioritization of water quality problems, the analysis shall identify potential sources of the problems, and recommend future monitoring and BMP implementation measures for identifying and addressing the sources. The analysis shall also include an evaluation of the effectiveness of existing control measures.

C. Monitoring reports shall include identification and analysis of any long-term trends in storm water or receiving water quality.

D. Monitoring reports shall provide an estimation of total pollutant loads (wet weather loads plus dry weather loads) due to urban runoff for each of the watersheds specified in Section J, Table 4 of Order No. 2001-01.

E. Monitoring reports shall for each monitoring program component listed above, include an assessment of compliance with applicable water quality standards.

F. All monitoring reports shall use a standard report format and shall include the following:

1. A stand alone comprehensive executive summary addressing all sections of the monitoring report;
2. Comprehensive interpretations and conclusions; and
3. Recommendations for future actions.

G. All monitoring reports submitted to the Principal Permittee or the SDRWQCB shall contain the certified perjury statement described in Standard Reporting Requirements in Attachment C section B.10.d.

H. All monitoring reports shall be~~peer~~ reviewed prior to submittal to the SDRWQCB by a~~n independent~~ committee (consisting of no less than three ~~members) of peers. All peer~~members). All review comments shall also be submitted to the SDRWQCB.

I. All monitoring reports shall be submitted in both electronic and paper formats.

J. All monitoring reports shall describe monitoring station locations by latitude and longitude coordinates, frequency of sampling, quality assurance/quality control procedures and sampling and analysis protocols.

K. Monitoring programs and reports shall comply with Section VI of Attachment B, as well as Attachment C.

VI. Standard Monitoring Requirements

A. All monitoring activities shall meet the following requirements:

1. Monitoring and Records [40 CFR 122.41(j)(1)]

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

2. Monitoring and Records [40 CFR 122.41(j)(2)] [California Water Code § 13383(a)]

The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application. This period may be extended by request of the SDRWQCB at any time.

3. Monitoring and Records [40 CFR 122.21(j)(3)]

Records of monitoring information shall include the information requested in Attachment B and the following:

a. The date, exact place, and time of sampling or measurements;
b. The individual(s) who performed the sampling or measurements;
c. The date(s) analyses were performed;
d. The individual(s) who performed the analyses;
e. The analytical techniques or methods used; and
f. The results of such analyses.

4. Monitoring and Records [40 CFR 122.21(j)(4)]

Monitoring results must be conducted according to test procedures approved under 40 CFR part 136 unless other test procedures have been specified in this Order.

5. Monitoring and Records [40 CFR 122.21(j)(5)]

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both.

6. Monitoring and Records [40 CFR 122.41(k)(2)]

The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.

7. Monitoring Reports [40 CFR 122.41(l)(4)

Monitoring results shall be reported at the intervals specified elsewhere in this Order.

8. Monitoring Reports [40 CFR 122.41(l)(4)(ii)]

If the discharger monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136, unless otherwise specified in the Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the reports requested by the SDRWQCB.

9. Monitoring Reports [40 CFR 122.41(l)(4)(iii)]

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the SDRWQCB in the Order.

ATTACHMENT C

STANDARD PROVISIONS REPORTING REQUIREMENTS, AND NOTIFICATIONS

A. STANDARD PROVISIONS

1. Duty To Comply [40 CFR 122.41(a)(1)]
   The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this Order has not yet been modified to incorporate the requirement.

2. Need to Halt or Reduce Activity Not a Defense [40 CFR 122.41(c)]
   It shall not be a defense for the discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. Upon reduction, loss, or failure of a treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of a treatment facility fails, is reduced, or is lost.

3. Duty to Mitigate [40 CFR 122.41(d)]
   The discharger shall take all reasonable steps to minimize or prevent any discharge or prevent any discharge or sludge use or disposal in violation of this Order which has a reasonable likelihood of adversely affecting human health or the environment.

4. Proper Operation and Maintenance [40 CFR 122.41(e)]
   The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the discharger only when the operation is necessary to achieve compliance with the conditions of this Order.

5. Permit Actions [40 CFR 122.41(f)] [California Water Code § 13381]
   This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

   a. Violation of any terms or conditions of this Order;
   b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts;
   c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
   d. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

   The filing of a request by the discharger for modification, revocation and reissuance, or termination of this Order, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

6. Property Rights [40 CFR 122.41(g)] [California Water Code §13263(g)]
   This Order does not convey any property rights of any sort or any exclusive privilege. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from liabilities under federal, state, or local laws, nor create a vested right for the discharger to continue the waste discharge.

7. Inspection and Entry [40 CFR 122.41(i)] [California Water Code § 13267(c)]
   The discharger shall allow the SDRWQCB, or an authorized SDRWQCB representative, or an authorized representative of the USEPA (including an authorized contractor acting as a representative of the SDRWQCB or USEPA), upon presentation of credentials and other documents as may be required by law, to:

   a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
   d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the Clean Water Act or California Water Code, any substances or parameters at any location.

8. Bypass of Treatment Facilities [40 CFR 122.41(m)]

   a. Definitions

      (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

      (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

   b. Bypass not Exceeding Limitations

      The discharger may allow any bypass to occur which does not cause effluent limitations of this Order or the concentrations of pollutants set forth in Ocean Plan Table A or Table B to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this provision.

   c. Notice

      (1) Anticipated bypass. If the discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.
      (2) Unanticipated bypass. The discharger shall submit notice of an unanticipated bypass as required in section B.7 of Attachment C.

   d. Prohibition of Bypass

Bypass is prohibited, and the SDRWQCB may take enforcement action against the discharger for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The discharger submitted notices as required under paragraph c. of this section. The SDRWQCB may approve an anticipated bypass, after considering its adverse effects, if the SDRWQCB determines that it will meet the three conditions listed above in paragraph d.(1) of this section.

9. Upset [40 CFR 122.41(n)]

a. Definition "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based effluent limitations because of factors beyond the reasonable control of the discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

b. Effect of an Upset An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph c. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

c. Conditions Necessary for a Demonstration of Upset A discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An upset occurred and that the discharger can identify the cause(s) of the upset;
(2) The permitted facility was at the time being properly operated;
(3) The discharger submitted notice of the upset as required in section B.7 of Attachment C of this Order; and
(4) The discharger complied with any remedial measures required under Provision A.5. of Attachment C of this Order.

d. Burden of Proof In any enforcement proceeding the discharger seeking to establish the occurrence of an upset has the burden of proof.

10. Other Effluent Limitations and Standards [40 CFR 122.44(b)(1)]
If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the SDRWQCB may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.

11. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncomplying discharge.

12. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

13. The discharger shall comply with any interim effluent limitations as established by addendum, enforcement action, or revised waste discharge requirements which have been, or may be, adopted by this SDRWQCB.

B. REPORTING REQUIREMENTS

1. Duty to Reapply [40 CFR 122.41(b)] This Order expires on ~~February 14, 2006~~**February 21, 2006**. If the discharger wishes to continue any activity regulated by this Order after the expiration date of this Order, the discharger must apply for and obtain new waste discharge requirements. The discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations not later than **180 days** in advance of the expiration date of this Order as application for issuance of new waste discharge requirements.

2. Duty to Provide Information [40 CFR 122.41(h)] The discharger shall furnish to the SDRWQCB, SWRCB, or USEPA, within a reasonable time, any information which the SDRWQCB, SWRCB, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order, or to determine compliance with this Order. The discharger shall also furnish to the SDRWQCB, SWRCB, or USEPA, upon request, copies of records required to be kept by this Order.

3. Planned Changes [40 CFR 122.41(l)(1)] The discharger shall give notice to the SDRWQCB as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b);

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in this Order, nor to notification requirements under 40 CFR 122.42(a)(l); or

   c. The alteration or addition results in a significant change in the discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of conditions in this Order that are different from or absent in the existing Order, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

4. Anticipated Non-Compliance [40 CFR 122.41(l)(2)] The discharger shall give advance notice to the SDRWQCB of any planned changes in the permitted facility or activity which may result in noncompliance with the requirements of this Order.

5. Transfers [40 CFR 122.41(l)(3)] This Order is not transferable to any person except after notice to the SDRWQCB. The SDRWQCB may require modification or revocation and

reissuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the Clean Water Act or the California Water Code in accordance with the following:

a. Transfers by Modification [40 CFR 122.61(a)]
Except as provided in paragraph b. of this reporting requirement, this Order may be transferred by the discharger to a new owner or operator only if this Order has been modified or revoked and reissued, or a minor modification made to identify the new discharger and incorporate such other requirements as may be necessary under the Clean Water Act or California Water Code.

b. Automatic Transfers [40 CFR 122.61(b)]
As an alternative to transfers under paragraph a. of this reporting requirement, any NPDES permit may be automatically transferred to a new discharger if:

(1) The current discharger notifies the SDRWQCB at least 30 days in advance of the proposed transfer date in paragraph b.(2) of this reporting requirement;

(2) The notice includes a written agreement between the existing and new dischargers containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

(3) The SDRWQCB does not notify the existing discharger and the proposed new discharger of his or her intent to modify or revoke and reissue the Order. A modification under this subparagraph may also be a minor modification under 40 CFR Part 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph b.(2) of this reporting requirement.

6. Twenty-four Hour Reporting [40 CFR 122.41(l)(6)]
Each Copermittee shall develop and submit criteria by which to evaluate events of non-compliance to determine whether they pose a threat to human or environmental health. These criteria shall be submitted in the Jurisdictional Urban Runoff Management Program Document and Annual Reports for SDRWQCB review. Using these criteria, the ~~The~~ discharger shall report any noncompliance with this Order or any noncompliance that may endanger human health or ~~the environment.~~environmental health. Any information shall be provided orally to the SDRWQCB within **24 hours** from the time the discharger becomes aware of the circumstances. A written description of any noncompliance shall be submitted to the SDRWQCB within **five days** of such an occurrence and contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours under this reporting requirement:

a. Any unanticipated bypass which exceeds any effluent limitation in this Order;

b. Any discharge of treated or untreated wastewater, including reclaimed or recycled wastewater, resulting from pipeline breaks, obstruction, surcharge or any other circumstance;

c. Any discharge or spill of raw or potable water not authorized by this order or resulting from pipeline breaks, obstruction, surcharge or any other circumstance;

d. Any upset which exceeds any effluent limitation in this Order;

e. Any spill or discharge of non-storm water not authorized by this Order. Non-storm water discharges not prohibited by the Copermittees pursuant to Section B of this Order need not be reported under this section; and

f. Any violation of this Order.

7. Other Non-Compliance [40 CFR 122.41(l)(7)]
The discharger shall report all instances of noncompliance not reported elsewhere under other sections of this Order at the time annual reports are submitted. The reports shall contain the information listed in part ~~B.7~~B.6 of Attachment C of this Order.

8. Other Information [40 CFR 122.41(l)(8)]
Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge, or submitted incorrect information in a Report of Waste Discharge, or in any report to the SDRWQCB, it shall promptly submit such facts or information.

9. Signatory Requirements [40 CFR 122.41(k)(1) and 40 CFR 122.22]
All applications, reports, or information submitted to the SDRWQCB shall be signed and certified.

a. All Reports of Waste Discharge shall be signed as follows:

(1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (a) 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 (b) 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 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) 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: (a) the chief executive officer of the agency; or (b) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA).

b. All reports required by this Order, and other information requested by the SDRWQCB shall be signed by a person described in paragraph a. of this reporting requirement,

or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph a. of this reporting requirement;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility

for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and,

(3) The written authorization is submitted to the SDRWQCB.

c. If an authorization under paragraph b. of this reporting requirement is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. of this reporting requirement must be submitted to the SDRWQCB prior to or together with any reports, information, or applications to be signed by an authorized representative.

d. Any person signing a document under paragraph a. or b. of this reporting requirement shall make the following certification:

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 gather and evaluate 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.

10. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the SDRWQCB. As required by the Clean Water Act, Reports of Waste Discharge, this Order, and effluent data shall not be considered confidential.

11. The discharger shall submit reports and provide notifications as required by this Order to the following:

Phil Hammer
STORM WATER UNIT
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
9771 CLAIREMONT MESA BLVD SUITE A
SAN DIEGO CA 92124-1324
Telephone: (858) 467-2952
Fax: (858) 571-6972

Eugene Bromley
US ENVIRONMENTAL PROTECTION AGENCY
REGION IX
PERMITS ISSUANCE SECTION (W-5-1)
75 HAWTHORNE STREET
SAN FRANCISCO CA 94105

12. Unless otherwise directed, the discharger shall submit three copies of each report required under this Order to the SDRWQCB and one copy to USEPA.

C. NOTIFICATIONS

1. California Water Code Section 13263(g)
   No discharge of waste into the waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights.

2. The SDRWQCB has, in prior years, issued a limited number of individual NPDES permits for non-storm water discharges to municipal storm water conveyance systems. The SDRWQCB or SWRCB may in the future, upon prior notice to the Copermittee(s), issue an NPDES permit for any non-storm water discharge (or class of non-storm water discharges) to a municipal storm water conveyance system. Copermittees may prohibit any non-storm water discharge (or class of non-storm water discharges) to a municipal storm water conveyance system that is authorized under such separate NPDES permits.

3. Enforcement Provisions [40 CFR 122.41(a)(2)] [California Water Code §§ 13385 and 13387]
   The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any condition or limitation of this Order, is subject to a civil penalty not to exceed $25,000 per day for each violation. The Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation of this Order, is subject to criminal penalties of $2,500 to $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation, or by imprisonment of not more than two years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of $5,000 to $50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than six years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any condition or limitation of this Order, and who knows at that time that he or she thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than $250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Clean Water Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than $1,000,000 and can be fined up to $2,000,000 for second or subsequent convictions.

4. Except as provided in Standard Provisions A.10. and A.11. in Attachment C of this Order, nothing in this Order shall be construed to relieve the discharger from civil or criminal penalties for noncompliance.

5. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties to which the discharger is or may be subject to under Section 311 of the Clean Water Act.

6. Nothing in this Order shall be construed to preclude institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

7. This Order shall become effective on **February ~~14,~~21, 2001**, provided the USEPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.

8. This Order supersedes Order No. 90-42 upon the effective date of this Order.

ATTACHMENT D

GLOSSARY

Beneficial Uses - The uses of water necessary for the survival or well being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals "Beneficial Uses" of the waters of the State that may be protected against include, but are not limited to, domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. [California Water Code Section 13050(f)].

Best Available Technology (BAT) – BAT is the acronym for best available technology economically achievable. BAT is the technology-based standard established by congress in CWA section 402(p)(3)(A) for industrial dischargers of storm water. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of treatment and best management practices, or BMPs. For example, secondary treatment (or the removal of 85% suspended solids and BOD) is the BAT for suspended solid and BOD removal from a sewage treatment plant. BAT generally emphasizes treatment methods first and pollution prevention and source control BMPs secondarily.

The best economically achievable technology that will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants, as determined in accordance with regulations issued by the Environmental Protection Agency Administrator. Factors relating to the assessment of best available technology shall take into account the age of equipment and facilities involved, the process employed, the engineering aspects of the application of various types of control techniques, process changes, the cost of achieving such effluent reduction, non-water quality environmental impact (including energy requirements), and such other factors as the permitting authority deems appropriate.

Best Conventional Technology (BCT) – BCT is an acronym for Best Conventional Technology. BCT is the treatment techniques, processes and procedure innovations, operating methods that eliminate amounts of chemical, physical, and biological characteristics of pollutant constituents to the degree of reduction attainable through the application of the best management practices to the maximum extent practicable.

Best Management Practices - Best Management Practices (BMPs) are defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. In the case of municipal storm water permits, BMPs are typically used in place of numeric effluent limits.

Bioaccumulate - The progressive accumulation of contaminants in the tissues of organisms through any route including respiration, ingestion, or direct contact with contaminated water, sediment, pore water, or dredged material to a higher concentration than in the surrounding environment. Bioaccumulation occurs with exposure and is independent of the tropic level.

Bioassessment - The use of biological community information to evaluate the biological integrity of a water body and its watershed. With respect to aquatic ecosystems, bioassessment is the collection and analysis of samples of the benthic macroinvertebrate community together with

physical/habitat quality measurements associated with the sampling site and the watershed to evaluate the biological condition (i.e. biological integrity) of a water body.

Bioconcentration – A process by which there is a net accumulation of a chemical directly from water into aquatic organisms resulting from simultaneous uptake and elimination by gill or epithelial tissue. Bioconcentration differs from bioaccumulation in that bioaccumulation refers to the progressive concentration of contaminants in the tissues of organisms through multiple pathways.

Biocriteria - Under the Clean Water Act, numerical values or narrative expressions that define a desired biological condition for a water body that are legally enforceable. The U.S. EPA defines biocriteria as: "numerical values or narrative expressions that describe the reference biological integrity of aquatic communities inhabiting waters of a given designated aquatic life use…(that)…describe the characteristics of water body segments least impaired by human activities."

Biological Integrity - Defined in Karr J.R. and D.R. Dudley. 1981. Ecological perspective on water quality goals. Environmental Management 5:55-68 as: "A balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitat of the region." Also referred to as ecosystem health.

Biomagnication – The transfer and progressive increase in tissue concentrations of a contaminant along the food chain. Because some pollutants can be transferred to higher trophic levels, carnivores at the top of the food chain, such as predatory fish, birds, and mammals (including humans), obtain most of their pollution burden from aquatic ecosystems by ingestion. Thus, although such pollutants may only be present in receiving waters in low concentrations, they can have a significant impact to the integrity of the ecosystem through biomagnification.

Clean Water Act Section 402(p) - [33 USC 1342(p)] is the federal statute requiring municipal and industrial dischargers to obtain NPDES permits for their discharges of storm water.

Clean Water Act Section 303(d) Water Body - is an impaired water body in which water quality does not meet applicable water quality standards and/or is not expected to meet water quality standards, even after the application of technology based pollution controls required by the CWA. The discharge of urban runoff to these water bodies by the Copermittees is significant because these discharges can cause or contribute to violations of applicable water quality standards.

Contamination - As defined in the Porter-Cologne Water Quality Control Act, contamination is "an impairment of the quality of waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. 'Contamination' includes any equivalent effect resulting from the disposal of waste whether or not waters of the state are affected."

Designated Waste - Designated waste is defined as a "nonhazardous waste which consists of pollutants which, under ambient environmental conditions at the waste management unit, could be released at concentrations in excess of applicable water quality objectives, or which could cause degradation of waters of the state." [CCR Title 27, Chapter 3, Subchapter 2, Article 2, Section 20210; WC Section 13173]

Effluent Limitations - Limitations on the volume of each waste discharge, and the quantity and concentrations of pollutants in the discharge. The limitations are designed to ensure that the discharge does not cause water quality objectives to be exceeded in the receiving water and does not adversely affect beneficial uses.

Effluent limitations are limitations of the quantity and concentrations of pollutants in a discharge. The limitations are designed to ensure that the discharge does not cause water quality objectives

to be exceeded in the receiving water and does not adversely affect beneficial uses. In other words, an effluent limit is the maximum concentration of a pollutant that a discharge can contain. To meet effluent limitations, the effluent typically must undergo one or more forms of treatment to remove pollutants in order to lower the pollutant concentration below the limit. Effluent limits are typically numeric (e.g., 10 mg/l), but can also be narrative (e.g., no toxics in toxic amounts).

Erosion – When land is diminished or warn away due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via storm water runoff. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road building, and timber harvesting.

Grading - The cutting and/or filling of the land surface to a desired slope or elevation.

Hazardous Waste - Hazardous waste is defined as "any waste which, under Section 600 of Title 22 of this code, is required to be managed according to Chapter 30 of Division 4.5 of Title 22 of this code." [CCR Title 22, Division 4.5, Chapter 11, Article 1]

Illicit Discharge - 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 form the municipal separate storm sewer) and discharges resulting from fire fighting activities.

Inert Waste - Inert waste is defined as one that "does not contain hazardous waste or soluble pollutants at concentrations in excess of applicable water quality objectives, and does not contain significant quantities of decomposable waste." [CCR Title 27, Chapter 3, Subchapter 2, Article 2, Section 20230]

MEP – MEP is the acronym for Maximum Extent Practicable. MEP is the technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) that municipal dischargers of storm water (MS4s) must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of treatment and best management practices (BMPs). MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their Urban Runoff Management Plan. Their total collective and individual activities conducted pursuant to the Urban Runoff Management Plan becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for ~~sanitary~~municipal separate storm sewer system maintenance). In the absence of a proposal acceptable to the SDRWQCB, the SDRWQCB defines MEP.

In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel, SWRCB addressed the achievement of the MEP standard as follows:

> "*To achieve the MEP standard, municipalities must employ whatever Best Management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive. In selecting BMPs to achieve the MEP standard, the following factors may be useful to consider:*

a. *Effectiveness: Will the BMPs address a pollutant (or pollutant source) of concern?*
b. *Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?*
c. *Public Acceptance: Does the BMP have public support?*
d. *Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?*
e. *Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc?*

The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPs and chooses to select only a few of the least expensive, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPs that should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPs that would address a pollutant source, or to pick a BMP base solely on cost, which would be clearly less effective. In selecting BMPs the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPs, it is the responsibility of the discharger to ensure that all BMPs are implemented."

Municipal Storm Water Conveyance System – (See Municipal Separate Storm Sewer System or MS4).

Municipal Separate Storm Sewer System (MS4) – MS4 is an acronym for Municipal Separate Storm Sewer System. A Municipal Separate Storm Sewer System is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, 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 designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designated or used for collecting of conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

Historic and current development make use of natural drainage patterns and features as conveyances for urban runoff. Urban streams used in this manner are part of the municipalities MS4 regardless of whether they are natural, man-made, or partially modified features. In these cases, the urban stream is both an MS4 and a receiving water.

National Pollution Discharge Elimination System (NPDES) - These permits pertain to the discharge of waste to surface waters only. All State and Federal NPDES permits are also WDRs.

Non-hazardous Solid Waste - Non-hazardous solid waste means all putrescible and nonputrescible solid, semi-sold, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and

semi-sold wastes and other discarded solid or semi-solid waste; provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentration which exceed applicable water quality objectives or could cause degradation of wasters of the state." [CCR Title 27, Chapter 3, Subchapter 2, Article 2, Section 20220]

Non Point Source (NPS) – Non point source refers to diffuse, widespread sources of pollution. These sources may be large or small, but are generally numerous throughout a watershed. Non Point Sources include but are not limited to urban, agricultural, or industrial areas, roads, highways, construction sites, communities served by septic systems, recreational boating activities, timber harvesting, mining, livestock grazing, as well as physical changes to stream channels, and habitat degradation. NPS pollution can occur year round any time rainfall, snowmelt, irrigation, or any other source of water runs over land or through the ground, picks up pollutants from these numerous, diffuse sources and deposits them into rivers, lakes, and coastal waters or introduces them into ground water.

Non-Storm Water - Non-storm water consists of all discharges to and from a storm water conveyance system that do not originate from precipitation events (i.e., all discharges from a conveyance system other than storm water). Non-storm water includes illicit discharges, non-prohibited discharges, and NPDES permitted discharges. An illicit discharge is defined at 40 CFR 122.26(b)(2) as any discharge to a municipal storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a separate NPDES permit and discharges resulting from emergency fire fighting activities.

Nuisance - As defined in the Porter-Cologne Water Quality Control Act a nuisance is "anything which 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."

Numeric effluent limitations - The typical method by which effluent limits are prescribed for pollutants in waste discharge requirements implementing the federal NPDES regulations. When numeric effluent limits are met at the "end-of-pipe", the effluent discharge generally will not cause water quality standards to be exceeded in the receiving waters (i.e., water quality standards will also be met).

Person - A person is defined as an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. [40 CFR 122.2].

Point Source - 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 operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged.

Pollution - As defined in the Porter-Cologne Water Quality Control Act, pollution is "the alteration of the quality of the waters of the State by waste, to a degree that unreasonably affects the either of the following: A) The waters for beneficial uses; or 2) Facilities that serve these beneficial uses." Pollution may include contamination.

Pollutant - A pollutant is broadly defined as any agent that may cause or contribute to the degradation of water quality such that a condition of pollution or contamination is created or aggravated.

Pollution Prevention - Pollution prevention is defined as practices and processes that reduce or eliminate the generation of pollutants, in contrast to source control, treatment, or disposal.

Post-Construction BMPs - A subset of BMPs including structural and non-structural controls which detain, retain, filter, or educate to prevent the release of pollutants to surface waters during the final functional life of development.

Pre-Development Runoff Conditions - The runoff conditions that exist onsite immediately before the planned development activities occur. This definition is not intended to be interpreted as that period before any human-induces land activities occurred. This definition pertains to redevelopment as well as initial development.

Receiving Water Limitations - Waste discharge requirements issued by the SDRWQCB typically include both: (1) "Effluent Limitations" (or "Discharge Limitations") that specify the technology-based or water-quality-based effluent limitations; and (2) "Receiving Water Limitations" that specify the water quality objectives in the Basin Plan as well as any other limitations necessary to attain those objectives. In summary, the "Receiving Water Limitations" provision is the provision used to implement the requirement of CWA section 301(b)(1)(C) that NPDES permits must include any more stringent limitations necessary to meet water quality standards.

Sediment - Soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human induced land disturbance activities) is considered a pollutant. This Order regulates only the discharges of sediment from anthropogenic sources and does not regulate naturally occurring sources of sediment. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

Storm Water - "Storm water" is as defined urban runoff and snowmelt runoff consisting only of those discharges which originate from precipitation events. Storm water is that portion of precipitation that flows across a surface to the storm drain system or receiving waters. Examples of this phenomenon include: the water that flows off a building's roof when it rains (runoff from an impervious surface); the water that flows into streams when snow on the ground begins to melt (runoff from a semi-pervious surface); and the water that flows from a vegetated surface when rainfall is in excess of the rate at which it can infiltrate into the underlying soil (runoff from a pervious surface). When all factors are equal, runoff increases as the perviousness of a surface decreases. During precipitation events in urban areas, rain water picks up and transports pollutants through storm water conveyance systems, and ultimately to waters of the United States.

Toxicity - Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies). The water quality objectives for toxicity provided in the Water Quality Control Plan, San Diego Basin, Region 9, (Basin Plan), state in part…*"All waters shall be free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life….The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge"….* Urban runoff discharges from MS4s are considered toxic when (1) the toxic effect observed in an acute toxicity test exceeds zero Toxic Units Acute (Tua=0); or (2) the toxic effect observed in a chronic toxicity test exceeds one Toxic Unit Chronic (Tuc=1). Urban runoff discharges from MS4s often contain pollutants that cause toxicity.

Total Maximum Daily Load (TMDL) - The TMDL is the maximum amount of a pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain water quality standards. Under Clean Water Act section 303(d), TMDLs must be developed for all

water bodies that do not meet water quality standards after application of technology-based controls.

Urban Runoff - Urban runoff is defined as all flows in a storm water conveyance system and consists of the following components: (1) storm water (wet weather flows) and (2) non-storm water illicit discharges (dry weather flows).

Waste - As defined in California Water Code Section 13050(d), "waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal."

Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste classification system which applies to solid and semi-solid waste which cannot be discharged directly or indirectly to water of the state and which therefore must be discharged to land for treatment, storage, or disposal in accordance with Chapter 15. There are four classifications of waste (listed in order of highest to lowest threat to water quality): hazardous waste, designated waste, nonhazardous solid waste, and inert waste.

Water Quality Objective - Numerical or narrative limits on constituents or characteristics of water designated to protect designated beneficial uses of the water. [California Water Code Section 13050 (h)]. California's water quality objectives are established by the State and Regional Water Boards in the Water Quality Control Plans.

As stated in the Porter-Cologne Requirements for discharge (CWC 13263): "(Waste discharge) 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 objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241."

A more comprehensive list of legal authority containing water quality objectives applicable to this Order can be found in Finding 37 and in Section VII Directives Disussion Underlying Broad Legal Authority for Order 2001-01 pp. 61-63.

Numeric or narrative limits for pollutants or characteristics of water designed to protect the beneficial uses of the water. In other words, a water quality objective is the maximum concentration of a pollutant that can exist in a receiving water and still generally ensure that the beneficial uses of the receiving water remain protected (i.e., not impaired). Since water quality objectives are designed specifically to protect the beneficial uses, when the objectives are violated the beneficial uses are, by definition, no longer protected and become impaired. This is a fundamental concept under the Porter Cologne Act. Equally fundamental is Porter Cologne's definition of pollution. A condition of pollution exists when the water quality needed to support designated beneficial uses has become unreasonably affected or impaired; in other words, when the water quality objectives have been violated. These underlying definitions (regarding beneficial use protection) are the reason why all waste discharge requirements implementing the federal NPDES regulations require compliance with water quality objectives. (Water quality objectives are also called water quality criteria in the Clean Water Act.)

Water Quality Standards - are defined as the beneficial uses (e.g., swimming, fishing, municipal drinking water supply, etc.,) of water and the water quality objectives necessary to protect those uses.

Waters of the State - Any water, surface or underground, including saline waters within the boundaries of the State [California Water Code Section 13050 (e)]. The definition of the Waters of the State is broader than that for the Waters of the United States in that all water in the State is

considered to be a Waters of the State regardless of circumstances or condition. Under this definition, a Municipal Separate Storm Sewer System (MS4) is always considered to be a Waters of the State.

Waters of the United States - Waters of the United States can be broadly defined as navigable surface waters and all tributary surface waters to navigable surface waters. Groundwater is not considered to be a Waters of the United States. Under this definition (see below), a Municipal Separate Storm Sewer System (MS4) is always considered a Waters of the United States.

As defined in the 40 CFR 122.2, the Waters of the U.S. are defined as: **"(a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;** (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition**: (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;** (f) The territorial seas; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA."

Watershed - That geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).

ATTACHMENT E

DRY WEATHER ANALYTICAL MONITORING SPECIFICATIONS - URBAN RUNOFF

Dry weather analytical and field screening monitoring consists of (1) field observations and screening monitoring and (2) analytical monitoring at selected stations. Pursuant to section F.5 of this Order, the purpose of dry weather analytical and field screening monitoring is to detect and eliminate illicit connections and illegal discharges to the MS4 using ~~MS4.~~ frequent, geographically widespread dry weather discharge monitoring and follow-up investigations. Each Copermittee shall conduct the following dry weather analytical and field screening monitoring tasks:

1. Develop MS4 Map

   Each Copermittee shall develop or obtain an up-to-date labeled map of its entire municipal separate storm sewer system (MS4) and the corresponding drainage watersheds within its jurisdiction. The use of a Geographic Information System (GIS) is highly recommended, but not required. The accuracy of the MS4 map shall be confirmed during monitoring activities (See Task 6).

2. Select Dry Weather Analytical Monitoring Stations

   ~~Each~~Based upon a review of its past Dry Weather Monitoring Programs, each Copermittee shall select dry weather analytical monitoring stations within its jurisdiction. Stations shall be either major outfalls or other outfall points (or any other point of access such as manholes) randomly located throughout the MS4 by placing a grid over a drainage system map and identifying those cells of the grid which contain a segment of the MS4 or major outfall; or, stations may be selected non-randomly provided adequate coverage of the entire MS4 system is ensured and that the selection of stations meets or exceeds the requirements given below. The dry weather analytical and field screening monitoring stations shall be established using the following guidelines and criteria:

   a. A grid system consisting of perpendicular north-south and east-west lines spaced ¼ mile apart shall be overlayed on a map of the MS4, creating a series of cells;
   b. All cells that contain a segment of the MS4 shall be identified and one dry weather analytical monitoring station shall be selected in each cell;
   c. Stations should be located downstream of any sources of suspected illegal or illicit activity;
   d. Stations shall be located to the degree practicable at the farthest manhole or other accessible location downstream in the system within each cell;
   e. Hydrological conditions, total drainage area of the site, traffic density, age of the structures or buildings in the area, history of the area, and land use types shall be considered in locating stations;
   ~~f. For small MS4s (which serve a population of less than 100,000), no more than 100 cells need to have identified stations; for medium MS4s (which serve a population of 100,000 - 250,000), no more than 250 cells need to have identified stations; and for large MS4s (which serve a population of more than 250,000), no more than 500 cells need to have identified stations; and~~
   ~~g. If fewer than 100 cells in small MS4s, fewer than 250 cells in medium MS4s, and fewer than 500 cells in large MS4s are created by the overlay on the MS4 map, then a monitoring station shall be located in each cell which contains a segment of the MS4.~~

f. Determining Number of Stations: Based upon review of previous Dry Weather Monitoring Programs, each Copermittee shall determine a minimum number of stations to be sampled each year with provisions for alternate stations to be sampled in place of selected stations that do not have flow.

3. Complete MS4 Map

Each Copermittee shall clearly identify each dry weather analytical monitoring station on its MS4 Map as either a separate GIS layer or a map overlay hereafter referred to as a Dry Weather Analytical Stations Map. Each Copermittee shall confirm that each drainage area within its jurisdiction contains at least one station.

4. Develop Dry Weather Analytical Monitoring Procedures

Each Copermittee shall develop written procedures for dry weather analytical and field screening monitoring (consistent with 40 CFR part 136), including field observations, monitoring, and analyses to be conducted at a minimum between May 1st and September 30th of each year. The dry weather analytical and field screening monitoring program shall be ~~analyses.~~designed to emphasize frequent, geographically widespread monitoring to detect illicit discharges and illegal connections. At a minimum, the procedures must be based on the following guidelines and criteria:

a. Determining Sampling Frequency: Dry weather analytical and field screening monitoring shall be conducted at each identified station at least once ~~during the permit cycle of this Order.~~ between May 1st and September 30th of each year or as often as the Copermittee determines is necessary to comply with the requirements of Section F.5 of the Tentative Order. ~~At a minimum, approximately 1/5 of the identified stations shall be field screened annually.~~

b. If flow or ponded runoff is observed at a dry weather analytical monitoring station and there has been at least seventy-two (72) hours of dry weather, make observations and collect ~~two (2) grab samples during a twenty-four (24) hour period with a minimum period of four (4) hours between samples.~~at least one (1) grab sample. Record general information such as time since last rain, quantity of last rain, site descriptions (i.e., conveyance type, dominant watershed land uses), flow estimation (i.e., width of water surface, approximate depth of water, approximate flow velocity, flow rate), and visual observations (i.e., odor, color, clarity, floatables, deposits/stains, vegetation condition, structural condition, and biology).

c. At a minimum, collect samples for analytical laboratory analysis of the following constituents:

~~(1)Total Dissolved Solids~~
~~(2)Total Suspended Solids~~
~~(3)Turbidity~~
(1) Total Hardness
~~(5)pH~~
~~(6)Specific Conductance~~
(2) Surfactants (MBAS)
~~(8)Total Phosphorus~~
~~(9)Dissolved Phosphorus~~
~~(10) Nitrate Nitrogen~~
~~(11) Nitrite Nitrogen~~

~~(12) Total Kjeldahl Nitrogen~~
~~(13) Ammonia Nitrogen~~
~~(14) Biological Oxygen Demand~~
~~(15) Chemical Oxygen Demand~~
~~(17)~~(3) Oil and Grease
~~Total Petroleum Hydrocarbons~~
(4) Diazinon and Chlorpyrifos
~~(19) Cadmium (Total and Dissolved)~~
~~(20) Copper (Total and Dissolved)~~
~~(21) Mercury (Total and Dissolved)~~
~~(22) Silver (Total and Dissolved)~~
~~(23) Lead (Total and Dissolved)~~
~~(24) Zinc (Total and Dissolved)~~
~~(25) Antimony (Total and Dissolved)~~
~~(26) Arsenic (Total and Dissolved)~~
~~(27) Chromium (Total and Dissolved)~~
~~(28)~~(5) ~~Nickel (Total and Dissolved)~~Cadmium (Dissolved)
(6) Copper (Dissolved)
(7) Lead (Dissolved)
(8) Zinc (Dissolved)
(9) Enterococcus bacteria
(10) Total Coliform bacteria
(11) Fecal Coliform bacteria

At a minimum, field screening analysis of the following constituents:

(1) Specific conductance (calculate estimated Total Dissolved Solids).
(2) Turbidity
(3) pH
(4) Reactive Phosphorous
(5) Nitrate Nitrogen
(6) Ammonia Nitrogen

c. If the station is dry (no flowing or ponded runoff), make and record all applicable observations and select another station from the list of alternate stations for monitoring.

~~d.Develop a paired sample study to compare and evaluate the Colilert Quantitray method with the conventional Most Probable Number or Membrane Filtration methods for Total and Fecal coliform and Enterococcus bacteria analysis for dry weather monitoring.[7] [8]~~

d. Develop criteria for dry weather analytical and field screening monitoring results whereby exceedance of the criteria will require follow-up investigations to be conducted to identify the source causing the exceedance of the criteria.

~~[7] The Colilert® System for Total Coliforms and Escherichia coli prepared by Stephen C. Edberg, Yale University School of Medicine; Frances Ludwig and Darrell B. Smith, South Central Connecticut Regional Water Authority; and Martin J. Allen, AWWA Research Foundation, April 1991. AWWA Research Foundation Order Number: 90576. http://www.awwarf.com/exsums/90576.htm~~

~~[8] Comparison of the Colilert® Method and Standard Fecal Coliform Methods Prepared by Stephen C. Edberg, Yale University School of Medicine; and Darrell B. Smith, South Central Connecticut Regional Water Authority, May 1994 AWWA Research Foundation Order Number: 90647 http://www.awwarf.com/exsums/90647.htm~~

e. Dry weather analytical and field screening monitoring stations identified to exceed dry weather analytical monitoring criteria for any constituents shall continue to be screened in subsequent years.

f. Develop procedures for source identification follow up investigations in the event of exceedance of dry weather analytical and field screening monitoring result criteria. These procedures shall be consistent with procedures required in section F.5.c. of this Order.

g. Develop procedures to eliminate detected illicit discharges and connections. These procedures shall be consistent with each Copermittees Illicit Discharge and Elimination component of its Jurisdictional Urban Runoff Management Plan as discussed in section F.5 of this Order.

5. Submit Dry Weather Analytical Monitoring Map and Procedures

Each Copermittee shall submit its dry weather analytical and field screening monitoring map (including the MS4, drainage watersheds, and station locations) and dry weather analytical monitoring procedures to the Principal Permittee as part of its Jurisdictional Urban Runoff Management Program Document on the date prescribed by the Principal Permittee. The procedures shall, at a minimum, address all issues included in section 4. of this Attachment. The Principal Permittee shall collectively submit the dry weather monitoring analytical maps and procedures to the SDRWQCB within ~~180~~**365 days** of adoption of this Order. Implementation of dry weather analytical monitoring under the requirements of this Order shall commence ~~within **180 days** of adoption of this Order.~~ by May 1, 2002.

6. Conduct Dry Weather Analytical Monitoring

~~Each~~Until the Dry Weather Analytical and Field Screening Monitoring Program is implemented, each Copermittee shall continue to implement the Dry Weather Monitoring Program required under Order 90-42. Starting May 1, 2002, each Copermittee shall conduct dry weather analytical and field screening monitoring in accordance with its storm water conveyance system map and dry weather analytical and field screening monitoring procedures as described in Tasks 1 – 4 above. If monitoring indicates an illicit connection or illegal discharge, conduct the follow-up investigation and elimination activities as described in submitted dry weather analytical and field screening monitoring procedures and sections F.5.c. and F.5.d. of this Order.

During monitoring, the accuracy of its MS4 map and shall be confirmed. Correct any inaccuracies in the either the MS4 map or the Dry Weather Analytical Stations Map and resubmit the corrected maps in the next annual report.

7. Summarize and Report Dry Weather Analytical Monitoring Results

As part of its individual Jurisdictional URMP Annual Report, each Copermittee shall summarize and report on its dry weather analytical monitoring results. The data shall be presented in tabular and graphical form. The reporting shall include analytical monitoring results, as well as follow up and elimination activities for potential illicit discharges and connections. Dry weather analytical monitoring reports shall comply with all monitoring and standard reporting requirements in Attachments B and C of Order 2001-01. The Principal Permittee shall submit to the SDRWQCB the individual dry weather analytical monitoring reports as part of the unified Jurisdictional URMP Annual Report on January 31, ~~2002,~~2003, and every year thereafter.

Attachment 6

for

Fact Sheet/Technical Report for San Diego Municipal Storm Water Permit
(Order No. 2001-01)

Response to Comments on San Diego Municipal Storm Water Permit

This document provides the rationale for changes to the San Diego Municipal Storm Water Permit not found or discussed in the main text of the Fact Sheet/Technical Report.

RESPONSE TO COMMENTS

ORDER NO. 2001-01
(San Diego Municipal Storm Water Permit)
November 6, 2001

Agenda Item 9
For
San Diego Regional Water Quality Control Board Meeting
On February 21, 2001

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LIST OF ABBREVIATIONS

303(d)	Water bodies listed as impaired under Section 303(d) of the Clean Water Act.
ASBS	Area of Special Biological Significance
BAT	Best Available Technology
BMP	Best Management Practice
CALTRANS	California Department of Transportation
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CSBP	California Stream Bioassessment Procedure
CTR	California Toxics Rule
CWA	Clean Water Act
CWC	California Water Code
EMAP	Environmental Monitoring and Assessment Program
ESA	Environmentally Sensitive Area
FR	Federal Register
JURMP	Jurisdictional Urban Runoff Management Program
LARWQCB	Los Angeles Regional Water Quality Control Board
MBAS	Methylene Blue Activated Substance
MEP	Maximum Extent Practicable
MLLW	Mean Lower Low Water
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
NPS	Non Point Source
NSC	Numeric Sizing Criteria
NURP	Nationwide Urban Runoff Program

PC	Porter-Cologne Water Quality Control Act
POTW	Publicly Owned Treatment Works
SANDAG	San Diego Association of Governments
SCCWRP	Southern California Coastal Water Research Project
SDRWQCB	San Diego Regional Water Quality Control Board
SUSMP	Standard Urban Storm Water Mitigation Plan
SWRCB	State Water Resources Control Board
SWPPP	Storm Water Pollution Prevention Plan
TAC	State Water Resources Control Board Urban Runoff Technical Advisory Committee
TIE	Toxicity Identification Evaluation
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TSS	Total Suspended Solids
TUa	Toxic Units Acute
TUc	Toxic Units Chronic
URMP	Urban Runoff Management Program
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirement
WEF	Water Environment Association
WMA	Watershed Management Area
WQA	Water Quality Act of 1987 (Amendments to the Clean Water Act)
WQO	Water Quality Objective
WURMP	Watershed Urban Runoff Management Program

INTRODUCTION

Background

The Regional Board received a total of approximately 1500 comments from almost 100 different organizations and individuals. These comments include oral comments received at the public hearing on December 13, 2000; formal written comments received by November 30, 2000 (close of written comment period); and comments received at a series of three public workshops conducted on tentative Order No. 2001-01. Public workshops were conducted on October 19, 2000, November 2, 2000, and November 16, 2000 for the purpose of obtaining public comment. In addition to being addressed in this document, each workshop comment was also responded to orally during the course of the workshops.

For purposes of developing responses, each of the approximately 1500 comments were placed into one of roughly 50 broad categories such as legal issues, construction, dry weather monitoring, cost, and education. Furthermore greater than 60% of the total comments were not unique; these comments were grouped with other similar comments in order to expedite/facilitate the responding process.

Permit Revisions

The Regional Board appreciates the efforts of all those who contributed a substantial amount of time and effort to provide comments on tentative Order No. 2001-01. The comments are valuable and many have resulted in proposed permit language changes. To the extent that a revision to the permit language is proposed as a result of a particular comment, that fact is noted in the response to that comment. The revised draft permit will be available to the public as soon as possible during the week of February 12, 2001.

Format of this Document

The overall organization of this document is consistent with the organization of tentative Order No. 2001-01. Responses to “General Comments” are presented first followed by responses to “Comments on Multiple Sections”. The remainder of the document contains responses to “Comments on Specific Sections” presented in same sequence as the sections in the tentative order, i.e., Findings 1 through 39, Directives A through R, and Attachments A through E.

Ample Legal Authority

Many of the comments received challenge the Regional Board’s authority to require one or more the directives contained in tentative Order No. 2001-01.

The tentative order is based on the federal Clean Water Act, the Porter-Cologne Water Quality Control Act (Division 7 of the Water Code, commencing with Section 13000), applicable state and federal regulations, as well as all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the State Water Resources Control Board and the Regional Water Quality Control Plan (Basin Plan) adopted by the Regional Board.

As discussed in the Fact Sheet/Technical Report, the following five broad legal authority citations generally apply to all directives in Order No. 2001-01, and provide the SDRWQCB with ample underlying authority to require each of the directives.

CWA 402(p)(3)(B)(ii) – Prohibit Non-Storm Water
The CWA requires in section 402(p)(3)(B)(ii) that permits for discharges from municipal storm sewers "shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers."

CWA 402(p)(3)(B)(iii) – Reduce to MEP and Whatever Else is Needed
The CWA requires in section 402(p)(3)(B)(iii) that 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**." *(emphasis added.)*

40 CFR 122.26(d)(2)(i)(A-F) – Obtain Adequate Legal Authority
Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A-F) provide that each Copermittee's permit 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."

40 CFR 122.26(d)(2)(iv) – Reduce to the MEP and Whatever Else is Needed

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) provides that the Copermittee shall develop and implement a proposed management program which "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**. *(emphasis added.)* The program shall also include a description of staff and equipment available to implement the program. […] Proposed programs may impose controls on a systemwide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. […] Proposed management programs shall describe priorities for implementing controls."

Porter –Cologne Act section 13377 – Implement Clean Water Act and Whatever Else is Needed

California Water Code section 13377 provides that "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 (Clean Water 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**." *(emphasis added.)*

When a regional board issues waste discharge requirements to control discharges of urban runoff and storm water, it is exercising the authority of the state, as set forth in the Porter-Cologne Water Quality Control Act, in a manner that will implement the federal NPDES regulations as well as all applicable provisions of the Porter-Cologne Act, statewide Water Quality Control Plans and Policies and the Regional Water Quality Control Plan (Basin Plan). While regional board orders prescribing such requirements include the conditions and limitations prescribed for NPDES permits by the USEPA, the legal effect of waste discharge requirements depends, not on the Clean Water Act, but upon independent state law.

In other words, the regional boards have independent authority to impose requirements that exceed those contained in the federal regulations governing storm water discharges. California's Porter-Cologne Water Quality Control Act

antedates the 1972 federal Clean Water Act amendments to the Federal Water Pollution Control Act and, in some particulars, provides broader authority over activities that could affect water quality than the Clean Water Act. For example, state authority extends to all discharges of waste that could affect the quality of surface or ground water while the Clean Water Act applies only to discharges of pollutants from point sources to surface waters. The Clean Water Act explicitly preserves independent state authority to enact and implement its own standards and requirements, provided that such standards and requirements are at least as stringent as those that would be mandated by the Clean Water Act and the NPDES regulations:

> Except as expressly provided in this chapter, nothing in this chapter shall (1) preclude or deny the right of any State or political subdivision thereof or interstate agency to adopt or enforce (A) any standard or limitation respecting discharges of pollutants, or (B) any requirement respecting control or abatement of pollution; except that if an effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance is in effect under this chapter, such State or political subdivision or interstate agency may not adopt or enforce any effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance which is less stringent than the effluent limitation, or other limitation, effluent standard, prohibition, pretreatment standard, or standard of performance under this chapter; or (2) be construed as impairing or in any manner affecting any right or jurisdiction of the States with respect to the waters (including boundary waters) of such States. [CWA 510; 33USC1370.]

Thus, while the state is compelled to ensure implementation of the federal regulations for water pollution control, it is free to implement whatever additional water quality control measures may be authorized by state law. The California Legislature explicitly reiterated the independent regulatory discretion of the state in its amendments to reconcile Porter-Cologne with the Clean Water Act.

Discharges of Waste are Privileges, Not Rights

In addition to the Regional Board's broad legal authority and discretion as discussed above, it is important to keep in mind that the Porter Cologne Act clearly specifies that discharges of waste into waters of the state are privileges, not rights [section 13263(g)]. The Porter Cologne Act also specifies that requirements for discharges of waste need not allow use of the full waste assimilation capacity of receiving waters [section 13263(b)] and that discharges of waste may be prohibited [section 13243].

General Comments

Comment: Need more time to set up both industrial and commercial pollution prevention programs. (County of San Diego (1), County of San Diego (2))

Response: The implementation schedule for the Jurisdiction Urban Runoff Management Program, excluding Section F.1, has been extended in the revised Tentative Order from 180 days to 365 days.

Comment: Tentative Order No. 2001-01 cannot require Copermittees to "measurably increase the knowledge" or "measurably change the behavior" of target communities. (County of San Diego)

Response: As part of demonstrating that management measures have been completed to the Maximum Extent Practicable, there must be a demonstration of program effectiveness. Therefore, the requirement to demonstrate an increase in knowledge or beneficial behavior changes will remain in the Tentative Order.

Comment: The Order would undermine the Copermittees' CEQA process. The Copermittees will need to perform CEQA review before taking actions that will implement most of the requirements in the Order. The Order would force the Copermittees to amend their General Plans, amend ordinances, enter into agreements or build some type of facility. Each of these actions is likely to trigger CEQA review. The time needed to complete CEQA review varies greatly depending upon the type of review required, the size and the complexity of the proposed project. The Copermittees have identified several potential impacts to the environment that would be caused by implementing this Order. These potential impacts will compel the Copermittees at the least to prepare a Negative Declaration, and probably an Environmental Impact Report ("EIR"), before some of these requirements can be implemented. The 90- or 180-day timeline allowed for implementing most of the Order's requirements is unrealistic if merely a negative declaration is needed. The timelines are not possible if an EIR is needed. (County of San Diego, Procopio, Cory, Hargreaves & Savitch)

Response: Schedules for the implementation of the requirements of the Tentative Order have been extended. These extensions should be adequate for CEQA review.

It should be noted that many of the requirements imposed by the Tentative Order have been in place since the adoption of Order No. 90-42. Therefore amendments to General Plans and ordinances, agreements or construction of facilities and other work necessary for compliance with this order should have either been completed or well underway.

Comment: The County is also concerned that the environmental review will not be meaningful given the prescriptive nature of the Order. CEQA demands that a public agency analyze the environmental effects of a proposed project. The analytical process is supposed to include an opportunity for the public to participate and an opportunity for the public agency to take the environmental analysis and the public input into account when it makes decisions regarding the project. The prescriptive terms of the Order will reduce the County's environmental review to mere window dressing when the County acts to implement the Order. The County will not be able to consider modifications that will mitigate impacts or alternative projects that the analysis shows to be preferred because the County will be facing significant penalties unless it adopts a project consistent with the terms of the Order. (County of San Diego)

Response: The Tentative Order provides adequate flexibility to the Copermittees to implement their urban runoff management programs. The Copermittees are provided wide discretion in the implementation of BMPs. Furthermore, concerns regarding the Tentative Order's flow requirements potential for negative impacts have been alleviated, in that greater discretion has been provided to the Copermittees.

Comment: The Tentative Order's various requirements for implementation of structural BMPs and infiltration may adversely impact wetlands by reducing flows reaching the wetlands. (IEA, BIASC, BIASD, County of San Diego)

Response: The Tentative Order will not adversely impact wetlands through a reduction in their receipt of flows. There are two conditions to consider regarding flows to wetlands: wet weather flows and dry weather flows.

The Tentative Order has been revised to include only one requirement (F.1.b.2.b.i.) regarding wet weather flows. It is important to note this requirement only applies to new development and significant redevelopment, and therefore does not effect the majority of the area of most watersheds. The requirement states: "BMPs shall […] Control the post-development peak storm water runoff discharge rates and velocities as necessary to maintain or reduce pre-development downstream erosion, and to protect stream habitat." As can be seen, the requirement attempts to maintain peak flow rates at predevelopment levels. Nowhere does the requirement make it necessary for peak flow rates to be reduced below predevelopment rates. By seeking to maintain predevelopment peak flow rates, the Tentative Order helps preserve the natural wet-weather runoff conditions, thereby protecting wetlands, as opposed to adversely impacting them.

The Tentative Order's SUSMP requirements include the option of infiltration of storm water. This in an option, and need not be used if concerns exist regarding unforeseen impacts. The Tentative Order also promotes infiltration of storm water runoff during wet weather. Again, these requirements seek to maintain the natural infiltration rates and thereby maintain the natural flow regime, which can only benefit wetlands. Development, with its associated impervious surfaces, greatly reduces infiltration at newly developed sites. Maximization of infiltration at such development sites will only swing infiltration rates back closer to their natural predevelopment levels. It is doubtful that natural predevelopment infiltration levels can even be achieved at developed sites, as many engineers attested to at the Tentative Order workshops. Therefore, it is highly unlikely that requirements promoting the use of infiltration will result in decreased flows to wetlands, thereby causing any adverse impacts. On the contrary, promotion of infiltration maintains natural groundwater recharge and overland runoff rates, both of which are necessary

for most healthy wetlands. Any argument focusing only on quantity of overland flows misses the important impact groundwater recharge typically has on wetlands.

The other flow condition the Tentative Order addresses is dry weather flows. It has been stated that the Tentative Order's prohibitions on illicit discharges (section B) will impact the artificial dry weather flows upon which some wetlands are reliant. This is incorrect. The requirements for the prohibition of non-storm water discharges in section B of the Tentative Order are almost identical to requirements regarding non-storm water discharges in the current San Diego Municipal Storm Water Permit (Order No. 90-42). Clearly, these prohibitions have not led to the halt of dry weather urban runoff within San Diego County over the last ten years. It has been further stated that Legal Authority section D.1.b of the Tentative Order will also result in decreased dry weather flows to wetlands. Again, this is not the case. This section requires the Copermittees to have legal authority to prohibit the discharges described in the section. It does not require the discharges to be prohibited in all instances, but rather requires the Copermittees to have the legal authority to prohibit such discharges in the event that prohibition is determined to be necessary. Irregardless, it is doubtful that any of the discharges discussed in section D.1.b would be beneficial to wetlands.

It has also been suggested that the provisions of the Tentative Order will require the diversion of dry weather flows to the sanitary sewer, thereby depriving wetlands of valuable artificial flows. Nowhere does the Tentative Order require diversion of any types of flow to the sanitary sewer. The Tentative Order actually does the opposite by promoting onsite controls and discouraging diversion. The draft Fact Sheet/Technical Report also discusses a preference for on site controls as opposed to diversion-type regional solutions. Furthermore, the Tentative Order's requirement that dry weather flows be diverted from structural infiltration BMPs (section F.1.b.2.i.iii) does not constitute a diversion to the sanitary sewer. Dry weather flows can simply be diverted to other BMPs such as filters, which would remove pollutants in the dry weather flows prior to their discharge to wetlands or other downstream areas.

Comment: Allow co-permittees to develop time schedules for watershed mapping and implementation of watershed URMP and submittal of reports. (County of San Diego (1), County of San Diego (2))

Response: The Copermittees may develop time schedules for watershed mapping and implementation of the Watershed Urban Runoff Management Program Report that achieve compliance with the task completion and submittal dates specified in the revised Tentative Order.

Comment: Submittal dates for the first and second unified JURMP report, and model SUSMPs reports need to be extended. (County of San Diego (1), County of San Diego (2), County of San Diego (3))

Response: The revised Tentative Order eliminates the requirement to submit both a first and second unified Jurisdictional Urban Runoff Management Program Document. The revised Tentative Order requires the submittal of one Unified Jurisdictional Urban Runoff Management Program Document 365 days following the adoption of the Tentative Order. Additional time to develop the Model SUSMP will

not provided. The submittal of the first Unified Jurisdictional Urban Runoff Management Program Report has been extended by 365 days.

Comment: Several permit requirements constitute an unfunded mandate requiring reimbursement from the State. (Building Industry of Southern California, City of Del Mar, Building Industry of Southern California (2), Coalition for Practical Regulation, City of San Juan Capistrano, Coalition for Practical Regulation (2), City of El Cajon, County of San Diego)

Response: The requirements of the tentative permit are not within the definition of "unfunded mandate" that would require reimbursement of costs under the California Constitution. This is because the requirements of the tentative permit are derived from the federal Clean Water Act, as opposed to State Law. Since the tentative order would implement a federal requirement, rather than a state requirement, the tentative order is not an "unfunded mandate" by the state. The State Water Resources Control Board (SWRCB) has previously determined in several circumstances that regional board orders are exempt from the requirement for reimbursement under the California Constitution.
Also, although this program is a federal requirement, SDRWQCB staff has provided the Copermittees with information on creating funding sources. Several Copermittees have established funding sources to mitigate the strain on the municipalities general fund.

Comment: Comment period was too short to give the necessary responses. (City of Escondido, County of San Diego)

Response: The comment period was proposed and sufficiently noticed with the release of Tentative Order 2001-01. Extension of the adoption schedule was considered and rejected by the SDRWQCB in open hearing on December 13, 2000.

Comment: 365 days is not long enough to develop and implement SUSMP. The date to implement the land use planning date and SUSMP conflict by 180 days. (County of San Diego, City of San Diego)

Response: The development and implementation of the Model SUSMP requirements of Section F.1 of the Tentative Order are realistic and achievable. Additional time has been provided for the Copermittees to implement the other requirements of the Jurisdictional Urban Runoff Management Program in order to facilitate the timely completion and implementation of the entire Jurisdictional Urban Runoff Management Program. Under the revised Tentative Order, the dates for implementation of Land Use Planning and the Model SUSMP requirements now coincide.

Comment: There appears to be a schedule conflict with regards to Section F.1.b and Sections D.2. And D.2.d. (City of La Mesa, County of San Diego)

Response: Section F.1.b contains requirements for modifications to the project approval process and is not in conflict with the requirements of Section D.2 which require each Copermittee to submit certified statements from its chief legal counsel that the Copermittee has adequate legal authority to implement and enforce each of the requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and the revised Tentative Order. The revised Tentative Order extends the submittal date for requirements in Section D.2 by 90 days to accommodate the Copermittees request for additional time.

Comment: What authority do land use permitting agencies have to enforce the requirements of the Tentative Order on third parties? (City of Chula Vista)

Response: Storm water permits are issued to municipalities because of their land use authority. The ultimate responsibility for the pollutant discharges, increased runoff, and inevitable long-term water quality degradation that results from urbanization lies with local governments. This responsibility is based on the fact that it is the local governments that have authorized the urbanization (i.e., conversion of natural pervious ground cover to impervious urban surfaces) and the land uses that generate the pollutants and runoff. Furthermore, the MS4 through which the pollutants and increased flows are conveyed, and ultimately discharged into receiving waters, are owned and operated by the same local governments. In summary, the municipal Copermittees under Order No. 2001-01 are responsible for discharges into and out of their storm water conveyance systems because (1) they own and operate the MS4; and (2) they have the legal authority that authorizes the very development and land uses which generate the pollutants and increased flows in the first place.

Order No. 2001-01 holds the local government accountable for this direct link between its land use decisions and water quality degradation. The permit recognizes that each of the three major stages in the urbanization process (development planning, construction, and the use or operational stage) is controlled by and must be authorized by the local government. Accordingly, this permit requires the local government to implement, or require others to implement, appropriate best management practices to reduce pollutant discharges and increased flow during each of the three stages of urbanization.

For example, since grading cannot commence prior to the issuance of a local grading permit, the Copermittees have a built-in mechanism to ensure that all grading activities are protective of receiving water quality. A Copermittee has the authority and discretion to withhold issuance of the grading permit until the project proponent has demonstrated to the satisfaction of the Copermittee that the project will not violate the Copermittee's ordinances or cause the Copermittee to be in violation of its municipal storm water permit. Since the SDRWQCB will ultimately hold the Copermittee responsible for any discharges from the grading project, the Copermittee will want to use its own permitting authority to ensure that the project proponent implements whatever measures the Copermittee deems necessary to protect discharges into its MS4.

Comment: The RWQCB should not issue a municipal stormwater permit that is so fundamentally inconsistent with similar permits issued elsewhere in the state. The foundation of the permit may not be

legal. However, legal or not, the issuance of a radically different permit in San Diego than has been issued elsewhere in the state is not good policy, and it is not fair. The Order the San Diego RWQCB has proposed is more stringent and invasive in almost all respects than prior municipal stormwater permits issued in this state. The Order is much more stringent and prescriptive, and much less flexible than permits issued to Orange County, to other Los Angeles area Copermittees, and to municipalities in Ventura, Riverside, and Santa Clara. (County of San Diego)

Response: The mission of the RWQCBs and SWRCB is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. The "benefit" to which this mission statement refers is expressed in terms of the beneficial uses designated in regional water quality control plans (basin plans). Each RWQCB develops these plans for its own region, in keeping with California Water Code § 13240 et seq. Since the mission of the RWQCBs involves protecting beneficial uses that are designated by region or portion thereof, it is appropriate for the actions of a RWQCB to be specific to its region or portions thereof. In other words, in carrying out its mission, it is more important that the SDRWQCB take actions as necessary and appropriate to protect beneficial uses in the San Diego region than it is to achieve multi-regional or statewide permit consistency. The Tentative Order is intended first and foremost to protect beneficial uses in the area to which it applies, not to be consistent with permits adopted in the past that are applicable to other areas.

Comment: The federal Clean Water Act and state Water Code do not give the RWQCB the broad legal authority which staff claims, and on which the validity of the Order depends.

In the Technical Report, at pages 62 and 63 and passim, the RWQCB claims broad authority to require in this Order “Whatever Else is Needed.” This claim is based on both federal and state law. However, the Order goes well beyond any omnibus or general authority the cited statutes actually provide.

Section 401(p)(3) of the Clean Water Act provides that municipal stormwater permits

“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.”

This language in section 401(p)(3) is all about controls to reduce discharges of pollutants. Even the “other provisions” the section authorizes must be appropriate for the control of such pollutants. Read by itself, this language plainly says nothing about the protection of water quality. Moreover, the language cannot be read as a subtle backdoor attempt to authorize water quality based requirements “if appropriate” since the Clean Water Act does not require municipal stormwater discharges to meet water quality standards. This language is not about the impacts of stormwater discharges on water quality, and it is not a blanket authorization for the RWQCB to require anything it wants based on amorphous or unsupported claims that such requirements are “appropriate” or “needed.”

In Defenders of Wildlife v. Browner (Ninth Cir. 1999) 191 F3d 1159, the federal appellate court with jurisdiction over California contrasted this language with provisions of the Clean Water Act that applied to industrial dischargers, and held that EPA was not obliged to require in an EPA-issued permit that municipal discharges strictly comply with state water quality standards. In dicta, the Court also advised that EPA “has the authority to determine that ensuring strict compliance with state water-quality standards is necessary to control pollutants.”

The dicta in Defenders of Wildlife does not authorize the regional water boards to require municipal stormwater discharges to meet state water quality standards in every case. At most, that dicta contemplates (as it clearly states) that this requirement could be imposed after a determination that this kind of requirement was in fact "necessary to control pollutants."

There is no determination or Finding of this kind supporting the Order. Instead, with complete circularity, Finding 13 states that compliance with receiving water limits based on water quality objectives is necessary to ensure that municipal stormwater discharges do not contribute to violations of water quality objectives. This is a legally insufficient Finding to support the water quality based requirements the Order seeks to impose.

Adding a new Finding to this Order before final promulgation would not cure this legal defect, because there is no reference in the Technical Report to evidence that could support the required Finding. Absent compelling evidence, it would be arbitrary for the RWQCB to find that application of the Clean Water Act's MEP standard by the Copermittees would not adequately control pollutants.

State law is also relevant there. The Technical Report cites to Water Code section 13377 as a source of omnibus authority. The second part of that section authorizes only "anymore stringent effluent standard or limitation," and only where "necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance." (Water Code § 13377.)

Many of the requirements imposed by the Order and based on this purported authority are not effluent standards or limitations—they are not even discharge- related requirements. Instead, they are directives to the Copermittees to take regulatory actions against third parties. These kinds of additional requirements are not authorized by section 13377.

Any authority that section 13377 might provide to impose requirements that are not "controls to reduce the discharge of pollutants," is further limited by Water Code section 13372. This section requires that state law be construed to prevent "any inconsistency" with respect to required NPDES permits. It is absolutely fundamental to the scheme for municipal stormwater discharges laid out in the Clean Water Act that these discharges are not subject to water quality standards. Any interpretation or application of section 13377 that reversed this fundamental policy decision would be inconsistent with the Clean Water Act, and is prohibited by Water Code section 13372. Congress made a fundamental distinction between industrial discharges and municipal stormwater discharges in the Clean Water Act. The Ninth Circuit affirmed that distinction in Defenders of Wildlife. Water Code section 13372 requires this RWQCB to do likewise.

Finally, any requirements that are based on Water Code section 13377 must be justified by the RWQCB "as necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance." The RWQCB has not acknowledged and has not met this burden. The burden is real. In Southern California's Edison Co. v. State Water Resources Control Board (1981) 116 Cal.App.3d 751, the Edison Company, operator of the San Onofre Nuclear Power Plant, brought an action against the State Water Resources Control Board challenging waste discharge requirements imposed upon the power plant by the San Diego Regional Water Quality Control Board under an NPDES permit and waste discharge requirements ("WDRs"). The San Diego Regional Board's Order was affirmed by the State Board. The petitioner challenged the WDRs, claiming the permit standards requiring the petitioner to remove pollutants entering into the generating stations through its water intake valve were required to have been set on a "net" rather than a "gross" basis. The State Board adopted a Water Control Plan ("Ocean Plan") from which the Regional Board presumably derived its authority to issue the permit, although that Plan

did not authorize the regulations on a gross basis as opposed to a net basis. (Id. at 757.) The trial court set aside the Regional Board's "gross standard," finding it was issued "beyond the authority of [either of] the Boards." (Id. at 754.)

On appeal, the Appellate Court held that while the Clean Water Act allows states or other agencies to enact stricter limitations than those found in the Federal Guidelines, such stricter limitations are only permitted "as necessary for the protection of the beneficial uses of the ocean." (Id. at 758-759, citing Water Code § 13377.) The court went on to find that in order for a regional board to make such a finding it must "first annunciate its reasoning; which must in turn be supported by the evidence." (Id.) In Southern California Edison Co., because the State Board's order was not supported by evidence showing that a more stringent standard was necessary to protect special beneficial uses of the ocean, "the Board's findings were inadequate" and "the absence of such evidence makes it impossible to determine whether stricter regulations than those found in the ocean plans are in fact necessary." (Id. at 759.) Finally, the Court held that as to the one finding that even addressed the issue, it "fails to explain how a specific use or uses will be benefited by implementation of the stricter standards or why stricter standards are in fact necessary." (Id. at 761.)

Neither the Clean Water Act nor the Porter-Cologne Act authorizes the RWQCB to impose the numerous programs and unfunded mandates set forth in the Tentative Order, particularly where the RWQCB has not provided sufficient evidence to justify the need for such stricter standards. Examples of overly restrictive provisions of the Tentative Order that are not supported by sufficient evidence include those provisions of the permit that prohibit the discharge of wash water from residential areas, the requirement that the Copermittees control the discharge of pollutants "to" the MS4, the requirement that the permittees carry out all "inspection surveillance and monitoring" apparently to be determined in the future by the Regional Board or through some private lawsuit, and numerous other provisions of the Tentative Order including the numerical sizing criteria set forth in the provisions dealing with SUSMPs. Further, the Regional Board has failed to annunciate its reasoning to support why such stricter standards are "necessary," and there is no evidence cited in the Technical Report to support such standards or reasoning. The stricter standards as set forth in the Tentative Order are not authorized under either the Clean Water Act or State Law.

The County believes the dicta in this case erroneously interprets what section 402(p)(3)(B) authorizes. This section need not and should not be read to authorize application of water quality prohibitions to municipal stormwater discharges; that would be a strained interpretation that is not consistent with the basic statutory scheme Congress created for municipal stormwater. Instead, the phrases “reduce the discharge of pollutants” at the beginning of the section, and “control of such pollutants” at the end of the section should be read as meaning the same thing. The authorization to do more in section 402(p)(3)(B) would then merely authorize expansion of the specific list of MEP techniques included as examples in the section. See comment “O” above. (County of San Diego)

Response: Water Code 13263 & 13377 give RWQCB authority to regulate discharges to preserve highest reasonable water quality and water quality needed to sustain beneficial uses, including aquatic habitat, etc. NPDES regulations mandate reduction of pollutants in storm water that cause or contribute to pollution to MEP by municipalities; evidence establishes risk of unreasonable degradation and pollution associated with urban runoff and support’s RWQCB imposition of requirements implementing “MEP” performance standards.

While CWA does not require municipalities to satisfy receiving water standards; [Defenders of Wildlife v Browner (9th c, 1999), 191F3d 1159] WQ sections 13263 & 13377 requires WDRs functioning as NPDES permits to implement water quality objectives (i.e., water quality standards) in basin plans and

provisions of the CWA and NPDES regulations needed to protect beneficial uses, and to prevent nuisance.

Comment: Tentative Order No. 2001-01 violates California Water Code section 13360 by specifying the "particular manner in which compliance may be had," in the form of specific BMPs. (County of San Diego)

Response: California Water Code (CWC) section 13360 generally prohibits the Regional Boards from specifying the manner of compliance with state waste discharge requirements. However, CWC section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Since tentative Order No. 2001-01 is written to implement CWA requirements, it does not violate section 13360 for the SDRWQCB to include specified programs of Best Management Practices (BMPs) to be implemented by the municipalities in order to carry out CWA requirements. Specificity is even more crucial in waste discharge requirements for storm water discharges given their lack of numerical effluent limits. In order to reduce storm water pollution to the maximum extent practicable (MEP), the tentative order must require specific styles of BMPs (i.e., structural or source control), but that is not to say that the SDRWQCB is dictating one specific BMP to accomplish the task. The municipalities often have many BMPs available to get the job done.

Comment: The Order unnecessarily and inappropriately creates additional and more severe penalties for requirements that should not be included in the Order, including restatements of existing non-water quality requirements.

Violation of any requirement of a valid NPDES permit can subject the "discharger" to severe penalties, as a result of EPA, RWQCB, or citizens' enforcement actions. This enforcement system should not be abused by adding requirements to an NPDES permit that do not directly implement the Clean Water Act and the state Water Code.

In the Order, the RWQCB has chosen to direct municipalities to become general permit enforcers, pollution prevention regulators, and water quality regulators. See comments "S" and "T" above. Even if the County were inclined to agree that it should implement these kinds of programs, it could not accept the burden of implementing such difficult programs within 180 days under the threat of Clean Water Act penalties. Continued inclusion of these kinds of programs as requirements of the Order, rather than as suggestions or guidance, would leave the County with no prudent option but to oppose the Order.

The Order also attempts to transform other existing non-water regulatory requirements into NPDES requirements. For example, the Order prohibits unlawful disposal of storm drain wastes. This activity is already illegal, and is already subject to appropriate penalties. The Order also requires "proper" disposal of unused pesticides, herbicides and fertilizers from municipal facilities. But "improper" disposal is already illegal. (County of San Diego)

Response: To the extent that the Tentative Order may require proper disposal of wastes, pesticides, herbicides, etc., the requirements are very broad. The Tentative Order's requirements addressing disposal are only included to help ensure such substances are not disposed of in the MS4. Therefore, the Tentative

Order's requirements on disposal are directly related to the Tentative Order's prohibition of illicit discharges. As such, they are appropriate requirements for the Tentative Order.

Comment: The theory behind the permit is that water pollution can be prevented by stopping water. (Building Industry Association of San Diego County)

Response: The Tentative Order seeks to ensure that the beneficial uses of a receiving water are protected despite discharges from MS4s into that receiving water. Beneficial uses are defined as the uses of water necessary for the survival or well being of humans, plants, and wildlife. Municipal storm water NPDES permits contain requirements to achieve numeric and narrative receiving water quality objectives which are established to protect these beneficial uses. The Tentative Order includes these water quality objectives and a prohibition that MS4 discharges may not cause the water quality objectives in the receiving water to be exceeded. By definition, when the water quality objectives of a receiving water are exceeded, the beneficial uses of that water are not adequately protected.

Typical NPDES permits are based on the concept of employing full-scale treatment of an effluent to remove pollutants at the end of the pipe (i.e., just before being discharged into receiving waters). Accordingly, typical NPDES permits contain numeric effluent limits which are arithmetically derived from receiving water quality objectives for each pollutant of concern in the effluent. However, municipal storm water permits are not typical NPDES permits because they are not based on the concept of full-scale treatment of polluted storm water. Full scale end of pipe treatment for storm water is not considered economically and technologically feasible at this time. Therefore municipal storm water permits do not contain numeric effluent limits, but rather are based on the concept that pollutants can be effectively reduced in storm water to the maximum extent practicable by the application of a wide range of best management practices (BMPs). The technology-based performance standard of “maximum extent practicable” refers to evaluation and implementation of BMPs to the maximum extent practicable, except where (1) other effective BMPs will achieve greater or substantially similar pollution benefits; (2) the BMP is not technically feasible; or (3) the cost of BMP implementation greatly outweighs the pollution control benefits.

In other words, in municipal storm water permits, receiving water quality objectives are attained by way of BMP implementation, including use of pollution prevention, source control, and treatment control BMPs. To protect receiving water beneficial uses, municipal storm water permits require the use of best management practices which prevent the generation of pollutants and keep runoff from coming into contact with pollutants, to be supplemented by the use of methods that remove or treat pollutants. The BMPs available to the Copermittees include many that do not act by "stopping water" but rather through a variety of means ranging from prevention and source reduction, which may not involve flow at all, to structural treatment BMPs that effectively remove pollutants from urban runoff prior to discharge to receiving waters. Within the framework of the Tentative Order, the Copermittees have the discretion to determine which BMPs to implement.

Comment: Beach closings will not be prevented with this permit since they are predominantly caused by sewage spill. (Building Industry Association of San Diego County)

Response: As discussed in the Fact Sheet/Technical Report and Findings 2-7, sewage spills are only one of many sources of the significant pollutant loadings characteristic of urban runoff. The Tentative

Order provides a regulatory framework within which the Copermittees will implement programs to reduce to the maximum extent practicable pollutants in urban runoff discharged from their MS4s and prevent their discharges from causing or contributing to exceedances of water quality objectives.

Urban runoff is fundamentally important to the water quality of Southern California. It has been found to be a leading cause of water quality impairment in the San Diego Region and nationwide. Untreated pollutants in urban runoff, indiscriminate of dry or wet weather conditions, routinely find their way to creeks, lagoons, bays, and ocean. These pollutants are transported by runoff from over watering of residential lawns, runoff from rainfall, and runoff from other sources. San Diego area urban runoff is commonly contaminated with pesticides, fertilizers, animal droppings, trash, food wastes, automotive byproducts, and many other toxic substances which are generated in the urban environment. Water that flows over streets, parking lots, construction sites, and industrial, commercial, residential, and municipal areas carries these untreated pollutants through storm drain networks directly to the receiving waters of the region. Southern California, with the highest coastal population density of the entire country, suffers multiple tribulations from these urban generated pollutants.

The United States Environmental Protection Agency (US EPA) recognizes urban wet weather flows as the number one source of estuarine pollution in coastal communities. This trend is reflected locally by the 1998-1999 City of San Diego and Co-Permittee NPDES Stormwater Monitoring Program Report, which names urban runoff as one of the most significant contributors of pollution to our waterways and coastal areas. Furthermore, this document reports that monitoring efforts indicate that instream concentrations of pathogen indicators (fecal coliform and streptococcus) and heavy metals (such as cadmium, copper, lead, and zinc) exceed state and federal water quality criteria. Storm water within the region has also been found to contain the pesticides diazinon and chlorpyrifos (Dursban) at levels that can cause chronic or acute toxicity.

Polluted urban runoff causes many impacts in Southern California, including increased public health risks, high concentrations of toxic metals in harbor and ocean sediments, and toxicity to aquatic life. A study exploring the health risks associated with urban runoff in Southern California was conducted in 1995 by the Santa Monica Bay Restoration Project using a survey of 15,000 bathers at three Santa Monica beaches. The study concluded that there is a 57% 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 potential for public health risks resulting from urban runoff is reflected in the San Diego region as well. In 1999, there were 29 days in which the San Diego County Health Department issued general advisories to avoid waters 300 feet either side of all storm drain outlets in order to protect the public from potential adverse health effects caused by urban runoff. Also, in 1999 there were 720 combined beach closures and postings in San Diego County. The San Diego County Department of Health does not recommend the public recreate in closed or posted waters due to associated health risk. A breakdown of the beach closure and posting data is as follows: 127 of these closings were related to sewage spills, 71 related to river mouth outlets or some other excavation, and 522 of the days were related to some exceedance of water quality standards. Urban runoff can also impact drinking water; contamination by urban runoff has forced the closure of potable water reservoirs within the City of San Diego in order to protect public health.

The San Diego Regional Water Quality Control Board (SDRWQCB) finds that such problems are indeed frequently urban runoff related. For instance, a common conveyance for a sewage spill to reach a beach is through the municipal storm water system. Also, exceedances of standards at some of the Region's beaches have unquestionably resulted from pollutants conveyed by the storm water drainage system. In addition, urban runoff is increasingly being targeted as the cause of beach closures and postings in other

areas of the San Diego region and Southern California. Urban runoff has been identified as a principal contributor to fecal coliform contamination in Orange County's Aliso Creek, a creek which often causes beach postings when flowing into the ocean. Municipal enforcement efforts focusing on urban runoff have also resulted in reduced coliform levels in receiving waters in Encinitas. Finally, US EPA goes on to say that urban storm water runoff and sewer overflows have become the largest cause of beach closings in the United States for the previous three years, becoming more significant than such sources as oil spills and publicly owned treatment works.

Regardless of how beach posting and closure data is interpreted, one thing is clear: Beneficial uses are not being met for the waters in the San Diego Region, and urban runoff is a significant contributor to this receiving water impairment. For San Diego, known throughout the world for its beach lifestyle, these statistics are bound to have increasingly serious effects on tourism revenue as well as the local cultural identity.

Comment: The permit conflicts with US EPA Phase II Storm Water Regulations which encourage implementation on a regional or watershed basis. (Building Industry Association of San Diego County)

Response: The Tentative Order requires the Copermittees within a watershed to collaborate to develop and implement a Watershed Urban Runoff Management Program.

Comment: Since the region's storm water problems stem from existing land use actions, new development and redevelopment would carry a disproportionate share of the financial obligation to implement the provisions of the permit. (Building Industry Association of San Diego County)

Response: The Tentative Order does not require new development and redevelopment to carry a disproportionate share of the financial burden to implement the provisions of the permit. The requirements on new development and redevelopment are required under the Federal NPDES regulations, and are designed to prevent new development and redevelopment from exacerbating existing conditions. The SWRCB supports this approach, stating in Order WQ 2000-11 that "[i]n the context of the entire effort required by the permit, the development controls can be seen as preventing the existing situation from becoming worse." The requirements for new development and redevelopment are only one section of the Tentative Order; the entire rest of the Tentative Order is focused on existing problems stemming from existing development conditions. The controls on new development do not result in a disproportionate financial obligation, since incorporation of BMPs during the planning phase of development has been consistently shown to be the most cost effective approach to reduce pollutant loads to receiving waters (USEPA, 1999b).

Comment: The creation of storm water utility districts would ensure equitable financial responsibility and provide essential regulatory flexibility to more accurately respond to specific pollutants of concern on a per watershed basis. The board is urged to consider this more practical and cost effective approach. (Building Industry Association of San Diego County)

Response: Nothing in the Tentative Order prevents the Copermittees from forming a storm water utility district to aid in funding and implementation of their urban runoff management programs.

Comment: SDRWQCB Has Failed To Show That The Proposed Permit Will Reduce Pollutants To The "Maximum Extent Practicable" As Required By CWA and Porter-Cologne.

SDRWQCB has failed to establish any findings to support the determination that the permit is protective of water quality. There has also been no determination made as to whether the program required by the permit is necessary, cost effective, or capable of implementation by the Copermittees or third parties.SDRWQCB has failed to establish any findings to support the determination that the permit is protective of water quality. Further, there are no findings which indicate that implementation of the permit will result in the reduction of pollutants in receiving water to the maximum extent practicable (MEP). (Building Industry Association of San Diego County)

Response: MEP is the acronym for Maximum Extent Practicable. MEP is the technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) that municipal dischargers of storm water (MS4s) must meet. It is implementation of actions required by the permit, not the permit itself, that will meet MEP. That implementation is the responsibility of the Permittees.

Comment: There has been no initial determination that any pollutants even exist in the storm water runoff. The necessity of determining the existence and source of pollutants was reaffirmed recently by the City of Huntington Beach. The City recently identified a prime suspect which caused beach closures in 1999: bird waste from a nearby marsh. These findings confirm the necessity to identify the source of pollutants, and analyze the methods used to treat them in order to meet MEP. The findings by the City of Huntington Beach also suggest that the objectives of the CWA and Porter-Cologne cannot and quite possibly should not be achieved in every circumstance. (Building Industry Association of San Diego County)

Response: Findings 3, 4, 5, 6, 7, and 9, together with their corresponding discussions in the draft Fact Sheet/Technical Report, identify the pollutants commonly found in urban runoff and their impacts to receiving waters. The Copermittees' monitoring efforts frequently find pollutants in storm water runoff at concentrations which exceed USEPA benchmark values for storm water, exceed water quality objectives, and cause toxicity.

Comment: The Proposed Permit Improperly Relies on Volume/Flow Control to Prevent Pollution.

The proposed Permit and Draft Fact Sheet/Technical Report for SDRWQCB Order No. 2001-01 ("Fact Sheet") professes to address both volume/flow control and specific pollutants of concern, examination of the proposed permit's actual application makes clear that it is a volume and flow control program, doing nothing by its own provisions to identify and clean up existing sources of pollution. Rather it relies upon volume capture and/or treatment from new development and redevelopment. By focusing on this high cost and low impact approach, adoption of the proposed permit would be an outright rejection of SDRWQCB's responsibility to bring about actual solutions to the existing problem. […]

The Fact Sheet in the proposed permit quotes Governor Davis:

"In his veto message of a $6.9 million bill that would have funneled money to Orange County to help curb urban runoff and clean beaches, Davis said the legislation 'focuses on a temporary, seasonal fix and does not provide for identification and elimination of the sources of contamination.'" (Fact Sheet, p. 33.)

The Governor's observation applies to the entire proposed permit.

[…]

The proposed permit instead seeks to classify all runoff affiliated with development or redevelopment as polluted. There is no attempt whatsoever to distinguish between types of runoff and the content of runoff. The "urban runoff" is impermissible under the proposed permit.

[…]

This across the board focus upon prospective urban runoff – without differentiation – to the exclusion of identifying and meaningfully remediating existing sources and collections of pollutants is an arbitrary and capricious exercise of SDRWQCB's discretion in adopting the proposed permit. (Building Industry Association of San Diego County)

Response: The Tentative Order addresses both urban runoff flows and the pollutants found in them. The Tentative Order also addresses urban runoff from all sources, including both existing and new development.

While the Tentative Order does address changes in peak flow rates resulting from new development, it does so in a limited manner. Based on the comments from many interested parties, the prohibition against any increase in peak flow rates resulting from new development has been changed; the requirement to address changes in peak flow rates now only applies to development falling under the SUSMP categories, where the potential for downstream erosion exists. The necessity for the control of peak flow rates increases from development is strongly supported. USEPA states: "In many cases the impacts on receiving waters due to changes in hydrology can be more significant than those attributable to the contaminants found in storm water discharges" (USEPA, 1999a). Furthermore, the SWRCB upheld in Order WQ 2000-11 that control of peak flow rates from SUSMP priority development projects was appropriate.

The Tentative Order does not treat all urban runoff from new development as polluted; rather, it finds that to adequately control pollutant discharges and changes in flow from new development, structural treatment BMPs must be implemented at various priority development project categories. The SWRCB has found that structural treatment BMPs are needed at SUSMP priority development project categories, stating in Order WQ 2000-11 that such an application constitutes MEP.

Finally, the Tentative Order does not only focus on new development, but also has extensive requirements for existing development. The Tentative Order requires that BMPs be implemented for the following types of existing land uses or activities: construction, municipal, commercial, residential, and industrial.

Comment: The SDRWQCB fails to demonstrate the constitutional justification for the exercise of federal jurisdiction over these wholly intrastate facilities, in advance of any discharge to waters of the United States in violation of the Commerce Clause. (Building Industry Association of San Diego County)

Response: State and Federal lands and activities will be addressed under the Phase II Storm Water NPDES Regulations in March 2003. The operators of these facilities will be added as Copermittees or otherwise be required to meet or exceed the requirements of the Jurisdictional Urban Runoff Management Program for the area in which they are located. The Tentative Order does not require the Copermittees to control runoff from freeways, agricultural land, etc. over which they do not have jurisdiction, provided that discharges from such sources do not enter their MS4s. Municipalities cannot arrogate to themselves the authority to regulate discharges from facilities or activities beyond their jurisdiction, e.g., discharges from state and federal facilities including highways and Indian reservations directly to waters of the state that are not part or tributary to the municipality's MS4. Municipalities are required, however, to have or develop legal authority to regulate storm water discharges and urban runoff within their jurisdictions, including discharges that may be subject to concurrent regulation by the state and federal governments. In addition, where municipalities control access to MS4 infrastructure for the accommodation of discharges from entities within their physical jurisdiction (including school districts, state and federal facilities, construction sites and industrial facilities) municipalities must exercise such control in a manner consistent with their obligation under the Regional Board's requirements to reduce pollutants in their MS4 to the maximum extent practicable.

Comment: The SDRWQCB despite its cursory denial in Finding 36, made no determination whether permit compliant MS4 discharges will cause or contribute to the unreasonable degradation of receiving water quality and therefore violate the state and federal Antidegradation Policies. (Building Industry Association of San Diego County)

Response: Tentative Order No. 2001-01 does not violate the state and federal Antidegradation Policies. The Policies ordinarily are triggered by new discharges, expansion of existing facilities, or a reduction in the level of treatment of an existing discharge, “since such activities would presumably lower water quality." US EPA Questions & Answers on Antidegradation, at p. 6. The antidegradation issues were analyzed in detail during the adoption of the original San Diego Municipal Storm Water Permit, Order No. 90-42, therefore, a new analysis for the reissuance of waste discharge requirements is unnecessary. Furthermore, Tentative Order No. 2001-01 complies with the Policies by requiring Copermittees to “meet waste discharge requirements which will result in the best practicable treatment or control of the discharge” and through the implementation of “cost-effective and reasonable best management practices.”

Comment: Flexibility in BMP design is needed to address non-stormwater quality issues associated with their construction, such as vector management (e.g. mosquito breeding). (County of Orange Public Facilities & Resources Dep)

Response: Flexibility in BMP design is provided in the Tentative Order. Structural treatment BMPs are only required to be a specific size. The type of BMPs to be implemented, as well as their design, is left to the discretion of the Copermittees.

Comment: The Tentative Order improperly delegates the Regional Board's enforcement duties to the municipalities. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: Tentative Order No. 2001-01 in no way delegates the SDRWQCB's enforcement authority to Copermittees. Throughout the tentative Order, Copermittees are required to implement and enforce their permit required legal authority. The genesis of this requirement is 40 CFR (Code of Federal Regulations) 122.26(d)(2)(i). This section states that Copermittees must demonstrate that they have adequate legal authority to: (1) control "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;" (2) prohibit "illicit discharges to the municipal storm sewer;" (3) control "the discharge to a municipal separate storm sewer of spills, dumping or disposal of materials other than storm water;" (4) control "among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system;" (5) "[r]equire compliance with conditions in ordinances, permits, contracts or orders;" and (6) "[c]arry out all inspection, surveillance and monitoring procedures necessary to determine compliance and non-compliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer."

The federal regulations in 40 CFR 122.26 establish a dual system for regulation of industrial and construction site discharges through municipal storm water conveyance systems. Industries and construction sites are permitted under statewide general NPDES industrial or construction storm water permits. These permits require industries and construction sites to do the following: (1) to reduce pollutants to comply with best available technology (BAT) and best conventional technology (BCT) performance standards and (2) to not cause or contribute to violations of applicable water quality objectives. In addition, industries and construction sites are subject to regulation by municipalities through storm water ordinances developed according to municipal storm water permits issued by the state. Pursuant to Clean Water Act section 402(p)(3)(iii) municipalities are required to implement controls to reduce the discharge of pollutants from municipal storm water conveyance systems to the maximum extent practicable (MEP). Because storm water from industrial facilities may be a major contributor of pollutants to municipal storm water conveyance systems, municipalities are obligated to develop controls for storm water discharges associated with industrial activity through their system in their urban runoff management program. (See Federal Register preamble, Volume 55, No. 222, November 16, 1990, page 48000.)

The US EPA intended that the municipalities and delegated states share the responsibility of regulating storm water discharges from industrial and construction site activities. The US EPA believed that this dual approach would result in the most effective regulation. Since municipalities are ultimately responsible for discharges from their municipal storm water conveyance systems, it is in their best interest to regulate what is discharged into their system.

To satisfy the conditions of its own municipal storm water permit, a municipality may need to impose additional requirements on industrial or construction site dischargers. This need may apply to industries and construction sites which are permitted under the statewide general industrial or construction storm water permits, as well as those which are not. Therefore, a municipality should develop a mechanism to assure that all industrial and construction sites that discharge to the municipality's storm water conveyance system, know their obligation to comply with the terms of the municipality's storm water ordinance. (See Guidance Manual for the Preparation of Part 2 of The NPDES Permit Applications for discharges from Municipal Separate Storm Sewer Systems, pages 3-1 to 3-2.)

To the extent that a discharge from an industrial or construction site facility covered under the statewide general storm water permit causes a violation of an applicable receiving water objective contained in a municipality's storm water permit, both the industrial or construction site discharger and the municipality may be liable.

Comment: The permit does not extend clear, concise numeric sizing requirements to existing development, as it does for new development and significant redevelopment. (San Diego Baykeeper)

Response: While the Permittees may choose to implement numeric sizing criteria on existing development, the SDRWQCB will not be making this a requirement under the Tentative Order. The reasoning for this is to provide their Permittees maximum flexibility to choose from a wide spectrum of best management practices. In some cases retrofitting existing development with BMPs that are based on numeric sizing criteria will be the best approach. In other cases, another approach will have to be utilized as the numeric sizing will be technologically or economically prohibitive.

Comment: The co-permittees contentions that reducing pollutant loads in stormwater flows will harm wetlands or riparian habitat are unlikely ; to the contrary, selection of BMPs that will filter, infiltrate or treat runoff will benefit wetlands and the riparian habitat by providing cleaner water flows. (Surfers Tired of Pollution)

Response: Comment noted.

Comment: Constructed wetlands should not be considered as mitigation or rationalization for the destruction of existing habitat, filling or grading existing natural wetlands or vernal pools, or channelization of natural waterways, nor should co-permittees be permitted to claim that BMPs require them to degrade existing habitat, wetlands, vernal pools or lakes, rivers or streams in order to mitigate stormwater runoff from new development or redevelopment. (Surfers Tired of Pollution)

Response: Comment noted.

Comment: The Regional Board should encourage a cooperative approach and take the time to understand the real constraints faced by cities rather than imposing conditions which cities cannot implement, resulting in hard feelings and exposing the cities to litigation from the environmental community. (Coalition for Practical Regulation)

Response: Comment noted.

Comment: I strongly urge you and your board to support the current permit to keep the water safe for us, our children, and our wildlife. (Harmon, Warren)

Response: Comment noted.

Comment: There will be opposition to the permit from those who consider the cost too high, but it will be cheaper in the long run to adopt 2001-01and protect the quality of our water. (Hinton, Mel)

Response: Comment noted.

Comment: Strict controls over runoff should be established to maintain existing water quality in the face of the expected growth in population and land development. (Hinton, Mel)

Response: Comment noted.

Comment: There are areas of the permit that are unduly vague, such as in the areas of education and enforcement. The IEA would like to see guidelines set by the RWQCB in these areas to avoid confusion and inequitable enforcement of regulations. (Industrial Environmental Association)

Response: Where the Tentative Order is not prescriptive, it is to provide the Copermittees discretion in developing and implementing their programs.

Comment: Many areas of the permit call for prohibitions on specific discharges or industries, regardless of size. It does not seem efficient nor effective to prohibit minor discharges from very small businesses or minor sources. The IEA encourages the RWQCB to adopt a small business and/or small discharge exemption. (Industrial Environmental Association)

Response: The prohibition of non-storm water discharges in required by the Clean Water Act. The Clean Water Act does not include exemptions based on size of discharges. However, certain non-storm water discharges, listed in section B.2, are allowed if the Copermittees find that they are not a significant source of pollutants. For these types of non-storm water discharges, size of discharge may be considered.

Comment: Significant Redevelopment
Pollutants of Concern
Maximum Extent Practicable
Environmentally Sensitive Area
Tributary to an Environmentally Sensitive Area
We urge the Regional Board to include in this permit, clear, measurable definitions of the above referenced terms. (McKenna & Cuneo, L.L.P.)

Response: Please refer to the definitions and clarifications regarding significant redevelopment, pollutants of concern, maximum extent practicable, environmentally sensitive area, and tributary to an environmentally sensitive area addressed elsewhere in the response to comments.

Comment: The Permit imposes specific requirements on projects subject to the SUSWMP that may be impossible to achieve in the Urban Core. If the proposed SUSWMP requirements are infeasible for Urban Core projects, the Draft Permit should allow Copermittees to develop alternative requirements that achieve the same goal.

However, in order to assure that the Permit imposes the proper requirements on varying projects, a definition of Urban Core is required.

The level of urbanization in the urban core creates several unique problems when attempting to apply SUSWMPs to new construction and significant reconstruction. They include the cost of land, development (use) density, urban in fill, "Smart Growth," and ability to control pollutants, etc. SDRWQCB Staff fails to recognize the significant and different challenges that the SUSWMP imposes on geographies with varying levels of development.

As discussed below, the definition of Maximum Extent Practicable (MEP), in conjunction with the Waiver provisions of the SUSWMP may have the effect of creating different requirements for the Urban Core. Because these differing requirements may create what others will perceive as preferential treatment for the Urban Core, it is important that the Draft Permit defines the term "Urban Core" carefully, and narrowly.

Proposed Definition
This proposal defines the Urban Core as those watersheds, or portions of watersheds that meet the following criteria:
I . At least 90% of the land surface is currently impervious;
2. Average vehicular traffic on main roadways exceeds 25,000 ADT;
3. Average vehicular traffic on intersecting roadways exceeds 15000 ADT; and
4. Average land values exceed the Countywide average by 25%.

C. Rationale
The Draft Permit does not discuss the concept of the "Urban Core. The definition of Urban Core, however, ultimately affects two important concepts imbedded in the Draft Permit: "Maximum Extent Practicable" ("MEP") and the Waiver Provisions.

First, this proposed definition of Urban Core considers the issue of impervious surfaces; a concept that the Regional Board already concedes will result in greater volumes of water to be "mitigated" through treatment or infiltration. These volumes directly relate to project costs, which as described below, are integral to the definition of MEP.

Second, it considers the issue of traffic density. The Regional Board Staff is already aware that in high traffic density areas, infiltration, the most cost effective mitigation tool, will not be allowed without pretreatment. Ultimately, this prohibition will drive-up costs, which, in turn, will limit MEP. Defining the Urban Core in the manner proposed above also considers land values. Again, the cost of land will affect the cost of any Treatment Control BMPs that, in turn, will limit MEP. The Draft Permit states that the Waiver Provision is triggered by a finding of "extreme limitations of space for treatment on a redevelopment project". One rational basis for a finding of extreme of "impracticability for a specific property is that the value of the land required for the Treatment Control BMPs is so high that the project is no longer economically viable. (McKenna & Cuneo, L.L.P.)

Response: The commentor asserts that new development and significant redevelopment within the “urban core” should not be subject to the SUSMP requirement for implementation of structural treatment

BMPs which meet numeric sizing criteria. However, the implementation of structural treatment BMPs which meet numeric sizing criteria is quite feasible within the urban core.

Not all structural treatment BMPs require large amounts of land, which may be expensive in the urban core. For example, sand filters or catch basin inserts can be used. USEPA specifically identifies these BMPs for urban core use, stating "media filters are commonly used to treat runoff from small sites such as parking lots and small developments, in areas with high pollution potential such as industrial areas, or in highly urbanized areas where land availability or costs preclude the use of other BMP types. Filters should be placed off-line (i.e., a portion of the runoff volume, called the water quality volume, is diverted to the BMP, while any flows in excess of this volume are bypassed) and are sometimes designed to intercept and treat only the first half inch or inch of runoff and bypass larger storm water flows. A benefit of using filters in highly urbanized areas is that the filter can be placed under parking lots or in building basements, limiting or eliminating costly land requirements" (USEPA, 1999a). While these BMPs may not address increases in peak flow rates resulting from development, the permit provides that peak flow rates need not be controlled where potential for erosion does not exist (see change at permit section F.1.b.2.b.i). This would apply to significant parts of the urban core of downtown San Diego, which discharges directly into the bay.

Furthermore, the "heavy use" nature of the urban core requires BMP implementation. As the commentor states, the urban core experiences pervasive imperviousness (which reduces on site treatment) and high levels of vehicular traffic, which is a common source of pollutants in urban runoff. Rather than preclude structural treatment BMP use in the urban core, this "heavy use" instead necessitates the need for urban core structural treatment BMP implementation.

In addition, the SUSMP provisions provide for a waiver if implementation of all BMPs is found to be infeasible. If a project in the urban core cannot implement any BMP, a waiver may be granted.

Finally, exempting the urban core from SUSMP structural treatment BMP requirements would not be consistent with SWRCB guidance. SWRCB Order WQ 2000-11 found that the SUSMP provisions constitute MEP. Relaxing of the SUSMP provisions would therefore be below the MEP standard.

Comment: The document contains numerous acronyms, many of which are unique to this document. This makes for very difficult reading, particularly if one is interested in only one section or topic. Recommendations: (a) Provide a list of acronyms and their definitions, and more preferably, include a glossary -including the acronyms. (b) Provide a flow chart showing how all of the activities and decisions interrelate. (Padre Dam Municipal Water District)

Response: A list of acronyms is included in the draft Fact Sheet/Technical Report. A glossary is included in Attachment D of the Tentative Order. The Task and Submittal Summary Tables should be sufficient summarize the schedule for tasks and submittals required by the Tentative Order. Development of a flow chart is beyond the current scope of "response to comments," but will be considered after adoption of the Tentative Order.

Comment: The requirements of this permit should be in alignment with that of permits already issued to Caltrans, and others. Requirements should be consistent to avoid disconnects in operational methodology between agencies. (SANDAG)

Response: To the extent feasible, the requirements of the Tentative Order are consistent with permits already issued within the region. However, the Tentative Order regulates discharges of a different nature than other permits within the region. Due to the large volume of urban runoff regulated by the Tentative Order, and the continued impairment of receiving waters caused by urban runoff, the Tentative Order may contain specific requirements addressing municipal urban runoff not contained in other permits.

Comment: We urge that the Board resist the pressures to weaken this permit or to delay its adoption and implementation. There may be cases in which all of the elements of the proposed schedule can not be met. We urge that the Board treat these requests deliberately so that flexibility is allowed to address limited valid issues, but that shortsighted efforts to delay the process are rejected. (San Diego Audubon Society)

Response: Comment noted.

Comment: CALTRANS facilities and activities have a major impact on the water quality and development patterns of our region, as mentioned above. We understand that there may be problems with addressing actions of CALTRANS and other agencies that are not controlled by local jurisdictions. That is not a reason to exclude these sources of pollution. (San Diego Audubon Society)

Response: To the extent that Caltrans activities discharge to Copermittees' MS4s, the Tentative Order places responsibility on the Copermittees for such discharges. Municipalities cannot arrogate to themselves the authority to regulate discharges from facilities or activities beyond their jurisdiction, e.g., discharges from state and federal facilities including highways and Indian reservations directly to waters of the state that are not part or tributary to the municipality's MS4. Municipalities are required, however, to have or develop legal authority to regulate storm water discharges and urban runoff within their jurisdictions, including discharges that may be subject to concurrent regulation by the state and federal governments. In addition, where municipalities control access to MS4 infrastructure for the accommodation of discharges from entities within their jurisdiction (including school districts, state and federal facilities, construction sites and industrial facilities) municipalities must exercise such control in a manner consistent with their obligation under the Regional Board's requirements to reduce pollutants in their MS4 to the maximum extent practicable.

Therefore, while the Tentative Order does not address all Caltrans discharges, it does address them to the extent that they enter the Copermittees' MS4.

Comment: We urge that the permit include the regulation of these state and federal agencies. The impacts of their(Border Patrol & other state and federal agencies) operations could be significantly improved if the measures described in this permit were required and enforced for their activities. If Jurisdictional conflicts occur, we urge that the Board use these conflicts to elevate the issues to state and federal agencies and our state and federal legislators so the problems will be resolved to allow the Board to comprehensively and effectively protect our water quality. (San Diego Audubon Society)

Response: Phase II of the Federal NPDES storm water regulations will cover state and federal facilities. To the extent that the Border Patrol (or other state and federal agencies) own and operate a MS4, as well as meet the criteria for applicability under Phase II, the Border Patrol (or other state and federal agencies) will be issued Phase II NPDES storm water permits. Implementation of Phase II is anticipated for 2003.

Comment: The Tentative Order establishes policy inconsistent with the Clean Water Act and State Board policies, and may therefore set a precedent for future municipal storm water permits. (California Stormwater Quality Task Force)

Response: Tentative Order No. 2001-01 is consistent with the Clean Water Act (CWA) and State Board policies. Section 402(p)(3)(B)(iii) of the CWA requires municipalities to implement "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." The SDRWQCB's responsibility is to translate this section of the CWA into the form of waste discharge requirements. The tentative Order's required programs are consistent with the CWA because they reduce the discharge of pollutants to the maximum extent practicable (MEP). Furthermore, the CWA and federal regulations describe only minimal storm water program components. Although the tentative Order may describe portions of program components that are not specifically addressed in the federal requirements and regulations, the SDRWQCB has made express findings that these components are significant sources of storm water pollution. Since the CWA and federal regulations do not exclude sources that are significant pollutant contributors, it is appropriate to cover the sources in the tentative Order.

Comment: To supplement funding for stormwater management programs, Copermittee's should be encouraged to issue citations containing administrative fines to repeat violators of local discharge control measures (Surfrider Foundation)

Response: As noted in Sections F.2.h and F.3.b.7, the Tentative Order does encourage the implementation of sanctions to ensure compliance. Such sanctions include non-monetary penalties, fines, bonding requirements, and permit denials for non compliance. The Copermittees have the authority and discretion to adopt ordinances and issue citations for the violations of those ordinances. The manner in which monies collected by a Copermittee for discharge violations is used is entirely the discretion of the Copermittee.

Comment: There is no recognition of other agencies that receive and treat urban runoff or those that must protect drinking water supplies from the impacts of urban runoff. We suggest that there be a more direct avenue for water agency involvement in the process. The Stormwater Permit addresses the federally mandated Clean WaterAct (CWA) but does not address the federally mandated Safe Drinking Water Act (SDWA). (Sweetwater Authority)

Response: The Copermittees are encouraged to coordinate with outside agencies in the Tentative Order in Finding 31, which states "Copermittee coordination with other watershed stakeholders, especially Caltrans and the Department of Defense, is also critical."

Comment: Protection from Existing Development: Sweetwater Authority agrees that urban runoff discharges are a leading cause of receiving water quality impairment in the San Diego Region. Nearly twenty years ago, the Authority began a process for protecting the water quality of Sweetwater Reservoir through the conceptualization, design and eventual construction of an Urban Runoff Diversion System (URDS) to capture urban runoff flows from development upstream of the reservoir. While successful implementation of the proposed Stormwater Permit may significantly control urban runoff from future development, ongoing operation and maintenance of the URDS will Protect Sweetwater Reservoir from water quality impacts originating from existing developments. (Sweetwater Authority)

Response: Comment noted.

Comment: The draft document will require Copermittees to implement Urban Runoff Management Programs (URMPs) designed to reduce discharges of pollutants and flow into and from municipal storm sewer systems. To be most effective, the permit states that "URMPS must contain both structural and non-structural best management practices (BMPs)." Sweetwater Authority's expertise should be included in the process of protecting the Sweetwater River watershed. (Sweetwater Authority)

Response: The Copermittees are encouraged to coordinate with outside agencies in the Tentative Order in Finding 31, which states "Copermittee coordination with other watershed stakeholders, especially Caltrans and the Department of Defense, is also critical."

Comment: On May 8, 1985, the County Board of Supervisors approved a request by Sweetwater Authority to collect fees from new development. Specifically, the Board directed the Department of Planning and Land Use (DPLU) to continue a practice of placing conditions on development proposals, to the satisfaction of Sweetwater Authority, regarding the protection of Sweetwater Reservoir. For future developments, including significant redevelopment in the Sweetwater River watershed, cooperation with Sweetwater Authority should be required in order to continue the implementation of this long standing policy and practice. The URDS was constructed at Sweetwater Authority's expense with the understanding that future watershed development would financially contribute to this structure, which was built solely to protect the reservoir from cumulative impacts of development. The payment of fees to mitigate cumulative impacts of urban runoff should be considered when determining the waste discharge requirements for new developments in the Sweetwater River watershed. (Sweetwater Authority)

Response: The Copermittees are encouraged to coordinate with outside agencies in the Tentative Order in Finding 31, which states "Copermittee coordination with other watershed stakeholders, especially Caltrans and the Department of Defense, is also critical."

Comment: The permit is sensible and equitable in that it vests responsibility for controlling water quality impacts with the parties that actually cause the impacts. (Environmental Health Coalition)

Response: Comment noted.

Comment: The permit is a smart approach to growth because it requires developers to plan for future impacts and address the impacts now instead of later. (Environmental Health Coalition)

Response: Comment noted.

Comment: The permit will assure a suitable minimal baseline if enforcement is adequate and if Copermittees act responsibly. (Environmental Health Coalition)

Response: Comment noted.

Comment: The permit is clear and it provides the maximum amount of specificity possible given the limits of the Board's legal authority. (Environmental Health Coalition)

Response: Comment noted.

Comment: The Board should issue a reference sheet to the public which explains the differences between the old and new permits. (Environmental Health Coalition)

Response: A comparison of the requirements of Order 90-42 (the current San Diego Municipal Storm Water Permit), the Federal NPDES storm water regulations, the 1995 draft of the reissuance of the San Diego Municipal Storm Water Permit, the 1998 draft of the reissuance of the San Diego Municipal Storm Water Permit, and the Tentative Order has been developed. The comparison was provided to Regional Board members for the December 13, 2000 Public Hearing. It is available on the SDRWQCB website at http://www.swrcb.ca.gov/rwqcb9/Programs/Storm_Water/permits_comparisondsj2.pdf.

Comment: Regional Board staff have done an excellent job in preparing and presenting the new permit. (Environmental Health Coalition)

Response: Comment noted.

Comment: The Fact Sheet is detailed, concise, and deeply relevant. (Environmental Health Coalition)

Response: Comment noted.

Comment: The San Diego permit is a great improvement on the Los Angeles Permit and supports the direction of the State Board. Further, we believe that the staff has done an excellent job reflecting the comments and intent of the State Board direction. The permit is reasoned in that it focuses on significant impacts to water quality and thereby avoids being arbitrary in its application. While we look forward to when all sources of pollution are regulated, we support the proposed phasing of "worst-first" sources as long as the others will follow in future revisions of the regulations. (Environmental Health Coalition)

Response: Comment noted.

Comment: A clause should be added to the permit which makes it clear that there will be future permit revisions and amendments to ultimately achieve optimal water quality protection. (Environmental Health Coalition)

Response: The Tentative Order encourages a long-term view of urban runoff management. It includes several components which are designed to expand over the long-term. For example, the watershed requirements included in the Tentative Order are designed to expand in future re-issuances of the Tentative Order. As such, the long-term context of the Tentative Order is sufficient.

Comment: The Permit appears to be an attempt to expand legal authority over local government in a manner not prescribed (though not specifically precluded) by the Clean Water Act. Such unrestricted expansion of control is troubling. (City of San Juan Capistrano)

Response: The Tentative Order does not expand on the legal authority provided the SDRWQCB by the Clean Water Act and Porter-Cologne. The increased detail in the Tentative Order is supported by the Clean Water Act, Porter-Cologne, and more recent guidance from USEPA and the SWRCB. Where the Tentative Order has increased detail, the detailed requirements are included as necessary to achieve water quality standards.

The Clean Water Act supports increased detail in permits, where necessary, in section 402(p)(3)(B)(iii), which requires that 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." Porter-Cologne also supports this approach in section 13377, which requires "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 (Clean Water 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 anymore stringent effluent standards or limitation necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance."

More recent USEPA guidance also supports more detail in storm water permits where needed to meet water quality standards. In its "Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits" USEPA states "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." The

SWRCB cited this guidance in Order WQ 2000-11, which upheld SUSMP requirements as a correct interpretation of the MEP standard.

Comment: Provide Co-permittees a written commitment that SDRWQCB staff will participate in their programs over the next 5 years and then follow through with active participation, support and involvement. (San Diego Co-permittees)

Response: SDRWQCB staff will be an active participant by fulfilling stormwater program commitments prescribed by the SWRCB in its annual program workplan. These tasks include regulating storm water discharges in accordance with federal regulations, conducting a designated number of audits and compliance inspections of the co-permittees, conducting comprehensive reviews of a designated number of MS4 submittals and a cursory review of other submittals, conducting and attending workshops, develop outreach materials and program guidance, respond to public inquiries, etc.

Comment: In several places throughout the tentative order it states that compliance should be an "iterative process" that is comprehensive, effective, and flexible. The Co-permittees agree with this approach but the specificity of the tentative order seems to be in direct conflict with this approach. (San Diego Co-permittees)

Response: The term "iterative process" only appears in the Tentative Order once, at Finding 14, where it applies to section C of the Tentative Order. The term specifically refers to the process to be undertaken in the situation where discharges from an MS4 persist in causing or contributing to an exceedance of water quality objectives, despite the Copermittee's full implementation of its urban runoff management program (see section C of the Tentative Order). The term does not mean that compliance with the whole urban runoff management program and Tentative Order should be an "iterative process." Instead, the term means that efforts required to meet water quality standards, which go above and beyond those required in the urban runoff management program and other sections of the Tentative Order, may be implemented in an "iterative process."

Comment: We are concerned about the Order's directive to require interagency agreements and JPA type cooperation between municipalities. Several issues have been left undefined and require co-permittees to propose task definitions to SDRWQCB. If municipalities, environmental groups, or regulated agencies can't agree on some of the parameters of some of the Order's directives, we will find courts making the decisions. Effort directed towards defending a municipality's interpretation of the Order takes away from the time and resources devoted to the primary responsibility - that of keeping pollutants out of the receiving waters. (City of Imperial Beach)

Response: A certain level of Copermittee coordination is necessary to effectively implement the permit throughout the region. Some Copermittees request more emphasis on Copermittee collaboration within the Tentative Order to promote regional consistency. USEPA supports Copermittee collaboration, stating "Coapplicants […] may use interjurisdictional agreements to show adequate legal authority and to ensure planning, coordination, and the sharing of the resource burden of permit compliance. When more than one entity is submitting an application for a MS4 (either as coapplicants or as individual applicants for different parts of a system), the role of each party must be well defined. Each applicant or coapplicant

must show the ability to fulfill its responsibilities, including legal authority for the separate storm sewers it owns or operates" (USEPA, 1992).

The Tentative Order's requirements for Copermittee collaboration are relatively broad in order to allow the Copermittees discretion and flexibility in implementing their programs. Based on the Copermittees current collaboration efforts, it is anticipated that future collaboration efforts will be successful.

Comment: The City of La Mesa agrees with the comments presented by the City of S.D., the principal Copermittee. (City of La Mesa)

Response: Comment noted.

Comment: Are the indian reservations exempt from these requirements (Barona, Sycuan, Pala, Campo, etc.)? (Anonymous Workshop 1)

Response: The State of California has not been designated by the U.S. EPA to regulate Indian Reservation lands under the NPDES program.

Comment: For a project, is the discharge point at the boundary or some point down stream or up stream? (Wesch, Gary)

Response: In most cases, the project boundary would be considered the discharge point for runoff coming from a project. If a project is sharing a structural treatment BMP with another project, the discharge point may be considered the outlet of the structural treatment BMP, provided the subject project has implemented adequate pollution prevention and source control BMPs on its site.

Comment: At what point does polluted runoff become a liability for a municipality- When it enters MS4, or when it leaves it? (Anonymous Workshop 1)

Response: The Copermittees are responsible for discharges both into and from their MS4. Copermittees cannot passively receive and discharge pollutants from third parties. As US EPA states, "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" (USEPA, 1999b).

Discharges of pollutants to the MS4 must therefore be controlled, and an important means for a municipality to achieve this is through the development and enforcement of municipal legal authority. USEPA states "A crucial requirement of the NPDES storm water regulation is that a municipality must demonstrate that it has adequate legal authority to control the contribution of pollutants in storm water discharged to its MS4. […] In order to have an effective municipal storm water management program, a municipality must have adequate legal authority to control the contribution of pollutants to the MS4. […]

'Control,' in this context, means not only to require disclosure of information, but also to limit, discourage, or terminate a storm water discharge to the MS4" (USEPA, 1992).

Since discharges which enter the MS4 are generally discharged unimpeded directly into receiving waters, the Copermittee's legal authority is to apply to both discharges into and from MS4s. Federal NPDES regulations clearly provide the SDRWQCB with the legal authority to require municipalities to control discharges from third parties into their MS4. 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff from commercial, residential, industrial, and construction land uses or activities. Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A - D) require municipalities to have legal authority to control various discharges to their MS4. This concept is further supported in the Preamble to the Phase II Final Rule NPDES storm water regulations, which states "The operators of regulated small MS4s cannot passively receive and discharge pollutants from third parties" (USEPA, 1999b). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule findings for small municipalities are also applicable to larger municipalities such as the Copermittees. Finally, underlying the Federal NPDES storm water regulations is the Clean Water Act, which states in section 402(p)(3)(B)(ii) that municipalities shall "effectively prohibit non-stormwater discharges into the storm sewers."

The requirement for municipal storm water dischargers to have, and exercise, local governmental authority in order to comply with water quality control obligations is analogous to the requirement for Publicly Owned Treatment Works to have and exercise legal authority to require pretreatment of industrial wastes being discharged to their sewage collections systems (CWA 402(b)(8)).

Comment: How is Caltrans affected by this tentative order? (Anonymous Workshop 1)

Response: SDRWQCB does not anticipate conflicts arising between tentative Order 20001-001 and Order No. 99-06-DWQ, NPDES No. CAS000003, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation (Caltrans). Order No. 99-06-DWQ applies to construction activities and maintenance from all Caltrans highways, properties, activities and facilities throughout the State and applies to Caltrans and/or their contractors. Tentative Order No. 2001-001 applies to discharges into municipal Separate Storm Sewer Systems. In the event that the requirements of Order No. 99-06-DWQ are in conflict with Tentative Order No. 2001-001 the SDRWQCB will conduct a thorough evaluation of individual conflicts and determine which requirement will prevail.

Comment: Are yard drains permissible in residential neighborhoods which connect to MS4? (Jim)

Response: The Tentative Order requires the Copermittees to prohibit all illicit discharges not composed entirely of storm water unless specifically addressed in Section B.2. However, runoff from residential yards (landscape irrigation, lawn watering) would only be prohibited by the Copermittee if the Copermittee determined it was a significant source of pollutants. Alternately, the Copermittee could implement or require the implementation of BMPs to reduce the pollutants in the non-storm water discharge to the MEP and report the information required in Section B.3.c.

Comment: How are you going to incorporate TMDL limits into the permit? (ie- diazinon for chollas creek) (Capretz, Nicole)

Response: Currently, there are no USEPA approved TMDLs for the San Diego Region, and therefore no limitations that can be explicitly included in the Tentative Order at this time. However, 40 CFR 122.44 (d)(vii)(B) requires that NPDES effluent limitations be consistent with any waste load allocation for the discharge prepared by the state (Regional Board) and approved by USEPA. In other words, once TMDL limits are established and approved by USEPA, NPDES permits must include effluent limitations that are consistent with the TMDL. Furthermore, USEPA's guidance for developing TMDLs in California includes a recommendation that the state (Regional Board) evaluate how waste load allocations will be translated into NPDES permits as part of the development of the TMDL implementation plan.

Comment: I understand you are hiring more staff..would you please explain how your role will be changing from regulatory to a more team and cooperative role to achieve water quality improvement outcome. (American Public Works Association)

Response: The SDRWQCB is currently hiring staff to fill vacancies from budget augmentations in several programs, including storm water. Staff assigned to work in oversight of storm water regulations will assist in the effective implementation of Order No. 2001-001. Increased staff will provide dischargers more resources to assist in achieving compliance with Order No. 2001-001. However, we do not anticipate a shifting the balance between compliance assurance and assistance.

Comment: Sediment should be redefined to exclude soils consist with natural soils and should also exclude all sediment that is directly deposited onto the coastline through improved drainage systems. (City of Solana Beach)

Response: Finding 7 of the Tentative Order states "[t]he most common categories of pollutants in urban runoff include […] sediment (due to anthropogenic activities) […]." By clarifying that it is sediment from "anthropogenic activities" which is the pollutant, the finding makes the distinction between natural sediment loading and sediment loading from anthropogenic activities such as construction. The Tentative Order does not seek to control sediment from natural erosion, but rather to control sediment from man-made sources. Sediment from man-made sources needs to be controlled for several reasons. The US EPA explains in the Phase II NPDES storm water regulations that storm water discharges generated from urban 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 due to sediment loads in urban runoff. Increased fine sediment loads from construction sites can adversely affect 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 the streambed, and reducing intergravel dissolved oxygen by reducing the permeability of the bed material. Water quality impairment also results from urban runoff carrying sediment, in part, because a number of pollutants are preferentially absorbed onto mineral or organic particles found in fine sediment. Sediment transport and delivery by urban runoff is a primary pathway for introducing key pollutants, such as nutrients, metals, and organic compounds into aquatic systems (USEPA, 1999b). Due to this capability for sediment in urban runoff to carry significant pollutant loads, sediment from anthropogenic activities is considered a pollutant which must be addressed.

Comment: There is no need to delay issuance of this permit for financial, implementation, or compliance issues. (Escondido Creek Conservancy)

Response: Comment noted.

Comment: Unregulated urban run-off is having a detrimental effect on Agua Hedionda Lagoon. Attempts made by this organization to address it through the normal channels have been unsuccessful. (University of California Natural Reserve System)

Response: Comment noted.

Comment: I'd like to urge the adoption of, or maybe the allowance for a public utility district or public utility to handle these storm water management facilities. Any kind of structural facility -- let me caveat this by saying I've worked in other regions for a number of years, namely in (inaudible) Bay region where we've had a system in place for 20 to 30 years doing this type of thing, and their structural major BMPs are controlled by the public agencies. And I wasn't involved in the very beginning of the process, but I don't know if they had found that out by accident or if they just locked into it from the beginning. But to allow or to require the individual owners, individual homeowners associations and individual entities scattered throughout the county to maintain and operate these storm water BMPs, you're not going to get the result that you want, I don't think. You're going to get a hodgepodge, a myriad of different levels of compliance. It's probably better to be managed by the co-permittees or a public utility to do that. (Project Design Consultants)

Response: How maintenance of BMPs is conducted is at the discretion of the Copermittees. This could include the Copermittees forming a public utility district to perform BMP maintenance.

Comment: Please, stay the course, stop any further delays, and make us all comply with what is good for all of us, not just for a few who want to make a buck. It's unfortunate that most of the co-permittees who were here this morning are not here to hear the other side of the story, and they probably believe themselves that they are it. But they're the ones who are responsible for our miseries at this time, the loss of quality of life, whether it is traffic, higher cost of electricity, shortages, inability to meet the requirements of our sewage systems, and a lot more of other pollution. I would like to say that it's because of you that I think the region will be forced to think another way around. You will be the catalyst to make all the co-permittees work together and improve our community finally. So please keep the course. (Ymzon, Ray)

Response: Comment noted.

Comments on Multiple Sections

Comment: The SDRWQCB does not have the legal authority to specify conditions of approval for the Copermittees' permits (in section F.1.b). Such conditions are most appropriately determined by the Copermittees. Inclusion of minimum conditions of approval in the Tentative Order also violates California Water Code section 13360. (County of San Diego, Procopio, Cory, Hargreaves & Savitch)

Response: Regional board has authority under Porter-Cologne to require municipalities to exercise local planning and permitting authority in a manner that will reduce discharges of pollutants in MS4 to MEP in a manner consistent with state and regional water quality control plans and policies. Discharges of pollutants from development and other activities pursuant to municipalities' planning and subject to local permitting constitute a significant source of pollutants discharged to MS4. It is practicable for municipalities to exercise their authority over development projects and other regulated activities in a manner that will implement best management practices developed for industrial and construction activities pursuant to regulation under statewide waste discharge requirements (and such additional conditions as may be reasonably necessary under the circumstances affecting discharges of pollutants to MS4 within each municipality).

Comment: As opposed to having specific flow criteria for new development in the Tentative Order, it is recommended that the Copermittees be required to address their control measures for streambed erosion on a drainage basin basis as part of their Urban Runoff Management Plans, due to the complex nature of stream bed erosion. The permit should merely require the Co-permittees to protect natural channels and minimize stream erosion to the maximum extent practicable. (APWA, City of San Diego, County of San Diego, San Diego Copermittees, Carlsbad, Sempra Energy, La Mesa, El Cajon)

Response: The Tentative Order's requirement that "Post-development runoff which is greater in peak rate or velocity than pre-development runoff from the same site is prohibited" was designed to protect downstream areas from erosion caused by increased flows resulting from development. However, the blanket prohibition, as proposed, could result in the application of the requirement at relatively small sites, which pose an insignificant threat of downstream erosion due to their limited impervious surfaces. Application of the prohibition at all sites could also pose significant implementation difficulties for the Copermittees.

For these reasons, the requirement that post-development peak flow rates not exceed predevelopment rates for all development sites has been removed. Instead, the requirement shall only apply to new development and significant redevelopment falling under the SUSMP priority development project categories. The SUSMP priority development project categories are comprehensive in their application to significant new development and redevelopment projects. The categories ensure that most new development and redevelopment will be subject to SUSMPs. Therefore, the requirement that post-development peak flow rates not exceed predevelopment rates will still apply to most development projects. Only smaller projects not falling under the SUSMP requirements will be exempted.

As part of their model and local SUSMPs, the Copermittees will be required to maintain predevelopment peak flow rates and velocities coming from new development as necessary to prevent increased downstream erosion where the potential for downstream erosion exists. This requirement allows the Copermittees discretion in the methods to be developed and implemented to control post-development peak flow rates and downstream erosion. Furthermore, the Copermittees can develop and implement different methods to be applied in different watersheds or different areas of a watershed, provided that the different methods are effective in adequately reducing post-development peak flow rates to control erosion. The Copermittees' model and local SUSMPs must include a description of how predevelopment peak flow rates will be maintained to control erosion in downstream areas.

There is extensive guidance for the Copermittees to draw from in developing criteria to address post-development peak flow rates for the control of downstream erosion. For example, the State of Washington has developed the following criteria regarding post-development peak flow rates: "Stormwater discharges to streams shall control streambank erosion by limiting the peak rate of runoff from individual development sites to 50 percent of the pre-developed condition of the 2-year, 24-hour design storm while maintaining the pre-developed condition peak runoff rate for the 10-year, 24-hour and 100-year, 24-hour design storms." Regarding control of post-development flow durations, the State of Washington has developed the following criteria: "Stormwater discharges to streams shall match developed discharge durations to predeveloped durations for the range of predeveloped discharge rates from 50% of the 2 year peak flow up to the full 50 year peak flow" (Washington State Department of Ecology, 1999). The State of Maryland has developed the following criteria to addressed increased peak flow rates resulting from development: "To protect channels from erosion, 24 hour extended detention of the one-year, 24 hour storm event shall be provided. […] The rationale for this criterion is that runoff will be stored and released in such a gradual manner that critical erosive velocities during bankfull and near-bankfull events will seldom be exceeded in downstream channels" (Maryland Department of the Environment, 1999).

It should be noted that this approach, of allowing the Copermittees to develop peak flow rate criteria to control downstream erosion, is consistent with the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11.

See changes in permit sections A.4, F.1.a.9, F.1.b.1.g, F.1.b.2.b.i, and F.1.b.2.j.

Comment: Many requirements of the Tentative Order may require Copermittees to amend their municipal codes and increase criminal and/or civil penalties. If the civil penalties chargeable by the Regional Board exceed those authorized by our municipal code, the City could be responsible for any "shortfall" or the Regional Board might not deem the City's efforts to implement the various practices, programs and plans, as having been made "in good faith." Our authority to charge civil penalties is limited by the Government Code, and our authority to charge criminal penalties, and the total amount of any such fines, is likewise limited by the Penal Code. Additionally, the courts do not automatically impose the criminal penalties set forth in our municipal code. (Imperial Beach, El Cajon)

Response: Comment noted.

Comment: The prohibition of post-development peak flow rates exceeding pre-development peak flow rates may exacerbate flooding if implemented in lower watersheds. (Walker, El Cajon)

Response: The Tentative Order's requirement that "Post-development runoff which is greater in peak rate or velocity than pre-development runoff from the same site is prohibited" was designed to protect downstream areas from erosion caused by increased flows resulting from development. However, the blanket prohibition, as proposed, could result in increased flooding if implemented in lower watersheds, due to the potential for flow control devices in lower watersheds to release their peak discharges in correspondence with peak flows instream.

The blanket prohibition has therefore been removed from the Tentative Order. Instead, the requirement shall only apply to new development and significant redevelopment falling under the SUSMP priority development project categories. As part of their model and local SUSMPs, the Copermittees will be required to maintain predevelopment peak flow rates and velocities coming from new development as necessary to prevent increased downstream erosion where the potential for downstream erosion exists. This requirement allows the Copermittees discretion in the methods to be developed and implemented to control post-development peak flow rates and downstream erosion. Furthermore, the Copermittees can develop and implement different methods to be applied in different watersheds or different areas of a watershed (such as lower watersheds), provided that the different methods are effective in adequately reducing post-development peak flow rates to control erosion. The Copermittees' model and local SUSMPs must include a description of how predevelopment peak flow rates will be maintained to control erosion in downstream areas.

See changes in permit sections A.4, F.1.a.9, F.1.b.1.g, F.1.b.2.b.i, and F.1.b.2.j.

Comment: The Tentative Order exceeds SDRWQCB authority by requiring the Copermittees to regulate peak flows from development.

SDRWQCB relies upon PUD No. 1 v. Washington Department of Ecology (1994) 511 U.S. 700 to support its position that volume/flow control is proper. (See Fact Sheet, p. 21.) This reliance is misplaced. At issue in PUD No. 1 was a hydroelectric dam and a condition imposed upon a discharge permit that required a minimum level of discharges, i.e., that water discharges be increased. The case stressed the presence of evidence in the record as to the importance of the continual flow of water on the ecosystem surrounding the dam. The opinion also repeatedly stressed that the flowage concerns at issue are the "effects of dams and other diversions . . . "(E.g., PUD No. 1, 511 U.S. at p. 1913.) (County of San Diego, BIASD)

Response: The SDRWQCB has the legal authority to regulate flows from new development. The SWRCB has upheld this legal authority in adopting its Order WQ 2000-11. The Final LARWQCB SUSMP, upheld by SWRCB Order WQ 2000-11, states "Post-development peak storm water runoff discharge rates shall not exceed the estimated pre-development rate for developments where the increased peak storm water discharge rate will result in increased potential for downstream erosion."

This legal authority to regulate flows from new development is further explained in the Draft Fact Sheet/Technical Report for the Tentative Order. The Fact Sheet/Technical Report states:

Federal NPDES regulation 40 CFR 122.44(d)(1) requires municipal storm water permits to include any requirements necessary to "[a]cheive water quality standards established under section 303 of the CWA, including State narrative criteria for water quality." The term "water quality standards" in this context refers to a water body's beneficial uses and the water quality objectives necessary to protect those beneficial uses. The negative impact of urban runoff flow on the beneficial uses of receiving waters has been widely documented. Increases in flows from impervious surfaces associated with urbanization can result in (1) increases in the number of bankfull events and increased peak flow rates; (2) sedimentation and increased sediment transport; (3) frequent flooding; (4) stream bed scouring and habitat degradation; (5) shoreline erosion and stream bank widening; (6) decreased baseflow; (7) loss of fish populations and loss of sensitive aquatic species; (8) aesthetic degradation; and (9) changes in stream morphology (USEPA, 1999a). USEPA finds that the level of imperviousness resulting from urbanization is strongly correlated with the water quality impairment of nearby receiving waters (USEPA, 1999b). USEPA further attributes much of this water quality impairment to changes in flow conditions from urbanization, stating "[I]n many cases, the impacts on receiving streams due to high storm water flow rates or volumes can be more significant than those attributable to the contaminants found in storm water discharges" (USEPA, 1999a). Therefore, in order to protect the beneficial uses and water quality objectives of waters receiving urban runoff flows (as required by 40 CFR 122.44(d)(1)), the SDRWQCB has under certain circumstances placed limits on urban runoff flows in the tentative permit.

In addition, the authority of states to regulate flow in order to protect water quality standards has been addressed by the U.S. Supreme Court in PUD No. 1 v. Washington Department of Ecology, 511 U.S. 700 (1994). In this case the U.S. Supreme Court found that the Clean Water Act applies to water quantity as well as water quality, stating "[p]etitioners also assert more generally that the Clean Water Act is only concerned with water 'quality' and does not allow the regulation of water 'quantity.' This is an artificial distinction. In many cases, water quantity is closely related to water quality." The U.S. Supreme court goes on to refer to the Clean Water Act's definition of pollution ("the man-made or man induced alteration of the chemical, physical, biological, and radiological integrity of water" 33 U.S.C. 1362(19)) and states "[t]his broad conception of pollution – one which expressly evinces Congress' concern with the physical and biological integrity of water – refutes petitioners' assertion that the Act draws a sharp distinction between the regulation of water 'quantity' and water 'quality'." In this context, the U.S. Supreme Court held that the state's regulation of flow was "a limitation necessary to enforce the designated use of the River as a fish habitat." Finally, it was held that the state's regulation of flow was "a proper application of the state and federal antidegradation regulations, as it ensures than an 'existing instream water use' will be 'maintained and protected.' 40 CFR 131.12(a)(1) (1992)."

Comment: What design storm shall be used to determine the pre-development peak rate or velocity that may not be exceeded with new development or significant redevelopment? (Chula Vista, Walker, Project Design Consultants, SDCAA)

Response: Designation of the design storm which shall be used has been left to the discretion of the Copermittees. A blanket requirement to control a particular design storm may not be appropriate for all areas, such as lower watersheds. Therefore, development of criteria for the control of post-development peak flow rates shall be conducted by the Copermittees as part of the model and local SUSMPs.

As part of their model and local SUSMPs, the Copermittees will be required to maintain predevelopment peak flow rates and velocities coming from new development as necessary to prevent increased downstream erosion where the potential for downstream erosion exists. This requirement allows the

Copermittees discretion in the methods to be developed and implemented to control post-development peak flow rates and downstream erosion. Furthermore, the Copermittees can develop and implement different methods to be applied in different watersheds or different areas of a watershed, provided that the different methods are effective in adequately reducing post-development peak flow rates to control erosion. The Copermittees' model and local SUSMPs must include a description of how predevelopment peak flow rates will be maintained to control erosion in downstream areas.

There is extensive guidance for the Copermittees to draw from in developing criteria to address post-development peak flow rates for the control of downstream erosion. For example, the State of Washington has developed the following criteria regarding post-development peak flow rates: "Stormwater discharges to streams shall control streambank erosion by limiting the peak rate of runoff from individual development sites to 50 percent of the pre-developed condition of the 2-year, 24-hour design storm while maintaining the pre-developed condition peak runoff rate for the 10-year, 24-hour and 100-year, 24-hour design storms." Regarding control of post-development flow durations, the State of Washington has developed the following criteria: "Stormwater discharges to streams shall match developed discharge durations to predeveloped durations for the range of predeveloped discharge rates from 50% of the 2 year peak flow up to the full 50 year peak flow" (Washington State Department of Ecology, 1999). The State of Maryland has developed the following criteria to addressed increased peak flow rates resulting from development: "To protect channels from erosion, 24 hour extended detention of the one-year, 24 hour storm event shall be provided. […] The rationale for this criterion is that runoff will be stored and released in such a gradual manner that critical erosive velocities during bankfull and near-bankfull events will seldom be exceeded in downstream channels" (Maryland Department of the Environment, 1999).

It should be noted that this approach, of allowing the Copermittees to develop peak flow rate criteria to control downstream erosion, is consistent with the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11.

See changes in permit sections A.4, F.1.a.9, F.1.b.1.g, F.1.b.2.b.i, and F.1.b.2.j.

Comment: Rather than hold pollutant discharges from new development to pre-development levels, the permit should hold discharges to natural levels. (Surfrider Foundation)

Response: The holding of post-development pollutant discharges to predevelopment or natural levels may not always be necessary for the protection of receiving water quality. There may be circumstances where a slight increase in pollutant concentrations from newly developed area may not contribute to an exceedance of water quality standards. For example, if a discharge's pollutant concentration from a newly developed area is increased but still well below the water quality objective for the 303(d) listed receiving water, the discharge will most likely not contribute to the exceedance of the water quality objective. The TMDL process frequently allows for such a situation, when "safety factors" for new development are included in waste load allocations.

The TMDL process is a more appropriate process for determining such allocations that the Tentative Order. It is a formal process which allows for extensive stakeholder involvement and public participation. It also addresses discharges from all sources, both existing and new.

For these reasons, the Tentative Order has been modified. The Tentative Order will still prohibit "post-development runoff containing pollutant loads which cause or contribute to an exceedance of receiving water quality objectives." Also, the potential for new development to cause or contribute to the 303(d) listing of a receiving water will need to be addressed in the Copermittees' planning processes. However, the requirement that post-development pollutant concentrations not exceed predevelopment pollutant concentrations will be removed. This issue will be addressed during the pending TMDL processes.

Comment: Holding discharges of pollutants from new development to pre-development levels is problematic because pre-development levels will not be known for a parcel and obtaining the information will cause project delays. How will pre-development levels be determined? (Sempra, SANDAG, Oceanside, Wesch)

Response: The blanket requirement that "Discharges of post-development runoff into a Clean Water Act section 303(d) water body containing any pollutant (for which the water body is already impaired) in levels exceeding predevelopment levels (for those same pollutants) is prohibited" has been removed from the Tentative Order. Therefore, this issue has been resolved.

Comment: The SDRWQCB should not require the Copermittees to address urban runoff flows "into" their MS4s because it does not have the appropriate legal authority. SDRWQCB does not have legal authority to apply performance standards (MEP or water quality standards) to individual project sites in Copermittee jurisdictions. Such requirements go beyond the requirements of the Clean Water Act.

Further, the County has no authority to enforce the California Water Code, and therefore has no legal authority to prohibit discharges by third parties based on the water quality impacts of those discharges.

The Order violates the separation of powers doctrine by legislating beyond the RWQCB's administrative power. California's governmental structure grants the right to make state laws only to the State's Senate and Assembly. (Cal. Const., Art. IV, § 1, Art. V, § 1; (City of San Jose v. State of California (1996) 45 Cal.App.4th 1802, 1810.) As a creature of statute, the RWQCB possesses only that power conferred by the Porter-Cologne Act to regulate water quality and the discharge of wastes affecting water quality. (See Water Code §§ 13225, 13260, 13263; 13263.3 13377, 20th Century Ins. v. Quakenbush (1998) 64 Cal.App.4th 135, 141.)

Moreover, the RWQCB need not rely on the Copermittees to prevent stormwater discharges that adversely affect water quality. The Clean Water Act specifically authorizes EPA and the States to require permits of "[a] discharge for which [EPA] or the State determines that the stormwater discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants." The RWQCB is therefore free to require permits of any stormwater discharger that it believes contributes to a violation of water-quality standards. (Sempra, City of San Diego, BIASC, Orange County, Procopio, Cory, Hargreaves & Savitch, California Storm Water Quality Task Force, County of San Diego)

Response: The requirement for control of discharges into the MS4 is currently required of the Copermittees in Order No. 90-42. Section IX. of Order No. 90-42 states "The permittees shall develop and implement BMPs to reduce/control/eliminate pollutants in discharges to and from stormwater

conveyance systems in their areas of jurisdiction to the maximum extent practicable." Given the impact to receiving waters in the San Diego Region caused by urban runoff, as well as projections for increased urban growth in the region, it is not warranted to eliminate this requirement.

USEPA supports the concept that Copermittees cannot passively receive and discharge pollutants from third parties. As US EPA states, "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" (USEPA, 1999b).

Discharges of pollutants to the MS4 must therefore be controlled, and an important means for a municipality to achieve this is through the development and enforcement of municipal legal authority. USEPA states "A crucial requirement of the NPDES storm water regulation is that a municipality must demonstrate that it has adequate legal authority to control the contribution of pollutants in storm water discharged to its MS4. […] In order to have an effective municipal storm water management program, a municipality must have adequate legal authority to control the contribution of pollutants to the MS4. […] 'Control,' in this context, means not only to require disclosure of information, but also to limit, discourage, or terminate a storm water discharge to the MS4" (USEPA, 1992).

Since discharges which enter the MS4 are generally discharged unimpeded directly into receiving waters, the Copermittee's legal authority is to apply to both discharges into and from MS4s. Federal NPDES regulations clearly provide the SDRWQCB with the legal authority to require municipalities to control discharges from third parties into their MS4. 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff from commercial, residential, industrial, and construction land uses or activities. Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A - D) also require municipalities to have legal authority to control various discharges to their MS4. This concept is further supported in the Preamble to the Phase II Final Rule NPDES storm water regulations, which states "The operators of regulated small MS4s cannot passively receive and discharge pollutants from third parties" (USEPA, 1999b). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule findings for small municipalities are also applicable to larger municipalities such as the Copermittees. Finally, underlying the Federal NPDES storm water regulations is the Clean Water Act, which states in section 402(p)(3)(B)(ii) that municipalities shall "effectively prohibit non-stormwater discharges into the storm sewers."

It is important to note the SWRCB also supports control of discharges into MS4s. The SWRCB recently upheld the LARWQCB SUSMP requirements in Order WQ 2000-11. These requirements place significant restrictions on discharges from third parties into MS4s. In fact, the SUSMP provisions included in the Tentative Order, as upheld by the SWRCB, represent the most stringent and specific requirements in the Tentative Order regarding the control of discharges into the MS4.

Finally, the requirement for municipal storm water dischargers to have, and exercise, local governmental authority in order to comply with water quality control obligations is analogous to the requirement for Publicly Owned Treatment Works to have and exercise legal authority to require pretreatment of industrial wastes being discharged to their sewage collections systems (CWA 402(b)(8)).

Comment: A regional approach to BMP implementation should be allowed by the permit, as opposed to the permit's site-by-site focus. Due to economies of scale, regional approaches are more cost effective.

Regional BMPs can enhance wetland and riparian habitats. By not allowing regional approaches, the Tentative Order goes against SWRCB Order WQ 2000-11, the Clean Water Act, the California Water Code (section 13360), and practices in the State of Florida, which all support regional approaches. (La Mesa, Sempra Energy, Carlsbad, SANDAG, Nolte, BIASC, County of San Diego, Coalition for Practical Regulation, BIASD, Escondido, Chula Vista, San Diego Co-permittees, Rancho Mission Viejo Company, APWA Committee, Project Design Consultants, Associated General Contractors of America)

Response: Implementation of BMPs on a site by site basis provides many benefits. By its very definition, new development presents opportunities for on-site BMPs to be designed into the development as an integral component, at low cost, and with a greater likelihood for protecting water quality downstream over the life of the development. Treatment costs for municipal storm water generally increase with distance from the source. Regional "end of pipe" treatment also results in the loss of cost reducing opportunities for water quality improvements en route. Rather than increasing costs, small collection strategies, located at the point where runoff initially meets the ground, repeated consistently over entire projects, will usually yield the greatest water quality improvements for the least cost (BASMAA, 1999).

Furthermore, regional BMP approaches (such as end of pipe diversions) can send the wrong message to dischargers and the public, which can then cause setbacks in progress which has already been made. Instead of the idea that "business as usual" is acceptable since regional BMPs will "take care of everything" downstream, the message that SUSMPs and numeric sizing criteria should send is that behavior and site design must change in order for water quality to improve.

Additionally, popular short-term regional solutions, such as end of pipe diversions into sanitary sewers, are effective only for dry weather flows. The sanitary sewerage collection systems found in the San Diego region were not designed to handle the increased loads from dry weather flows, let alone flows from even minor storm runoff events. Likewise, the existing coastal Publicly Owned Treatment Works (POTWs) are not sized to treat wet weather flows, have almost no capacity for expansion, and will not be able to treat storm water flows.

However, while onsite BMPs provide many benefits, there may be cases where offsite structural BMPs, implemented on a "neighborhood" or "sub-watershed" basis, may be more feasible. This is particularly the case for existing development, where opportunities for innovative site design do not exist. To allow more flexibility in BMP implementation, the Tentative Order SUSMP requirements regarding structural treatment BMPs will be changed to allow BMPs to be shared by multiple new development projects on a "neighborhood" or "sub-watershed" level. The SWRCB supports this approach in Order WQ 2000-11, which states "We do note that there could be further cost savings for developers if the permittees develop a regional solution to the problem." It should be noted, however, that shared BMPs will be required to be implemented upstream from any receiving water supporting beneficial uses. The receiving waters (such as urban streams) of the region cannot be used to transport potentially contaminated urban runoff to "regional" treatment facilities.

See change at permit sections F.1.b.2.c and F.1.b.2.b.xiii.

Comment: More stringent requirements for discharges to 303(d) listed do not account for causes of the impairment. (City of Chula Vista)

Response: The more stringent BMP requirements for discharges tributary to 303(d) listed water bodies refers specifically to activities that may be a source of those pollutants for which the water body is listed. Not all activities in the watershed tributary to a 303(d) listed water body generate pollutants impairing the waterbody. Activities that do not generate pollutants for which a 303(d) listed water body is listed would not be subject to the more stringent BMP requirements.

Comment: The requirements mandated by the Tentative Order for all storm water conveyance systems tributary to San Diego Bay do not appear to be based upon the MEP criteria, but take an overly broad approach to pollution prevention. Findings 9 and 10 (page 3) refers to storm water runoff's potential contribution to the impairment of designated beneficial uses and the need to "…attain water quality objectives necessary to support designated beneficial uses". However, the Tentative Order fails to relate the pollutants to be removed by the required BMPs to the impairment of designated beneficial uses. (City of Chula Vista)

Response: It is the Copermittees' responsibility to require the implementation of BMPs that meet MEP for all discharges from their MS4s. Discharges for which BMPs meeting MEP have been implemented are less likely to cause exceedances of water quality objectives or the impairment of beneficial uses of the receiving waters. With respect to more stringent BMP requirements in watersheds tributary to 303(d) listed impaired water bodies (e.g. San Diego Bay), the more stringent requirements refer to those pollutants for which the water body is listed as impaired and those activities that might generate those pollutants.

Comment: The required BMPs listed in the Tentative Order are not consistent with the "Comprehensive Management Plan for San Diego Bay." (City of Chula Vista)

Response: There is no requirement for the minimum BMPs required to be consistent with the "Comprehensive Management Plan for San Diego Bay."

Comment: Which BMPs are the most cost effective and how should they be implemented? (City of Chula Vista)

Response: It is the Copermittees' responsibility to determine the cost effectiveness of various BMPs and how they should be implemented. Compliance with the Tentative Order is based on the use of BMPs to reduce pollutants in urban runoff to the MEP. Manner of compliance with respect to specific BMP selection is legally and properly the responsibility of the Copermittees.

Comment: How will BMPs differ for high, medium, and low threats to water quality? (City of Chula Vista)

Response: The Copermittees have the responsibility and discretion to select BMPs that they conclude will best address high, medium, or low threats to water quality to reduce pollutants in discharges to the MEP. The differences in BMPs will largely depend on the potential threats, the conditions under which

the threats exist or may exist, and the cost effectiveness of various BMPs available to the Copermittees that reduce pollutants to the MEP.

Comment: The Tentative Order imposes significant new prohibitions and conditions on the release of stormwater that are not found in Order 90-42. (County of San Diego)

Response: Comment noted.

Comment: The RWQCB has failed to comply with the requirements of the Clean Water Act or State law in formulating the subject permit.

1. [Reserved]

2. The Tentative Order Exceeds the Authority Under the Regulations to Regulate Discharges "From" MS4s.

An additional example of the Regional Board exceeding its authority under state or federal law is illustrated by its attempt to impose various requirements and regulations on the County for discharges to and from municipal separate storm sewer systems ("MS4s") of which they are neither owners nor operators. The regulations to the Clean Water Act specifically provide that "Copermittees need only comply with permit conditions relating to discharges from the municipal separate sewer source for which they are operators." (40 CFR § 122.26(a)(3)(vi).) Because the Tentative Order seeks to impose upon the County numerous conditions relating to discharges from MS4s in which the County is not operator of the MS4, the Regional Board has exceeded its authority under the Clean Water Act and State Law. (40 CFR § 122.26(a)(3)(vi).)

3. The Tentative Permit Improperly Seeks to Require the Copermittees To Immediately Eliminate Illicit Connections.

In addition, the Regional Board through the Tentative Order, seeks to require the County to "prohibit and eliminate illicit connections to the MS4." (Tentative Order, p. 11, D.1.C.) "Each Copermittee shall eliminate all detected illicit discharges, discharge sources, and connections immediately." (Tentative Order, p. 35, § (F).5.d.) Yet, regulations to the Clean Water Act only authorize the State to require the removal of "illicit discharges," (see 40 CFR § 122.26(d)(2)(iv)(B)), and there is no authority anywhere in the Clean Water Act or State law which enables the State to impose upon the County the obligation to inspect and to force the removal and termination of "illicit connections," i.e., to initiate legal proceedings to obtain a mandatory injunction requiring the immediate removal of all such illicit connections.

4. [Reserved]

5. The Tentative Order Unlawfully Seeks to Transfer Oversight Responsibility of Other NPDES Permits to the Copermittees.

The Regional Board has further exceeded any authority it asserts it has under the Clean Water Act and State Law by attempting to shift to the Copermittees, the State Board's responsibility to administer and enforce the Clean Water Act's provisions governing industrial and construction activities (Tentative Order, p. 12, § C.1.h.) Clearly, the obligation to regulate industrial and construction activities falls on the shoulders of the State Board and, according to the Regional Board, in turn on the Regional Board. There is no authority anywhere under the Clean Water Act or State Law that would allow this Regional Board to in effect "pass the buck" and transfer this responsibility onto municipalities. That this obligation is not to be passed on to municipal permittees is made clear by the regulations themselves and the express exemption from the definition of "illicit discharges," of discharges otherwise authorized by a separate NPDES permit. (See, 40 CFR § 122.26(b)(2)): "Illicit discharges means any discharge to a municipal

separate storm sewer that is not composed entirely of storm water except discharges pursuant to an NPDES permit. . . .")
Pursuant to the regulations, a Copermittee need only monitor and control pollutants in storm water from such "industrial facilities" when the permittee determines such discharges "are contributing a substantial pollutant loading to the municipal storm sewer system." (40 CFR § 122.26(2)(iv)(C).) Without such a determination by the Copermittee, neither the State Board nor the regional boards can require the regulation of such facilities by any Copermittee.
Further evidence that the Copermittees have no authority over permitted industrial activities and sites, are additional regulations addressing the municipalities program for detecting and removing illicit discharges to the MS4. 40 CFR section 122.26(2)(iv)(B) requires the development of a management program to remove such illicit discharge to the MS4, "(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." (See 40 CFR § 122.26(iv)(B).) Accordingly, a Copermittee has no authority to regulate and control an already permitted discharge into the MS4.
In sum, there is no authority under any portion of the Clean Water Act or under any provision of the Porter-Cologne Act, that authorizes the Regional Board or any other agency to impose upon the Copermittees the obligation to regulate, inspect, and enforce the requirements of the Clean Water Act dealing with industrial and construction NPDES permits. (County of San Diego)

Response: 2. The Tentative Order does not require the Copermittees to regulate discharges from MS4s they do not own, unless such discharges are entering their MS4. The Federal NPDES regulations are clear on this responsibility of the Copermittees. Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(D) provides that "[The Copermittee must demonstrate that it can control] through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system."

Municipalities cannot arrogate to themselves the authority to regulate discharges from facilities or activities beyond their jurisdiction, e.g., discharges from state and federal facilities including highways and Indian reservations directly to waters of the state that are not part or tributary to the municipality's MS4. Municipalities are required, however, to have or develop legal authority to regulate storm water discharges and urban runoff within their jurisdictions, including discharges that may be subject to concurrent regulation by the state and federal governments. In addition, where municipalities control access to MS4 infrastructure for the accommodation of discharges from entities within their jurisdiction (including school districts, state and federal facilities, construction sites and industrial facilities) municipalities must exercise such control in a manner consistent with their obligation under the Regional Board's requirements to reduce pollutants in their MS4 to the maximum extent practicable.

3. Illicit discharges to the MS4 are prohibited and must be eliminated, as required by the federal NPDES regulations. Illicit connections carry illicit discharges. In order to prevent illicit discharges, illicit connections must be eliminated. Therefore, the elimination of illicit connections is required in the Tentative Order.

The SDRWQCB has the authority to require the elimination of illicit connections under CWA section 402(p)(3)(B)(iii) and CWC section 13377.

5. The Tentative Order does not transfer oversight of the General Industrial and Construction Permits to the Copermittees. The Copermittees are not responsible for enforcing or overseeing the General Statewide Industrial or Construction Permits. The SDRWQCB will oversee and enforce the General Statewide Industrial and Construction Permits. The Copermittees are however, responsible for enforcing their ordinances that implement the Tentative Order, including the prohibitions against illicit discharges.

USEPA supports this approach, clearly placing responsibility for the control of discharges from construction and industrial sites with municipalities. The USEPA notes in the preamble to the Storm Water Regulations that municipalities are in the best place to enforce compliance with storm water discharge requirements:

"Because storm water from industrial facilities may be a major contributor of pollutants to MS4s, municipalities are obligated to develop controls for storm water discharges associated with industrial activity through their system in their storm water management program…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 noted in the Fact Sheet/Technical Report, the USEPA felt it so important to control the discharge of pollutants from construction and industry that it established a double system of regulation over construction and industrial sites. Two parallel regulatory systems were established with the same common objective of keeping pollutants from construction and industrial sites out of the MS4. A structure was created where local governments must enforce their local ordinances and permits as required under their municipal storm water permits, while the SDRWQCB (state) must enforce its statewide general construction and industrial storm water permits. The two regulatory systems were designed to complement and support each other in the shared goal of minimizing pollutant discharges in runoff from construction and industrial sites.

Regarding construction sites, USEPA also places enforcement responsibility on municipalities, requiring small municipalities to develop and implement "[a]n ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance […]" (40 CFR 122.34(b)(4)(ii)(A)). In its guidance for the Phase II regulations, US EPA goes on to support increased municipality responsibility, stating "Even though all construction sites that disturb more than one acre are covered nationally by an NPDES storm water permit, the construction site runoff control minimum measure for the small MS4 program is needed to induce more localized site regulation and enforcement efforts, and to enable operators of regulated small MS4s to more effectively control construction site discharges into their MS4s." While these above citations refer to small municipalities under Phase II of the NPDES program, USEPA recommendations to small municipalities are applicable to larger municipalities such as the Copermittees, due to the typically more serious water quality concerns attributed to such larger municipalities.

The language of the Tentative Order has been revised to more carefully describe the requirements of the Tentative Order with regard to the dual regulation of construction and industrial sites as discussed above.

With the recent addition of resources and staff from budget augmentations in several programs, including storm water, the SDRWQCB expects to "vigorously administer and enforce" the General Statewide Industrial and Construction permits as requested by one commentor. The language of Finding 24 of the Tentative Order has been revised to remove all discussion of what constitutes "good faith" in enforcing local legal authority. Furthermore, the Tentative Order does not "reward" Copermittees that enforce its storm water ordinances that implement the Tentative Order. Rather, the Section F.2.g.2 offers the Copermittees the discretion to voluntarily use the requirements of the General Construction Permit to implement and enforce its own storm water ordinances. Nor does Section F.2.h "write" the Copermittees Stormwater Ordinances or even specify what types of penalties and fines must be included. Section F.2.h only requires that the Copermittees enforce their ordinances and is not an infringement on the Copermittees legislative authority or its police powers. The SDRWQCB will enforce the General

Statewide Construction Permit; the Copermittees are required to enforce their own storm water ordinances.

Comment: The Order purports to regulate discharges that the RWQCB has no authority to regulate by means of an Order to Copermittees

Finding 2 (p.1) of this Order correctly states:

The discharge of urban runoff from an MS4 is a "discharge of pollutants from a point source [Copermittee MS4s]" into waters of the United States as defined in the Clean Water Act.

The Order does not reflect the limitations that this places on the general applicability of this Order. The purpose of the Order is to regulate the quality of runoff discharged from Copermittee MS4s . The RWQCB also may require Copermittees to use their planning process, and prohibitions on illegal discharges, to affect discharges to their MS4s. However, discharges that never enter or leave these systems cannot be regulated through an Order issued to Copermittees. As such, this Order may not be used to regulate, or to require Copermittees to regulate, any of the following:

a.Discharges by third parties directly into groundwater,
b.Discharges by third parties directly into surface water , and
c.Discharges either directly into, or from a Copermittee MS4 into, any area which is not a water of the state (including "Environmentally Sensitive Areas").

The RWQCB also cannot use its focused and limited NPDES / WDR permitting authority as general authority to regulate non-point source pollution within Copermittee jurisdictions. This is simply not the purpose of this municipal stormwater point source discharge permitting system, and goes well beyond any authorities explicitly or implicitly granted by it. The County requests deletion of all provisions of the Order that conflict with the above limitations.

Under the CWC, this applies equally to waters of the state.

And with limitations, the policies and practices affecting the quality of the water entering the MS4.

As discussed in comment FF, the County disagrees with staff's conclusion that urban streams are MS4 components (Finding 8). (County of San Diego)

Response: The Tentative Order does not attempt to require Copermittees to regulate discharges from third parties directly to groundwater, surface water, or environmentally sensitive areas.

The Tentative Order requires the implementation of structural treatment BMPs, of which infiltration to groundwater is one option. Where the Copermittees choose to allow infiltration/redirection of flows which would otherwise enter their MS4s, restrictions are appropriate. The Copermittees cannot choose to redirect flows away from their MS4s and claim no responsibility for the potential impacts of such actions. In addition, the SWRCB upheld in Order WQ 2000-11 the infiltration restrictions included in the LARWQCB SUSMP, on which the infiltration restrictions in the Tentative Order are based.

Regarding discharges to surface water, discharges of storm water that are not within a municipality's jurisdiction or that are not tributary to a municipality's MS4 may be subject to other water quality control

requirements, but do not impose upon the municipality any regulatory obligation under these requirements. However, it is incorrect to assert that a municipality should not be responsible under the requirements for discharges to natural drainages that are used as part of the municipality's MS4, regardless of the "ownership" of such a natural drainage or stream. The determination of whether or not a particular natural drainage or urban stream channel is or is not part of the municipality's MS4 depends on the particular circumstances of the channel and the municipality's urban runoff management practices. If municipalities rely on natural drainage channels or urban streams to collect and convey urban runoff and storm water to or from an MS4, they should be recognized as components of the municipality's MS4; the municipality would be required to reduce pollutant discharges therein to the maximum extent practicable. Application of requirements for discharges of storm water in MS4s to natural drainages and urban streams does not "transform" such drainages and streams to MS4s; however, it does reflect the fact that the Regional Board recognizes the water quality consequences of municipalities' reliance on such drainages and streams for the management of storm water and urban runoff, and the environmental impact upon such drainages and streams as a consequence of the increased flows therein associated with urban development and land use under the planning and regulatory authority of municipalities.

Nevertheless, there may be discharges from activities and projects within municipalities that are not tributary to the municipality's MS4 and do not subject the municipality to liability for compliance with these requirements, e.g., a discharge of storm water or landscape irrigation runoff from an existing individual residential property directly to waters of the state that are not part of, or tributary to, the municipality's MS4. (Such discharges may, however, be subject to direct regulation by the regional board under individual waste discharge requirements if the discharge consists of or contains waste that could affect the quality of the waters of the state if it is not already covered by statewide requirements for industrial or construction activities.) Municipalities cannot arrogate to themselves the authority to regulate discharges from facilities or activities beyond their jurisdiction, e.g., discharges from state and federal facilities including highways and Indian reservations directly to waters of the state that are not part or tributary to the municipality's MS4. Municipalities are required, however, to have or develop legal authority to regulate storm water discharges and urban runoff within their jurisdictions, including discharges that may be subject to concurrent regulation by the state and federal governments. In addition, where municipalities control access to MS4 infrastructure for the accommodation of discharges from entities within their jurisdiction (including school districts, state and federal facilities, construction sites and industrial facilities) municipalities must exercise such control in a manner consistent with their obligation under the Regional Board's requirements to reduce pollutants in their MS4 to the maximum extent practicable.

Finally, language in the Tentative Order pertaining to discharges to environmentally sensitive areas has been modified. Requirements for such discharges only apply to environmentally sensitive areas containing receiving waters, where the discharge has entered or is entering the Copermittee's MS4.

Comment: The Order imposes liability on the county for stormwater that is beyond the County's jurisdiction.

The Order purports to impose liability on the County for all stormwater discharges within its jurisdiction by (1) pronouncing that natural streams not owned by the County are a part of the County's municipal separate storm sewer system, and (2) by pronouncing that "title" to all stormwater in the County passes to the County when that stormwater is "accepted" into a conveyance system. As a result, the County will face liability for stormwater discharges emanating from state and federal properties, Indian lands, school districts, state roads and freeways, private industry, residences and County properties.

The RWQCB cannot transform streams into MS4s, and cannot assign the County regulatory responsibility and potential liability for natural drainages it does not own or operate. Moreover, the possible involvement of the San Diego County Flood Control District in the "operation" of these streams does not confer jurisdiction over the County. The Flood Control District is a separate legal entity from the County.

The RWQCB also cannot simultaneously regulate streams as waters of the state and as MS4s. Separate and inconsistent regulatory authorities and requirements apply to waters of the state and to MS4s. Finally, the state has no authority under federal or state law to determine who has "title" to stormwater. See comment "O2." (County of San Diego)

Response: A municipality's responsibility for discharges of storm water and urban runoff in its MS4 must be coextensive with the municipality's jurisdiction to regulate such discharges. Discharges of storm water that are not within a municipality's jurisdiction or that are not tributary to a municipality's MS4 may be subject to other water quality control requirements, but may not impose upon the municipality any regulatory obligation under these requirements. However, the commentor is incorrect to assert that a municipality should not be responsible under the requirements for discharges to natural drainages that are used as part of the municipality's MS4, regardless of the "ownership" of such a natural drainage or stream. The determination of whether or not a particular natural drainage or urban stream channel is or is not part of the municipality's MS4 depends on the particular circumstances of the channel and the municipality's urban runoff management practices. If municipalities rely on natural drainage channels or urban streams to collect and convey urban runoff and storm water to or from an MS4, they should be recognized as components of the municipality's MS4; the municipality would be required to reduce pollutant discharges therein to the maximum extent practicable. Application of requirements for discharges of storm water in MS4s to natural drainages and urban streams does not "transform" such drainages and streams to MS4s; however, it does reflect the fact that the Regional Board recognizes the water quality consequences of municipalities' reliance on such drainages and streams for the management of storm water and urban runoff, and the environmental impact upon such drainages and streams as a consequence of the increased flows therein associated with urban development and land use under the planning and regulatory authority of municipalities.

Nevertheless, there may be discharges from activities and projects within municipalities that are not tributary to the municipality's MS4 and do not subject the municipality to liability for compliance with these requirements, e.g., a discharge of storm water or landscape irrigation runoff from an existing individual residential property directly to waters of the state that are not part of, or tributary to, the municipality's MS4. (Such discharges may, however, be subject to direct regulation by the regional board under individual waste discharge requirements if the discharge consists of or contains waste that could affect the quality of the waters of the state and if it is not already covered by statewide requirements for industrial or construction activities.) Municipalities cannot arrogate to themselves the authority to regulate discharges from facilities or activities beyond their jurisdiction, e.g., discharges from state and federal facilities including highways and Indian reservations directly to waters of the state that are not part or tributary to the municipality's MS4. Municipalities are required, however, to have or develop legal authority to regulate storm water discharges and urban runoff within their jurisdictions, including discharges that may be subject to concurrent regulation by the state and federal governments. In addition, where municipalities control access to MS4 infrastructure for the accommodation of discharges from entities within their jurisdiction (including school districts, state and federal facilities, construction sites and industrial facilities) municipalities must exercise such control in a manner consistent with their obligation under the Regional Board's requirements to reduce pollutants in their MS4 to the maximum extent practicable.

Terminology in Finding 15 based on "ownership" of and "title" to pollutants or flows may be confusing, and has been modified to articulate the fact that there must be a nexus between municipal jurisdiction and responsibility for pollutant reduction under the requirements. See change at permit Finding 15.

Comment: A Combination of BMPs (prevention, source and treatment) is recommended. But what role does cost-effectiveness play in the decision to implement a range of BMPs? (County of San Diego)

Response: At the level of BMP implementation, the Copermittees have the discretion to determine and optimize the cost effectiveness of a combination of BMPs that meet MEP.

Comment: Cities are generally prohibited from trespassing on private property, and it is questionable as to whether cities have the legal authority to implement the inspection and monitoring programs; cities generally have to obtain court orders to inspect private property, which is an expensive and cumbersome process. (Coalition for Practical Regulation)

Response: The Clean Water Act (CWA) and the implementing regulations found at 40 CFR 122.26 must be interpreted in a manner to carry out the purpose of the CWA. The U.S. EPA's guidance on this issue makes it clear that the CWA and the federal regulations seek to impose an inspection responsibility on the Copermittees. There is an express requirement for Copermittees to demonstrate or obtain the authority to conduct inspections at 40 CFR 122.26(d)(2)(i)(F). To the extent that cities do not presently possess authority to inspect, they will obtain such authority in compliance with this regulation.

Generally, the Copermittees should presently possess authority to enforce and ensure compliance with their various permits, such as for construction and business. The Copermittees should be able to rely on that authority to gain access to private property in the majority of cases to assure compliance with the storm water permit requirements. In the much smaller number of cases, where the inspectors are unable to gain consensual entry to premises, they may have no right of entry without a warrant.

Comment: The IEA recommends language be added to allow for future advances in technology. Such language might be "or equivalent alternative" after the word BMP. (Industrial Environmental Association)

Response: The definition of BMP in Attachment D of the Tentative Order is broad and inclusive. It is likely that any measure that constitutes an "equivalent alternative" would already fall under this broad definition, making the inclusion of the term unnecessary.

Comment: Municipal Wastewater Systems are likely to become Recipients of MS4 Flows. Several sections of the proposed permit require the removal or diversion of flows from the MS4 system Examples are Finding 32., which states that they should be removed from the MS4 system, Sections B.2. that prohibits from entering an MS4 any of the following:
c. Uncontaminated groundwater infiltration.
d. Uncontaminated pumped ground water;
f. Springs;

k. Water line flushing;
I. Landscape irrigation;
m. Discharges horn potable water sources other than water main breaks;
n. Dechlorinated swimming pool discharges.
Sections B4, D.b. (2) to (9), and F. 11 (2) also identify flows that would likely be discharged to the sanitary sewer system.
Consequently, there is the potential for substantial increases of flows into sanitary sewer systems, and for substantial increases in pollutant loads that the downstream treatment systems would need to treat. There are cost factors for additional facilities and the operations and maintenance thereof that would affect the contributing Copermittee. it is understood that the document under discussion is a permit document, however such a permit will require substantial investments in facilities and the maintenance and operation of them.
Recommendations: (a) Provide guidance that the sanitary sewer system may not be the most appropriate means for treating or conveying the flows and loads being regulated. (b) Coordinate this program with either State or Federal finding programs to provide the resources necessary to meet the objectives. (Padre Dam Municipal Water District)

Response: The requirements in Tentative Order 2001-01 that some flows or wastes in the MS4 should be diverted or removed does not necessarily mean that they should be removed or diverted into a sanitary sewer. Finding 32, noted in the comments, finds that wastes and pollutants that deposit and accumulate in the MS4 system will be discharged from those structures into receiving waters. The finding states only that such accumulated wastes must be characterized and lawfully disposed. It does not require, or even recommend, that they be discharged into a sanitary sewer. Section B.2, noted in the comment, refers to non-storm water discharges that are prohibited only if the Copermittee determines that they are a significant source of pollutants to waters of the United States. Section B.2 of the Tentative Order does not require such discharges to be diverted or removed into a sanitary sewer. The Copermittees have the flexibility and discretion to determine the manner in which they comply with the requirements of Section B.2 of the Tentative Order.

Comment: Some terminology used throughout the document such as "significant source of pollution" is vague and subject to interpretation. Where possible vague terms should be defined or avoided, creating a document that is clear in scope and intent. (SANDAG)

Response: The terminology used throughout the Tentative Order was selected to provide the Copermittees with flexibility and discretion to implement the Order in a manner that they determine to be the most effective while providing specific minimum standards and criteria. In some instances, the language is intended to allow the Copermittees to draft the programs, plans, prioritizations, etc in their Jurisdictional Urban Runoff Management (JURMP) Documents and Annual Reports, which are subject to SDRWQCB review and comment. In other instances, the language is purposefully broad to provide for the inclusion of a wide range of conditions, requirements, etc. In both situations, the specific language the commentor requests will be developed in the Copermittees JURMP Documents and Annual Reports.

Comment: The Permit should also place special emphasis on protected bodies of water that are "at risk of becoming degraded". (San Diego Audubon Society)

Response: The Tentative Order requirements are already so broad and far reaching that a special emphasis on protected bodies of water that are at "risk of becoming degraded" would be redundant. Arguably, nearly every water body in the San Diego Region could fit that description. The Copermittees, however, have the discretion to consider extending additional water quality protection measures to water bodies that are not presently listed as impaired under the 303(d) list.

Comment: The language concerning Conditions of Approval and Storm Water Mitigation Plans is vague. These sections should be reworded to require long-term maintenance of all post-construction BMPs in perpetuity and to establish a system of controls that assures that maintenance is performed. (Kristar)

Response: Details regarding the long term maintenance of post-construction BMPs is left to the discretion of the Copermittees, to provide them flexibility in developing and implementing their programs. The Copermittees model and local SUSMPs should address how long term BMP maintenance will be ensured.

More detailed requirements included in the LARWQCB SUSMP regarding BMP maintenance can serve as guidance to the Copermittees. The LARWQCB SUSMP states:

"[T]he Permittee shall require that the applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements and/or Conditional Use Permits.

For all properties, the verification will include the developer's signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The transfer of property to a private of public owner must have conditions requiring the recipient to assume responsibility for maintenance of any Structural or Treatment Control BMP to be included in the sales or lease agreement for that property, and will be the owners responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year and retain proof of inspection. For residential properties where the Structural or Treatment Control BMPs are located within a common area which will be maintained by a homeowner's association, language regarding the responsibility for maintenance must be included in the projects conditions, covenants and restrictions (CC&R). Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the Permittee can provide. The transfer of this information shall also be required with any subsequent sale of the property.

If Structural of Treatment Control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by the County of other appropriate public agency. Structural or Treatment control BMPs proposed for transfer must meet design standards adopted by the public entity for the BMP installed and should be approved by the County or other appropriate public agency prior to its installation."

Comment: The permit does not address the problem of disposal of the collected contaminants and exposed materials such as sediment and debris from BMPs. (Kristar)

Response: Disposal of debris from BMPs is the responsibility and is at the discretion of the Copermittees.

Comment: The permit's focus on pollution prevention, source reduction and site specific measures is cost-effective, appropriate and much needed. (Environmental Health Coalition)

Response: Comment noted.

Comment: Amend F.2.g. pg.23, F.3.a.(7) pg.27, F.3.b(6) pg.29, and F.3.c.(4) pg.31 to require unannounced inspections. (Environmental Health Coalition)

Response: While unannounced inspections can be effective and are encouraged, the nature of inspections is left to the Copermittees. It is possible that in some cases unannounced inspections may be infeasible for legal reasons.

Comment: Numerous bold headings could be rewritten to be more informative (Findings 2,3,4,5,6 and 9). (City of San Juan Capistrano)

Response: The bold headings are meant to simply serve as a title thought for the entire findings. The SDRWQCB intended for the informative content to be in the explanatory remarks which follow the headings.

Comment: Insufficient Quantitative Data Exists to Support the Tentative Order.
Municipal MS4 permits are issued based on permit applications which require the inclusion of information concerning "source identification," "discharge characterization," and "characterization data." (40 CFR §§ 122.26(d)(1)(iii), (iv), and 122.26(d)(2)(ii) and (iii).) In fact, the primary purpose of the application process is to develop quantitative data on the types and sources of the pollutants in the effected receiving waters, and to thereafter develop various management programs based on the quantitative data developed. (40 CFR § 122.26(d)(2)(iv).)

In the instant case, the Regional Board has exceeded its authority under the Clean Water Act in attempting to issue the subject permit, as the Regional Board has failed to customize and particularize the terms of the permit to account for such "source identification," "discharge characterization," and "characterization data," as required by the Clean Water Act, before formulating the permit in question. (40 CFR § 122.26(d)(1)(ii).) In issuing a permit that is not based on the development of "quantitative data," and the information on the particular types and sources of pollutant in the subject receiving waters, the Regional Board is acting contrary to the policies and procedures of the Clean Water Act. An example of the lack of data development in formulating the provisions of the Tentative Order is illustrated by the rest of the Order itself. Specifically, Subsection D.1.b. requires the Copermittees to prohibit "discharges of wash

water from the cleaning or hosing of impervious surfaces in . . . residential areas including . . . driveways, patios . . . and outdoor eating or drinking areas, etc." Thus, the Tentative Order would require that the Copermittees adopt ordinances to prevent individual homeowners from cleaning patios, washing their windows or cleaning their pets. Yet, there is no quantitative data or other data to support such a restrictive requirement and draconian provision. (County of San Diego)

Response: The requirements of the Tentative Order are supported by source identification, discharge characterization, and characterization data. Copermittee monitoring reports, Copermittee annual reports, USEPA guidance, and SWRCB guidance are a few of the resources used to identify sources. In addition, the Copermittee monitoring reports, Copermittee annual reports, USEPA studies, and SWRCB studies provided discharge characterization data on the Copermittees' discharges. Information regarding source identification, discharge characterization, and characterization data are included in the draft Fact Sheet/Technical Report.

With regards to the prohibition of wash water, this type of discharge is clearly prohibited in the Clean Water Act at section 404(p)(3)(B)(iii), which states that municipal storm water permits shall "prohibit non-storm water discharges into the storm sewers." This requirement can be considered analogous to the speed limit. It is not enforced in all instances always; however, the Copermittees must have the legal authority to address problem situations. Washing of patios and outdoor eating areas can certainly impact receiving waters with pollutants such as oil and grease and coliform bacteria.

Comment: "Title" and thus Liability From Non-Copermittee Illicit Discharges Cannot Be Transferred to the Copermittees. The Tentative Order improperly seeks to transfer the responsibility for all private party illicit discharges, to the County and other Copermittees, without any authority to do so under the Clean Water Act or State law, by transferring title of an illicit discharges that enters the MS4 from a third party on to the Copermittees. In the instant proceeding, the Regional Board is presumably seeking to issue a "permit" to the Copermittees to allow discharges "from municipal storm sewers." (33 USC § 1342(p)(3)(B).) In issuing a permit to allow discharges from a municipal storm sewer, the authorizing agency, in this case the State Board, may require controls to reduce the discharge of pollutants to the "maximum extent practicable" including management practices, control techniques and system, design, engineering methods, and other provisions as the administrator or the State determines appropriate for the control of such pollutants. (Id.) However, under the Act, the State Board is limited in its ability to regulate Copermittees to controls that reduce the discharge of pollutants to the maximum extent possible "from municipal storm sewers."
The authorizing language under the Act does not authorize the State Board, or any other agency, to regulate discharges "to" the municipal storm sewer system, with the sole exception of imposing an obligation on Copermittees to "effectively prohibit non-storm water discharges into the storm sewers" (33 USC § 1342(p)(3)(b)(ii), which the County has already accomplished through prohibiting direct point source discharges of non-storm water to its MS4 system. Imposing any obligation on the permittees to take title to illicit discharges "to" its MS4 and thus assume liability for the same, when the permittee has otherwise complied with the terms of the Act, is not supported by the Act or State Law. (County of San Diego)

Response: The language in Finding 15 referring to "title" for storm water discharges into MS4s comes from the Preamble to the Phase II storm water regulations. While the Tentative Order holds the Copermittees responsible for discharges into their MS4s (as discussed in more detail elsewhere), it acknowledges that this responsibility does not constitute "title" for such discharges. Therefore, the language of Finding 15 will be modified for clarification.

See change at permit Finding 15.

Comment: The SDRWQCB is not authorized to issue municipal storm water permits in California. (County of San Diego)

Response: State regulations are not prerequisite for issuance of WDRs implementing federal CWA/NPDES regulations governing storm water. RWQCB is authorized by 13263/13377 to issue requirements for all discharges of waste that could affect the quality of water of the state, including those involving discharge of pollutants from point source to waters of the U.S. within each region. Water Code 13263/13377 together with state and regional Water Quality Control Plans and federal NPDES regulations provide sufficient guidance for RWQCB's to issue WDRs for individual municipalities or for all municipalities within a larger jurisdiction (i.e., County). While the SWRCB regulations do not specify either procedures or substantive requirements applicable only to discharges of storm water or urban runoff in MS4s, they do incorporate the applicable NPDES regulations, including those directly affecting storm water discharges (AOCFR 122.26).

Statewide consistency in the regulation of storm water discharges municipal S4s is desirable, requirements must also be tailored to the climatic, hydrologic and jurisdictional characteristics of each region. Informal coordination between regional boards and the state board as well as guidance published by USEPA ensures basic consistency between the MS4 requirements developed by each region. In addition, where the SWRCB has considered past actions by regional boards with regards to storm water discharges and has articulated principles governing such actions (as it did for receiving water limitations [citation]). Regional boards conform to their subsequent actions to such SWRCB precedents. Development of statewide precedents pursuant to the SWRCB's authority to under take administrative review of actions of the regional boards pursuant to WC 13320 does not require notification of proposed rulemaking under the Cal. APA (Gov't C. 11340). In fact all persons known to be interested in matters under review by the SWRCB are notified of such proceedings; in addition, notice of such proceedings are distributed very broadly in the SWRCBs Workshop and meeting notification process. The SWRCB solicits and considers comments from interested persons in its review of regional board actions [citations 23CCR 2205 et.seq.] Nonetheless, each region must also address the level of compliance with previous requirements achieved by municipalities with each region and within counties with each region. Accordingly, requirements in one region may be substantially more detailed than in another region in order to clarify the obligations and responsibilities of municipalities responsible for MS4s.

Comment: The Order exceeds RWQCB authority by requiring cooperation among Copermittees without the Copermittees' consent.

40 CFR Section 122.26(a)(3)(iii) provides that municipalities may either participate in a permit application with Copermittees, or may submit a distinct permit application for their separate storm sewers. 40 CFR. Section 122.26(a)(3)(vi) provides that Copermittees "need only comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are operators." 40 CFR Section 122.26(b)(1) defines "Copermittee" to mean "a permittee to an NPDES permit that is only responsible for permit conditions relating to the discharge for which it is operator." 40 CFR Section 122.26(d) provides that operators may submit "a jurisdiction-wide or system-wide permit application."

40 CFR Section 122.26(d)(2)(iv) provides that separate proposed management programs may be submitted by each coapplicant.

These regulations clearly do not allow the state to order Copermittees to cooperate—the decision to cooperate, and the manner and extent of that cooperation, must be based on Copermittee decisions.

The 20 Copermittees in San Diego did submit a joint application for the renewal of Order 90-42—early in 1994. The renewal they contemplated was far different than the renewal the RWQCB has proposed. Copermittees retain their rights in these circumstances, under 40 CFR Section 122.26(d)(2)(iv), to decline to be directed to coordinate in areas that exceed their consent. They retain their right to submit separate proposed management programs.

The Order would deny these rights by mandating new areas and new levels of Copermittee cooperation. For example, the Order purports to dictate that land use planning be done regionally in the future, even though State law makes land use planning a local prerogative. The Order is highly prescriptive in requiring Copermittee coordination and joint funding of a regional water quality monitoring effort. The Order would require that jurisdictional stormwater management programs be essentially subsumed into watershed programs during the life of the permit. The role of the lead Copermittee would also be expanded, and the RWQCB asserts the right to designate and impose additional obligations on the lead Copermittee. Finally, the Order requires "interagency agreements" among the Copermittees to control the contribution of pollutants from one portion of a shared MS4 to another. All of this is contrary to the right that federal law provides each municipality to act separately.

The County strongly believes that Copermittee cooperation is the best means available to achieve strong stormwater programs in San Diego. However, cooperation must be entirely a Copermittee choice; the RWQCB has no authority to dictate the scope or terms of this cooperation. (County of San Diego)

Response: The Federal NPDES regulations are clear in their requirements for coordination between the Copermittees.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) provides that the Copermittee shall develop and implement a proposed management program which "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. […] Proposed programs may impose controls on a systemwide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. […] Proposed management programs shall describe priorities for implementing controls."

Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(D) provides that "[The Copermittee must demonstrate that it can control] through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system."

Furthermore, Copermittee coordination is a necessity, due to the interrelated nature of storm water management. Storm water runoff does not follow municipality boundaries, and often travels through many municipalities while flowing towards receiving waters. Municipalities' actions towards storm water can therefore have a cumulative impact upon shared receiving waters.

In addition, the Copermittees currently coordinate under Order No. 90-42. Pending watershed efforts, which most Copermittees support strongly, will also require coordination in the future. Non-point source programs will also make coordination a necessity.

For these reasons, the SDRWQCB has included coordination requirements in the Tentative Order.

Comment: The Order violates the U.S. Constitution and exceeds the RWQCB's authority under state law by commandeering local government

The Order exceeds the RWQCB's authority under state and federal law because it orders or "commandeers" the County by requiring it to enact ordinances, modify its General Plan and implement a very specific stormwater management program. But the federal government cannot order States to pass laws, or otherwise take control of the State governing apparatus. In two cases, the U.S. Supreme Court has held that the federal government cannot "commandeer" state governments. (New York v. United States, 505 U.S. 144 (1992); Printz v. United States, 138 L.Ed.2d 914 (1997).) In general, the federal government can enact and apply laws of general applicability (e.g., all wastewater discharges must obtain NPDES permits), and can pressure States to act by offering or withholding grants.

These constitutional principles apply to the commandeering of local as well as State governments. Neither the State Board nor any regional board has the authority to infringe on or to direct the use of the Copermittees' police powers under the California Constitution, or to intrude upon their local land use authority or other traditional areas of local regulation.

The California Constitution provides counties and cities with "plenary authority" to govern local land uses and enact zoning regulations. (Candid Enterprises, Inc. v. Grossmont Union High School Dist. (1985) 39 Cal.3d 878, 885; Cal. Const., art. XI, § 7; see also, e.g., Euclid v. Ambler Realty Company (1926) 272 U.S. 365.) In this regard, state law reserves in counties and cities the "maximum degree of control over zoning matters." (Govt. Code, § 65800; Birkenfield v. City of Berkely (1976) 17 Cal.3d 129, 140.) Unless preempted by the state legislature, counties and cities retain full autonomy over local land use controls. (IT Corp. v. Solano County Board of Supervisors (1991) 1 Cal. 4th 81, 89-101.) The Porter-Cologne Water Quality Control Act's provisions, however, do not "occupy" the fields of water quality regulation or local land uses so as to displace local governments' primary land use regulation authority. (Id.; Water Code, §§ 13000-13002; see Baldwin v. County of Tehama (1994) 31 Cal.App.4th 166, 176.) The Order exceeds the RWQCB's authority by unlawfully forcing the County to exercise its own sovereign police power of land use regulation. (County of San Diego)

Response: The requirements of the Tentative Order implement the Federal NPDES regulations. These regulations require the Copermittees to enact ordinances to address particular situational discharges. The regulations also require General Plans to include urban runoff considerations (40 CFR 122.26(d)(2)(iv)(A)(2). The Tentative Order has been modified to provide the Copermittees discretion in how they include such considerations in their General Plans. Therefore, the Tentative Order does not commandeer local government.

Comment: The Order should be withdrawn

The Order should be withdrawn to allow consultations with Copermittees. A revised Order should be released for an extended public comment period following those consultations.

It is common practice for RWQCB staff to work with dischargers on terms for the renewal of significant NPDES permits prior to release of a proposed permit for comment. These consultations help to ensure that the assumptions underlying an Order are correct, that the meaning of the language in the Order is clear, that concerns about costs and feasibility have been understood and considered, that alternatives have been considered, and that legal issues have been identified and discussed.

Consultations are also necessary for this Order. The Order is much more complex in its prescriptions than a typical permit. RWQCB staff also have less understanding of local government functions, processes and permits than they do of industrial dischargers. The Order raises political, governance, and public resource issues that RWQCB staff are not accustomed to addressing.

Finally, cooperation and coordination among government agencies and entities is essential if better stormwater programs are to be promptly and effectively implemented in San Diego. (County of San Diego)

Response: SDRWQCB has followed state and federal guidelines for the required public input to reissue a NPDES permit. In some cases the SDRWQCB has exceeded in comment period time and public workshops the required allowance for public input. SDRWQCB believes that the regulatory basis of this permit has been known to all interested parties for a period of over ten years. The Tentative Order is the result of the cumulative input and cooperation of these events.

Comment: Staff has not worked with Co-permittees to ensure the program is cost effective and realistic to implement and the lease intrusive upon the lives of citizens and the business community.. (City of Carlsbad)

Response: Comment noted.

Comment: The City of Escondido participated in the development of the letter transmitted to the Board by the Copermittees providing comments on the Tentative Order 2001 and is supportive of letter transmitted by the Storm Water Quality Task Force. We continue to believe each of the issues raised in each of those letters has merit and should be addressed by the Board. (City of Escondido)

Response: Comment noted. Responses to comments included in the above referenced letters are found elsewhere in this document.

Comment: We would like a glossary of terms or phrases to ensure uniform understanding of the permit phrase such as, ". . . prohibit the discharge of pollutants and non-storm water in MS4" (para. 22), and ". . . use of BMP to reduce pollutants in site runoff. . ." (para.22). (City of Imperial Beach)

Response: The Tentative Order and the Fact Sheet/Technical Report provide a glossary and extensive discussion of terms and phrases used in Tentative Order. With respect to the phrases in the comment, the

commentor can refer to Section VII of the Fact Sheet/Technical Report for a full discussion of prohibitions and the use of BMPs to reduce pollutants in discharges.

Comment: While it is agreed that the process of public' participation in a manner that builds consensus across the wide spectrum of interest groups, how the City accomplishes this should not be a matter of the URMP. It should be sufficient to direct the Copermittees to involve the public. (City of Imperial Beach)

Response: As discussed in the Fact Sheet/Technical Report, the Federal NPDES regulations 40 CFR 122.26(d)(2)(iv) require each Copermittee to develop and implement an urban runoff management program. The SDRWQCB must assess the urban runoff management program to ensure that it is adequate to prohibit non-storm water discharges and reduce pollutant discharges to and from the MS4 to the maximum extent practicable, including the requirement for incorporating public participation. In order for the SDRWQCB to assess the urban runoff management program, each Copermittee must submit to the SDRWQCB a description of their program. The description must detail all activities the Copermittee is undertaking to implement the requirements of each component of the Jurisdictional URMP section of Order No. 2001-01.

The SDRWQCB has discretion to require Submittal of Jurisdictional URMP Document and Annual Report items F.6, H. 1.a.(8)(a), and J.2.f. in Order No. 2001-01 under the broad and specific legal authority cited in Fact Sheet/Technical Report.

Comment: Criteria for establishing the thresholds for medium and low threat to water quality are not provided in the Order. Recommend SDRWQCB provides the criteria for a medium and a low threat sites. These criteria definitions are needed in order to provide uniformity across the region and consistency with the SDRWQCB's intent. (City of Imperial Beach)

Response: Criteria for establishing the thresholds for medium and low threat to water quality sites are left to the discretion of the Copermittees. The Copermittees may wish to collaborate to provide uniformity across the region.

Comment: Page 35 of 50 - paragraph F.6., Page 39 of 50 -paragraph H. 1.a.(8)(a) and Page 42 of 50 - paragraph J.21 - Requires Copermittees to include a public participation mechanism in the Jurisdictional URMP. This component is to describe how public participation will be included in the implementation of the Jurisdictional and Watershed URMP.

SDRWQCB staff supports this requirement by citing 64 FR 68755 "[E]arly and frequent public involvement can shorten implementation schedules and broaden public support for a program." While it is agreed that the process of public participation in a manner that builds consensus across the wide spectrum of interest groups, how the City accomplishes this should not be a matter of the URMP. It should be sufficient to direct the Copermittees to involve the public. It should not be a matter that requires SDRWQCB oversight. Recommend the requirement that the URMP include the process of public participation be excluded. (City of Imperial Beach)

Response: The federal NPDES regulations clearly require the Copermittees to include public participation in the development of their urban runoff management programs. 40 CFR 122.26(d)(2)(iv) requires management programs to "include a comprehensive planning process which involves public participation […]". Therefore, the Tentative Order requires public participation on the part of the Copermittees. How public participation is implemented is left to the discretion of the Copermittees in the Tentative Order.

Comment: Examples of some unnecessary and burdensome requirements are:

Municipalities must submit, each year, a fiscal analysis evaluating the expenditures needed to implement the various programs and proving they have adequate resources to meet these expenditures.

The implementation of numerous Best Management Practices (BMPs), required for industrial, commercial, municipal, and residential activities without regard to water quality benefits, or justification of any prior violation of water quality objectives.

The list of illicit discharges, which the permittees must prohibit and control is too extensive, including discharges which may not be storm water pollutants, thus exposing the permittees to unjustified penalties for violations. (City of La Mesa)

Response: A role of the Permittees under the Tentative Order is to achieve pollutant reduction to the MEP. A role of the Regional Board under the Tentative Order is to assess compliance of the Permittees in reducing pollution to the MEP. The SDRWQCB believes that the above mentioned permit terms are crucial and necessary for the Regional Board to gain the information necessary to assess whether MEP has been met.

A fiscal analysis is required by the Federal NPDES regulations at 40 CFR 122.26(d)(2)(vi).

In a permit without numeric effluent limits, BMPs are required.

The Clean Water Act prohibits non-storm water discharges at section 402(p)(3)(B)(ii).

Comment: Smart Growth Principles v. RWQB Policies: RWQCB policies expressed in T.O. 2001-01 enumerate several policies and practices which clearly express a preference for land use policies which favor development which provide for significant areas of permeable vegetative areas for on-site storm water management. Accepted regional growth projections that show that even existing local land use plans may not have sufficient area with urban land uses designated to accommodate these projected growth. With the RWQCB's policies on urban storm water management, the obvious conclusion would be that land use plans would need to utilize extremely lower residential densities to promote additional on-site permeable areas. In other words, we should be promoting urban sprawl land use patterns. (City of La Mesa)

Response: The Tentative Order does not require infiltration where it is infeasible. While the SDRWQCB supports minimization of impervious surfaces to foster natural infiltration, it is not required. For example, infiltration is only one category of BMP out of many which are available to meet SUSMP

requirements. If site restrictions exist, the develop can forgo infiltration and use filtration BMPs instead. Infiltration BMPs can frequently be constructed underground to conserve space. Therefore, the Tentative Order does not require reductions in development densities.

Comment: Regional Board staff should use the Regional Hazardous Waste Management Plans database and methodologies developed by SANDAG agencies to address the hazardous waste discharges to the storm drains. (City of La Mesa)

Response: Since the Copermittees are responsible for prohibiting illicit discharges into their MS4s per the Clean Water Act (section 402(p)(3)(B)(ii)), it is recommended that they utilize the Regional Hazardous Waste Management Plan and corresponding database in their efforts to seek and eliminate illicit discharges.

Comment: As a small community in the County of San Diego, the City of Lemon Grove supports the collective comments proposed by the Co-permittees. (City of Lemon Grove)

Response: Comment noted. Responses to comments included in the above referenced letter are found elsewhere in this document.

Comment: The Tentative Order is also likely to discourage or prevent the use of reclaimed water where such use (e.g., for irrigation) could result in runoff of non-stormwater. Because no consideration has been given to these factors, the Order must be withdrawn until these factors have been considered. The Order must then be adjusted as appropriate to reflect these factors. (County of San Diego)

Response: The Tentative Order does not regulate the use of reclaimed water. However, in circumstances in which reclaimed water is used for lawn watering or landscape irrigation, the discharge of reclaimed water from these uses to the MS4 would be prohibited by the Copermittee only if the Copermittee determined that it was a significant source of pollutants. As stated in Section B.2 of the Tentative Order, the Copermittees may implement or require the implementation of BMPs to reduce pollutants in the discharge of non storm water to the MEP rather than prohibit the discharge of landscaping or lawn water runoff.

Comment: The Metro Commission supports the re-issuance of the Municipal Storm Water Permit to improve the water quality of the region's receiving waters. (Metro Commission)

Response: Comment noted.

Comment: The permit, as written, contains many detailed, specific, and conflicting requirements that would make it impossible to comply with its requirements without diverting storm water flows into the existing sanitary sewer system as a treatment means. (Metro Commission)

Response: The Tentative Order requires the treatment and reduction of pollutants in urban runoff to maximum extent practicable through the implementation of BMPs. Diversion of urban runoff to the sanitary sewer is not required under Tentative Order 2001-01.

Comment: The Tentative Order will encourage the disposal of urban runoffs into the sanitary sewer system and therefore require increases in collection and treatment facility capacities. This diversion will also cause more sewage spills due to increases in flow and blockage causing material. (Metro Commission)

Response: A number of BMP alternatives exist for the Copermittees to choose from that will reduce pollutants in urban runoff discharges to maximum extent practicable. Diversion to the sanitary sewer is only one of the options the Copermittees can address in their Jurisdictional and Watershed Urban Runoff Management Programs.

Comment: The administrative financial burden to the Copermittees should be simplified by having the permit apply to neighboring cities watershed approach. (City of Encinitas)

Response: The Tentative Order requires both a Jurisdictional and a Watershed Urban Runoff Management Program (URMP). The Watershed URMP, which is an extension of the Jurisdictional URMP rather than a separate program, is intended to be a neighboring cities watershed approach that will encourage the Copermittees to collaborate and share cost effective measures to manage urban runoff.

Comment: Can the tentative order allow the cities to prioritize categories for BMP implementation rather than prescribe that all land uses have high priority sites? (City of Escondido)

Response: Yes. Per the Federal NPDES regulations, the Copermittees must control pollutants from construction, municipal, commercial, residential, and industrial land uses. BMPs must be implemented for all of these land uses. Since BMPs must be implemented for each land use, prioritization of sites falling under each land use category is an effective means for focusing efforts. In some cases, the SDRWQCB has identified high priority areas and activities based on USEPA guidance and experience with enforcement. However, it is the Copermittees' discretion which BMPs are implemented for the various prioritized sites.

Comment: The Port supports the collaborative efforts for the 303(d)-TMDL process and the Bay Protection Toxic Cleanup Program. (Port of San Diego)

Response: Comment noted.

Comment: Sections F.2.h., F.5.e., Attachment C - Enforcement - What will be the RWQCB's enforcement policies? (City of Coronado)

Response: Enforcement actions available to the State and Regional Boards are established in the Porter Cologne Water Quality Control Act. The State Board has also established enforcement Guidance to Implement the Water Quality Enforcement Policy. These documents are available for review on the State Water Resources Control Board's web site located at www.swrcb.ca.gov or can be obtained at the SDRWQCB office.

Comment: Sections B.2., F. I.b.(2)(e), F.2.e., F.3.a.(3), F.3.c.(2), F.3.d.(2) - How do we determine what our pollutants are and how do we prioritize these if data is "noisy" and changes with every sampling? (City of Coronado)

Response: To provide maximum flexibility, SDRWQCB has in the above referenced permit sections identified activities that are of concern. The Copermittees may then determine what pollutants are of concern and a method for prioritizing these pollutants based on their knowledge of receiving waters and discharges. However, in some cases, SDRWQCB has specifically explained what pollutants are of concern or what activities require oversight for the given land use. Refer to the following permit sections as they describe the process the Copermittees should take to determine what pollutants are of concern.

If data for discharges is noisy, other assessments can be used. For example, pollutants for which nearby 303(d) waters are impaired can be considered pollutants of concern. In addition, some studies have linked particular pollutants with a particular land uses (Washington, 1999).

Comment: Sections F.21, F.3.a.(4), F.3.b.(4), F.3.c.(3), F.3.d.(3) - What action will the RWQCB take against an agency that defines BMPs to be used based on the priority of the development and then that BMP fails? (City of Coronado)

Response: Failure of BMPs, whether because of an inadequate design, poor construction, or lack of proper maintenance, that result in the discharge of runoff containing pollutants that have not been reduced to the MEP, would be a violation of the waste discharge requirements prescribed in tentative Order No. 2001-01. Any violation of waste discharge requirements prescribed in an NPDES permit may subject dischargers to enforcement action in accordance with Chapter 5, Enforcement and Implementation of the California Water Code. Enforcement actions are progressive and can range from the issuance of lower level actions such as staff enforcement letters to formal enforcement actions established in with Porter Cologne Water Quality Control Act, such as cleanup and abatement orders which require proof of corrective action and/or abatement of deleterious water quality impacts. Ultimately, failure to implement adequate BMPs subject dischargers to monetary civil liability which can range up to $25,000 per day of violation.

Comment: The RWQCB issued its initial flow specifications without any prior environmental analysis, consultation with resource agencies, or public comment. Staff then proposed a radically different requirement based on a workshop comment, again with no analysis or consultation. There can

be no presumption that the Board had it right the first time, or that staff have got it right the second time. (County of San Diego)

Response: The Tentative Order's requirement that "Post-development runoff which is greater in peak rate or velocity than pre-development runoff from the same site is prohibited" was designed to protect downstream areas from erosion caused by increased flows resulting from development. However, the blanket prohibition, as proposed, could result in the application of the requirement at relatively small sites, which pose an insignificant threat of downstream erosion due to their limited impervious surfaces. Application of the prohibition at all sites could also pose significant implementation difficulties for the Copermittees.

For these reasons, the requirement that post-development peak flow rates not exceed predevelopment rates for all development sites has been removed from the Tentative Order. Instead, the requirement shall only apply to new development and significant redevelopment falling under the SUSMP priority development project categories. The SUSMP priority development project categories are comprehensive in their application to significant new development and redevelopment projects. The categories ensure that most new development and redevelopment will be subject to SUSMPs. Therefore, the requirement that post-development peak flow rates not exceed predevelopment rates will still apply to most development projects. Only smaller projects not falling under the SUSMP requirements will be exempted.

As part of their model and local SUSMPs, the Copermittees will be required to maintain predevelopment peak flow rates and velocities coming from new development as necessary to prevent increased downstream erosion where the potential for downstream erosion exists. This requirement allows the Copermittees discretion in the methods to be developed and implemented to control post-development peak flow rates and downstream erosion. Furthermore, the Copermittees can develop and implement different methods to be applied in different watersheds or different areas of a watershed, provided that the different methods are effective in adequately reducing post-development peak flow rates to control erosion. The Copermittees' model and local SUSMPs must include a description of how predevelopment peak flow rates will be maintained to control erosion in downstream areas.

There is extensive guidance for the Copermittees to draw from in developing criteria to address post-development peak flow rates for the control of downstream erosion. For example, the State of Washington has developed the following criteria regarding post-development peak flow rates: "Stormwater discharges to streams shall control streambank erosion by limiting the peak rate of runoff from individual development sites to 50 percent of the pre-developed condition of the 2-year, 24-hour design storm while maintaining the pre-developed condition peak runoff rate for the 10-year, 24-hour and 100-year, 24-hour design storms." Regarding control of post-development flow durations, the State of Washington has developed the following criteria: "Stormwater discharges to streams shall match developed discharge durations to predeveloped durations for the range of predeveloped discharge rates from 50% of the 2 year peak flow up to the full 50 year peak flow" (Washington State Department of Ecology, 1999). The State of Maryland has developed the following criteria to addressed increased peak flow rates resulting from development: "To protect channels from erosion, 24 hour extended detention of the one-year, 24 hour storm event shall be provided. […] The rationale for this criterion is that runoff will be stored and released in such a gradual manner that critical erosive velocities during bankfull and near-bankfull events will seldom be exceeded in downstream channels" (Maryland Department of the Environment, 1999).

It should be noted that this approach, of allowing the Copermittees to develop peak flow rate criteria to control downstream erosion, is consistent with the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11.

See changes in permit sections A.4, F.1.a.9, F.1.b.1.g, F.1.b.2.b.i, and F.1.b.2.j.

Comments on Specific Sections

Section: Finding **Subsection: 1**

Comment: Amend Finding 1 pg.1 to include all Federal agencies including Navy, and the Department of Defense as Copermittee. The Department of Defense installations, and the property and projects under Navy ownership are among the largest potential sources of polluted urban runoff in the San Diego region. The Navy controls 181,000 acres of San Diego county and operates areas equivalent to small cities and large industries within its operations. In addition, the U. S. Navy should be listed in the appropriate watershed areas as a watershed Copermittee. (Sierra Club, Environmental Health Coalition, Surfrider Foundation, San Diego Audobon Society)

Response: The SDRWQCB intends to include the Navy in municipal storm water permits in the near future. However, in order to prevent any further delays in the adoption of the Tentative Order, this issue will be considered after adoption.

Section: Finding **Subsection: 1**

Comment: RWQCB should consider issuance of individual stormwater permits in the future. As Copermittee programs develop and additional knowledge of individual watersheds is obtained, there will likely result a need for more detailed runoff limitations and monitoring for each jurisdiction. (Surfrider Foundation)

Response: The Tentative Order is already an "individual" permit. Under the NPDES storm water municipal program, the permittees must submit an application which includes a proposed management plan as well as monitoring data. From this application, the Tentative Order is structured. SDRWQCB found the application to be inadequate to serve as the foundation for a permit reissuance and added additional requirements.

Section: Finding **Subsection: 2**

Comment: The Order includes a finding (No. 2 at page 1) that "urban runoff is a 'waste'..." as defined in California Water Code, section 13050(d). This finding sets the tone for the entire Order. The County disagrees with this finding, and it questions the approach to stormwater management that staff has proposed based on this finding. The County questions the finding because of the actual language of section 13050(d). More importantly, however, the County is concerned that any program founded on the attitude that stormwater is a "waste," will lead to the waste of stormwater. The section defines water as

including waste substances associated with human habitation, animals, producing, manufacturing or processing. It does not transform the water that may or may not contain such substances into "waste." Additionally, the Order and technical report have no factual basis to support this Finding. While staff may be able to demonstrate that runoff from a given site contains waste, there is no evidentiary or legal justification for categorically designating - across the board - any and all runoff from urbanized area as an "other waste substance." (County of San Diego, BIASC, BIASD, Orange County, San Juan Capistrano)

Response: The definition of waste included in Porter-Cologne is very broad. Waste includes "any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation […]" To the extent that urban runoff commonly contains pollutants, and frequently contains them at toxic levels (per the Copermittees' monitoring efforts), it certainly falls under the definition of "any and all other waste substances […] associated with human habitation." That the USEPA chooses to issue NPDES permits for the discharge of urban runoff is telling, in that these permits are typically issued for discharges from industry and wastewater facilities. In fact, NPDES permits issued by the State of California, including the Tentative Order, are generally called "Waste Discharge Requirements."

Section: Finding Subsection: 3

Comment: Sediment is not a pollutant in and of itself. Sediment does not move into the food chain and is not harmful if eaten by humans or fish. Sediment, if constantly discharged into some natural water bodies in excess of the water body's ability to discharge the sediment, can be a problem. These should be treated on a case-by-case basis rather than stating sediment is bad and cannot be in your MS4 system. We strongly recommend that this paragraph be revised to define sediment as not including native soils that are consistent in volume and size with naturally occurring erosion. One time loading in excess of the normal loading should be allowed as these mimic how nature provides sediment to our beaches. Most of the naturally occurring sand comes from episodic events such as landslides and heavy rain seasons. (City of Solana Beach)

Response: The Tentative Order does not seek to control sediment from natural erosion, but rather to control sediment from man-made sources. Sediment from man-made (anthropogenic) sources needs to be controlled for several reasons. The US EPA explains in the Phase II NPDES storm water regulations that storm water discharges generated from urban 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 due to sediment loads in urban runoff. One time loadings from construction sites can be harmful because of the fine nature of the sediment. USEPA states "A primary concern at most construction sites is the erosion and transport processes related to fine sediment […]" (USEPA, 1999b). Increased fine sediment loads from construction sites can adversely affect 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 the streambed, and reducing intergravel dissolved oxygen by reducing the permeability of the bed material. Furthermore, one time sediment loadings from construction can be "the equivalent of many decades of natural or even agricultural erosion" (USEPA, 1999b).

Water quality impairment also results from urban runoff carrying sediment, in part, because a number of pollutants are preferentially absorbed onto mineral or organic particles found in fine sediment. Sediment transport and delivery by urban runoff is a primary pathway for introducing key pollutants, such as nutrients, metals, and organic compounds into aquatic systems (USEPA, 1999b).

Due to this capability for runoff from urban development to carry increased sediment loads, as well as the sediment's capability to carry significant pollutant loads, sediment from anthropogenic activities is considered a pollutant which must be addressed.

In order to clarify that the Tentative Order does not seek to reduce natural erosion, Finding 3 will be changed to clarify that it is sediment due to anthropogenic activities which is considered a pollutant.

See change at permit section Finding 3.

Section: Findings Subsection: 3

Comment: Finding no. 3 is over generalized and not supported by the evidence in the record. Although much urban runoff is harmful to our receiving waters, not all urban runoff is harmful.

The RWQCB has failed:

1. To identify the pollutants of concern from particular developments, the sources of those pollutants and the impact such pollutants would have on our receiving waters.

2. To develop or require the development of the quantitative data necessary to develop an appropriate series of management programs and the terms of a permit to address the pollutants of concern and the sources of those pollutants.

3. To develop sufficient evidence to determine the impact of requiring soil infiltration and natural vegetation filtration and otherwise the reduction of impervious surfaces on our groundwater quality, and thus appears to be determining that our surface water quality is more important than our groundwater quality, without adequately considering the impacts on our groundwater quality and developing sufficient information on the pollutants of concern and the impacts of those pollutants on both our surface water quality and our groundwater quality. (County of San Diego)

Response: The US EPA supports this finding, stating in its 1996 National Water Quality Inventory that urban runoff/discharges from storm sewers are a major source of water quality impairment nationwide. The 1996 Inventory also found urban runoff to be the leading cause of ocean impairment for those ocean miles surveyed. In addition, the Region's Clean Water Act section 303(d) list (see Attachment 2), which identifies water bodies with impaired beneficial uses within the region, also indicates that the impacts of urban runoff on receiving waters are significant. Many of the impaired water bodies on the 303(d) list are impaired by constituents which have been found at high levels within urban runoff by the regional storm water monitoring program. Examples of constituents frequently responsible for beneficial use impairment include total and fecal coliform, heavy metals, and sediment; these constituents have been found at high levels in urban runoff both regionally and nationwide.

Section: Findings Subsection: 3

Comment: Remove the word "strong" in phrase "strong direct correlation" (City of San Diego)

Response: Sufficient reports exist in the literature exist to justify the use of the phrase "strong direct correlation." Among these are Karr and Chu (1999), Pitt (1995), Riley (1998), and NURP.

Section: Finding **Subsection: 4**

Comment: Urbanization reduces sediment loading by reducing the areas available for erosion and reducing and controlling landslides. (City of Solana Beach)

Response: We do not concur with this statement. The process of urbanization can dramatically increase sediment loading during the construction phase. Increases in sediment loading during this phase can have long term effects. USEPA finds that studies have shown that "the equivalent of many decades of natural or even agricultural erosion may take place during a single year from areas cleared for construction" (USEPA, 1999b).

Section: Findings **Subsection: 4**

Comment: The City questions to Finding No. 4, as it implies that the City has failed to take any measures to control the volume, velocity, or pollutant load of urban run-off. (City of San Diego)

Response: Finding 4 was not intended to be interpreted as stating that the Copermittees have failed to take any measures to control the volume, velocity, or pollution load of urban runoff. Nonetheless, despite many measures implemented by the Copermittees, beneficial uses of receiving waters are being impaired, receiving water quality objectives are frequently exceeded, and there exists a heightened level of concern in the public for the deteriorating water quality resulting in large part from urban runoff. Despite many measures taken to date, urban development does result in an increased pollutant load, volume, and velocity of urban runoff.

Section: Findings **Subsection: 4**

Comment: The last sentence of the first paragraph should be revised to state, "the natural purification characteristics of the land are diminished". In general in a suburban environment 40% or more of the land remains vegetated so all purification is not lost. (City of Carlsbad)

Response: The sentence refers "pavement and concrete," both of which refer to unvegetated ground cover. The language will not be changed.

Section: Findings **Subsection: 5**

Comment: No studies supporting Finding no. 5 are actually cited. There has been no consideration given to other important competing concerns, including the need for low and moderate income housing, the importance of other future development projects, and the need for impervious surfaces in connection with such developments. Finally, there has been no consideration given to the importance of having impervious surfaces, including protecting our groundwater, providing a means of safe transportation, and avoiding subsidence and erosion problems. (County of San Diego)

Response: There are no less than five studies cited to support this finding in the Staff Report. See Page 37, Finding Five of the Staff Report. The Findings section of the Tentative Order is intended to outline (in general terms) the basis for the requirements that follow - not to provide a literature review.

Section: Findings **Subsection: 5**

Comment: Finding 5 on page 2 - The first sentence referring to increased volume and velocity of runoff greatly increasing downstream erosion in natural channels should be eliminated. The statement is inconsistent with the remainder of the finding and represents a gross generality and not reflective of the complex relationship between developed land characteristics, runoff and soil erosion. When all other factors remain constant, increased volume and velocity of runoff will increase downstream erosion; however, such circumstance rarely occurs. Increased downstream erosion is easily offset by reduced erosion upstream due to channelization of flows, construction of basins and check dams, installation of landscaping and the general decrease in erodable surface area brought about by development. I believe there is a substantial body of evidence, which supports the fact that overall siltation transport, is reduced, and not increased, once land is developed. (City of Carlsbad)

Response: Finding 5 is accurate. USEPA finds that in many cases the impacts on receiving waters due to changes in hydrology can be more significant than those attributable to the contaminants found in storm water discharges (USEPA, 1999a). Research exhibits that downstream erosion follows urbanization. Stream adjustments resulting from urbanization include increased stream cross-sectional area to accommodate higher flows and significant downcutting of the stream channel (WEF/ASCE, 1998). Research models developed in the Pacific Northwest suggest that a threshold for urban stream stability exists at approximately 10% imperviousness of a watershed (WEF/ASCE, 1998). As the commentor notes, these impacts can be reduced through the implementation of basins, landscaping, etc. These practices are the types of BMPs the Tentative Order requires. While development may eventually reduce the amount of sediment reaching a stream, research exhibits that it also results in significant changes in stream hydrology such as downstream erosion.

Section: Finding **Subsection: 6**

Comment: Sediment does not close beaches. Without sediment there are no sand beaches to worry about. We strongly recommend that sediment be redefined to exclude soils consist with the natural soils. (City of Solana Beach)

Response: Finding 6 refers to pollutants in urban runoff which can be a threat to human health, such as pathogens and toxics. Finding 6 makes no reference to sediment.

Section: Findings **Subsection: 6**

Comment: No evidence supportsFinding no. 6. The County agrees that there is a water quality problem created by pollutants in urban runoff, but the pollutants of concern and the sources of those pollutants should be identified with supporting studies. (County of San Diego)

Response: Whether or not it always or ever causes human health problems, urban runoff does pose a human health threat. This finding is supported by a landmark study conducted by the Santa Monica Bay Restoration Project. The study found that there was an increased occurrence of illness in people that swam in proximity to a flowing storm drain outlet.

In addition to the human health risk urban runoff poses from bodily contact, urban runoff also has the potential to adversely impact human health through bioaccumulation/biomagnification of urban runoff pollutants in the food chain. Pollutants such as heavy metals and pesticides, which are commonly found in urban runoff, have been found to bioaccummulate and biomagnify in long-lived organisms at the higher trophic levels. Since many aquatic species are utilized for human consumption, toxic substances accumulated in species' tissues can pose a significant threat to public health.

The US EPA supports this finding when it states "As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients (e.g., nitrogen and phosphorus). These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans."

Section: Findings Subsection: 7

Comment: Tentative Order should discuss the concerned pollutants, as well as the sources of those pollutants, and the means in which to reduce the discharge of pollutants from such sources to the "maximum extent practicable". (County of San Diego)

Response: Comment noted. The Tentative Order addresses pollutants of concern and requires discharges of pollutants to be reduced to the "maximum extent practicable."

Section: Findings Subsection: 8

Comment: In Section 8, at page 3, the Tentative Order suggests that the Regional Board, under the Tentative Order, will treat all MS4s as receiving waters for purposes of water quality standards and enforcement. Indeed, the text suggests that man-made MS4s — even closed ones — will be treated as natural streams and receiving waters. Please provide a reference for the legal authority that allows the Regional Board to define man-made MS4s as receiving waters for purposes of water quality, since it is unclear that the water within man-made MS4s are technically waters of the State. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The Tentative Order does not state that all MS4s are receiving waters; nor does it attempt to. Rather, it states that in some cases, where an urban stream is used to convey urban runoff, that urban stream is considered to be part of the Copermittee's MS4.

A municipality's responsibility for discharges of runoff from developments they have authorized depends upon the following two conditions: (1) The discharging development must be within the municipality's jurisdiction; and (2) the runoff must be channeled into the municipality's MS4.

If a municipality uses an urban stream to convey runoff from a development that it has authorized, then that urban stream is part of its MS4. This is because the regional board recognizes the water quality consequences of the municipality's reliance on the stream for management of runoff and the environmental impact on the creek as a consequence of the increased flow resulting from the development that the municipality authorized.

Many urban streams which are used to convey runoff from development within a municipality's jurisdiction are part of the municipality's MS4, but not every urban stream used in this way is part of the MS4. A factual determination must be made on a case by case basis. The key difference is whether or not the runoff is collected and channelized by the municipality, or if it just sheet flows off the property into a stream. We recognize the distinction between a housing development in a rural area where the runoff sheet flows off the properties directly into a creek (here the creek is not an MS4) verses when the runoff is channeled by the municipality and then discharged to the creek (here the creek is part of the MS4).

Section: Finding Subsection: 8

Comment: When an urban stream has been designated part of a flood control system, it may reasonable to consider it a component of an MS4. Other streams should only be considered receiving waters. Urban streams should be deleted from the definition of MS4s.

Although the City shares the Regional Board's concern regarding proper management of urban streams, the City does not have the authority to manage or control urban streams that it does not own or for which it is not otherwise legally responsible. This is consistent with the federal regulations which define an MS4, in part, as a storm water conveyance system owned by a public body. See 40 CFR § 122.26(b)(8). Thus, the City believes it is incorrect for Finding No. 5 to state that "urban streams are part of the municipalities MS4." Only urban streams owned by, or under the control of, the City are part of the City's MS4. (San Juan Capistrano, City of San Diego, County of San Diego, Solana Beach)

Response: A municipality's responsibility for discharges of storm water and urban runoff in its MS4 must be coextensive with the municipality's jurisdiction to regulate such discharges. Discharges of storm water that are not within a municipality's jurisdiction or that are not tributary to a municipality's MS4 may be subject to other water quality control requirements, but may not impose upon the municipality any regulatory obligation under these requirements. However, the commentor is incorrect to assert that a municipality should not be responsible under the requirements for discharges to natural drainages that are used as part of the municipality's MS4, regardless of the "ownership" of such a natural drainage or stream. The determination of whether or not a particular natural drainage or urban stream channel is or is not part of the municipality's MS4 depends on the particular circumstances of the channel and the municipality's urban runoff management practices. If municipalities rely on natural drainage channels or urban streams to collect and convey urban runoff and storm water to or from an MS4, they should be recognized as components of the municipality's MS4; the municipality would be required to reduce pollutant discharges therein to the maximum extent practicable. Application of requirements for discharges of storm water in MS4s to natural drainages and urban streams does not "transform" such drainages and streams to MS4s;

however, it does reflect the fact that the Regional Board recognizes the water quality consequences of municipalities' reliance on such drainages and streams for the management of storm water and urban runoff, and the environmental impact upon such drainages and streams as a consequence of the increased flows therein associated with urban development and land use under the planning and regulatory authority of municipalities.

Section: Findings Subsection: 9

Comment: Finding No. 9 is an over-generalization, does not identify the pollutants of concern and the sources of those pollutants, and indicates that all discharges of pollutants and increase flows "from MS4s" are to be prohibited. This Finding is inconsistent with the Clean Water Act. Furthermore, the impact of the discharges of pollutants from MS4s to receiving water quality objectives, specifically including to 303(d) listed water bodies, is not an area to be addressed through regulation under this Tentative Order. Rather, total maximum daily load requirements will need to be properly evaluated and determined in accordance with other provisions of the Clean Water Act. The RWQCB has no authority to do so here. Further, as discussed in connection with Finding 13, the RWQCB has no authority to impose water quality standards or numeric limitations on the Copermittees. (See Defenders of Wildlife v. Browner, 191 F.3d 1159 (9th Cir. 1999.) (County of San Diego)

Response: The 303(d) list includes information about the source of impairment of receiving waters. For an overwhelming number of impaired receiving waters, non-point discharges are identified as a source. Most of the watersheds for these impaired water bodies are urban. Therefore, it can be inferred that urban runoff causes or contributes to these impairments.

There should be no doubt that such problems are indeed frequently urban runoff related. For instance, a common conveyance for a sewage spill to reach a beach is through the municipal storm water system. Also, exceedances of standards at some of our Region's beaches have unquestionably resulted from pollutants conveyed by the storm water drainage system (SDRWQCB CAO 97-69 and CDO 98-74). In addition, urban runoff is increasingly being targeted as the cause of beach closures and postings in other areas of the San Diego region and Southern California. Urban runoff has been identified as a principal contributor to fecal coliform contamination in Orange County's Aliso Creek, a creek which often causes beach postings when flowing into the ocean (SDRWQCB CAO 99-211).

It is necessary to address exceedances of water quality standards in the Tentative Order since it has been found that discharges from MS4s cause or contribute to exceedances of water quality standards. By including them in the Tentative Order, the Tentative Order can be used to ensure that these conditions do not persist. The SDRWQCB has legal authority to require these standards under 40 CFR 122.44(d)(1)(i), which requires NPDES permits to include limitations to "control all pollutants or pollutant parameters (either conventional, nonconventional, or toxic pollutants) which the Director determines are or may be discharged at a level which will cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality."

Section: Findings Subsection: 10

Comment: Finding No. 10
The City questions the characterization that, to "be most effective," URMPs must contain both structural and nonstructural BMPs. The City suggests that the last sentence of Finding No. 10 should state, instead,

that "URMPs should consider both structural and non-structural BMPs and require implementation of structural or non-structural BMPs, as appropriate." (City of San Diego)

Response: BMPs contain such broad categories of management practices as public education and code enforcement. Although these practices are intrinsic to an URMP, they are not by themselves going to be effective in all cases. Therefore, the broad terms of an urban area-wide runoff management plan must contain structural and non-structural BMPs. However, SDRWQCB recognizes that, from site to site, the municipality should consider both structural and non-structural BMPs and require implementation of structural or non-structural BMPs, as appropriate.

Section: Findings Subsection: 10

Comment: Since the Regional staff will not approve the Copermittees' Standard Urban Storm Water Mitigation Plans (SUSMPs) which implements the JURMP with respect to new development and significant redevelopment, Regional staff, therefore, will not be approving the Copermittees' selected list of BMP's either and apparently will not go so far as to even suggest levels of effectiveness that shall be expected of any particular structural BMP. How do the Copermittees establish and impose minimum water quality objectives that MEP is supposed to meet through installation and operation of structural BMP's during development? (City of Chula Vista)

Response: The SDRWQCB Basin Plan, the State Water Resources Control Board Ocean Plan, and the US EPA California Toxics Rule specify water quality objectives that apply to San Diego region receiving waters into which MS4s discharge. Through their Jurisdictional Urban Runoff Management Program Documents and Annual Reports, the Copermittees propose minimum BMPs necessary to meet pollution reduction in their urban runoff discharges to the MEP. The Copermittees' compliance with receiving water quality objectives will be evaluated in part through the monitoring and annual reports submitted to the SDRWQCB. In any case, the burden is on the Copermittee to demonstrate compliance with the Tentative Order.

Section: Findings Subsection: 10

Comment: Finding No. 10
Regional Board staff has failed to provide any legal or evidentiary support to justify the regulation of discharges "into" an MS4, and further, has failed to provide the appropriate legal authority and the sufficient evidence and findings to support the broad application of the URMPs program, as set forth in the Tentative Order. (County of San Diego)

Response: In the Pollution Prevention Act of 1990, Congress established a national policy that emphasizes pollution prevention over control and treatment. California Water Code section 13263.3(a) also supports pollution prevention, stating "The Legislature finds and declares that pollution prevention should be the first step in a hierarchy for reducing pollution and managing wastes, and to achieve environmental stewardship for society. The Legislature also finds and declares that pollution prevention is necessary to support the federal goal of zero discharge of pollutants into navigable waters." Finally, the Basin Plan also supports this finding by stating that "[T]o eliminate pollutants in storm water, one can either clean it up by removing pollutants or prevent it from becoming polluted in the first place. Because

of the overwhelming volume of storm water and the enormous costs associated with pollutant removal, pollution prevention is the only approach that makes sense."

Section: Findings Subsection: 10

Comment: The term "maximum extent practicable" (or "MEP") is not defined, nor is it clear that MEP means the same thing when applied to discharges into an MS4 as it does when applied to discharges from an MS4. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: MEP is defined in Attachment D of the Tentative Order. The definition applies to discharges both into and from the MS4.

Section: Findings Subsection: 10,12

Comment: The discussion of Finding No. 12 contradicts Finding No. 10. If pollution prevention measures are truly effective as the "first line of defense", then the effectiveness of structural BMPs, or any removal methodology for that matter, would be rendered more or less marginally effective. Is it really the intent of the Regional Board that MEP means implementation of enormously costly structural BMP's in order to achieve what may be a marginal improvement? (City of Chula Vista)

Response: Finding 12 does not conflict with Finding 10. Finding 12 states that "Pollution prevention…should be used in conjunction with source control and treatment control BMPs." The effectiveness of structural treatment BMPs can be enhanced with effective "pre-treatment" through source control and require less frequent and expensive maintenance. Effective pollution prevention provides the Copermittees with more options in the selection of BMPs that meet MEP and that can achieve more than "marginal improvement."

Section: Findings Subsection: 11

Comment: The discussion of Finding No. 11 (in the Fact Sheet/Technical Report) gives the effectiveness ranges of undefined types of structural BMPs, but makes no mention of the fact that the effectiveness of structural BMPs is also highly dependent on the scale of the BMP and its location within the watershed (relative to the source of the pollution). Before we can require compliance with specific onsite measures we must have some confidence that a minimum level of effectiveness can be demonstrated. (City of Chula Vista)

Response: The effectiveness ranges for BMPs discussed in the Fact Sheet/Technical Report can be assumed to be representative of the effectiveness of the BMPs in a wide range of conditions. The effectiveness ranges provided are a summary of over 20 years of data from many studies (USEPA, 1999a). The breadth of the summary indicates that its results can be relied on with a reasonable amount of assurance, provided the BMPs are sized and designed correctly. To ensure that BMPs are sized correctly, the Tentative Order includes numeric sizing criteria requirements. The Tentative Order also requires that structural treatment BMPs be "designed to maximize their pollutant removal capabilities" (section F.1.b.2.a.xii). Numerous guidance manuals on BMP design exist, such as by the State of

Washington, the State of Maryland, and the City of Sacramento (see the References section of these responses for more information). By requiring that BMPs be sized and designed correctly, the Tentative Order ensures that a structural treatment BMPs will achieve a minimum level of effectiveness.

Section: Findings Subsection: 11

Comment: Finding No. 11 provides in part that "Treatment control (or structural) BMPs remove pollutants from urban runoff." In its discussion of this finding in the Technical Report, the Regional Board asserts that data on structural BMPs "indicates that structural BMPs can be effective in reducing pollutants in urban runoff discharges." Thus, while the County does not dispute the fact that structural BMPs can be effective in reducing pollutants in urban runoff discharges, it does dispute the general contention that treatment control or structural BMPs always remove pollutants from urban runoff, and further disputes any finding that suggests that structural or treatment control BMPs are necessary and/or are effective for removing the subject "pollutants of concern." Whether any given treatment control BMP is appropriate and effective depends on the "pollutants of concern" which need to be identified before any treatment control BMP is forced on the project. Moreover, the requirement of any structural or treatment control BMPs must be imposed only after an appropriate cost/benefit analysis has been conducted and appropriate costs have been considered (including the impact of such BMPs on other policies of the State, such as the need for low/moderate income housing projects). (County of San Diego)

Response: The statement in Finding 11 that "Treatment control (or structural) BMPs remove pollutants from urban runoff" is correct. Based on data provided by USEPA, it is reasonable to conclude properly designed and sized BMPs are effective in removing pollutants. In its "Preliminary Data Summary of Urban Storm Water Best Management Practices," USEPA summarizes over 20 years of data on structural treatment BMP effectiveness (USEPA, 1999a). The summary concludes that for each category of structural treatment BMP assessed, that pollutants were removed to varying degrees of success. While various structural treatment BMPs were found to be more effective than others, none of the BMPs were found to be totally ineffective in reducing all pollutants.

Regarding the necessity of structural treatment BMPs, the SWRCB has found in Order WQ 2000-11 that structural treatment BMPs are necessary at SUSMP priority project development categories. The SUSMP provisions are the only part of the Tentative Order where structural treatment BMPs are specifically required. While structural treatment BMPs will most likely be necessary in areas outside of the new development SUSMP categories, the Tentative Order does not dictate their use.

The commentor is correct is asserting that pollutants of concern must be identified before implementation of a particular structural treatment BMPs. This why as part of the model and local SUSMPs, the Copermittees are required to develop a procedure for pollutant of concern identification (section F.1.b.2.e). Once pollutants of concern have been identified, then structural treatment BMPs are to be assessed for their effectiveness in removing those pollutants of concern.

Regarding the cost of implementing structural treatment BMPs at SUSMP priority development projects, the SDRWQCB and LARWQCB have demonstrated in past SUSMP documents that the cost of construction of structural treatment BMPs generally constitutes less than 1% of total project cost. Regarding costs of structural treatment BMPs, the SWRCB states in Order WQ 2000-11 "The Regional Board found that the cost to include BMPs that will meet the mitigation criteria will be one to two percent of the total development cost. This amount appears reasonable, especially in light of the amount of impervious surface already in Los Angeles County and the impacts on impaired water bodies."

Section: Findings Subsection: 12

Comment: The permit is supposed to regulate discharges "from" MS4s. There is no authority for the RWQCB to impose the Copermittees to regulate all business and personal practices of its community. (County of San Diego)

Response: In the Pollution Prevention Act of 1990, Congress established a national policy that emphasizes pollution prevention over control and treatment. California Water Code section 13263.3(a) also supports pollution prevention, stating "The Legislature finds and declares that pollution prevention should be the first step in a hierarchy for reducing pollution and managing wastes, and to achieve environmental stewardship for society. The Legislature also finds and declares that pollution prevention is necessary to support the federal goal of zero discharge of pollutants into navigable waters." Finally, the Basin Plan also supports this finding by stating that "[T]o eliminate pollutants in storm water, one can either clean it up by removing pollutants or prevent it from becoming polluted in the first place. Because of the overwhelming volume of storm water and the enormous costs associated with pollutant removal, pollution prevention is the only approach that makes sense."

Section: Finding Subsection: 13

Comment: Due to the time required to fully develop the BMP for attainment of receiving water limitations, is it likely that the opportunity to achieve source reduction in new developments will be missed? In the Eastern Territory of Chula Vista fully 75% of area is in SPA level review or better. Meaning the specific plans, policies, land plans and conditions are being developed at this very moment. (City of Chula Vista)

Response: It is the responsibility of the Copermittees to regulate the discharge of urban runoff from their MS4s to reduce pollutants to the MEP and to prevent an exceedance of receiving water quality objectives as a result of their urban runoff discharges. This requirement has been in force since the adoption of Order 90-42 in 1990. The City of Chula Vista, as cited in the example, is required to ensure that sufficient BMPs are implemented in both the new and existing developments to reduce pollutants to the MEP and to ensure that discharges from their MS4 do not cause or contribute to an exceedance of receiving water quality objectives. To the extent that implementation of some BMPs may not ensure attainment of receiving water quality objectives under all circumstances, an iterative process of BMP development, implementation, monitoring, and assessment is necessary and required to assure that an Urban Runoff Management Program is sufficiently comprehensive and effective to achieve compliance with receiving water quality objectives.

Section: Finding Subsection: 13

Comment: Finding No. 13 concerning receiving water limitations inappropriately provides that "compliance with receiving water limits based on applicable water quality objectives is necessary to ensure that MS4 discharges will not cause or contribute to violations of water quality objectives and the creation of conditions of pollution." In spite of the term "necessary," the Staff does not cite a single piece of evidence, study or analysis that supports the "necessity" for water quality standards in an MS4 permit. In fact, the Fact Technical Report merely makes a legal argument to attempt to support its position of "necessity," and no factual evidence or other evidence exists to support such a finding. Further, the Regional Board's authority to make such a finding is expressly refuted by the Ninth Circuit's decision in Defenders of Wildlife v. Browner 191 F.3d 1159 (9th Cir. 1999), wherein the Ninth Circuits expressly held that the language of the Clean Water Act does not provide the authority to impose numeric limitations in Municipal NPDES Permits. Thus, the Regional Board's citation of Defenders of Wildlife v. Browner as support for its position that it has such authority here, is in error as the Ninth Circuit specifically found that the Clean Water Act did not provide such authority, and that such authority if it existed, must exist under State law. Here, under California law, and specifically California Water Code Section 13377, the Administrator or State Board may only adopt more stringent requirements as provided for under the Clean Water Act, where there is a showing that more stringent requirements are "necessary to implement water quality control plans, or for the protection of the beneficial uses, or to prevent nuisance." There is no evidence anywhere in this record to support such a showing of "necessity," and thus there is no authority to impose water quality standards on the Copermittees.

The Clean Water Act is very clear that permits for discharges “from” municipal storm sewers are to require controls “to reduce the discharge of pollutants to the maximum extent practicable.” The attempt to impose any numeric effluent limits or water quality standards is an attempt to overlay a separate and more restrictive standard on the Copermittees. Any such more stringent standard is not supported by State law, as there has been no finding, or evidence to support such a finding, of “necessity” as required by the Porter-Cologne Act.

In Defenders of Wildlife v. Browner (9th Cir. 1999),191 F3d 1159 the federal appellate court with jurisdiction over California contrasted this language with provisions of the Clean Water Act that applied to industrial dischargers, and held that EPA was not obliged to require in an EPA-issued permit that municipal discharges strictly comply with state water quality standards. In dicta, this Court also advised that EPA “has the authority to determine that ensuring strict compliance with state water-quality standards is necessary to control pollutants.”

Again, State law is also relevant here. As noted, State Water Code section 13372 requires that State law be construed to prevent “any inconsistency” with respect to required NPDES permits. This should mean that the State must apply the State Water Code and the State water quality standards in the same way that federal law and federal water quality standards apply. It would be inconsistent with the fundamental principles of the Clean Water Act to assert that State water quality standards apply to municipal stormwater dischargers in the same manner as to industrial discharges. Congress made a distinction between these kinds of discharges, in the Clean Water Act, and the Ninth Circuit affirmed that distinction in Defenders of Wildlife. Water Code section 13372 requires the State to do likewise.

The dicta in Defenders of Wildlife does not authorize the regional water boards to require municipal stormwater discharges to meet state water quality standards in every case. At most, that dicta contemplates (as it clearly states) that this requirement could be imposed after a determination that this kind of requirement was “necessary to control pollutants.”

There is no determination or Finding of this kind supporting the Order. Instead, with complete circularity, Finding 13 states that compliance with receiving water limits based on water quality objectives is necessary to ensure that municipal stormwater discharges do not contribute to violations of water quality objectives. This is a legally insufficient Finding to support the water quality based requirements the Order seeks to impose.

Adding new Finding language to a final Order would not cure this legal defect, because there is no reference in the Technical Report to evidence that could support the required Finding. Absent compelling evidence, it would be arbitrary for the RWQCB to find that application of the Clean Water Act's MEP standard by the Copermittees would not adequately control pollutants.

The County believes the dicta in this case erroneously interprets what section 402(p)(3)(B) authorizes. This section need not and should not be read to authorize application of water quality prohibitions to municipal stormwater discharges; that would be a strained interpretation that is not consistent with the basic statutory scheme Congress created for municipal stormwater. Instead, the phrases "reduce the discharge of pollutants" at the beginning of the section, and "control of such pollutants" at the end of the section should be read as meaning the same thing. The authorization to do more in section 402(p)(3)(B) would then merely authorize expansion of the specific list of MEP techniques inclusions included as examples in the section. See comment "O" above. (County of San Diego)

Response: The impacts urban runoff causes to receiving waters within our region makes the necessity for the inclusion of water quality standards in the Tentative Order clear. Findings 3, 4, 5, 6, and 9, as well as their corresponding discussions in the draft Fact Sheet/Technical Report, all discuss the impacts of urban runoff to the region's receiving waters. Urban runoff is a leading cause of water quality impairment in the San Diego Region. To prevent urban runoff from continuing to be a leading cause of receiving water impairment, water quality standards are necessary in the Tentative Order. Compliance with water quality standards provides the necessary tool to ensure that water quality standards are achieved when implementation of BMPs to MEP are unsuccessful. The Copermittees efforts to date to implement BMPs to the MEP have not been sufficient to adequately protect receiving waters. The inclusion of requirements for compliance with water quality standards in the Tentative Order corrects this deficiency.

The issue of whether storm water discharges from MS4s must meet water quality standards has been intensely debated for the past five years. The argument arises because Clean Water Act section 402(p) fails to clearly state that municipal dischargers of storm water must meet water quality standards. On the issue of industrial discharges of storm water, the statute clearly indicates that industrial dischargers must meet both (1) the technology-based standard of "best available technology economically achievable (BAT)" and (2) applicable water quality standards. On the issue of municipal discharges however, the statute states that municipal dischargers must meet (1) the technology-based standard of "maximum extent practicable (MEP)" and (2) "such other provisions that the Administrator or the State determines appropriate for the control of such pollutants." The statute fails, however, to specifically state that municipal dischargers must meet water quality standards.

As a result, the municipal storm water dischargers have argued that they do not have to meet water quality standards; and that they only are required to meet the MEP standard. Environmental interest groups maintain that not only do MS4 discharges have to meet water quality standards, but that MS4 permits must also comply with numeric effluent limitations for the purpose of meeting water quality standards. On the issue of water quality standards, the US EPA, the SWRCB, and the SDRWQCB have consistently maintained that MS4s must indeed comply with water quality standards. On the issue of whether water quality standards must be met by numeric effluent limits, the US EPA, the SWRCB (in Orders WQ 91-03

and WQ 91-04), and the SDRWQCB have maintained that MS4 permits can, at this time, contain narrative requirements for the implementation of BMPs in place of numeric effluent limits.

SWRCB rationale: In addition to relying on US EPA's legal opinion concluding that MS4s must meet MEP and water quality standards, the SWRCB also relied on the Clean Water Act's explicit authority for States to require "such other provisions that the Administrator or the State determines appropriate for the control of such pollutants" in addition to the technology-based standard of MEP. To further support its conclusions that MS4 permit dischargers must meet water quality standards, the SWRCB relied on provisions of the California Water Code that specify that all waste discharge requirements must implement applicable Basin Plans and take into consideration the appropriate water quality objectives for the protection of beneficial uses.

The SWRCB first formally concluded that permits for MS4s must contain effluent limitations based on water quality standards in Order WQ 91-03. In that Order, the SWRCB also concluded that it was appropriate for Regional Boards to achieve this result by requiring best management practices, rather than by inserting numeric effluent limitations into MS4 permits. In Order WQ 98-01, the SWRCB prescribed specific precedent setting Receiving Water Limitations language to be included in all future MS4 permits. This language specifically requires that MS4 dischargers meet water quality standards and allows for the use of narrative BMPs (increasing in stringency and implemented in an iterative process) as the mechanism by which water quality standards can be met.

In Order WQ 99-05, the SWRCB modified its receiving water limitations language found in Order WQ 98-01 to meet specific objections by the US EPA (the modifications resulted in stricter compliance with water quality standards). SWRCB Order WQ 99-05 states "In Order WQ 98-01, the State Water Resources Control Board (State Water Board) ordered that certain receiving water limitation language be included in future municipal storm water permits. Following inclusion of that language in permits issued by the San Francisco Bay and San Diego Regional Water Quality Control Boards (Regional Water Boards) for Vallejo and Riverside respectively, the United States Environmental Protection Agency (EPA) objected to the permits. The EPA objection was based on the receiving water limitation language. The EPA has now issued those permits itself and has included receiving water limitation language it deems appropriate.

"In light of EPA's objection to the receiving water limitation language in Order WQ 98-01 and its adoption of alternative language, the State Water Board is revising its instructions regarding receiving water limitation language for municipal storm water permits. It is hereby ordered that Order WQ 98-01 will be amended to remove the receiving water limitation language contained therein and to substitute the EPA language. Based on the reasons stated here, and as a precedent decision, the following receiving water limitation language [which is found in Receiving Water Limitations item C. of Order No. 2001-01] shall be included in future municipal storm water permits."

In a late 1999 case involving MS4 permits issued by US EPA to several Arizona cities (Defenders of Wildlife v. Browner, 1999, 197 F. 3d 1035), the United States Court of Appeals for the Ninth Circuit upheld US EPA's requirement for MS4 dischargers to meet water quality standards, but it did so on the basis of US EPA's discretion rather than on the basis of strict compliance with the Clean Water Act. In other words, while holding that the Clean Water Act does not require all MS4 discharges to comply strictly with state water quality standards, the Court also held that US EPA has the authority to determine that ensuring strict compliance with state water quality standards is necessary to control pollutants. On the question of whether MS4 permits must contain numeric effluent limitations, the court upheld US EPA's use of iterative BMPs in place of numeric effluent limits.

SWRCB's final position: On October 14, 1999, the SWRCB issued a legal opinion on the federal appellate decision and provided advice to the Regional Boards on how to proceed in the future. In the memorandum, the SWRCB concludes that the recent Ninth Circuit opinion upholds the discretion of US EPA and the State to (continue to) issue permits to MS4s that require compliance with water quality standards through iterative BMPs. Moreover, the memorandum states that "[…] because most MS4 discharges enter impaired water bodies, there is a real need for permits to include stringent requirements to protect those water bodies. As total maximum daily loads (TMDLs) are developed, it is likely that MS4s will have to participate in pollutant load reductions, and the MS4 permits are the most effective vehicles for those reductions." In summary, the SWRCB concludes that the Regional Boards should continue to include the Receiving Water Limitations language established in SWRCB Order WQ 99-05 in all future permits.

Accordingly, the SDRWQCB has required in the Tentative Order that discharges from MS4s meet receiving water quality objectives.

Section: Finding Subsection: 13

Comment: Is the Copermittees' ability to impose water quality limits on new development restricted by not having numeric effluent limits in effect? Finding No. 13 is a two-edged sword for the Copermittees. On the one hand they are not, for the time being, held to numeric limits for discharges from MS4s and may utilize iterative "narrative BMPs" in their place as necessary to achieve the receiving water quality standard in effect. But a lack of numeric limits applied to what comes out of the pipe generally translates into a restriction on what may be required of new developments to control what goes into the pipe. (City of Chula Vista)

Response: The Copermittees are responsible for discharges that may cause or contribute to exceedances of receiving water quality objectives or that may constitute a threat to human or environmental health. The Copermittees are not, however, required under Tentative Order 2001-01 to impose water quality limits on new development. Tentative Order 2001-01 requires the Copermittees to implement programs and BMPs that reduce pollutants to the MEP. The Tentative Order does require that these BMPs meet numeric sizing criteria, but not numeric water quality limits, for some categories of new development and significant redevelopment. The selection of BMPs and other means to achieve MEP are the responsibility of the Copermittee and do not require water quality limits on effluent from new development. However, the Tentative Order would not prevent a Copermittee from establishing additional limits that are more protective of water quality and beneficial uses or different kinds of limits (such as numeric limits). As provided for in California Water Code § 13002, cities and counties may establish water quality protection requirements that go beyond the requirements of the SDRWQCB or SWRCB.

Section: Findings Subsection: 13

Comment: Receiving Water Limitations. In section 13, at page 3, the Tentative Order provides as follows: "Compliance with receiving water limits based on applicable water quality objectives is necessary to ensure that MS4 discharges will not cause or contribute to violations of water quality objectives and the creation of conditions of pollution." This statement implies that MS4s are not receiving waters, but instead are conveyances that discharge into receiving waters. This is arguably inconsistent with section 8, discussed above, which states that an urban stream is both an MS4 and a receiving water. Please explain this discrepancy. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: A municipality's responsibility for discharges of runoff from developments they have authorized depends upon the following two conditions: (1) The discharging development must be within the municipality's jurisdiction; and (2) the runoff must be channeled into the municipality's MS4.

If a municipality uses an urban stream to convey runoff from a development that it has authorized, then that urban stream is part of its MS4. This is because the regional board recognizes the water quality consequences of the municipality's reliance on the stream for management of runoff and the environmental impact on the creek as a consequence of the increased flow resulting from the development that the municipality authorized.

Many urban streams which are used to convey runoff from development within a municipality's jurisdiction are part of the municipality's MS4, but not every urban stream used in this way is part of the MS4. A factual determination must be made on a case by case basis. The key difference is whether or not the runoff is collected and channelized by the municipality, or if it just sheet flows off the property into a stream. We recognize the distinction between a housing development in a rural area where the runoff sheet flows off the properties directly into a creek (here the creek is not an MS4) verses when the runoff is channeled by the municipality and then discharged to the creek (here the creek is part of the MS4).

Section: Finding **Subsection: 14**

Comment: Good faith efforts at development, implementation, monitoring and assessment of BMP's that are later determined to be ineffective should not result in more restrictive requirements or fines, otherwise these unsuccessful attempts may lead to cover ups and the progress to develop better BMP's from lessons learned will not occur. (SANDAG)

Response: We generally concur with this statement. However, escalating enforcement to include the imposition of monetary penalties may occur when dischargers continue to implement ineffective BMPs, knowingly or willfully cover up unsuccessful BMPs, and/or fail to develop better BMPs from lessons learned. Further, inadequate BMPs that result in severe water quality impacts may also anticipate the imposition of monetary penalties and/or referred to the District Attorney for determination of whether criminal action should be pursued. Under criminal law, individual persons, as well as responsible parties in public agencies and business entities may be subject to fines or imprisonment for knowing, reckless or willful conduct that constitutes a serious threat to the environment

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Section: Findings **Subsection: 14**

Comment: Finding No. 14 provides that an iterative process of BMP development, implementation, monitoring and assessment is necessary to assure that an Urban Runoff Management Plan is sufficiently comprehensive and effective to achieve compliance with the receiving water quality objectives. Any requirement for an iterative BMP process must be justified by the Clean Water Act's standard of "maximum extent practicable" and there is no evidence cited in the record, nor any support in the Clean Water Act or the Porter-Cologne Act to support a finding that an iterative process of BMP is "necessary"

to assure that an Urban Runoff Management Plan is sufficiently comprehensive and effective. (County of San Diego)

Response: Finding 14's reference to an iterative process of BMP implementation applies to section C. of the Tentative Order. In section C., an iterative process of BMP implementation is required if exceedances of water quality standards persist, even after implementation of the Copermittees' urban runoff management programs. The language included in section C is consistent with the precedential SWRCB Order WQ 99-05.

Section: Finding Subsection: 15

Comment: Care should be taken to avoid alienation of the community, since community involvement and cooperation will be necessary to the success of the program. They may be the biggest assets to the clean water effort, and it is crucial that this process be handled sensitively with sufficient community outreach. (SANDAG)

Response: The SDRWQCB believes that individual citizen behavior does have a tremendous impact on the quality of waters in the Region. Public involvement, education, outreach, participation, and a sensitivity to the public's role are all crucial to protecting the environment. However, the SDRWQCB also believes that in all cases where an individual citizen refuses to take responsibility for his behavior, enforcement is a deterrent which must be considered.

Section: Finding Subsection: 15

Comment: Finding No. 15 is incorrect. It is based on a statement in the Final Rule for the Phase II regulations designed to encourage the Phase II communities to be more proactive than the regulations require. As the staff recognizes on page 46 of the Fact Sheet/Technical Report, if a municipality does not prohibit non-storm water discharges, it must accept responsibility for the water quality consequences of its decision. In other words, the municipality is responsible for the quality of discharges from its MS4. The staff goes on to say that, "For these reasons, each Co-permittee must prohibit and/or control discharges from third parties to its MS4." This is an extrapolation of existing law. A municipality is responsible for the quality of the discharges from its storm drain system, with the methods of achieving compliance up to the municipality. The proposed approach may lead to appeals and possibly litigation. (City of San Juan Capistrano)

Response: The Clean Water Act is clear that Copermittees must prohibit non-storm water discharges into its MS4. It states at section 403(p)(3)(B)(iii) that Copermittees shall “prohibit non-storm water discharges into the storm sewers.”

The requirement for control of discharges into the MS4 is also currently required of the Copermittees in Order No. 90-42. Section IX. of Order No. 90-42 states “The permittees shall develop and implement BMPs to reduce/control/eliminate pollutants in discharges to and from stormwater conveyance systems in their areas of jurisdiction to the maximum extent practicable.” Given the impact to receiving waters in the San Diego Region caused by urban runoff, as well as projections for increased urban growth in the region, it is not warranted to eliminate this requirement.

USEPA supports the concept that Copermittees cannot passively receive and discharge pollutants from third parties. As US EPA states, "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" (USEPA, 1999b).

Discharges of pollutants to the MS4 must therefore be controlled, and an important means for a municipality to achieve this is through the development and enforcement of municipal legal authority. USEPA states "A crucial requirement of the NPDES storm water regulation is that a municipality must demonstrate that it has adequate legal authority to control the contribution of pollutants in storm water discharged to its MS4. […] In order to have an effective municipal storm water management program, a municipality must have adequate legal authority to control the contribution of pollutants to the MS4. […] 'Control,' in this context, means not only to require disclosure of information, but also to limit, discourage, or terminate a storm water discharge to the MS4" (USEPA, 1992).

Since discharges which enter the MS4 are generally discharged unimpeded directly into receiving waters, the Copermittee's legal authority is to apply to both discharges into and from MS4s. Federal NPDES regulations clearly provide the SDRWQCB with the legal authority to require municipalities to control discharges from third parties into their MS4. 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff from commercial, residential, industrial, and construction land uses or activities. Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A - D) also require municipalities to have legal authority to control various discharges to their MS4. This concept is further supported in the Preamble to the Phase II Final Rule NPDES storm water regulations, which states "The operators of regulated small MS4s cannot passively receive and discharge pollutants from third parties" (USEPA, 1999b). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule findings for small municipalities are also applicable to larger municipalities such as the Copermittees. Again, underlying the Federal NPDES storm water regulations is the Clean Water Act, which states in section 402(p)(3)(B)(ii) that municipalities shall "effectively prohibit non-stormwater discharges into the storm sewers."

It is important to note the SWRCB also supports control of discharges into MS4s. The SWRCB recently upheld the LARWQCB SUSMP requirements in Order WQ 2000-11. These requirements place significant restrictions on discharges from third parties into MS4s. In fact, the SUSMP provisions included in the Tentative Order, as upheld by the SWRCB, represent the most stringent and specific requirements in the Tentative Order regarding the control of discharges into the MS4.

Finally, the requirement for municipal storm water dischargers to have, and exercise, local governmental authority in order to comply with water quality control obligations is analogous to the requirement for Publicly Owned Treatment Works to have and exercise legal authority to require pretreatment of industrial wastes being discharged to their sewage collections systems (CWA 402(b)(8)).

Section: Findings Subsection: 15

Comment: We are not aware of any legal authority allowing the Regional Board to regulate discharges into an MS4. We are aware only of the Regional Board's legal right to regulate discharges from an MS4 into a receiving water for which beneficial uses have been assigned. Please provide a statutory or case law reference granting the Regional Board authority to control and regulate discharges into MS4s. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The requirement for control of discharges into the MS4 is currently required of the Copermittees in Order No. 90-42. Section IX. of Order No. 90-42 states "The permittees shall develop and implement BMPs to reduce/control/eliminate pollutants in discharges to and from stormwater conveyance systems in their areas of jurisdiction to the maximum extent practicable." Given the impact to receiving waters in the San Diego Region caused by urban runoff, as well as projections for increased urban growth in the region, it is not warranted to eliminate this requirement.

USEPA supports the concept that Copermittees cannot passively receive and discharge pollutants from third parties. As US EPA states, "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" (USEPA, 1999b).

Discharges of pollutants to the MS4 must therefore be controlled, and an important means for a municipality to achieve this is through the development and enforcement of municipal legal authority. USEPA states "A crucial requirement of the NPDES storm water regulation is that a municipality must demonstrate that it has adequate legal authority to control the contribution of pollutants in storm water discharged to its MS4. […] In order to have an effective municipal storm water management program, a municipality must have adequate legal authority to control the contribution of pollutants to the MS4. […] 'Control,' in this context, means not only to require disclosure of information, but also to limit, discourage, or terminate a storm water discharge to the MS4" (USEPA, 1992).

Since discharges which enter the MS4 are generally discharged unimpeded directly into receiving waters, the Copermittee's legal authority is to apply to both discharges into and from MS4s. Federal NPDES regulations clearly provide the SDRWQCB with the legal authority to require municipalities to control discharges from third parties into their MS4. 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff from commercial, residential, industrial, and construction land uses or activities. Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A - D) also require municipalities to have legal authority to control various discharges to their MS4. This concept is further supported in the Preamble to the Phase II Final Rule NPDES storm water regulations, which states "The operators of regulated small MS4s cannot passively receive and discharge pollutants from third parties" (USEPA, 1999b). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule findings for small municipalities are also applicable to larger municipalities such as the Copermittees. Finally, underlying the Federal NPDES storm water regulations is the Clean Water Act, which states in section 402(p)(3)(B)(ii) that municipalities shall "effectively prohibit non-stormwater discharges into the storm sewers."

It is important to note the SWRCB also supports control of discharges into MS4s. The SWRCB recently upheld the LARWQCB SUSMP requirements in Order WQ 2000-11. These requirements place significant restrictions on discharges from third parties into MS4s. In fact, the SUSMP provisions included in the Tentative Order, as upheld by the SWRCB, represent the most stringent and specific requirements in the Tentative Order regarding the control of discharges into the MS4.

Finally, the requirement for municipal storm water dischargers to have, and exercise, local governmental authority in order to comply with water quality control obligations is analogous to the requirement for Publicly Owned Treatment Works to have and exercise legal authority to require pretreatment of industrial wastes being discharged to their sewage collections systems (CWA 402(b)(8)).

Section: Findings Subsection: 15

Comment: The Copermittees should not be responsible for illicit discharges from third parties. There is no authority under any provision of the Clean Water Act, the Porter-Cologne Act, or any regulations thereunder, to suggest the concept that a municipality, or any other party (other than the discharger) must accept responsibility for its unlawful actions. Under the Regional Board's theory, the State Legislature would be responsible for every burglary committed in the State merely because the State Legislature made it a crime for one to commit the act of "burglary." The Clean Water Act allows discharges to a municipal storm sewer system, so long as the municipality has obtained a permit under the Clean Water Act which requires controls "to reduce the discharge of pollutants to the maximum extent practicable . . . ." Where such a permit has been obtained, so long as the municipality is in compliance with the terms of the permit, it is in compliance with the requirements of the Clean Water Act. The fact that some third party has violated the provisions of the County's code or some other Copermittee's ordinance, cannot, under any circumstances, automatically result in a violation by the municipality of the Clean Water Act where the municipality is otherwise in compliance with the terms of the NPDES permit. (County of San Diego)

Response: Clean Water Act Section 402(p) specifically requires the operators of MS4s to prohibit non-storm water into their MS4s. A measure to determine if the operator has effectively prohibited such discharges is for the regulatory authority to determine if such discharges are occurring. In such cases where they are occurring, the operator must be held responsible.

Section: Findings Subsection: 15

Comment: Finding No. 15. The City questions the language in Finding No. 15, which states that the City "essentially takes 'title' for" discharges into MS4s. This finding should state only that the City should take reasonable steps to identify and eliminate illicit discharges by third parties. (City of San Diego)

Response: The language "title" comes from the Preamble to the Phase II storm water regulations. While the intent of using this term was to exhibit the Copermittees responsibility for the discharges, it may be confusing. For this reason, any language referring to "title" will be removed.

See change at permit Finding 15.

Section: Finding Subsection: 16

Comment: Copermittees do not profit from land development. Co-Permittees are required by law to allow economic uses of the land. Co-Permittees have some control over what is built but cannot prevent anything from being built. In addition hundreds of independent fiscal impact studies iIlustrate that the service costs to cities of new residential, industrial and office development far exceed all of the combined revenues cities receive from these developments (City of Chula Vista, City of Carlsbad, City of Solana Beach, Coalition for Practical Regulation, County of San Diego)

Response: While the Copermittees may not "profit" from land development according to the common definition and use of the word, the Copermittees do realize, or intend to realize, net benefits that are not

exclusively financial from the residential, commercial, industrial, and other activities proposed by private parties that they authorize within their jurisdiction. Because the Copermittees have the land use authority to regulate these activities, which can be a source of pollutants and runoff that impair receiving waters, so the Copermittees must also exercise their legal authority to ensure that the resulting increased pollutant loads and flows do not further degrade receiving waters. Nonetheless, the Finding will be revised to use the words "realize benefits" in place of "profit."

Section: Finding Subsection: 16

Comment: Finding No. 16 would result in a similar consequence that would supercede the power of local government. The new permit is proposing that the Regional Board adopt a finding to justify telling local governments specifically how they must use their land use authority. Our elected City Council has that responsibility pursuant to the Government Code. (City of San Juan Capistrano)

Response: California Water Code (CWC) section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Section 402(p)(3)(B)(iii) of the CWA requires municipalities to implement "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." The SDRWQCB's responsibility is to translate this section of the CWA into the form of waste discharge requirements. Therefore the SDRWQCB has the authority to require specified programs to be implemented by the municipalities in order to carry out CWA requirements. Furthermore, a program involving land use is specifically addressed at 40 CFR 122.26(d)(2)(iv)(A)(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." The tentative order solely requires Copermittees to exercise their planning power in a manner that takes into account potential water quality impacts and furthermore, for Copermittees to facilitate the smooth implementation of applicable provisions of the CWA.

Section: Findings Subsection: 16, 17, 18

Comment: What, if any effective control can the City exercise over pollution generation in much of the new development, after it is built out since there is a limit to what controls municipalities can enforce on property owners. (City of Chula Vista)

Response: The Copermittees are required to develop and implement a program to develop, implement, and evaluate the effectiveness of BMPs to reduce pollutants to the MEP and ensure that discharges of urban runoff to do cause or contribute to an exceedance of water quality objectives. The Copermittees are required to adopt and enforce sufficient legal authority and demonstrate sufficient financial resources to achieve permit compliance. The manner in which the Copermittees accomplish this is largely up to them.

Section: Findings Subsection: 17

Comment: Finding 17 is arbitrary and capricious and is not supported by the evidence. In Finding 17, Copermittees are held responsible for the short and long term water quality consequences of their land use planning, construction, and existing development decisions. On the contrary, the only "responsibility" under the Clean Water Act on the Copermittees is to comply with the terms of the NPDES permit, which is to be issued so long as sufficient controls are in place to reduce the discharge of pollutants to the maximum extent practicable from their MS4s. (County of San Diego)

Response: The Federal Regulations clearly require municipalities to address urban runoff during each stage of development. Regarding BMP implementation during each stage of urban development, US EPA recommends that Copermittees 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 noncompliance with design, construction or operation and maintenance.

Section: Finding Subsection: 18

Comment: Add: When a Copermittee incorporates policies and principles designed to safeguard water resources and protect public health into its General Plan. (State Department of Health Services)

Response: This issue has been addressed in the revised Tentative Order in Finding 36.

Section: Findings Subsection: 18

Comment: Finding No. 18 provides that land use planning and zoning is where urban development is conceived providing the greatest and most cost effective opportunity to protect water quality. The finding further provides that the incorporation of policies and principles to protect water resources in a Copermittee's general plan is a far reaching step towards the preservation of local water resources for future generations. As discussed elsewhere in the County's General and Specific comments, the provisions of the Tentative Order imposing on the Copermittees an obligation to modify their General Plans and to further adopt ordinances and laws in an attempt to preserve “local water resources for future generations,” is an improper attempt by the Regional Board to legislate and to act outside of any authority provided under the Clean Water Act or State law. It is also an attempt to "pass the buck" of protecting the waters of the State of California from the State and Regional Boards onto the individual Copermittees. It is, moreover, a clear attempt to impose an “unfunded mandate” on the Copermittees in violation of the California Constitution. (County of San Diego)

Response: The SDRWQCB has the legal authority to require the Copermittees' General Plans to include considerations of the water quality impacts caused by urban runoff. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) provides that Copermittees are to develop and implement a proposed management program which is to include “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.”

USEPA states that the Copermittee "must thoroughly describe how the municipality's comprehensive plan is compatible with the storm water regulations" (USEPA, 1992). To achieve this, the Copermittee shall incorporate water quality and watershed protection principles and policies into its General Plan (or equivalent plan). USEPA supports addressing urban runoff problems in General Plans (or equivalent plans) when it states "Runoff problems can be addressed efficiently with sound planning procedures. Master Plans, Comprehensive Plans, and zoning ordinances can promote improved water quality by guiding the growth of a community away from sensitive areas and by restricting certain types of growth (industrial, for example) to areas that can support it without compromising water quality" (USEPA, 2000).

While the SDRWQCB has the legal authority to require the Copermittees' General Plans to include considerations of the water quality impacts caused by urban runoff, the Tentative Order has been modified to provide the Copermittees with more discretion regarding the General Plans' contents. The Tentative Order will only include examples of the types of principles and policies which should be in a General Plan, instead of specific requirements. In addition, the Copermittees will be allowed to develop their own work plan and time schedule for any changes to their General Plans they find necessary. See change at permit section F.1.a.

Section: Findings Subsection: 19

Comment: Finding 19 on page 4 - Suggest changing the first sentence to "Unregulated construction activities can be a significant cause of receiving water impairment". Eliminate the second sentence because 1) it is extraneous to the finding and 2) it incorrectly implies that river impairment is caused by siltation from construction activities. River impairment from siltation has a far greater set of causative factors than mere construction activities (ie clear cut logging operations, improper agricultural practices, poor land and water management practices, overdredging of rivers etc). revise the third sentence to read "Sediment runoff rates from unregulated construction sites can greatly exceed natural " Within Carlsbad and many other jurisdictions where good erosion control methods are utilized, siltation downstream from the development is generally lower than predevelopment conditions. (City of Carlsbad)

Response: The Preamble to the Phase II storm water regulations include a comprehensive summary of studies documenting the impact of construction sites on receiving waters. The Preamble does not make a distinction between regulated and unregulated sites. While impairment due to siltation is not solely caused by construction sites, they are a key contributor. Though siltation may be reduced over the long-term after development, this finding refers to construction. As noted above, the impacts of construction on receiving waters has been widely documented.

Section: Finding Subsection: 19

Comment: Construction sites do not greatly exceed natural erosion rates, unless construction is continuous in the watershed. In nature, erosion is episodic, occurring during heavy rains when large landslides occur. If construction in the watershed is also episodic, as it is in our built-out community, than construction impacts are similar or less than what might have occurred if urbanization had not taken place. (City of Solana Beach)

Response: Erosion rates from construction sites have great potential to exceed natural erosion rates. In the Preamble to the Phase II NPDES storm water regulations, USEPA is very clear on potential for significant erosion from construction sites. The Preamble cites many studies exhibiting the negative impacts to receiving waters caused by erosion from construction sties. One study cited in the Preamble states "the equivalent of many decades of natural or even agricultural erosion may take place during a single year from areas cleared for construction" (USEPA, 1999b).

Section: Findings **Subsection: 19**

Comment: Finding No. 20 provides that "the Copermittees' wet weather monitoring results collected over the past decade, as well as volumes of other references in the literature today confirm substantial pollutant loads to receiving waters in runoff from existing urban development." The Regional Board further concludes that "Implementation of jurisdictional and watershed URMPs, which include extensive controls on existing development, can reduce pollutant loadings over the long term." The so called "volumes of other references" referred to in the finding are not cited anywhere in the finding itself or in the Regional Board's discussion of the finding in the Technical Report. Further, the effectiveness of any given URMP will depend on the development in question and the selected BMPs. (County of San Diego)

Response: For a comprehensive summary of studies documenting the impacts of urban runoff on receiving waters, see the Preamble to the Phase II NPDES storm water regulations (USEPA, 1999b).

Regarding the effectiveness of urban runoff management programs, it is true that BMP implementation is critical. That is why the Tentative Order includes extensive requirements for BMP implementation, while providing the Copermittees flexibility in choosing which particular BMPs to implement.

Section: Findings **Subsection: 19**

Comment: Re Finding 19: The State Board is attempting to abandon their responsibilities to regulate, inspect, and enforce the provisions of the CWA by transferring such responsibilities to the Copermittees via unfunded mandates. (County of San Diego)

Response: The CWA describes a process of dual authority in which regulated industrial and construction activity should be regulated by both the permitting authority and MS4 operator. This finding simply clarifies that dual regulation relationship. In no way does the Tentative Order represent an attempt of the SWRCB or SDRWQCB to abandon their responsibilities to regulate certain categories of industrial and construction sites. These categories are clearly defined in CWA section 402.

Section: Finding **Subsection: 20**

Comment: To assist in stormwater program funding Copermittees should charge fees for connection to MS4s similar to connection fees charged for use of the sanitary sewer system. (Surfrider Foundation)

Response: Comment noted.

Section: Findings Subsection: 21

Comment: Finding No. 21 provides that "because the urbanization process is a direct and leading cause of water quality degradation in this Region, fundamental changes to existing policies and practices about urban development are needed if the beneficial uses of San Diego's natural water resources are to be protected." The Regional Board then seeks to support this finding by referring to the Region's 303(d) list, which it claims shows that the impacts of urban runoff are significant. The finding is inappropriate as it is the responsibility of the State Board, not the Copermittees, to implement water quality practices and procedures as needed to protect the beneficial uses of San Diego's natural water resources. Again, the Regional Board seeks to transfer its obligations on to the Copermittees, and to impose an unfunded mandate on Copermittees. There is no legal or other evidentiary support for such a finding. (County of San Diego)

Response: The 303(d) list includes information about the source of impairment. For an overwhelming number of impaired receiving waters, non-point discharges are identified as a source. Most of the watersheds for these impaired water bodies are urban. Therefore, it can be inferred that urban runoff causes or contributes to these impairments.

Such problems are indeed frequently urban runoff related. For instance, a common conveyance for a sewage spill to reach a beach is through the municipal storm water system. Also, exceedances of standards at some of our Region's beaches have unquestionably resulted from pollutants conveyed by the storm water drainage system (SDRWQCB CAO 97-69 and CDO 98-74). In addition, urban runoff is increasingly being targeted as the cause of beach closures and postings in other areas of the San Diego region and Southern California. Urban runoff has been identified as a principal contributor to fecal coliform contamination in Orange County's Aliso Creek, a creek which often causes beach postings when flowing into the ocean (SDRWQCB CAO 99-211).

Since discharges from MS4s are not allowed to cause or contribute to an exceedance of water quality standards, the Copermittees are responsible for the discharges from their MS4s under such conditions.

Section: Findings Subsection: 22

Comment: Finding No. 22
The City questions whether the City has authority to prohibit the discharge of storm water into its MS4s where such discharge is authorized under a general industrial or construction storm water permit. If there is need for more stringent control, the Regional Board, themselves, should include such requirements in general construction and industrial storm water permits. However, to the extent the City is required to inspect, monitor, and generally oversee permitted industrial and construction sites, the City needs to enter an agreement with the Regional Board that clearly spells out each party's role and shared responsibilities concerning storm water discharges at permitted industrial and construction sites. For example, such an agreement should include a requirement that the Regional Board notify the City of its inspections of certain industrial sites, so the City does not repeat inspections already performed by the Regional Board. See Tentative Order, Section F.3.b(6) (provides that the City is not required to inspect certain industrial sites already inspected by the Regional Board). In addition, such an agreement should specify whether monitoring at an industrial facility under the Tentative Order is in addition to, in place of, or supplements

such industrial facility's monitoring program under the general industrial storm water permit, and whether group monitoring is permitted. (City of San Diego)

Response: It seems likely that the coordination of inspection efforts described in this comment would be beneficial. SDRWQCB looks forward to creating such relationships with municipalities. However, in response to the statement that municipalities may not have "the authority to prohibit the discharge of storm water into its MS4s where such discharge is authorized under a general industrial or construction storm water permit," SDRWQCB disagrees. Such authority should already exist under the municipal responsibility to review plans, grant permits, and enforce ordinances within its jurisdiction. Also, as provided for in California Water Code § 13002, cities and counties may establish water quality protection requirements that go beyond the industrial or construction storm water permits or other requirements of the SDRWQCB or SWRCB.

Section: Finding **Subsection: 23**

Comment: Second sentence add: EDUCATION- ……..how to accomplish their jobs while protecting water quality and public health, and their specific roles…. (State Department of Health Services)

Response: This issue has been addressed in the revised Tentative Order in Finding 36.

Section: Findings **Subsection: 24**

Comment: Finding 24 implies that the Regional Board will not seek enforcement against the City if it can be established that the City has 'demonstrated a good faith effort to educate and enforce its local ordinance. No definition of "good faith effort" is found in the Tentative Order and will open the cities to speculation and litigation from the environmental community. If it is intended that the establishment and implementation of the requisite ordinances, best management practices ("BMPs"), jurisdictional urban runoff management program ("Jurisdictional URMP"), and standard urban storm water mitigation plan ("SUSMP"), are examples of good faith, it should be stated somewhere in the document. The Finding does not have legal or factual support. (La Mesa, County of San Diego, Coalition for Practical Regulation, Procopio, Cory, Hargreaves, & Savitch, L.L.P., El Cajon)

Response: Finding 24 has been revised in the Tentative Order to remove all discussion of what constitutes "good faith" enforcement of local legal authority.

Section: Finding **Subsection: 24**

Comment: The IEA strongly urges the RWQCB to set enforcement guidelines in all areas of the permit to
ensure fair and equitable enforcement. (Industrial Environmental Association)

Response: Sections C, F.2.h, F.3.b.7, and Attachment C of the revised Tentative Order contains enforcement guidelines for the Copermittees to consider. The establishment of enforcement guidelines at the jurisdictional level, however, is the discretion and responsibility of the Copermittees.

Section: Findings Subsection: 24

Comment: The City and State permits should be consolidated with fees and enforcement authority passed through to Co-permittees. (City of Carlsbad)

Response: The Tentative Order does not require the Copermittees to enforce the General Construction and Industrial Permits. Where the Tentative Order refers to the General Permits, it does not require enforcement of the permits, but rather allows for the Copermittees to use them as tools in enforcing their own local permits. For example, it is useful for the Copermittee to require coverage under the General Industrial Permit, in that it will help the Copermittee ensure that the site is in compliance with local permits. However, in using such information, the Copermittee is not enforcing the General Permit. Instead, the Copermittee would be using the information as a tool for enforcement of its local permits. Since the Tentative Order does not require the Copermittees to enforce the General Permits, and since the Copermittees have their own responsibility for oversight of construction and industrial sites, passing State fees to the Copermittees is not warranted.

Section: Findings Subsection: 26

Comment: Finding 26 and Section C of the Tentative Order could result in violations of Receiving Water Limitations for toxicity and trigger $3,000 per violation. Is this the SDRWQCB's interpretation and intent? (La Mesa, Oceanside)

Response: The presence of toxicity in urban runoff discharged from MS4s that causes or contributes to an exceedance of receiving water quality objectives or constitutes a threat to human or environmental health is a violation of Order 90-42 and the Tentative Order.

We assume the reference to $3000 per violation is based on the provisions for Mandatory Minimum Penalties (MMPs) recently incorporated into the California Water Code. The MMPs apply to violations of effluent limitations. Section C establishes receiving water limitations, to which the MMPs do not apply.

Section: Findings Subsection: 26

Comment: The toxicity requirement cited in Finding 26 is neither legal nor attainable; this is a drinking water standard. The finding and the discussion that follows in the Technical Report are utilized to support the implementation of water quality standards or numeric effluent limitations. The Regional Board has no legal authority to impose numeric limitations on the Copermittees, nor to force the Copermittees to comply with water quality standards. The CALTRANS Statewide Permit does not contain this language and it should be removed from the Tentative Order. This is a more appropriate requirement for The Basin Plan as a Total Maximum Daily Loads allowable. The Basin Plans may need to be re-written. The finding and the discussion that follows in the Technical Report are utilized to support the implementation of water quality standards or numeric effluent limitations. As discussed above in other portions of these comments, the Regional Board has no legal authority to impose numeric limitations on the Copermittees, nor to force the Copermittees to comply with water quality standards. Rather, as set forth in Defenders of Wildlife v. Browner, supra, such an attempt would amount to the

imposition of standards stricter than those provided for under the Clean Water Act, which can only be supported after there has been a finding of "necessity" by the Regional Board in accordance with California Water Code Section 13377. No such finding of necessity has been made, nor would such a finding be supported by the evidence. (SANDAG, County of San Diego)

Response: The Toxicity requirement is derived from the Ocean Plan and is not a drinking water standard. The Copermittees have the responsibility to ensure that the discharge from their MS4s does not cause or contribute to exceedances of receiving water quality objectives nor constitutes a threat to human or environmental health. Toxicity is a measurement of the impact of MS4 discharges to human and environmental health.

Section: Findings Subsection: 27

Comment: As set forth under the CWA, the focus of the Tentative Order should be on controlling discharges from MS4s "to the maximum extent practicable". (County of San Diego)

Response: The first statement made in Finding 27 must be coupled with the following statement that reads, "This Order is not meant to control background or naturally occurring pollutants and flows." The statement to which this comment refers just helps clarify that the SDRWQCB will not hold the Permittees responsible for natural background levels.

Section: Findings Subsection: 28

Comment: The "Watershed Management Areas (WMAs)" table in Finding No. 28 (i.e., Table 2) is inconsistent with the similar "Copermittees by Watershed" table in Section J of the Tentative Order (i.e., Table 4). The information regarding what Table 2 terms the Mission Bay WMA differs from that contained in Table 4 for the same area.
We also suggest making the format of Tables 2 and 4 the same, because the current differences in formatting and content of these two tables lead to unnecessary confusion (e.g., Table 2 lists Penasquitos under the heading "Hydrologic Unit(s)," while Table 4 lists it under the heading "Watershed Urban Runoff Management Program" and lists Miramar Reservoir, HA (906.10) and Poway HA (906.20) under the heading entitled "Hydrologic Unit or Area"). (City of San Diego)

Response: Table 2 and 4 differ in minor ways for specific reasons. Table 2 comes directly out of the SDRWQCB report "Watershed Management Approach," January 2000. It is a basic table used by the SDRWQCB for watershed concerns such as impairments. However, Table 2 is not entirely useful for the development of watershed urban runoff management programs by the Copermittees. For this purpose, Table 4 was developed. The primary difference between the two tables is that the Mission Bay and Los Penasquitos watersheds are separated in Table 4. This separation is appropriate for Copermittee watershed management, since the two watersheds have different primary issues. For the development of Watershed Urban Runoff Management Programs, Table 4 should be used.

Section: Findings Subsection: 28

Comment: Table 2 of the Findings (No. 28) and Table 4 of section J. Watershed Urban Runoff Management Program lists Cajon as being in the San Diego Bay Watershed. All of the City of Cajon Drains to the San Diego River. (City of El Cajon)

Response: The error has been corrected in the Final Draft of the Tentative Order.

Section: Finding **Subsection: 28**

Comment: The 303(d) list for the San Diego region is lacking, and more studies should be performed to determine additional impairments. (Surfrider Foundation)

Response: Comment noted.

Section: Finding **Subsection: 28**

Comment: What information was used to list the San Luis Rey River as being impaired by coliform and nutrients? (City of Oceanside)

Response: The San Luis Rey River is not known to be impaired for coliforms or nutrients and is not listed on the 303(d) list. However, a portion of the coastline, designated Pacific Ocean, San Luis Rey Hydrologic Unit (HU) is considered impaired for coliforms. This coliform impairment was determined based on numerous beach closure days posted by the County of San Diego.

Section: Finding **Subsection: 28**

Comment: The permit should name all listed water bodies and their impairments. (Surfrider Foundation)

Response: Table 2 under Finding No. 28 in the permit includes a list of the surface water bodies and their corresponding 303(d) pollutant(s) of concern and/or impairment. In addition, Attachment 2 of the Fact Sheet also includes the 303(d) list for the San Diego Region.

Section: Finding **Subsection: 28**

Comment: Copermittees should be encouraged to identify threatened receiving waters to be considered for listing. (Surfrider Foundation)

Response: The Regional Board uses the process required by USEPA for identifying waterbodies that should be listed on the 303(d) list. Part of the process involves the Regional Board's solicitation of dischargers, stakeholders, etc. to identify waterbodies that are threatened or impaired and should be considered for 303(d) listing. Furthermore, in the permit under Section J. Watershed Urban Runoff Management Program, part 2.b., Copermittees are required to assess water quality of all receiving waters in the watershed based upon existing water quality data and annual watershed water quality monitoring.

This information will be provided in the URMP's annual reports to the Regional Board and would also be considered when identifying waterbodies for 303(d) listing. Therefore, the Copermittees are encouraged both through the permit, and through the listing process, to identify threatened receiving waters to be considered for 303(d) listing.

Section: Findings Subsection: 30

Comment: The City believes it will be difficult to develop a watershed planning component at a multi-jurisdictional level. Although run-off does not recognize political boundaries, such boundaries nevertheless exist. Regional Board coordination and funding are needed to facilitate the development of a multi-jurisdictional approach to watershed planning. (City of San Diego)

Response: The SDRWQCB will not be providing funding for the multi-jurisdictional approach as the requirement falls within the purview of the NPDES Program created by the Clean Water Act. The State of California has simply been delegated to administer this federally mandated program. However, the SDRWQCB plans to participate in watershed planning. This participation will in no way include a coordination role. Such a duty is better conducted by a local stakeholder.

Section: Findings Subsection: 30

Comment: The discussion of Finding 30 in the Technical Report inappropriately expands the application of the finding to require the identification, assessment and prioritization of "natural, social and other resources in the watersheds" and to "develop plans and regulations to guide growth and protect resources." Neither the Clean Water Act nor the Porter-Cologne Act, authorize either the State Board or the Regional Board, to regulate other resources in our environment (including endangered species, critical habitat, or coastal access), except to the extent that such would be necessary to protect the quality of our State's waters, but not vise versa. (County of San Diego)

Response: The Basin Plan identifies many beneficial uses which the SDRWQCB is responsible to protect. Multiple types of habitat, navigation, aquaculture, recreation, municipal service supply are among the many uses identified. The mission of the SDRWQCB is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. Good water quality is only one of the many uses which fall under the term "water resources."

Section: Finding Subsection: 30, 31

Comment: Finding No. 30: LAND USE PLANNING ON A WATERSHED SCALE and Finding No. 31: INTERGOVERNMENTAL COORDINATION
These findings will obviously require the close coordination of the various Copermittees. (SANDAG)

Response: Comment noted.

Section: Findings Subsection: 31

Comment: There is no authority under State or federal law that would allow the Regional Board to compel agreements between respective Copermittees. By definition, any "agreement" cannot be "compelled" and the Regional Board does not have any authority to compel agreements between Copermittees. Although agreements to assist in implementing programs "on a watershed and regional basis in the most cost effective manner" is a prudent course of action, unfortunately, the Tentative Order does not permit the implementation of the SUSMPs on a "regional basis." In fact, the Technical Report expressly states Staff is opposed to compliance with any SUSMP requirement using a "regional" approach, in spite of the fact that the State Board has already determined that "regional facilities" may be the most cost effective means in which to comply with SUSMP requirements, and in spite of the requirements of State law encouraging regional planning. (See Cal. Water Code § 13225(i).) (County of San Diego)

Response: The Federal NPDES regulations are clear that intergovernmental coordination between Copermittees can be required. They specifically prescribe coordination in two places. Federal NPDES regulation 40 CFR 122.26(d)(2)(i)(D) provides that "[The Copermittee must demonstrate that it can control through interagency agreements among coapplicants the contribution of pollutants from one portion of the municipal system to another portion of the municipal system." Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) provides that the Copermittee shall develop and implement a proposed management program which "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. […] Proposed programs may impose controls on a systemwide basis, a watershed basis, a jurisdiction basis, or on individual outfalls. […] Proposed management programs shall describe priorities for implementing controls."

Regarding the asserted conflict between intergovernmental coordination and SUSMPs, no conflict exists. First, the SUSMP provisions require development of a countywide model SUSMP. Second, the SUSMPs have been modified to allow for neighborhood or sub-watershed level structural BMP implementation.

Section: Findings Subsection: 31

Comment: Permit Section Pg. 7, Item 31: Governmental Coordination
The permit mentions that coordination with other watershed stakeholders, especially Caltrans and the Department of Defense, is critical. The staff and the Regional Water Quality Control Board (RWQCB) need to pursue State and Federal Legislation to mandate these other agencies to also cooperate with co-permittees. (City of Poway)

Response: Coordination with agencies such as Caltrans and the Department of Defense is critical and is addressed by the SDRWQCB in Finding 31. The Tentative Order does not require such coordination. Language in the Tentative Order regarding such coordination In Section D.1.g has been modified to clarify this.

Section: Findings Subsection: 32

Comment: The removal; characterization, and disposal of pollutants from MS4 (Municipal Separate Storm Sewer System) drainage structures will end up in the sewer system. (Metro Commission)

Response: The requirements in Tentative Order 2001-01 that some flows or wastes in the MS4 should be diverted or removed does not necessarily mean that they should be removed or diverted into a sanitary sewer. Finding 32, noted in the comments, finds that wastes and pollutants that deposit and accumulate in the MS4 system will be discharged from those structures into receiving waters. The finding states only that such accumulated wastes must be characterized and lawfully disposed. It does not require, or even recommend, that they be discharged into a sanitary sewer. Section B.2, noted in the comment, refers to non-storm water discharges that are prohibited only if the Copermittee determines that they are a significant source of pollutants to waters of the United States. Section B.2 of the Tentative Order does not require such discharges to be diverted or removed into a sanitary sewer. The Copermittees have the flexibility and discretion to determine the manner in which they comply with the requirements of Section B.2 of the Tentative Order.

Section: Findings Subsection: 33

Comment: Finding No. 33
As currently written, Finding No. 33 states that "Urban runoff is a significant contributor to the creation and persistence of Toxic Hot Spots in San Diego Bay." We believe it would be more accurate to state, at most, that urban runoff appears to be a potential contributor to Toxic Hot Spots – any broader statement is premature. As the Regional Board is aware, the City, in conjunction with the Port of San Diego and the U.S. Navy, are in the process of voluntarily conducting source identification work related to this issue. However, because this work is not yet completed, we believe there does not yet exist sufficient evidence or other documentation to support the broad language currently contained in Finding No. 33. (City of San Diego)

Response: The SWRCB's "Chemistry, Toxicity and Benthic Community Conditions in Sediments of the San Diego Bay Region" report supports Finding 33 (SWRCB, 1996). Regarding the Chollas Creek Toxic Hot Spot it states "Chollas Creek empties into the Bay near this site, carrying with it runoff from a large urban area. This creek is believed to carry high concentrations of PAHs into the Bay (McCain et al., 1992) and is the likely source of high chlordane levels at the site." Regarding the Downtown Piers Toxic Hot Spot, it states "Perhaps the most obvious explanation for these data [which found toxicity] would be the presence of a large storm drain and numerous smaller storm drains, which empty into the Bay near this station."

Section: Findings Subsection: 33

Comment: Finding No. 33 refers to California Water Code Section 13395 and provides that said section "requires regional boards to reevaluate waste discharge requirements ("WDR's") associated with toxic hot spots." The finding further refers to the consolidated toxic hot spot clean up program adopted by the State Water Resources Control Board in June of 1999. This finding is inappropriate in the subject Tentative Order, as Section 13395 specifically requires a reevaluation of waste discharge requirements for discharges who "have discharged all or part of the pollutants which have caused the toxic hot spot." Said

section further exempts the revision of a waste discharge requirement, if the toxic hot spot "resulted from practices no longer being conducted by the discharger or permitted under the existing waste discharge requirements, or that the discharger's contribution to the creation or maintenance of the toxic hot spot is not significant." Section 13395 is plainly directed at the actions of the person creating the "discharge" and would only apply to the requirements of the subject Tentative Order to the extent of discharges actually caused by the Copermittees. The finding incorrectly relies upon 13395 to support an expansion of the Tentative Order to toxic hot spot issues not otherwise authorized by Section 13395. (County of San Diego)

Response: The SWRCB's "Chemistry, Toxicity and Benthic Community Conditions in Sediments of the San Diego Bay Region" report supports Finding 33 (SWRCB, 1996). Regarding the Chollas Creek Toxic Hot Spot it states "Chollas Creek empties into the Bay near this site, carrying with it runoff from a large urban area. This creek is believed to carry high concentrations of PAHs into the Bay (McCain et al., 1992) and is the likely source of high chlordane levels at the site." Regarding the Downtown Piers Toxic Hot Spot, it states "Perhaps the most obvious explanation for these data [which found toxicity] would be the presence of a large storm drain and numerous smaller storm drains, which empty into the Bay near this station."

Section: Findings Subsection: 34

Comment: There is insufficient study and a lack of evidence to support the numeric sizing criteria set forth in the Tentative Order itself and its one size fits all application, and there is no finding, evidence, or other support for the general application of the exact same numerical sizing criteria to each and every one of the ten development categories identified in the Order. Finally, the numeric sizing criteria plainly violates Water Code Section 13360 and the prohibitions thereunder. (County of San Diego)

Response: Evidence in support of numeric sizing criteria is included in the "Staff Report for Standard Urban Storm Water Mitigation Plans and Numerical Sizing Criteria for Best Management Practices" and "Supplemental Information for Public Workshop on Numeric Sizing Criteria for Post-Construction BMPs for New and Re-Development," as referenced in the draft Fact Sheet/Technical Report. Application of SUSMPs and numeric sizing to the ten SUSMP priority development project categories is addressed elsewhere. Finally, the SWRCB found in Order WQ 2000-11 that SUSMPs and numeric sizing criteria constituted MEP and did not violate California Water Code section 13360.

Section: Finding Subsection: 34

Comment: Finding No 34: CHANGING THE STORM WATER MANAGEMENT APPROACH
The approach of filtering storm water by "...allowing it to flow slowly over permeable vegetative surfaces..." may not work well in the San Diego region because of the impermeable soil types that are predominant in this region, therefore this should not become a requirement, rather a recommendation. It may work in some areas of the region and may be a good solution, but if it is required without a determination of the soil types, vector control problems may be generated. Rats, roaches and mosquitoes tend to breed in areas where it is damp or where water is allowed to pond. (SANDAG)

Response: SDRWQCB recognizes that the region has an abundance of low permeability soil conditions. However, through the process of evapotranspiration, vegetative matter can abate nuisance waters that bare soil cannot. Also important to note is that infiltration is not the only option discussed in the finding. Filtration is also suggested.

Section: Findings **Subsection: 34**

Comment: Finding 34 on page 7 - Revise the finding to reduce the reliance upon "restoring and preserving the natural hydraulic cycle" through the use of over simplified structural controls like reducing post development runoff rates to predevelopment levels. Overemphasis of this simplified approach can potentially result in an effect opposite from what is intended. Even well designed facilities based upon "natural system" concepts can have significant negative environmental consequences. Poorly designed solutions can potentially have disastrous consequences. The City of Carlsbad and other coastal cities are characterized by hilly terrain subject to the very real potential of landslides and slippage. Directing runoff water into the geologic formations beneath land developments can result in catastrophic landslide events. Carlsbad is currently plagued with water seepage and springs that occur post development and which create a significant nuisance for the City and its residents. The construction of mandatory filtration basins could significantly increase the occurrence of these springs. Additionally, in some areas there is the potential for subsurface water to flow through soils containing -natural minerals which when leached out can result in runoff more deleterious than the pollutants in urban runoff. This document should instead focus on establishing clear goal based criteria designed to reduce pollutant loading rather than directing the agencies towards structural solutions based upon simple and potentially faulty assumptions. (City of Carlsbad)

Response: While the Tentative Order encourages infiltration, it is never required where it may be infeasible. Furthermore, the Tentative Order does not encourage accelerated infiltration rates; rather, it only encourages preserving natural infiltration rates. Finally, the Copermittees are provided discretion for the oversight of any infiltration BMPs. They can therefore ensure that natural infiltration does not cause significant negative environmental consequences.

Section: Findings **Subsection: 34**

Comment: In many cases, the “permeable vegetated surfaces” will have to be recreated or developed from scratch, since much of the watershed is now covered with hardscape. This will require significant funding that currently does not exist in many municipal budgets. Please provide information regarding how the Regional Board will assist Copermittees in creating the permeable, vegetated filters contemplated in the Tentative Order. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The SDRWQCB will not be providing funding for the Co-Permittees to implement their programs.

Section: Finding **Subsection: 35**

Comment: Sweetwater Authority questions the soundness of the statement that, "...the risks typically associated with the infiltration of runoff (especially from residential land use areas) are not significant."

CWA requirements that may be addressed by pervious surfaces and infiltration may not resolve issues associated with drinking water supplies, based on SDWA requirements. (Sweetwater Authority)

Response: The SDRWQCB acknowledges the potential risk from infiltration of storm water. The Tentative Order includes requirements for the protection of groundwater in section F.1.b.2.i. These requirements are based on USEPA guidance, as developed by the USEPA Risk Reduction Engineering Laboratory. Implementation of such requirements should greatly reduce the risk of groundwater contamination resulting from storm water infiltration. Clearly, proper management of storm water infiltration is needed. For this reason, Finding 35 will state that the risk of groundwater contamination from storm water infiltration can only be reduced to insignificant levels if proper management is implemented.

Section: Finding **Subsection: 35**

Comment: We urge that the permit include specific requirements of the jurisdictions and the developers that long term operation, maintenance, and monitoring, and access be assured in perpetuity. (San Diego Audubon Society)

Response: Section F.1.b.2.b.x of the Tentative Order requires proof of a mechanism to ensure ongoing long-term BMP maintenance. A mechanism for long-term BMP maintenance would inherently include provisions for inspections/monitoring of the maintenance of the BMP. For example, the LARWQCB SUSMP includes consideration of inspections/monitoring of BMP maintenance. The LARWQCB SUSMP can serve as guidance to the Copermittees regarding BMP maintenance. The LARWQCB SUSMP states:

"[T]he Permittee shall require that the applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements and/or Conditional Use Permits.

For all properties, the verification will include the developer's signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The transfer of property to a private of public owner must have conditions requiring the recipient to assume responsibility for maintenance of any Structural or Treatment Control BMP to be included in the sales or lease agreement for that property, and will be the owners responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year and retain proof of inspection. For residential properties where the Structural or Treatment Control BMPs are located within a common area which will be maintained by a homeowner's association, language regarding the responsibility for maintenance must be included in the projects conditions, covenants and restrictions (CC&R). Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the Permittee can provide. The transfer of this information shall also be required with any subsequent sale of the property.

If Structural of Treatment Control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by the County of other

appropriate public agency. Structural or Treatment control BMPs proposed for transfer must meet design standards adopted by the public entity for the BMP installed and should be approved by the County or other appropriate public agency prior to its installation."

Section: Findings Subsection: 35

Comment: Finding No. 35 involves infiltration of potential groundwater contamination and the management of the risks associated with infiltration, including requiring maintenance of drainage features in perpetuity. First, again as discussed elsewhere in these comments, it is the State Board and the Regional Board's obligation to protect the waters of the State of California and that obligation cannot be transferred onto the Copermittees. Second, a sufficient study has not been conducted for the Regional Board to conclude that the infiltration of urban runoff and the risks created through groundwater quality are superseded by the need to improve our surface water quality. In effect, there is insufficient evidence to support the application of a numerical sizing criteria, the objective of which is to discharge the pollutants of concern into our soil and into our groundwater, before they enter into the MS4 system, so as to avoid impacts on our surface water quality. Insufficient analysis has been conducted by the Regional Board to determine the impact of the numerical sizing criteria on the quality of our groundwater. In addition, the Regional Board's reference and reliance upon guidance from the State of Washington and the State of Maryland ignore those states (as well as the State of Florida's) reliance upon regional approaches, which Staff in this case has specifically disclaimed the benefits of, and their application in this permit. The Regional Board's refusal to consider "regional approaches" is also directly contrary to the express findings of the State Board in Order No. WQ 2000-11, and the provisions of California Water Code Section 13225(i).) (State Board Order No. WQ 2000-11, p. 21; Water Code § 13225(i).) (County of San Diego)

Response: The Tentative Order requires the implementation of structural treatment BMPs, of which infiltration is one option. Where the Copermittees choose to allow infiltration/redirection of flows which would otherwise enter their MS4s, restrictions are appropriate. The Copermittees cannot choose to redirect flows away from their MS4s and claim no responsibility for the potential impacts of such actions. In addition, the SWRCB upheld in Order WQ 2000-11 the infiltration restrictions included in the LARWQCB SUSMP, on which the infiltration restrictions in the Tentative Order are based.

Again, the Tentative Order does not require infiltration. It is merely one type of BMP out of many from which the Copermittees can choose. The Tentative Order includes infiltration restrictions in the event that infiltration is the chosen option for BMPs. The infiltration restrictions in the Tentative Order are based on a risk assessment conducted by USEPA's Risk Reduction Laboratory (USEPA, 1994). The sole purpose of the infiltration restrictions is to reduce the risk of groundwater contamination.

Regarding "regional approaches" the Tentative Order has been revised to allow for the implementation of neighborhood or sub-watershed level BMPs.

Section: Findings Subsection: 39

Comment: The public comment period and the hearing should be continued for at least ninety (90) days in order to give the Copermittees, and all interested Stakeholders, sufficient time to review and comment on such important issues. (County of San Diego)

Response: Sufficient time was given for interested parties to review the Tentative Order. Sufficient opportunity was given for all interested parties to voice their concerns and submit written comments.

Section: A Subsection:

Comment: The Permit must include numeric effluent limits. The Permit's omission of water quality-based effluent limits for numerous impairing pollutants is inconsistent with federal permitting regulations. If the State has failed to develop and implement numeric water quality criteria for a toxic pollutant, the regulations still require a numeric effluent limit to be established "Where a State has not established a water quality criterion for a specific chemical pollutant that is present in an effluent at a concentration that causes, has the reasonable potential to cause, or contributes to an excursion above a narrative criterion within an applicable State water quality standard, the permitting authority must establish effluent limits using one or more of the following options: [including using 'calculated numeric water quality criteria' and 'EPA water quality criteria']." 40 C.F.R. § 122.44(d)(1)(vi). (San Diego Baykeeper, Surfers Tired of Pollution, Surfrider Foundation, Environmental Health Coalition, San Diego Audobon Society)

Response: Typical NPDES permits are based on the concept of employing full-scale treatment of an effluent to remove pollutants at the end of the pipe (i.e., just before being discharged into receiving waters). Accordingly, typical NPDES permits contain numeric effluent limits which are arithmetically derived from receiving water quality objectives for each pollutant of concern in the effluent. However, municipal storm water permits are not typical NPDES permits because they are not based on the concept of full-scale treatment of polluted storm water. Full scale end of pipe treatment for storm water is not considered economically and technologically feasible at this time. Therefore municipal storm water permits do not contain numeric effluent limits, but rather are based on the concept that pollutants can be effectively reduced in storm water to the maximum extent practicable by the application of a wide range of best management practices (BMPs).

USEPA has issued guidance on the issue of numeric effluent limits in municipal NPDES storm water permits. It states "In response to recent questions regarding the type of water quality-based effluent limitations that are most appropriate for National Pollutant Discharge Elimination System (NPDES) storm water permits, the Environmental Protection Agency (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" (USEPA, 1996).

The Tentative Order follows this interim permitting approach.

Section: A Subsection:

Comment: The Permit should include in the Discharge Prohibition section that "The Permittee shall modify [their storm water management plan] to comply with waste load allocations developed and

approved pursuant to the process for the designation of Total Maximum Daily Loads for impaired water-bodies." (San Diego Baykeeper)

Response: 40 CFR 122.44 (d)(vii)(B) requires that NPDES permit effluent limitations be consistent with any waste load allocation for the discharge that are prepared by the state (Regional Board) and approved by USEPA. Once TMDL limits are established and approved by USEPA, NPDES permits will be required to include effluent limitations that are consistent with the TMDL allocations, so the concept of the proposed language is already required by federal regulation. In addition, a finding will be added to the permit to reference TMDLs and their relationship to the permit. This finding will be similar to the proposed language.

Section: A Subsection:

Comment: The title of the section "Prohibitions - Discharges" should be revised to read "Prohibitions Stormwater Discharges" (Sempra Energy)

Response: Section A of the Tentative Order can apply to both storm water and non-storm water discharges. Therefore, its title will not be changed.

Section: A Subsection:

Comment: The proposed Permit fails to include mass limits in the permit, and is thus inconsistent with 40 C.F.R. Section 122.45(f). Mass limits based on current performance should be applied for all pollutants referenced in the permit that are also listed on the 303(d) list for the permits' receiving waters. (San Diego Baykeeper)

Response: The inclusion of mass limits for pollutants in the Tentative Order is not required. 40 CFR 122.45(f) refers to requirements for pollutants for which numerical effluent limits have been calculated. Since numerical effluent limits have not been applied in the Tentative Order, as is allowed in 40 CFR 122.44(k), calculation of mass limits is not necessary or required.

Section: A Subsection:

Comment: A list of specific Water Quality Objectives for each pollutant should be compiled and included as an attachment to the permit. (San Diego Baykeeper)

Response: SDRWQCB publishes Water Quality Objectives for this region in the Water Quality Control Plan. This Basin Plan serves as the foundation for which every decision, permit, enforcement, and action is taken by the SDRWQCB. All Permittees are required to be knowledgeable on the terms and conditions set in the Basin Plan (including specific Water Quality Objectives). Therefore, the Tentative Order will not be amended to include an additional listing as doing so would be redundant.

Section: A Subsection:

Comment: The current definition of Water Quality Objectives included in Attachment D (Glossary) is not sufficiently specific to ensure violations are prohibited and should include those contained in the San Diego Basin Plan, the California Ocean Plan, the California Toxics Rule, the National Toxics Rule, and other state or federally approved surface water quality plans used by the Regional Board to regulate all discharges, including storm water discharges. (San Diego Baykeeper)

Response: The definition of water Quality Objectives in Attachment D (Glossary) has been revised to refer to the broad legal authority cited in the Fact Sheet/Technical Report (Section VII Directives Discussion Underlying Broad Legal Authority for Order No. 2001-01) and to contain the following:

As stated in the Porter-Cologne Requirements for discharge (CWC 13263),
"(Waste discharge) 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 objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance, and the provisions of Section 13241."

Section: A Subsection: A.1

Comment: The phrase, "...or threaten to cause" is used in various places throughout the document. This phrase is very broad and subjective. This phrase should be removed. (SANDAG)

Response: Prohibition A.1, including the term "threatening to cause" is taken directly from the Basin Plan and therefore will not be changed.

Section: A Subsection: A.1

Comment: The definition of the term nuisance as defined in CWC § 13050 should be researched. This may be a similar concern to the phrase "threaten to cause". It is our understanding that Caltrans had the term nuisance removed from their permit. (SANDAG)

Response: Prohibition A.1, including the term "nuisance," is a Basin Plan Prohibition, and therefore will remain in the Tentative Order.

Section: A Subsection: A.2

Comment: Page 4 of 50 - paragraph 22. - Pursuant to this Order, local permits, plans, and ordinances must (a) prohibit the discharge of pollutants and non-storm water into the MS4; and (b) require the routine use of BMPs to reduce pollutants in site runoff.

These statements are or appear to be contradictory. Subparagraph (a) prohibits discharge of pollutants and non-storm water. Subparagraph (b) requires BMPs to reduce pollutants. What are the subtleties that distinguish when pollutant discharge is prohibited verses when the requirement is to reduce pollutants? Is the intent that subparagraph (a) is relative to non-storm water runoff; and subparagraph (b) is relative to

storm water runoff? Additionally, confusion exists within subparagraph (a) in that, the statement "discharge of pollutants and non-storm water" is prohibited could be interpreted to mean that discharge of pollutants and discharge of non-storm water are interdependent (i.e. must have both conditions to be prohibited) or independent (i.e. need only one condition to be prohibited). Finally in subparagraph (b) the pollutant reduction is relative to "site runoff." EPA defines storm water runoff as Urban Runoff; and runoff as precipitation, snow melt, or irrigation water. But there is no definition of site runoff. Recommend paragraph 22 be embellished to more clearly describe the intent of the section relative to the issues raised above. (City of Imperial Beach)

Response: The language in Finding 22 regarding prohibitions refers to Prohibitions section A and B in the Tentative Order. Prohibition A refers to the prohibition of discharges of pollutants which may cause conditions of pollution. Prohibition B refers to the prohibition of non-storm water. References to reducing pollutants to MEP are applicable when discharges of pollutants are not causing conditions which warrant prohibition.

Section: A Subsection: A.2, A.3

Comment: The City suggests that this Prohibition be deferred until the City is required to implement these and other relevant provisions of the Tentative Order. (City of San Diego)

Response: Prohibitions A.2 and A.3 are essentially in effect at present. Order No. 90-42 (section IX) requires the Copermittees to implement BMPs to reduce the discharge of pollutants into and from their MS4s to the maximum extent practicable. The Basin Plan prohibits discharges in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance. Since these requirements are, for practical purposes, already in effect and enforceable, there is no compelling reason to defer their effective dates in the Tentative Order.

Section: A Subsection: A.3

Comment: At page 8 of the Tentative Order, Prohibition A.3 provides that "[d]ischarges into and from MS4s containing pollutants which have not been reduced to the maximum extent practicable (MEP) are prohibited." This prohibition provides little in the way of helpful guidance to Copermittees. First, "MEP" must be defined in the Order, so that Copermittees have a clear and convenient reference. Second, the Order should describe the criteria by which the Regional Board will determine whether discharges into and from MS4s have been reduced to MEP standards. Third, the Order should identify which party — the Copermittee or the Regional Board — has the burden of establishing that discharges have or have not been reduced to MEP. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: First, MEP has been defined in the Tentative Order. See Attachment D Glossary, Page D-3. Second, see the final portion for clarification of the criteria for which the Regional Board will determine if MEP has been met. Third, this portion also clarifies that the Regional and State Boards have the final responsibility of assessing whether MEP has been met. Please see excerpt from the Tentative Order below:

MEP is the acronym for Maximum Extent Practicable. MEP is the technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) that municipal dischargers of storm water (MS4s) must

meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of treatment and best management practices (BMPs). MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their Urban Runoff Management Plan. Their total collective and individual activities conducted pursuant to the Urban Runoff Management Plan becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for sanitary sewer maintenance). In the absence of a proposal acceptable to the SDRWQCB, the SDRWQCB defines MEP.

In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel, SWRCB addressed the achievement of the MEP standard as follows:

"To achieve the MEP standard, municipalities must employ whatever Best Management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive. In selecting BMPs to achieve the MEP standard, the following factors may be useful to consider:

a.Effectiveness: Will the BMPs address a pollutant (or pollutant source) of concern?
b.Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?
c.Public Acceptance: Does the BMP have public support?
d.Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?
e.Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc?

The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPs and chooses to select only a few of the least expensive, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPs that should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPs that would address a pollutant source, or to pick a BMP based solely on cost which would be clearly less effective. In selecting BMPs the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPs, it is the responsibility of the discharger to ensure that all BMPs are implemented."

Section: A **Subsection: A.3**

Comment: Add: A.4. Water wasting and excessive water runoff is prohibited. (State Department of Health Services)

Response: The terms "water wasting and excessive water runoff" are too broad and subjective for the Copermittees to comply with and for the SDRWQCB to enforce adequately. Moreover, many of the Copermittees have already implemented measures to encourage water conservation. Regional Board does not recommend adding this language as a prohibition to Section A.4 of the Tentative Order.

Section: A Subsection: A.4

Comment: Clarify Section A4. Page 8. This prohibition appears to subject all new construction and redevelopment projects to SUSMP requirements, whereas, Section F.I.b(2), limits the applicability of SUSMPs to specific "Priority Development Project Categories" (Sections F. 1.b(2)(a)(i)-(x)). Therefore, the above language in this prohibition needs to be clarified that it is only applicable to the specific Priority Development Project Categories. (Sempra Energy)

Response: The language in Prohibition A.4 regarding peak flow rates and velocities has been removed. Requirements for the control peak flow rates and velocities will apply only to new development and significant redevelopment falling under the SUSMP categories.

Section: A Subsection: A.4

Comment: In areas altered from impervious to pervious, are storm water "volumes" regulated? (Anonymous Workshop 1)

Response: The Tentative Order does not require that increased storm water runoff volumes resulting from development be addressed, due to the difficulty in reducing such volumes. Impervious surfaces create increased storm water runoff volumes by preventing or reducing infiltration. Reduction in these resulting storm water runoff volumes by constructing infiltration devices is not always feasible, particularly due to soil conditions in many areas of the region, or due to limited space . Due to these limitations, reduction of storm water runoff volumes resulting from development is not required by the Tentative Order, but rather is strongly encouraged. Minimization of impervious surfaces is encouraged throughout the Tentative Order, while minimization of directly connected impervious areas is required in the SUSMP provisions. The Tentative Order also supports preserving and restoring the natural hydrologic cycle. Furthermore, in developing methods to control downstream erosion resulting from the development of SUSMP priority development projects, the Copermittees are required to consider means for reducing storm water runoff volumes. These can include infiltration and minimization of directly connected impervious areas, as noted above, as well as structural BMPs, such as cisterns.

Section: A Subsection: A.4

Comment: Section A.4: “Site” should be defined. (City of Chula Vista)

Response: Language in Prohibition A.4 which refers to peak flow rates and discharges to 303(d) listed water bodies has been removed. Therefore, the term "site" no longer is included in Prohibition A.4.

Section: A **Subsection: A.4**

Comment: The Tentative Order does not define the terms “New Development” and “Significant Redevelopment” so it is difficult to ascertain which projects fall within Prohibition A.4. For example, does “New Development” include projects that have approved tract maps but have not yet begun construction? And at what point does a redevelopment project become “significant” for purposes of this Order? (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: Prohibition A.4 refers to all new development and redevelopment. It should be noted, however, that specific BMPs to be implemented for all new development and redevelopment is left to the discretion of the Copermittees. For very small or insignificant new development and redevelopment projects, the Copermittees may identify BMPs such as education measures as being sufficient. In addition, for clarification it should be noted that language in Prohibition A.4 which refers to peak flow rates and discharges to 303(d) listed water bodies has been removed. See change at permit section A.4.

Section: A **Subsection: A.4**

Comment: Is consideration given to redevelopment that does not exceed the pollution levels of existing development being replaced? (City of Chula Vista)

Response: Language in Prohibition A.4 which refers to predevelopment pollutant levels has been removed.

Section: A **Subsection: A.4**

Comment: A.4 Footnote 1 page 8 should be clarified or deleted because the wording is too vague and there should be an emphasis on actual impacts and not just flow rates and velocities. (Environmental Health Coalition)

Response: The footnote to Prohibition A.4 was included in the Proposed Changes document (Attachment 9 of the Executive Officer Summary Report for the December 13, 2000 Public Hearing). It referred to situations where detention in lower watersheds can increase the potential for flooding, by releasing detained flows which coincide with the timing of peak flood flows from upper watersheds.

Since the language of Prohibition A.4 has been removed from the Tentative Order, the footnote no longer applies.

Section: A **Subsection: A.4**

Comment: If the objective of the SUSMP is met if new development does not contribute to exceedance of receiving water quality objectives why impose the MEP rule on new development or redevelopment? Clarify. (City of Chula Vista)

Response: Copermittees must (1) reduce pollutants loads in post-development runoff to the maximum extent practicable and (2) ensure that post-development runoff does not cause or contribute to an exceedance of water quality standards. They cannot do one to the exclusion of the other. While post-development runoff in many situations may not be causing or contributing to an exceedance of water quality standards, significant increases in pollutant loads in post-development runoff may still degrade the quality of receiving waters, even if water quality standards are not exceeded. This is against antidegradation policy. For this reason, pollutants loads in post-development runoff must also be reduced to the maximum extent practicable.

Section: A Subsection: A.4

Comment: The proposed approach disregards the quality of runoff from new development. It is entirely possible that the runoff from new development will comply with water quality objectives but be higher than background levels in non-developed lands. (County of Orange Public Facilities & Resources Dep)

Response: The holding of post-development pollutant discharges to predevelopment or natural levels may not always be necessary for the protection of receiving water quality. There may be circumstances where a slight increase in pollutant concentrations from newly developed area may not contribute to an exceedance of water quality standards. For example, if a discharge's pollutant concentration from a newly developed area is increased but still well below the water quality objective for the 303(d) listed receiving water, the discharge will most likely not contribute to the exceedance of the water quality objective. The TMDL process frequently allows for such a situation, when "safety factors" for new development are included in waste load allocations.

The TMDL process is a more appropriate process for determining such allocations than the Tentative Order. It is a formal process which allows for extensive stakeholder involvement and public participation. It also addresses discharges from all sources, both existing and new.

For these reasons, the Tentative Order has been modified. The Tentative Order will still prohibit "post-development runoff containing pollutant loads which cause or contribute to an exceedance of receiving water quality objectives." Also, the potential for new development to cause or contribute to the 303(d) listing of a receiving water will need to be addressed in the Copermittees' planning processes. However, the requirement that post-development pollutant concentrations not exceed predevelopment pollutant concentrations will be removed. This issue will be addressed during the pending TMDL processes.

Section: A Subsection: A.4

Comment: Additionally, this prohibition should be redrafted so that it is clear that it applies only to specific Priority Development Project Categories. (Sempra Energy)

Response: Prohibition A.4 applies to all new development and redevelopment. However, language relating to peak flow rates and discharges to 303(d) listed water bodies has been removed.

Section: A Subsection: A.4

Comment: Section A.4.: "Post-development runoff which is greater in peak rate or velocity than pre-development runoff from the same site is prohibited." It is generally accepted that an undeveloped site, once developed, will have a higher peak rate runoff, additionally, because the runoff will in most cases be controlled, the velocity of that runoff will increase. It is more important to require that this increased rate or velocity cannot cause pollution. (City of Coronado)

Response: The language regarding peak flow rates and velocities in Prohibition A.4 has been removed from the Tentative Order. Control of peak flow rates and velocities shall instead apply only to SUSMP priority development projects. However, the control of peak flow rate and velocity increases from development is important. USEPA states: "In many cases the impacts on receiving waters due to changes in hydrology can be more significant than those attributable to the contaminants found in storm water discharges" (USEPA, 1999a). Therefore, the Tentative Order includes controls on both flows and pollutant discharges.

Section: A Subsection: A.5

Comment: Some of the prohibitions appear inappropriate.

For example, the prohibited discharges from vessels listed in paragraphs 15-18 are not relevant to the Tentative Order. This should be specified in Prohibition No. A.5. (i.e., that only relevant Basin Plan Prohibitions apply) or, alternatively, inappropriate prohibitions should be deleted from Attachment A. (City of San Diego)

Response: California Water Code Section 13243 provides that a Regional Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste, or certain types of waste is not permitted. The discharge prohibitions in Attachment A are applicable to any person, as defined by Section 13050(c) of the California Water Code, who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

It is true that only those Basin Plan prohibitions that might pertain to discharges to or from a storm water conveyance system are relevant to the tentative Order. Some Basin Plan prohibitions may not be applicable to discharges to or from the storm water conveyance system of one or more Copermittees. However, it is neither prudent or necessary to delete a Basin Plan prohibition from Table A based on assumption that it would never be applicable. Doing so could weaken the permit if there were an unanticipated or unusual situation to which one of the deleted prohibitions might apply. In any case, there is no harm in having Attachment A include all the Basin Plan prohibitions, including those which may seem unlikely to apply to discharges to or from a storm water conveyance system.

Section: B Subsection: B.4

Comment: All fire activities such as washing and training should be exempted from storm water permit because:
1. Discharges from fire service activities are typically clean.
2. Many fire agencies have no funds to pay for water filter devices.
3. BMPs might hinder or interfere with important fire suppression drills, potentially leading to safety concerns due to inadequate training
4. Fire service discharges are minimal, and therefore have limited impact.
5. There are no commercial facilities to wash fire trucks. Therefore, the practical and efficient way for the user to discharge this water into the sanitary sewer system. (San Diego County Fire Chiefs' Association, Vista Fire Department, Ramona Fire Department, City of Escondido, City of Oceanside, Borrego Springs Fire Protection District, Procopio, Cory, Hargreaves, & Savitch, L.L.P., State Department of Forestry and Fire Protection, Fire Districts Association of California, Intermountain Volunteer Fire & Rescue Department, San Diego Lifeguard Service, Rancho Santa Fe Fire Protection District, Metro Commission)

Response: The SDRWQCB agrees that all fire service activities are important to the protection of life and property. It is possible that extensive BMP implementation could potentially impair fire service readiness in some cases. For these reasons, section B.4 of the Tentative Order will be changed. In order to allow the discharge of non-emergency fire fighting flows to be addressed in a manner which is feasible for the fire service, section B.4 will require the Copermittees to develop and implement a program to reduce pollutants in non-fire fighting flows identified by the Copermittees to be significant sources of pollutants. This will provide the Copermittees and the fire service with the means to develop a program which will not adversely affect fire service activities or require diversion of wash water, etc to the sanitary sewer.

Section: B Subsection: B.1

Comment: Prohibition No. B.1., which requires the City to “effectively prohibit all types of non-storm water discharges,” is unrealistic. The City cannot prohibit discharges of which it is not aware. (City of San Diego)

Response: Prohibition B.1 comes directly from the Clean Water Act (section 402(p)(3)(B)(ii)). There are no exemptions provided in the Clean Water Act for unknown discharges. Although eliminating discharges which are not known to occur may be difficult, there is nothing to prevent prohibition of discharges - known and unknown. Prohibit is defined as "to forbid by authority." Copermittee ordinances can effectively prohibit all non-storm water discharges, regardless of whether or not they have been identified.

Section: B Subsection: B.2

Comment: Prohibition B.2, set forth on page 9 of the Tentative Order, lists 17 categories (a through q) of non-storm water that may be discharged into and from an MS4, unless the Copermittee determines that

such categories of discharge are a "significant source of pollution to waters of the United States." The term "significant" is not defined qualitatively or quantitatively in the Order, so one is left to presume that "significance" will be defined not by the Regional Board but by the Copermittees themselves. By what authority and through what mechanism will the Regional Board overturn a Copermittee's determination that a given discharge category is not a "significant" source of pollution? How will the Regional Board address discharge categories that, when viewed from a single Copermittee's perspective, are individually insignificant, but when viewed from a watershed perspective are cumulatively significant? (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: As per the Federal NPDES regulations, the determination of significance is left to the Copermittees' discretion. However, if it is determined that the discharges are individually or cumulatively causing or contributing to an exceedance of water quality standards, the SDRWCB may require implementation of BMPs for such discharges, per section C of the Tentative Order.

Section: B Subsection: B.2

Comment: Is there a method for determining which of the categories listed in this section are not significant sources of pollution? Please define significant. (SANDAG)

Response: As per the Federal NPDES regulations, determination of significance is left to the discretion of the Copermittees.

Section: B Subsection: B.2

Comment: In some hydrologic areas, the tap water from MWD may contains TDS at the level higher than the Basin Plan TDS water quality objectives for surface waters. Would TDS be considered a pollutant? Would mineral removal be required as a BMP to achieve MEP for tap water discharges? (City of Oceanside)

Response: Under the current Basin Plan, TDS levels in excess of defined water quality objectives could be considered a pollutant. In a recent decision, the SDRWQCB voted to uphold TDS water quality objectives in a ground water basin to prevent the degradation of water quality and the loss of beneficial uses.

Section: B Subsection: B.2

Comment: We urge that these categories be prohibited at levels well below those at which they each become significant. The paragraph might be improved to change the word "significant" to "potentially significant" or perhaps "observable". (San Diego Audubon Society)

Response: This requirement, and the term "significant," are based directly on the Federal NPDES regulations (40 CFR 122.26(d)(2)(iv)(B)(1). In order to be consistent with the Federal NPDES regulations, no change will be made.

Section: B **Subsection: B.2**

Comment: Strict adherence to these permit requirements will create a significantly greater risk to the environment than that posed by activities currently regulated by the RWQCB. The mandated requirement to unnaturally increase infiltration everywhere development occurs will create discharges from rising ground water, springs, crawl space pumps and footing drains. (City of Carlsbad)

Response: Nowhere does the Tentative Order mandate the unnatural acceleration of infiltration. The Tentative Order promotes the use of infiltration to offset losses of infiltration due to the creation of impervious surfaces due to development. This type of infiltration restore natural infiltration rates, as opposed exceeding natural infiltration rates.

Section: B **Subsection: B.2**

Comment: Will car dealers washing cars be allowed to continue draining to MS4?
How are cities to stop wash water from service stations from discharging to MS4? (Jim)

Response: The discharge of wash water from car dealerships and service stations into the MS4 constitutes an illicit discharge which is prohibited under the existing Order 90-42 and Tentative Order 2001-01. The Copermittees are required to address such activities under Sections F.3.c and F.5 of the Tentative Order.

Section: B **Subsection: B.2**

Comment: Is runoff from commercial parking lots which drain to MS4 prohibited? (Jim)

Response: Runoff from commercial parking lots that drain to MS4s are not prohibited, but pollutants in such non-storm water runoff must be reduced to the MEP.

Section: B **Subsection: B.2.c**

Comment: Contaminated groundwater is not allowed to be infiltrated or pumped into the MS4. Therefore, the only efficient means to dispose or treat contaminant underground water is to discharge it into the sanitary sewer system. (Metro Commission)

Response: Under the requirements of Section B.2 of the Tentative Order, after determining that groundwater in an area is a significant source of pollutants, the Copermittee is required to implement or require the implementation of BMPs that will reduce the pollutants to the MEP and include that information in a report to the SDRWQCB. Diversion to the sanitary sewer is only one option available to the Copermittees among a number of possible alternatives.

Section: B Subsection: B.2.j

Comment: Are manufactured or mitigation habitats or wetlands included in the discharge category: "Flows from riparian habitats and wetlands are prohibited only if the Copermittee identifies them as a significant source of pollution"(see section B. Prohibitions 2 j)?
What operational programs would be required to allow such wetlands or habitat to be considered a non-prohibited discharge? (City of Chula Vista)

Response: Properly designed, operated, and maintained artificial habitats or wetlands constructed for purposes of urban runoff treatment are not included in the discharge category "Flows from riparian habitats and wetlands are prohibited only if the Copermittee identifies them as a significant source of pollution" because, by definition, these are BMPs created by the Copermittees to treat urban runoff containing pollutants.

Section: B Subsection: B.2.n

Comment: In section B.2.n., include non-dechlorinated swimming pool discharges in the list to be complete. (Padre Dam Municipal Water District)

Response: The list of discharges included in Prohibition B.2 is taken directly from the Federal NPDES regulations (40 CFR 122.26(d)(2)(iv)(B)(1)). Dechlorinated swimming pool discharges are included in the list because they are generally not a significant source of pollutants. However, non-dechlorinated swimming pool discharges are not included in the list because they can be a significant source of pollutants, due to the presence of chlorine. For this reason, the list will not be changed.

Section: B Subsection: B.2.p

Comment: Individual residential car washing need not be prohibited under B 2 p because the prohibition against hosing of impervious surfaces in residential area will prohibit individual residential car washing. (City of Chula Vista)

Response: Section D.1.b.5 requires the Copermittees to prohibit the discharge of wash water from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, and residential areas. This prohibition does not require the Copermittees to prohibit these activities, only the discharge of the wash water to the MS4.

Section: B Subsection: B.3

Comment: It is not clear what constitutes a significant source of pollutants. It will be difficult for an agency to categorically determine which category will have a significant source of pollutant. Each category will be source dependent. It will be difficult to know which BMP is to be implemented before a discharge is anticipated. (City of La Mesa)

Response: The Copermittees are required to make the determination of what constitutes a significant source of pollutants with respect to the pollutants concerned, potential impact to receiving waters of the discharge of the pollutants, and the affect of the discharge of such pollutants on their compliance with Tentative Order 2001-01. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(1) places determination of what constitutes a significant source of pollutants on the Copermittees. Implementation of BMPs is the responsibility of the Copermittees. If necessary, the Copermittees can contact the SDRWQCB for guidance.

Section: B **Subsection: B.3**

Comment: What constitutes a significant source of pollutants? (City of Chula Vista)

Response: The Copermittees are required to make the determination of what constitutes a significant source of pollutants with respect to the pollutants concerned, potential impact to receiving waters of the discharge of the pollutants, and the effect of the discharge of such pollutants on their compliance with Tentative Order 2001-01. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(1) places determination of what constitutes a significant source of pollutants on the Copermittees.

Section: B **Subsection: B.3**

Comment: Can the tentative order require the Regional Board to approve BMPs submitted by the Copermittees? (Port of San Diego)

Response: It is not the SDRWQCB role to approve/disapprove submittals. However, upon review of BMPs the Copermittee will be notified if the submittal is not sufficient.

Section: B **Subsection: B.3**

Comment: Request the SDRWQCB include the definition of "significant source of pollutants" in measurable terms. (City of Imperial Beach)

Response: The Copermittees are required to make the determination of what constitutes a significant source of pollutants with respect to the pollutants concerned, potential impact to receiving waters of the discharge of the pollutants, and the affect of the discharge of such pollutants on their compliance with Tentative Order 2001-01. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(B)(1) places determination of what constitutes a significant source of pollutants on the Copermittees.

Section: B **Subsection: B.3**

Comment: Prohibition No. B.3. appears to be unnecessary, as it merely repeats what already is required pursuant to Section C of the Tentative Order. In addition, the 180 day deadline is impractical, as

the identification of non-storm water discharges and implementation of BMPs for the identified non-storm water discharges is a continuous process. (City of San Diego)

Response: Prohibition B.3 does not repeat the requirements of section C. Prohibition B.3 refers to "de minimis" non-storm water discharges only which have been found to be significant sources of pollutants. Section C of the Tentative Order refers to any discharge which causes or contributes to an exceedance of receiving water quality objectives.

In order to be consistent with extensions of the implementation deadline for the Jurisdictional Urban Runoff Management Programs, a similar extension has been provided here. See change at permit section B.3.c.

Section: B Subsection: B.3.c

Comment: Why are the Copermittees required to identify BMPs for non-storm water discharges that are not a significant source of pollutants or are not categorically prohibited? (Anonymous Workshop 2)

Response: If a non-prohibited non-storm water discharge listed in Section B.2 of the Tentative Order is determined by the Copermittee to not be a significant source of pollutants, no prohibition or BMPs are required under Tentative Order 2001-01.

Section: B Subsection: B.3.c.1

Comment: Page 9 of 50 B.3.c. (1) – How are the Copermittees to know which categories of non-storm water discharge will have a discharge and whether or not the discharge will be prohibited or not? (City of Chula Vista)

Response: The categories of discharges of non-storm water discharges listed in B.2 need only be prohibited from entering an MS4 if such categories of discharges are identified by the Copermittee as a significant source of pollutants. It is the Copermittees' responsibility to identify these discharges and determine whether they constitute a significant source of pollutants. For non-storm water discharges that are determined by the Copermittee to be a significant source of pollutants, it is the Copermittees responsibility to select and implement a BMP or other course of action to prevent the discharge of the non-storm water discharge in question. This has been a requirement under Order No. 90-42 (Section VIII. B) since July 1990.

Section: B Subsection: B.3.c.2

Comment: Page 9 of 50 B.3.c. (2) – How are the Copermittees to know which BMP is to be implemented before a discharge is anticipated (City of Chula Vista)

Response: The categories of discharges of non-storm water discharges cited in the comment (air conditioning condensation, lawn watering, [dechlorinated] swimming pool discharges, etc....) need only be prohibited from entering an MS4 if such categories of discharges are identified by the Copermittee as a

significant source of pollutants. It is the Copermittees' responsibility to identify these discharges and determine whether they constitute a significant source of pollutants. For non-storm water discharges that are determined by the Copermittee to be a significant source of pollutants, it is the Copermittees responsibility to select and implement a BMP or other course of action to prevent the discharge of the non-storm water discharge in question. This has been a requirement under Order No. 90-42 (Section VIII. B) since July 1990.

Section: B Subsection: B.4

Comment: The definition of fire-fighting flows included in the permit should be "flows necessitated by an emergency from the time of unit response until the unit is back in full service and ready for the next call." (Fire Districts Association of California)

Response: The SDRWQCB agrees that all fire service activities are important to the protection of life and property. It is possible that extensive BMP implementation could potentially impair fire service readiness in some cases. For these reasons, section B.4 of the Tentative Order will be changed. In order to allow for the discharge of non-emergency fire fighting flows to be addressed in a manner which is feasible for the fire service, section B.4 will require the Copermittees to develop and implement a program to reduce pollutants in non-fire fighting flows identified by the Copermittees to be significant sources of pollutants. This will provide the Copermittees and the fire service with the means to develop a program which will not adversely affect fire service activities. The Copermittees can work with the fire service to define fire fighting flows and non-fire fighting flows.

Section: B Subsection: B.4

Comment: Add: B.5. Vector Control: The application of pesticides and herbicides for public health protection by the local vector control agency are not prohibited. (State Department of Health Services)

Response: No provision of the Tentative Order prohibits vector control agencies from applying pesticides and herbicides for vector control purposes. However, in some cases, compliance with BMPs developed by the Copermittees may restrict or prevent such applications in order to mitigate collateral pollution associated with such applications. As discussed in Finding 36 of the revised Tentative Order, local vector control agencies are encouraged to work closely with the Copermittees in whose jurisdictions applications of pesticides or herbicides may be necessary for vector control. Sufficient provisions exist in the Jurisdictional Urban Runoff Management Program to allow collaborative development of vector control measures and BMPs that achieve meaningful vector control and compliance with Tentative Order.

Section: B Subsection: B.4

Comment: The Board should not exempt non-emergency fire fighting activities from runoff mitigation requirements and prohibitions. Non-emergency activities are not subject to the time pressures which exempt emergency flows. (Environmental Health Coalition)

Response: Comment noted.

Section: B **Subsection: B.4**

Comment: On page 9, paragraph B.4, the text exempts emergency fire fighting flows saying they do not require BMPs and need not be prohibited. We urge that this exemption be changed to say that BMPs shall be employed, except in cases where their implementation would impact effectiveness, safety, and property. (San Diego Audubon Society)

Response: Non-practice fire fighting situations are emergencies. Loss of life and property are real concerns. There are also safety concerns regarding fire fighters. Implementation of BMPs in these situations might inadvertently compromise safety or effectiveness. For these reasons, BMP implementation during emergency fire fighting activities are not required.

Section: B **Subsection: B.5**

Comment: On page 10 of 50 under B.5. The last sentence mentions discharges containing pollutants which cannot be reduced to MEP through BMPs shall be prohibited. What standard do you apply to determine MEP? Are there numeric standards? (City of Oceanside)

Response: MEP is defined in Attachment D of the Tentative Order.

Section: B **Subsection: B.5**

Comment: Prohibition B.5 also states that "[n]on-prohibited discharges listed in B.2 above which contain pollutants which cannot be reduced to the maximum extent practicable by the implementation of BMPs shall be prohibited on a categorical or case by case basis." This sentence in non-sensical. If a Copermittee applies all feasible BMPs to reduce pollutants from a certain category of discharge, it is our understanding that the MEP standard has been met, in which case the discharge would be allowed. If the MEP standards demand something over and above all feasible BMPs — which would be absurd — please identify what additional measures would be required to meet the standard. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The intent of Prohibition B.5 is to require the prohibition of the discharges listed in Prohibition B.2, if those discharges contain pollutants which cannot be reduced to insignificant levels. This requirement is found at 40 CFR 122.26(d)(2)(iv)(B)(1). The language of this requirement has been changed to clarify this intent. See change at permit section B.5.

Section: C **Subsection:**

Comment: The Permit should include measurable benchmarks in storm water permits so that success or failure can be evaluated during the permit period and ensure that corrections can be made. (San Diego Baykeeper)

Response: The Tentative Order contains measurable benchmarks in the requirements for the Copermittees to develop and implement a Jurisdictional and Watershed Urban Runoff Management Program. Some examples include successful implementation of program elements and the results of the Dry Weather Monitoring and Receiving Water Monitoring Programs. The JURMP and WURMP both require an annual assessment of the program effectiveness with respect to both program implementation and water quality monitoring results.

Section: C Subsection: C.1

Comment: Reporting of discharges causing or contributing to cause an exceedance is an important element to the successful implementation of this permit. It is critical that Copermittees are confident that good faith effort implementation and subsequent reporting of errant discharges are not viewed in a punitive nature. Section C of the Tentative Order does not address whether compliance with the prescribed procedure "immunizes" the Copermittee from future enforcement actions (NOVs, CAOs, CDOs, ACLs) should the exceedances continue after the revised URMP is implemented. The Tentative Order suggests that this may in fact be the case, since section C.3 indicates that the Regional Board will continue to have enforcement powers only "while the Copermittee prepares and implements the above report." This is a critical issue that must be clarified in the Order. (Procopio, Cory, Hargreaves, & Savitch, L.L.P., SANDAG)

Response: As noted in Section C.3, at no time is a discharger whose discharge causes or contributes to an exceedance of receiving water quality objectives or that constitutes a threat to human or environmental health "immunized" from future enforcement actions by virtue of complying with standard NPDES Permitting BMP implementation and reporting requirements. Nonetheless, cooperative, responsible actions on the part of the discharger in attempt to comply with the Order are recognized as critical to resolving violations and protecting the beneficial uses of receiving waters.

Section: C Subsection: C.2

Comment: The Copermittees should be required in the Tentative Order to ensure that all proposed project-level storm water management programs, BMPs, or Storm Water Pollution Prevention Plans are available for review and comment by the public as part of the reconfigured environmental review process before they are approved for implementation. Furthermore, all comments need to be considered by the SDRWQCB prior to its approval of the report of exceedances of Receiving Water Limitations. (Sempra Energy, Surfrider Foundation)

Response: The public has the right to comment on all discretionary activities considered by the Copermittees. Storm Water Pollution Prevention Plans (SWPPPs) on file with the SDRWQCB are available for public review and comment. Unless requested, dischargers are not required to submit

SWPPPs to the SDRWQCB, but are required to have them on-site, up to date, and ready for review at any time during business hours.

Section: C **Subsection: C.2**

Comment: Add C.2.b.: Upon determination by the facility operator, local vector control agency or SDRWQCB that a BMP is breeding vectors, the facility operator shall promptly notify and thereafter submit a report to the SDRWQCB that describes the vector control measures and/or maintenance that will be done to correct the problem. (State Department of Health Services)

Response: While the SDRWQCB's authority to require submission of technical and monitoring reports is broad enough to require municipalities to monitor and report any alteration in the environment associated with water quality control measures; it would be more appropriate for the Copermittees to develop vector monitoring and management in collaboration with vector control agencies rather than to require municipalities to report any such collateral effects of storm water management to the SDRWQCB. Regional Board staff do not recommend the proposed language be added to Section C.2.b of the Tentative Order.

Section: C **Subsection: C.2**

Comment: Mere implementation of BMPs proposed in an approved Jurisdictional URMP will not preclude liability and possible third-party enforcement actions under the Clean Water Act if receiving water limitations are not strictly met.

Any additional time period granted by the RWQCB for modifications to the URMP will not act as a stay of enforcement action. (Surfrider Foundation)

Response: Comment noted.

Section: D **Subsection:**

Comment: The permit should include language that promotes the use of low tech controls such as vegetated filter traps. (Environmental Health Coalition)

Response: Section D of the Tentative Order refers only to the requirement for each Copermittee to establish, maintain and enforce adequate legal authority to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means. As discussed in Finding 11, the Copermittees have the discretion to the use of low tech controls such as vegetated filter traps in the implementation of the Jurisdictional Urban Runoff Management Programs.

Section: D **Subsection: D.1**

Comment: Parts of Section D.1.b appear to be in conflict with Section B.2 because it does not incorporate the non-storm water discharge categories that can be approved discharges pursuant to Section B (see Section B.2.(a-q). The list of "illicit discharges" should be deleted, as it is overly prescriptive and dictates the manner in which the City is required to comply with the general objectives of the Tentative Order. In order to avoid confusion with other provisions of the Tentative Order, the introductory clause of section D.1.b. be modified, as follows: "Prohibit all identified illicit discharges not otherwise allowed pursuant to section B.2." (City of San Diego, Sempra Energy, SANDAG)

Response: The list of illicit discharges was incorporated in the Tentative Order in part to satisfy repeated requests from the Copermittees and other commentors on previous drafts of the Tentative Order for more specificity and detail in the Tentative Order. The language of the introductory clause of section D.1.b. has been modified as suggested: "Prohibit all identified illicit discharges not otherwise allowed pursuant to section B.2."

Section: D Subsection: D.1

Comment: The enforcement obligations imposed on Copermittees by this section of the Tentative Order create additional problems. First, it is not clear that the Regional Board can delegate its enforcement duties to the Copermittees, since the Clean Water Act and California Water Code designate the State, and no one else, as the entity responsible for enforcing water quality standards. There is no provision for delegating enforcement to the holders of municipal storm water permits. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: Section D.1 does not delegate the enforcement duties of the SDRWQCB to the Copermittees. This section requires to Copermittees to develop legal authority to control discharges to its MS4, as required by the Clean Water Act and the Federal NPDES regulations. Section D.1.a requires the Copermittees to control the discharges of pollutants from construction and industrial sites which are discharged to the MS4. This requirement is taken directly from the Federal NPDES regulations at 40 CFR 122.26(d)(2)(i)(A). This requirement does not require the Copermittees to enforce the General Industrial and Construction Permits, but rather requires the Copermittees to enforce their own ordinances and permits at construction and industrial sites, as required by the Federal NPDES regulations at 40 CFR 122.26(d)(2)(iv)(C)(1) and 40 CFR 122.26(d)(2)(iv)(D)(3).

Sections D.1.b - D.1.i include standard requirements for the Copermittees to obtain legal authority, as required under Federal NPdES regulations 40 CFR 122.26(d)(2)(i)(B - F).

Where section D.1.g refers to interagency agreements with other owners of the MS4, such as Caltrans and the Department of Defense, the language in this section has been modified. Rather than require interagency agreements with such agencies, the Tentative Order will encourage such agreements. See change at section D.1.g.

Section: D Subsection: D.1

Comment: Copermittees will enforce their legal authority to control discharges into and from their MS4s. (Surfrider Foundation)

Response: Comment noted.

Section: D Subsection: D.1

Comment: We are unaware of any statute or case decision giving the Regional Board authority to dictate to municipalities the form and content of their ordinances, statutes, permits and/or contracts, to do so violates California Water Code section 13360. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: California Water Code (CWC) section 13360 generally prohibits the Regional Boards from specifying the manner of compliance with state waste discharge requirements. However, CWC section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Since tentative Order No. 2001-01 is written to implement CWA requirements, it does not violate section 13360 for the SDRWQCB to require the municipalities to demonstrate that they have adequate legal authority to implement the tentative order's requirements. The legal authority requirements can be found at 40 CFR (Code of Federal Regulations) 122.26(d)(2)(i). This section states that Copermittees must demonstrate that they have adequate legal authority 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 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 non-compliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer."

Section: D Subsection: D.1.a

Comment: The Tentative Order should require an ordinance requiring that the design and construction of all proposed structural BMPS shall be coordinated with the local Mosquito or Vector Control Agency or State Department of Health Service. (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: D Subsection: D.1.b.6

Comment: D.1.b.(6). page 1; "Discharges of run off from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials. " should be revised to read "Discharges of stormwater from

storage areas that is contaminated by chemicals, fuels, grease, oil, or other hazardous materials. " (Sempra Energy)

Response: The language prohibiting illicit discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials will be retained in Section D.1.b.6 of the Tentative Order. Storage areas for chemicals, fuels, grease, oil, or hazardous materials can be the site of spills or deposition from the materials stored there. Illicit discharges from these sites are likely to convey pollutants into the MS4. MS4 discharges attributable to illicit discharges and connections from industrial sites or hazardous materials storage sites can be a significant source of pollutant loading to receiving waters. The NURP study concluded that the quality of urban runoff can be adversely impacted by illicit discharges and connections (US EPA, 1983). Furthermore, US EPA states that illicit discharges and connections result in "untreated discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, solvents, nutrients, viruses, and bacteria to receiving waterbodies. Pollutant levels from these illicit discharges have been shown in EPA studies to be high enough to significantly degrade receiving water quality and threaten aquatic wildlife and human health" (2000).

For these reasons, CWA section 402(p)(3)(B)(ii) requires each Copermittee to prohibit non-storm water discharges into its MS4. The detection and elimination of illicit discharges and connections is also clearly identified in the federal regulations as a high priority (40 CFR 122.26(d)(2)(iv)(B) and 122.26(d)(2)(iv)(B)(1)). As guidance for detecting and eliminating illicit discharges and connections, the US EPA suggests "The proposed management program must include a description of inspection procedures, orders, ordinances, and other legal authorities necessary to prevent illicit discharges to the MS4" (1992). Furthermore, the Water Quality Control Plan for the San Diego Basin Waste Discharge Prohibition 8 states "Any discharge to a storm water conveyance system that is not entirely composed of 'storm water' is prohibited unless authorized by the Regional Board."

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.5.d in Order No. 2001-01 under the broad and specific legal authority cited above.

Section: D Subsection: D.1.g

Comment: The order illegally requires the County to enter into agreements with third party dischargers such as Caltrans or the Department of Defense. The RWQCB has no authority to direct Copermittees to enter into "interagency agreements" of any kind with Copermittees or third parties. "Ordering" the County to make contracts cannot compel third parties to be reasonable. Moreover, even if all third parties were motivated and reasonable, entering into these agreements would be a daunting task. In addition to Caltrans and the Department of Defense, other "owners of the MS4" (as MS4 is defined by the Order) could include school districts, flood control authorities, Indian nations, any owner of property through which a stream flows, and any developer or homeowner's association with privately owned utility infrastructure. (County of San Diego, Procopio, Cory, Hargreaves, & Savitch)

Response: The intent of section D.1.g was for the Copermittees to form interagency agreements among themselves, while other interagency agreements were to be encouraged. In order to clarify this intent, the Tentative Order will be modified.

See change at permit section D.1.g.

Section: D **Subsection: D.1.g**

Comment: Section D.l.g. - How will the RWQCB enforce Tentative Order 2001-001 if it conflicts with Caltrans' NPDES permit? (City of Coronado)

Response: We do not anticipate conflicts arising between Tentative Order 2001-001 and Order No. 99-06-DWQ, NPDES No. CAS000003, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the State of California, Department of Transportation (Caltrans). Order No. 99-06-DWQ applies to construction activities and maintenance from all Caltrans highways, properties, activities and facilities throughout the State and applies to Caltrans and/or their contractors. Tentative Order No. 2001-001 applies to discharges into Municipal Separate Storm Sewer Systems. In the event that the requirements of Order No. 99-06-DWQ are in conflict with Tentative Order No. 2001-001 the SDRWQCB will conduct a thorough evaluation of individual conflicts and determine which requirement will prevail.

Section: D **Subsection: D.1.g**

Comment: Since required interagency agreements may not be consummated with agencies not subject to state or federal law (e.g. Native American Tribes and Mexico) language should be included that states that such agreements should be pursued. (Environmental Health Coalition)

Response: Where section D.1.g refers to interagency agreements with other owners of the MS4, such as Caltrans and the Department of Defense, the language in this section has been modified. Rather than require interagency agreements with such agencies, the Tentative Order will encourage such agreements.

See change at section D.1.g.

Section: D **Subsection: D.1.g**

Comment: Page 11 of 50 D.1.g. – What kind of interagency agreements is required among the Copermittees and other owners that share the same Municipal Separate Storm Sewer System (MS4)? (City of Chula Vista)

Response: Tentative Order 2001-01 requires that the Copermittees "control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Copermittees (and other owners of the MS4 such as Caltrans or Department of Defense)." The nature and terms of the agreements are the responsibility of the Copermittees as operators of the MS4s to determine.

The Copermittees of a shared MS4 must demonstrate that together they can control the contribution of pollutants over the whole shared MS4. To this effect, the US EPA states “When two or more municipalities submit a joint application, each coapplicant must demonstrate that it individually possesses adequate legal authority over the entire municipal system it operates and owns. A coapplicant need not fulfill every component of legal authority specified in the regulations, as long as the combined legal

authority of all coapplicants satisfies the regulatory criteria for every segment of the MS4 (including authority over all sources that discharge to the MS4). […] Coapplicants also may use interjurisdictional agreements to show legal authority and to ensure planning, coordination, and the sharing of the resource burden of permit compliance" (1992).

Section: D Subsection: D.1.h

Comment: City must adopt and implement legal authority to enforce the requirements of the Tentative Order. (City of Chula Vista)

Response: The Copermittees' ability to determine compliance and noncompliance with permit conditions is critical to control pollutant discharges to and from MS4s. Determination of compliance and noncompliance allows for significant sources of pollutants to be identified and addressed, thereby minimizing the discharge of pollutants from the MS4 and the resulting receiving water quality degradation. For this reason each Copermittee must have legal authority to carry out the inspections, surveillance, and monitoring necessary to assess compliance. Regarding compliance determination, US EPA states "municipalities should provide documentation of their authority to enter, sample, inspect, review, and copy records, etc., as well as demonstrate their authority to require regular reports" (1992). The SDRWQCB has discretion to require Legal Authority item D.1.g in Order No. 2001-01 under the broad legal authority cited above.

Section: D Subsection: D.1.h

Comment: Section D.1.h, set forth on page 12 of the Tentative Order, requires that Copermittees pass ordinances giving them the power to "enter, sample, inspect, review and copy records, and require regular reports from industrial facilities discharging into its MS4, including construction sites . . ." Such ordinances, if adopted by a Copermittee, would be ripe for constitutional challenge by the regulated community. It is by no means clear that municipalities could impart to themselves the search and seizure powers prescribed in the above-quoted language. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: Local governments, like state and federal governments, are precluded from unreasonable searches for and seizure of evidence, and, absent extraordinarily exigent circumstances, must obtain warrants before inspecting private property to enforce local ordinances. Nevertheless, it is common governmental practice to require persons who must obtain governmental authorization for their activities, or whose activities are subject to governmental regulation, to consent to reasonable inspection by the regulatory officials of the government. Thus, persons who discharge waste that could affect the quality of the waters of the state are required as a condition of their waste discharge requirements to allow inspection and sampling by the Regional Board. Similarly, local governments regulate development, construction, and industrial and commercial uses of property within their jurisdiction. Commercial food service establishments are subject to inspection by local health officials as a routine matter and construction sites are visited by building inspectors. Municipalities are required by federal NPDES regulations to have or develop legal authority to implement regulatory programs needed to reduce the discharge of pollutants to MS4, including the authority to inspect sources of pollutants that are discharged to MS4. Given the routine nature of local governmental inspections to enforce local health and building ordinances, it is not unreasonable to expect municipalities to provide authority for such inspections as

may be necessary to reduce pollutants in MS4 by the consent of persons subject to the municipalities' regulatory authority.

Section: D Subsection: D.1.h

Comment: Copermittees should be encouraged to develop effective systems of record keeping to track chronic violators of local discharge prohibitions. All enforcement records must be made available to the public upon request. (Surfrider Foundation)

Response: SDRWQCB encourages the public disclosure of such information. However, in order to provide the greatest amount of flexibility to the Permittees, the Tentative Order will not specifically require any procedure for making such information available to the public. It should be noted that such information is provided to the SDRWQCB in Annual Reports, which are available for public review.

Section: D Subsection: D.1.i

Comment: Add: Require the use of BMPs to prevent or reduce the discharge of pollutants to MS4s, without creation of mosquito and disease vectors. (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: D Subsection: D.2

Comment: The Regional Board has no legal right to demand a statement certifying that the Copermittee "has adequate legal authority to implement and enforce" each of the requirements of the Order as described in section D.2. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The SDRWQCB is justified in requiring the Copermittees to submit a certified statement of adequate legal authority. California Water Code section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Tentative Order No. 2001-01 is written to implement CWA requirements, therefore the SDRWQCB can require the municipalities to demonstrate that they have adequate legal authority to implement the tentative order's requirements. The legal authority requirements can be found at 40 CFR (Code of Federal Regulations) 122.26(d)(2)(i). This section states that Copermittees must demonstrate that they "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 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 non-compliance with permit conditions including the prohibition on illicit discharges to the municipal separate storm sewer."

Section: D Subsection: D.2

Comment: Legal authority certification, Section D.2, should be made consistent with 40 CFR 122.26(d)(2)(1). (Port of San Diego)

Response: Section D.2 of the revised Tentative Order is consistent with 40 CFR 122.26(d)(2)(1). Section D.2 requires each Copermittees' chief legal counsel certify and submit to the SDRWQCB a statement that the Copermittee has adequate legal authority to implement and enforce each of the requirements of the 40 CFR 122.26 (d)(2)(I)(A-F) and the Tentative Order. This is not a certification of the Jurisdictional Urban Runoff Management Program itself.

Section: E Subsection: E

Comment: Clarify which BMPs are approved by the SDRWQCB and under what field conditions are they to be used? Are the Copermittees expected to develop implementation manuals for "unproven" BMPs that will work in the San Diego region, or will SDRWQCB provide reference to existing approved sources? (City of Chula Vista)

Response: In order to provide the Copermittees with flexibility and discretion, under Tentative Order the Copermittees will specify which BMPs they will implement or require to be implemented to reduce pollutants in urban runoff discharges to the MEP. A list and description of these minimum BMPs and how they shall be implemented shall be described in the appropriate sections of the Jurisdictional Urban Runoff Management Program (JURMP) Documents and Annual Reports, subject to review and comment by the SDRWQCB. The SDRWQCB does not "approve" BMPs, but will review and provide comment on each JURMP Document and Annual Report. The Copermittees are not expected to develop implementation manuals for unproven BMPs unless they decide such an activity is necessary to meet MEP.

Section: E Subsection: E

Comment: why does the order require the Copermittee to ensure that the pollutants in the runoff is reduced to the MEP standard but requires construction and industrial permitted dischargers to meet BAT/BCT standards. Does that mean the municipality have to provide additional treatment to discharges from construction and industrial permitted sites? (City of Oceanside)

Response: Pollutant discharges in storm water to and from MS4s are held to applicable technology based standards. Storm water discharges to the MS4 from industrial and construction activities owned by the Copermittee, which fall under the general statewide industrial and construction storm water permits,

must meet the BAT/BCT performance standard per permit requirements. This BAT/BCT performance standard is required in CWA section 301(b)(2), and is further described in CWA sections 304(b)(2-4).

Pollutant discharges in storm water to and from the MS4 for all other urban land use activities, including industrial and construction activities not covered under the Statewide General Industrial and Construction Permits, must be reduced to the maximum extent practicable. CWA section 402(p)(3)(B)(iii) and Federal NPDES regulation 40 CFR 122.26 (d)(2)(iv) require pollutant discharges in urban runoff discharged from MS4s to be reduced to the maximum extent practicable.

Since discharges which enter the MS4 are generally discharged unimpeded directly into receiving waters, the maximum extent practicable standard is to apply to both discharges into and from MS4s. Federal NPDES regulations clearly provide the SDRWQCB with the legal authority to require municipalities to control discharges from third parties into their MS4. 40 CFR 122.26(d)(2)(iv)(A - D) require municipalities to implement controls to reduce pollutants in urban runoff from commercial, residential, industrial, and construction land uses or activities to the maximum extent practicable. Federal NPDES regulations 40 CFR 122.26(d)(2)(i)(A - D) require municipalities to have legal authority to control various discharges to their MS4. This concept is further supported in the Preamble to the Phase II Final Rule NPDES storm water regulations, which states "The operators of regulated small MS4s cannot passively receive and discharge pollutants from third parties" (US EPA, 1999). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule findings for small municipalities are also applicable to larger municipalities such as the Copermittees. Finally, underlying the Federal NPDES storm water regulations is the Clean Water Act, which states in section 402(p)(3)(B)(ii) that municipalities shall "effectively prohibit non-stormwater discharges into the storm sewers."

The requirement for municipal storm water dischargers to have, and exercise, local governmental authority in order to comply with water quality control obligations is analogous to the requirement for Publicly Owned Treatment Works to have and exercise legal authority to require pretreatment of industrial wastes being discharged to their sewage collections systems (CWA 402(b)(8)).

The SDRWQCB has discretion to require Technology Based Standards item E. in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F Subsection:

Comment: Implementation of the Jurisdictional URMP will take longer than the time allowed in the permit. (Procopio, Cory, Hargreaves, & Savitch, County of San Diego, Carlsbad)

Response: The implementation schedule for the Jurisdiction Urban Runoff Management Program, excluding Section F.1, has been extended in the revised Tentative Order from 180 days to 365 days.

Section: F Subsection:

Comment: In Section F, add suggestions for information sharing among Copermittees such as, a jointly managed website, establishment of information-exchange programs and coordinated educational efforts. (Environmental Health Coalition)

Response: The Copermittees are encouraged in the Tentative Order to collaborate in the development and implementation of their Urban Runoff Management Programs. The manner in which the Copermittees share or exchange information is left to their discretion in order to provide flexibility in implementing the requirements of the Tentative Order.

Section: F **Subsection:**

Comment: Jurisdictional URMP (Section F.). Section F, found at page 13 of the Tentative Order, describes generally the Jurisdictional URMP that is required under the Order. Please describe what guidance and assistance the Regional Board will be providing to Copermittees as they attempt to develop their URMPs. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: Since the adoption of Order 90-42, the SDRWQCB staff has worked with the Permittees to provide guidance and assistance in the form of correspondence, written comments on proposed management measures, attendance at watershed stakeholder group meetings, and significant meeting time with Copermittees. The SDRWQCB is currently hiring staff to fill vacancies from budget augmentations in several programs, including storm water. Staff assigned to work in storm water will assist in the effective implementation of Order No. 2001-001 as previously under Order 90-42. Increased staff will provide dischargers more resources to assist in achieving compliance with Order No. 2001-001. However, we do not anticipate a significant shift in the balance between compliance assurance (enforcement) and assistance.

Section: F.1 **Subsection:**

Comment: Copermittees should be encouraged to develop and implement impervious surface cover limits (expressed as % of development) for new development and include such standards in their substantive planning documents. (Surfrider Foundation, San Diego Baykeeper)

Response: The Tentative Order requires that Copermittees consider the level of imperviousness within their jurisdictions and watersheds. For example, Finding 5 discusses the impacts to receiving water quality resulting from increases in imperviousness. Sections F.1.a.1, F.1.b.1.b, and F.1.b.2.b.v all require the Copermittees to address increased imperviousness in their planning processes. Through these requirements, the concept of impervious surface cover limits is encouraged. While the SDRWQCB encourages impervious surface cover limits, the Tentative Order has been written to provide the Copermittees with discretion in how they address increases in impervious surfaces.

Section: F.1 **Subsection:**

Comment: Not enough time is allotted for the revision of the General Plan Amendments as required in the Jurisdictional Urban Runoff Management Plan. Allow co-permittees to submit workplans for revision of General Plans. Need more time. (City of San Diego, County of San Diego, Chula Vista)

Response: In order to provide the Copermittees with flexibility in amending their General Plans, they will be allowed to submit a workplan, including time schedule, for their General Plan amendments. The workplan will be due with the Jurisdictional Urban Runoff Management Program document.

See change at permit section F.1.a.

Section: F.1 Subsection:

Comment: It's time that we raise the bar in the way that we deal with storm water. It's not changed in 100
years: gutter, pipe, culvert, channel. We have the intellect and creativity and financial resources to solve the problem. It's important that we accept the challenge, and I would like to add to that, this argument is not dissimilar from that prior to -- by the building industry prior to the implementation of the Americans with Disabilities Act, ADA. The sky was falling. It was going to cost hundreds of thousands of jobs. (Tuchscher Development Enterprises)

Response: Comment noted.

Section: F.1 Subsection:

Comment: Reference economics, our project-specific analysis and projects that we've actually planned have
proven that to implement best management practices, they're actually less expensive by about 30 percent. Concrete is very, very expensive. There is a maintenance cost. Vegetated infiltration basins, biofilter systems do cost money to maintain on a semi-annual basis, or an annual basis. But there are vehicles available to put in place -- financial vehicles that can allow for that maintenance to happen in the form of landscape maintenance districts, community facilities districts, or property owner associations. What we need to do is move from a purely mechanical hardware system of dealing with storm water to a hardware and software system, and that includes some of those maintenance elements. What we found is that when you do that, you end up with a financial wash. (Tuchscher Development Enterprises)

Response: Comment noted.

Section: F.1 Subsection:

Comment: The Order attempts to grant to the Regional Board comprehensive land use planning authority when the authority currently resides exclusively in the municipalities. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The Tentative Order does not attempt to provide the SDRWQCB with land use authority. The Tentative Order does not restrict the location or type of development. This authority resides with the

Copermittees. The Tentative Order merely requires that developments within the Copermittees' jurisdictions consider water quality, and implement measures as necessary to achieve receiving water quality standards.

Section: F.1 Subsection:

Comment: In the area of zoning and building codes, currently in most all jurisdictions in dealing with storm water management, the codes cause the developer to build in a way that -- the city has or jurisdiction has standards, and those usually include gutters, pipe, culvert, and channel, concrete structures. Current codes do not allow developers to do the right thing without taking on additional discretionary political risk. What developers need really is predictability, and developers currently cannot afford to challenge staff or propose change in code or deviation from city or county standards that requires further discretionary political approval. The storm water management permit that you are considering will bring new regulations and cause new codes to change and allow, frankly, the right thing to be done for those of us that wish to do it. (Tuchscher Development Enterprises)

Response: Comment noted.

Section: F.1 Subsection:

Comment: One last area, land area. San Diego as far back as the Nolan Plan in 1908 decided from its general plan standpoint to preserve canyons, valleys, drainage basins and build on hilltops and mesas. What's interesting about that is when you compare it to the European model, all of those towns were built in the valleys, the canyons and not on the hilltops. We did that for a number of reasons, but, importantly, it was an environmental orientation. And our current planning efforts and the way that our planning has evolved still does that. What that means is that suburban projects usually have 30 to 70 percent open space and, frankly, plenty of room to put in place the infiltration basins and the BMPs that are being looked at now. Urban development is a different challenge, but the technology exists. To deal with this matter, in fact, Supervisor Roberts who testified earlier this morning in a previous life was an architect and designed a premiere example of a commercial application of BMPs in Davis, California, one of the few jurisdictions in California that allow those types of things to occur. It was about 20 years ago, but he was a leader in this effort. And the ballpark district downtown uses BMPs and, quite frankly, simply because they can. It's possible and economically viable. (Tuchscher Development Enterprises)

Response: Comment noted.

Section: F.1 Subsection: F.1

Comment: F.1.a.(4) "Limit disturbances of natural water bodies and natural drainage systems caused by development including roads, highways, and bridges."

F.1.a.(5) "Prior to making land use decisions, utilize methods available to estimate increases in pollutant loads and flows resulting from projected future development. Require incorporation of structural and non-structural BMPs to mitigate the projected increases in pollutant loads and flows."

F.1.a.(6) "Avoid development of areas that are particularly susceptible to erosion and sediment loss; or establish development guidance that identifies these areas and protects them from erosion and sediment loss."

F.1.a.(7) "Reduce pollutants associated with vehicles and increasing traffic from development. Coordinate local traffic management efforts with the San Diego County Congestion Management Plan."

F.1.a.(8) "Implement the San Diego Association of Governments (SANDAG's) recommendations as found in the Water Quality Element of its Regional Growth Management Strategy."

13. All of the above is inappropriate content for a GP, especially given that it is another agency's document, and this is no legal or practical basis to include the same in a GP. This requirement would give SANDAG a greater role in land use planning than is provided by state law. (County of San Diego)

Response: The Tentative Order has been changed to allow the Copermittees discretion in determining the contents of their General Plans with regards to urban runoff.

Section: F.1 Subsection: F.1

Comment: F.1. "Land Use Planning for New Development and Redevelopment Program"

1. Inadequacy of legal authorities cited. The Technical Report states ("Broad Legal Authority," p. 87) that the RWQCB possesses the authority to prescribe the conditions of section F.1. under the following broad legal authorities: Clean Water Act ("CWA") sections 402(p)(3)(B)(ii-iii), California Water Code ("CWC") section 13377, and Federal EPA NPDES regulations at 40 CFR § 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR § 122.26(d)(2)(iv). The County disagrees with staff's contention that the sections cited above provide the blanket authority claimed by staff to prescribe the detailed programs in section F.1. A discussion of the County's position on the relevancy of these authorities is provided in section O of the County's comments.

Under Broad Legal Authority (page 87), the Technical Report states that "40 CFR 122.26(d)(2)(iv)(A)(2) generally applies to all directives under Jurisdictional Urban Runoff Management Program item F.1." This section reads as follows: "122.26(d)(2)(iv)(A)(2). [The applicant must include 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 plans shall address controls to reduce pollutants in discharges from municipal separate storm sewers after construction is completed."

The County agrees that 40 CFR § 122.26(d)(2)(iv)(A)(2) generally applies to section F.1., but it disagrees that the regulation provides any authority for the specific details of this section. 40 CFR § 122.26(d)(2)(iv)(A)(2) generally discusses a program to reduce discharges of pollutants from Copermittee MS4s. While it is arguably not possible to effectively reduce such discharges without addressing the facilities that discharge to our MS4, this section in no way establishes even limited authority for the RWQCB to prescribe any conditions of the programs that Copermittees may establish to do so.

Moreover, that the Tentative Order may only regulate discharges "from" MS4s is clear from the language of the CWA itself, "Permits for Discharges from Municipal Storm Sewers." (3 U.S.C. § 1342(p)(3)B).) (County of San Diego)

Response: The SDRWQCB has authority to regulate discharges of waste that could affect the quality of the waters of the state by the issuance and enforcement of waste discharge requirements that will ensure attainment of water quality consistent with the water quality objectives established in the basin plan. While the SDRWQCB should not interfere in land use planning by local governments, it may properly require municipalities to consider the water quality consequences of land use decisions involving development projects and construction, and to exercise local government authority to ensure that the consequences of land use and planning decisions will not cause or contribute to the threat of pollution in waters of the state associated with discharges of pollutants in MS4. Failure to exercise local authority over land use, development, construction, and other sources of pollutants in the MS4 will subject municipalities to liability for failure to reduce pollutants in the MS4 to MEP.

Section: F.1 Subsection: F.1

Comment: Inadequacy of the Fact Sheet / Technical Report (Technical Report) The Technical Report (pp. 86-103) fails to provide adequate justification for, and analysis and explanation of, most of the significant new programs and activities proposed in section F.1. Examples of significant issues not addressed include but are not limited to:

Requirements applicable to all development projects. Section F.1. imposes significant new requirements on all development projects, and arguably sets the same high standard of compliance for single family homes that it does for each of the "high priority" SUSMP categories. No explanation or evidence of any kind is provided for application of the exact same one-size-fits-all standard. (County of San Diego)

Response: Section F.1 of the Tentative Order has been modified. Requirements applicable to all development projects have been modified to ensure applicability. See change at permit section F.1.

Section: F.1 Subsection: F.1.a

Comment: The General Plan should be used for general planning and not for site specific planning. It is not appropriate to assume pollutant source controls and treatment are needed for each specific project. They may be needed on an individual site to meet water quality requirements, but that decision should be made at the detailed plan review stage, not as a general plan requirement. (Building Industry Association of Southern CA)

Response: The Tentative Order has been changed to allow the Copermittees discretion in determining the contents of their General Plans with regards to urban runoff.

Section: F.1 Subsection: F.1.a

Comment: At F.1.a, the Tentative Order requires that Copermittees revise their respective General Plans so that land use decisions will be made in a manner consistent with water quality objectives. Again, however, the Regional Board has no authority to direct municipalities on matters of land use planning; and it certainly cannot dictate how and when and in what way a municipality revises its General Plan. Further, the Government Code, not the Water Code, regulates General Plan amendments and may preclude the very kinds of revisions demanded by the Tentative Order. (For example, the Government Code requires that the land use and circulation elements of a General Plan be coordinated, which often means that new roads must be constructed to serve new development. This will almost guarantee an increase in impervious surfaces, which the Order tries to prohibit.) (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The SDRWQCB has the legal authority to require the Copermittees' General Plans to include considerations of the water quality impacts caused by urban runoff. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) provides that Copermittees develop and implement a proposed management program which is to include "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."

USEPA states that the Copermittee "must thoroughly describe how the municipality's comprehensive plan is compatible with the storm water regulations" (USEPA, 1992). To achieve this, the Copermittee shall incorporate water quality and watershed protection principles and policies into its General Plan (or equivalent plan). USEPA supports addressing urban runoff problems in General Plans (or equivalent plans) when it states "Runoff problems can be addressed efficiently with sound planning procedures. Master Plans, Comprehensive Plans, and zoning ordinances can promote improved water quality by guiding the growth of a community away from sensitive areas and by restricting certain types of growth (industrial, for example) to areas that can support it without compromising water quality" (USEPA, 2000).

While the SDRWQCB has the legal authority to require the Copermittees' General Plans to include considerations of the water quality impacts caused by urban runoff, the Tentative Order has been modified to provide the Copermittees with more discretion regarding the General Plans' contents. The Tentative Order has been revised to include examples of the types of principles and policies which should be in a General Plan, instead of specific requirements. In addition, the Copermittees will be allowed to develop their own work plan and time schedule for any changes to their General Plans they find necessary. See change at permit section F.1.a.

Section: F.1 Subsection: F.1.a

Comment: Page 13, Section F.1.a Revise General Plan -Please clarify language to ensure that in addition to General Plan Revisions, the co-permittees, where applicable, should be required to amend the Local Coastal Programs to include nonpoint source management measures for controlling and reducing stormwater and non-stormwater runoff. (Surfers Tired of Pollution)

Response: While the SDRWQCB agrees that it may be beneficial to include urban runoff considerations in Local Coastal Programs, this issue is at the discretion of the Copermittees.

Section: F.1 **Subsection: F.1.a**

Comment: Page 14, after F. 1. a. (5), add:
(6) Ensure that all structural BMPS are designed in a manner that will prevent breeding of mosquitoes. (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: F.1 **Subsection: F.1.a**

Comment: Copermittees should be encouraged to make water quality protection a priority as compared to other non-environmental and non-public health related goals noted in planning documents. (Surfrider Foundation)

Response: The Tentative Order encourages the consideration of water quality in planing documents. The Tentative Order requires water quality and watershed protection principles and policies be included in the Copermittees' General Plans. The Copermittees are also required to modify development project approval processes to account for water quality.

Section: F.1 **Subsection: F.1.a**

Comment: It is contrary to state law, and the SDRWQCB lacks the legal authority, for the Tentative Order to specify what the Copermittees must include in their General Plan. Except where expressly provided by statute, the preparation of a General Plan ("GP") is a local matter. (Gov. Code sections 65300.7, 65300.9). The SDRWQCB may not dictate GP provisions, principles, or policies. State law provides that the inclusion of provisions in a GP concerning "prevention and control of the pollution of streams and other waters" is optional. The RWQCB cannot contradict the Government Code by making such provisions mandatory. At most, the Tentative Order should provide examples of certain objectives or categories of measures, but allow the Copermittees the necessary flexibility to determine what shall be included in their General Plans for purposes of complying with Tentative Order. Because the General Plan provision specifies in detail the manner in which the Copermittees must comply with the general objectives of the Tentative Order, it is inconsistent with Cal. Water Code § 13360(a). (County of San Diego, City of San Diego, La Mesa)

Response: The Tentative Order has been changed to allow the Copermittees discretion in determining the contents of their General Plans with regards to urban runoff.

Section: F.1 Subsection: F.1.a.1

Comment: How is the term "minimized" evaluated and enforced? (City of Carlsbad)

Response: The Regional Board may review at any time the proactive actions taken by the Copermittee to decrease to the least possible amount (e.g. minimize) impacts from storm water runoff to any given receiving water by new development and redevelopment. The Regional Board may at any time review revisions to the Copermittee's General Plan, Project approval process, and Environmental Review Process including their CEQA checklist to determine if the conditions require project proponents to decrease to the least possible amount impervious land coverage, slow runoff, and where feasible maximize opportunities for infiltration of rainwater into soil. The Regional Board may review at any time a Copermittee's Standard Urban Storm Water Mitigation Plan (SUSMP) to determine if it includes source control BMPs and pollution prevention measures to reduce to the lease possible amount pollutants of concern from reaching receiving water bodies and directly connected impervious areas. The Regional Board may review at any time the construction component of its Jurisdictional Urban Runoff Management Plan to determine if the approval process for local grading and construction permits include conditions which require project proponents to reduce to the least possible amount: 1) areas that are cleared and graded to only the portion of a site that is necessary for construction, and 2) the exposure time of disturbed soil areas. The Regional Board may review at any time the Copermittee's educational program for its 1) Planning and Development Review Staffs and Inspectors, and 2) Construction, Building, and Grading Staffs and Inspectors to determine if they understand how impacts to receiving water quality resulting from development and construction (respectively) can be reduced to the least possible amount through implementation of various source control and structural BMPs.

The Regional Board will enforce these requirements through its review of the required plans mentioned above and inspection of sites with violations of the requirement to reduce to the least possible amount (e.g. minimize) impacts to receiving waters from storm water runoff.

Section: F.1 Subsection: F.1.a.2

Comment: The use of detention basins and infiltration should be encouraged only if cost effective and feasible. (City of Poway)

Response: Tentative Order section F.1.a.2 refers to BMP implementation at new development sites during the planning phase. Implementation of BMPs for new development during the planning phase is the most cost effective approach. USEPA states: "Many studies indicate that prior planning and design for the minimization of pollutants in post-construction storm water discharges is the most cost-effective approach to storm water quality management" (USEPA, 2000). In addition, the SDRWQCB has calculated that implementation of structural treatment BMPs which meet numeric sizing criteria constitutes less than 1% of total project costs. The SWRCB has found that such costs are reasonable (SWRCB, 2000a). Therefore, the requirement for BMP implementation in F.1.a.2 is appropriate.

Section: F.1 Subsection: F.1.a.2

Comment: F.1.a.(2) The requirements of this section are unsubstantiated. This should be deleted entirely or moved to the Technical Report as suggested guidance, as it is not supported by the findings, and as there is no evidence in the record to support its inclusion. (County of San Diego)

Response: The Tentative Order has been changed to allow the Copermittees discretion in determining the contents of their General Plans with regards to urban runoff.

Section: F.1 Subsection: F.1.a.3

Comment: F.1.a.(3) "Preserve, and where possible, create or restore areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones. Encourage land acquisition of such areas."

12. The County supports the inclusion of this section only as suggested guidance. The RWQCB is a water quality regulatory agency and has only the authority specifically provided in state law. The RWQCB may not dictate habitat-related GP requirements to the County or dictate that land acquisitions be a preferred strategy for pursuing any goal. However, the County has a longstanding commitment to land acquisition, to protect habitat, and will continue those policies. (County of San Diego)

Response: The Tentative Order has been changed to allow the Copermittees discretion in determining the contents of their General Plans with regards to urban runoff.

Section: F.1 Subsection: F.1.a.3

Comment: Encourage land acquisition by who and how is this determined? (City of Carlsbad)

Response: Encouragement of land acquisition can be a significant means for protecting water quality. For example, acquisition of land adjacent to a receiving water can be a preventive measure which ensures that future pollutants sources will not be created on the land. This tactic is frequently used by water agencies to protect the water quality of drinking water reservoirs. Environmental and other interest groups also frequently use this method to preserve receiving waters. Municipalities may also be interested in protecting their riparian corridors and wetlands.

Section: F.1 Subsection: F.1.a.4

Comment: F.1. (a) (4) The statement to limit disturbance of natural water bodies could be used by third parties
as an arbitrary justification to prevent project development. Other environmental processes already address the issue of wetland impacts and mitigation. (SANDAG)

Response: Limiting disturbance of natural water bodies does not constitute prevention of project development.

Section: F.1 Subsection: F.1.a.5

Comment: Section F.1.a (5): What level of mitigation is required? (City of Chula Vista)

Response: The Copermittees have the responsibility of determining anticipated pollutant loading and planning BMP implementation that will minimize pollutant discharge in urban runoff to the MEP.

Section: F.1 Subsection: F.1.a.6

Comment: 15. F.1. (a) (6) The San Diego region has a significant presence of soil that is erosive. The purpose of this permit is to allow development in the region by utilizing Best Available Technology to eliminate adverse impacts to the waters of the U.S. This element could be used by third parties as justification to prevent project development. (SANDAG)

Response: Section F.1.a.6 comes directly from SANDAG's Water Quality Element - Regional Growth Management Strategy. It in no way requires the prevention of project development; instead, it says that development of such highly erodable areas should be avoided and/or that guidance should be developed to prevent erosion of such areas.

Section: F.1 Subsection: F.1.a.7

Comment: Section F.1.a.7 "Reduce pollutants associated with vehicles" is a requirement best handled by a system similar to the smog test where a vehicle would be tested for leaks on an biannual basis. It is unfair to hold cities responsible for pollutant sources that they cannot control. Street sweeping is the BMP of choice for maintaining streets but it is ineffective for oils. This problem should be handled at the state level through inspections instead of requiring cities to install expensive filters throughout their system. (City of Oceanside)

Response: The Tentative Order has been changed to allow the Copermittees discretion in determining the contents of their General Plans with regards to urban runoff. The revised Section F.1.a.7 contains examples which the Copermittees may implement at their discretion.

Specifically, the Copermittees shall under Section F.1.a.7 may include in their General Plan, measures that "Reduce pollutants associated with vehicles and increasing traffic resulting from development." Vehicles are the source of numerous pollutants apart from smog or apparent leaks. With respect to Finding 16 and Section F.1.a.7, requiring the design and construction of parking and traffic facilities in such a way as to reduce the discharge in urban runoff of pollutants deposited from vehicles is a reasonable and necessary requirement of Copermitteesunder their land-use permitting authority. While this problem can and is to some degree addressed at the state level through inspections and vehicle registration requirements, the Copermittees have the discretion to also address this source of pollutants in their Jurisdictional Urban Runoff Management Programs.

Section: F.1 Subsection: F.1.a.7

Comment: Reduce pollutants associated with vehicles … This clause is overly broad, vague, open to interpretation, and generally beyond the authority of the RWQCB. It should be removed. (Industrial Environmental Association)

Response: SDRWQCB believes that the sentence clearly states the objective. The objective is to protect water quality from the pollutant deposition caused by the combustion of fossil fuels. Where water quality is affected, the issue is most certainly within the authority of the SDRWQCB.

Section: F.1 Subsection: F.1.a.8

Comment: Implement the SANDAG recommendations as found in the Water Quality Element of its Regional Growth Management Strategy. This Strategy was not part of the original permit, nor was a copy incorporated in the permit. Comments cannot be made as to how it relates to the permit. This section should be deleted until such time as the plan can be provided and appropriate comment period set. (Industrial Environmental Association)

Response: SANDAG's Water Quality Element of its Regional Growth Management Strategy has been and is available from SANDAG and the SDRWQCB.

Section: F.1 Subsection: F.1.a.9

Comment: F.I.(a)(9) This element has been stated before within this document in various locations, A.4.
Prohibitions-Discharges, for example. There is no need to repeat the same text. (SANDAG)

Response: Certain requirements are repeated in the Tentative Order to ensure that impacts from urban runoff are considered during various stages of the municipalities' planning processes.

Section: F.1 Subsection: F.1.a.9

Comment: F. 1.a.(9) page 14 "For new development and significant redevelopment only: ... This section needs to be revised to clarify that it applies solely to specific Priority Development Project Categories. (Sempra Energy)

Response: The Tentative Order has been changed to allow the Copermittees discretion in determining the contents of their General Plans with regards to urban runoff.

Section: F.1 Subsection: F.1.a.9

Comment: Drainage law in California has developed from a number of court cases. The results generally have been an "upstream" property owner has a right to reasonably develop his property and the

"downstream" owner has an obligation to receive the increased runoff. Section F.1.a.9 appears to change what case law has developed. Is this the intent and can this be done? (Bras, Charles)

Response: The language in section F.1.a.9 of the Tentative Order regarding peak flow rates and velocities has been removed. Control of peak flow rates and velocities shall instead apply only to SUSMP priority development projects. The requirements regarding the control of peak flow rates and velocities do not infringe on a property owners' rights to develop. Nor do they infringe on property owners' alleged right to discharge greater volumes of water from a development than were discharged prior to development. Rather they ensure that a property owner's development does not result in increases in peak flow rates which may cause or contribute to an excursion above receiving water quality standards (such as impairment of beneficial uses). Control of peak flow rate increases resulting from development is necessary; as USEPA states "In may cases the impacts on receiving waters due to changes in hydrology can be more significant than those attributable to the contaminants found in storm water runoff" (USEPA, 1999a). Furthermore, the SWRCB has found in Order WQ 2000-11 that control of peak flow rate increases resulting from SUSMP priority development projects is appropriate.

Section: F.1 Subsection: F.1.b

Comment: A process to prioritize development projects and subsequent control strategies has not been followed by the RWQCB and is not provided to the Copermittees. Section F.1.b. requires that all development projects be required to implement all of the minimum BMPs listed in section F.1.b.(1). While the County agrees that all categories of projects should initially be evaluated in determining program priorities and requirements, we also believe that to effectively manage our water quality programs, by law, we must be allowed the flexibility to determine which types of projects we will address and how we will do so.

Section F.1. still restricts the ability of Copermittees to prioritize their control strategies in two important ways. First, it sets essentially the same standards for all sites in section F.1.b.(1) that it requires for “high priority” SUSMP sites in section F.1.b.(2) by mandating (1) pollution prevention, and (2) source control BMPs, and (3) run-off rate control and detention/treatment BMPs and by establishing identical performance standards in all instances. Second, the definitions of SUSMP categories are so broad and inclusive that most sites would be included anyway. The only significant difference appears to be in the size of the paper trail that will be generated. (County of San Diego, Sempra)

Response: The requirements of F.1.b.1 have undergone changes which make them applicable to all development projects. The requirements for pollution prevention BMPs have been removed. The requirements for peak flow rate control and discharges to 303(d) water bodies have also been removed. In addition, the requirement for buffer zones has been adapted to allow for other buffer methods, such as trees, noise reductions, etc. By making these changes, the requirements of section F.1.b.1 are basic requirements which should be met by all development projects.

See changes at permit section F.1.b.1.

Section: F.1 Subsection: F.1.b

Comment: The SDRWQCB has inadequate legal authority in CFR section 122.26(d)(2)(iv)(A)(2) to require the site-specific and universal application of the requirements of section F.1.b. on all development sites. (County of San Diego)

Response: Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(2) provides that Copermittees develop and implement a proposed management program which is to include "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."

USEPA places high priority on the inclusion of development permit requirements in planning process, stating "Proposed storm water management programs should include planning procedures for both during and after construction to implement control measures to ensure that pollution is reduced to the maximum extent practicable in areas of new development and redevelopment. Design criteria and performance standards may be used to assist in meeting this objective" (USEPA, 1992). The US EPA further finds that "The municipality should consider storm water controls and structural controls in planning, zoning, and site or subdivision plan approval" (USEPA, 1992). In addition, US EPA states each Copermittee should "have an ordinance or other regulatory mechanism requiring the implementation of post-construction runoff controls […]" (USEPA, 2000). Furthermore, in its Phase II Final Rule, US EPA requires small municipalities to "Use an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects […]" (USEPA, 1999b). In light of USEPA's focus on planning requirements, the Tentative Order contains requirements for project approval.

This increased detail is also necessary due to the continued degradation of the region's receiving waters caused by urban runoff. The "1998-1999 City of San Diego and Co-Permittee NPDES Stormwater Monitoring Program Report" indicates that the typical urban runoff coming from residential, commercial, industrial, and roadway land uses frequently contains such pollutants as Total Phosphorus, Nitrate + Nitrite Nitrogen, Total Suspended Solids, Lead, Copper, and Zinc at concentrations which exceed USEPA benchmark values for storm water (City of San Diego, 1999). Construction sites are also a significant concern due to the impairment caused by sediment of such valuable water resources within the region as Agua Hedionda Lagoon, Buena Vista Lagoon, San Elijo Lagoon, and Los Penasquitos Lagoon. Increased detail in the planning process is further supported by USEPA's "Interim Permitting Approach" which supports expansion of permit requirements where necessary to attain water quality standards (USEPA, 1996).

It should be noted that the project requirements in section F.1.b.1 have been modified to make them applicable to all projects. They have been broadened or flexibility has been added to provide discretion to the Copermittees.

See change at permit section F.1.b.1.

Section: F.1 Subsection: F.1.b.1.d

Comment: The SDRWQCB does not have the legal authority to require the Copermittees to verify evidence of coverage under the statewide General Construction Permit. (County of San Diego)

Response: Under federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(C), the Copermittees must address urban runoff from industry. One effective means to do this is to ensure coverage under the General Industrial Permit. USEPA supports the Copermittees using the General Industrial Permit requirements as a tool to help enforce their own ordinances and responsibilities when it states "Municipalities are urged to evaluate pollution prevention plans and discharge monitoring data collected by the industrial facility [as required under the General Industrial Permit] to ensure that the facility is in compliance with its NPDES storm water permit. Site inspections should include (1) an evaluation of the pollution prevention plan and any other pertinent documents, and (2) an onsite visual inspection of the facility to evaluate the potential for discharges of contaminated storm water from the site and to assess the effectiveness of the pollution prevention plan" (USEPA,1992). The Tentative Order requires verification of coverage under the General Industrial Permit because it is a useful tool to help ensure industrial sites are aware of their obligations to implement BMPs. It should be noted that the SDRWQCB is not requiring the municipality to enforce the General Industrial Permit, but rather to take advantage of the resources it provides.

The SDRWQCB has legal authority to include this requirement in the Tentative Order under Clean Water Act section 402(p)(3)(B)(iii) and California Water Code section 13377.

Section: F.1 Subsection: F.1.b.2

Comment: The SUSMP section of the Tentative Order should conform with SWRCB Order WQ 2000-11. (IEA)

Response: The SUSMP section of the Tentative Order does conform with SWRCB Order WQ 2000-11. The Tentative Order includes the same priority development project categories as outlined in SWRCB Order WQ 2000-11, with the following modifications/additions:

1. The parking lot size criteria was changed from 25 or more parking spaces to 15 or more parking spaces. This change was based on a comment from the Port of San Diego during the April 13, 2000 SDRWQCB SUSMP Public Workshop. The comment noted that the other parking lot size criteria of 5,000 square feet actually corresponded more closely with the size of 15 parking spaces, rather than 25 parking spaces. In order to make the two parking lot size criteria as similar as possible, the criteria for 25 parking spaces was reduced to 15 parking spaces.

2. The single-family hillside residence category was changed to "All hillside development greater than 5,000 square feet." This change was made to reflect the urban runoff concerns generated by hillside development. The primary concern regarding hillside development is the potential for on-site and downstream erosion resulting from changes in the flow regime caused by the development. While pollutants from hillside development (including single-family residences) can be significant, increases or changes in flow conditions provide the greatest potential for impacts to beneficial uses. Therefore, the type of development on a hillside is not at issue as much as the size of the development and the resulting changes in the on-site and downstream flow regime. For this reason, rather than focus on the type of hillside development, the SDRWQCB SUSMP requirements focus on size. The size (5,000 square feet)

was chosen based on SWRCB guidance in Order WQ 2000-11, which uses a size threshold of 5,000 square feet for significant redevelopment.

3. Retail gasoline outlets were added as a SUSMP priority development project category. Regarding retail gasoline outlets as a priority category, the SWRCB states in the December 26, 2000 memo that Order WQ 2000-11 "allows broader discretion by the Regional Water Boards to decide whether to include additional types of development in future SUSMPs. These areas for potential future inclusion in the SUSMPs include retail gasoline outlets […]." The Draft Fact Sheet/Technical Report for Tentative Order No. 2000-01 discusses the rationale for retail gasoline outlets to be designated a priority development project category.

4. Streets, roads, highways, and freeways were added as a SUSMP priority development project category. This is due to their potential to be a significant contributor of pollutants in urban runoff. A Federal Highway Administration "Pollutant Loading and Impacts from Highway Stormwater Runoff, Volume 3; Analytical Investigation and Research Report" (1990) finds that concentrations of total suspended solids, nitrate + nitrite nitrogen, and zinc exceed USEPA benchmark values for concentrations of these pollutants in urban runoff. Streets, roads, highways, and freeways also consist of extensive impervious surfaces, which alter flow regimes and increase potential for downstream erosion.

5. Projects within, directly adjacent to, or discharging directly to Environmentally Sensitive Areas (ESAs) were added as a SUSMP priority development project category. While the SWRCB withdrew Environmentally Sensitive Areas as a priority development project category from the LARWCB SUSMP, Order WQ 2000-11 provides discretion to Regional Boards in adding Environmentally Sensitive Areas in future permits. The primary reason the SWRCB withdrew ESAs as a LARWQCB SUSMP category was because the ESAs were in conflict with other language within the LARWQCB permit. This is not the case for the SDRWQCB Tentative Order. Furthermore, the SWRCB stated that a size threshold should be placed on the ESA category. The SDRWQCB has provided such a threshold in the Tentative Order, and has held three public workshops and participated in SUSMP stakeholder group meetings where no other size threshold has been formally suggested.

The Tentative Order also applies to both discretionary and non-discretionary projects. While the SWRCB did not include non-discretionary projects in the LARWQCB SUSMP in Order WQ 2000-11, the SWRCB upheld the discretion of Regional Boards to include non-discretionary projects in future permit SUSMPs. The SWRCB indicates the inclusion of non-discretionary projects in SUSMPs should be strongly considered when it states in Order WQ 2000-11 that "the limitation of the SUSMPs to discretionary projects may not be sufficiently broad for an effective storm water control program […]."

The Tentative Order further conforms with Order WQ 2000-11 by requiring pollution prevention, source control, and structural treatment BMPs. The functions these BMPs are required to perform in the Tentative Order mirror those required by the LARWQCB SUSMP (and upheld by the SWRCB). The SDRWQCB added the following functional requirements for implemented BMPs:

1. Minimize directly connected impervious areas. This requirement was added due to the strong correlation between imperviousness and receiving water impacts (as discussed in Finding 5). By minimizing the connections between impervious surfaces, the potential impacts resulting from imperviousness are reduced.

2. BMPS shall be designed to maximize their pollutant removal capabilities. This requirement was added to ensure that BMPs are designed correctly.

3. BMPs shall be implemented as close to pollutant sources as possible and prior to runoff discharges into the MS4 or other receiving waters.

4. BMPs shall ensure that post-development runoff does not contain pollutant loads which cause or contribute to an exceedance of water quality objectives or which have not been reduced to the maximum extent practicable. This is a basic requirement of the Tentative Order (see Prohibitions A.2 and A.3, and their corresponding discussions in the Fact Sheet/Technical Report) and is included here to reiterate the importance new development site design in protecting receiving waters.

5. BMPs shall ensure that post-development runoff into a Clean Water Act section 303(d) water body containing any pollutant (for which the water body is already impaired) does not contain those same pollutants in levels exceeding pre-development levels.

The Tentative Order also conforms with SWRCB Order 2000-11 regarding numeric sizing criteria for structural treatment BMPs. The methods proposed for calculating the size of volume-based structural treatment BMPs are the same as those upheld by the SWRCB. The Tentative Order also includes additional numeric sizing criteria for flow-based BMPs. These criteria for flow-based BMPs provide clarity to the Tentative Order, in that they account for the fact that volume-based BMPs are limited by the volume of water they can treat, while flow-based BMPs are limited by the flow rate of runoff they can treat. The methods used to calculate the numeric sizing criteria for flow-based BMPs are equivalent to those upheld by the SWRCB in Order WQ 2000-11.

The Tentative Order allows for equivalent numeric sizing criteria to be developed by the Copermittees. This provision was included in the Tentative Order to allow the Copermittees some flexibility in the methods used to calculate the numeric sizing criteria. While SWRCB Order WQ 2000-11 does not address such a provision, limited flexibility of SUSMP requirements does not contradict the Order.

The Tentative Order also includes provisions for the development of procedures to identify pollutants of concern and implement SUSMPs. These provisions were included to provide some consistency in SUSMP requirements throughout the County. Again, while SWRCB Order WQ 2000-11 does not address such a provision, provisions for consistency of SUSMP requirements does not contradict the Order.

The Tentative Order also includes an exemption from meeting the numeric sizing criteria requirement. This exemption conforms with the LARWQCB SUSMP, which was upheld by SWRCB Order WQ 2000-11. The LARWQCB SUSMP states "Restaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical structural or treatment control BMP design standard requirement only."

The Tentative Order also conforms with SWRCB Order WQ 2000-11 regarding the waiver process for SUSMPs. The SWRCB upheld a SUSMP waiver process in Order WQ 2000-11. The SWRCB also supports the concept of a waiver fund, as required by the Tentative Order, when it states "[t]he concept of a mitigation fund or 'bank' is a positive idea for obtaining regional solutions to storm water runoff." However, Order WQ 2000-11 proceeds to list several issues which must be resolved regarding a waiver fund. These issues are listed in the Tentative Order, and the Copermittees are provided one year to develop a waiver fund which addresses the issues, with an additional minimum of six months to implement the waiver fund.

Finally, the Tentative Order conforms with SWRCB Order WQ 2000-11 regarding infiltration and groundwater protection. Order WQ 2000-11 upheld the LARWQCB SUSMP's provisions regarding

infiltration. The LARWQCB SUSMP cites limitations and guidance for infiltration practices included in "Potential Groundwater Contamination from Intentional and Non-Intentional Stormwater Infiltration," Report No. EPA-600-R-94-051 (USEPA, 1994). It also includes limitations on infiltration based on provisions implemented in the States of Washington and Maryland. The limitations on infiltration included in the Tentative Order SUSMP requirements are from these same three sources.

Section: F.1 **Subsection: F.1.b.2**

Comment: Supports the draft permit and urges its adoption. (San Diego Audubon Society, San Diego State University Pacific Estuarine Lab, Environmental Health Coalition, Port of San Diego, City of Lemon Grove)

Response: Comment noted.

Section: F.1 **Subsection: F.1.b.2**

Comment: The SUSMP requirements are overly prescriptive, deny the Copermittees the opportunity to develop flexible and cost-effective programs, and are in violation of California Water Code 13360(a). For example, the Copermittees should be allowed to designate SUSMP Priority Categories of Development. (City of San Diego, County of San Diego)

Response: The level of detail in the SUSMP requirements has been upheld by the SWRCB. The SDRWQCB has incorporated SWRCB guidance into the SUSMP requirements wherever possible. In addition, Clean Water Act section 402(p)(3)(B)(iii) gives USEPA and States considerable discretion on establishing provisions for implementation in storm water programs, stating "require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and systems, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of pollutants." Further, interim USEPA policy guidelines on BMPs for storm water programs explains that the permitting authority can require more specific conditions or limitations where water quality standards are not being met and adequate information exists (61 CFR 43761).

Section: F.1 **Subsection: F.1.b.2**

Comment: Non-discretionary projects should not be subject to SUSMPs, since it will lead to SUSMPs being applied to insignificant projects which will not impact water quality. (County of San Diego)

Response: It is necessary for SUSMPs to apply to both discretionary and non-discretionary projects in order to adequately reduce pollutants in urban runoff discharges resulting from new development. Non-discretionary projects constitute a significant portion of new development projects. Their status as "non-discretionary projects" does not ensure that they will not generate pollutants or increase flows in their

post-construction or "use" phase. The SWRCB supports this in Order WQ 2000-11 when it states "the limitation of the SUSMPs to discretionary projects may not be sufficiently broad for an effective storm water control program […]." Furthermore, the inclusion of non-discretionary projects under the SUSMP requirements will not lead to SUSMP requirements being applied to insignificant projects. Only non-discretionary projects which fall under the SUSMP Priority Development Project Categories will be subject to the SUSMP requirements. Urban runoff from projects falling under these categories have been determined to pose significant threats to receiving water quality by the SDRWQCB, SWRCB, and LARWQCB. Regarding non-discretionary projects, the SWRCB has stated in its December 26, 2000 memo from Craig M. Wilson to the Regional Board Executive Officers that its Order WQ 2000-11 "allows broader discretion by the Regional Boards to decide whether to include additional types of development in future SUSMPs. These areas for potential future inclusion in SUSMPs include […] ministerial projects […]."

Section: F.1 **Subsection: F.1.b.2**

Comment: The Tentative Order should not require SUSMPs. (La Mesa)

Response: Pursuant to the Clean Water Act and Federal NPDES regulations, municipal storm water permits must require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including controls which address pollutant discharges resulting from new development and significant redevelopment. In a precedential decision (Order WQ 2000-11) the SWRCB found that the SUSMP provisions constitute MEP for addressing pollutant discharges resulting from new development and significant redevelopment.

Section: F.1 **Subsection: F.1.b.2**

Comment: The Copermittees cannot apply SUSMP or other Tentative Order requirements on projects which have already received approval, such as those which have undergone CEQA or have approved tentative maps. Such an added burden is either unenforceable or will expose the City to liability "taking" of the property without just compensation.

Government Code section 65961 may restrict our ability to impose certain conditions on these projects. That section prohibits the County for a five-year period following the recordation of a subdivision map from requiring conditions to the issuance of any building permit for single or multiple family residential units which the County could have lawfully imposed as a condition of the previously approved tentative or parcel map. Section 65961(a) does include exceptions for conditions required in order to protect the public health or safety or to comply with state or federal law, but the Order is not a state law. (City of San Diego, County of San Diego, La Mesa, Imperial Beach, Wesch, Hammann, Anonymous, Chula Vista, Carlsbad, El Cajon, McKenna & Cuneo)

Response: The tentative order is not intended to compel Copermittees to retroactively negate or otherwise displace previous lawful determinations concerning SUSMP requirements. The tentative order will impact development and redevelopment projects that have not been previously designed and approved for construction. Copermittees will have the responsibility to discern if the project proponent

claims that lawful prior approvals exist for their project. See paragraph (F.1.b.2.) that provides for an 18 month period of time after the adoption of the tentative order to facilitate Copermittee transition to the SUSMP requirements.

See change at permit section F.1.b.2.

Section: F.1 Subsection: F.1.b.2.a

Comment: Replacement of structures should not be considered significant redevelopment under SUSMPs unless the replacement results in an increase of 5,000 square feet of impervious surfaces or more. (Sempra Energy, County of San Diego)

Response: Replacement of structures is not considered significant redevelopment unless the replacement results in an increase of 5,000 square feet of impervious surfaces or more. In the Tentative Order, significant redevelopment is clearly defined "as the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site." Following this definition of significant redevelopment is a list of examples of significant redevelopment, which includes "replacement of a structure." None of the listed examples, including "replacement of a structure," constitute significant redevelopment unless they result in an increase of at least 5,000 square feet of impervious surface. The definition of significant redevelopment in the Tentative Order is identical to that included in SWRCB Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.a

Comment: New airfields and expansions of existing airfields (municipal, private) should be added as a SUSMP Priority Project Category. (Sierra Club, EHC, San Diego Baykeeper)

Response: While private airfields would generally fall under the priority category “Commercial developments greater than 100,000 square feet,” due to the size of their impervious surfaces and the number of sources (planes and other vehicles) present at the private airfields, they will be included in the list of applicable commercial developments for clarification. Municipal airfields should be addressed as high priority municipal areas under the Copermittees’ Municipal Existing Development Components of their Jurisdictional Urban Runoff Management Programs.

See change at permit section F.1.b.2.a.iii.

Section: F.1 Subsection: F.1.b.2.a

Comment: An adequate rationale for the selection of the SUSMP Priority Development Project Categories has not been provided. An adequate analysis of existing development projects, their potential threat to water quality (both individually and collectively), and the feasibility of implementing these or

other proposed controls is needed to provide a nexus between the priority categories and their potential water quality impact. (County of San Diego)

Response: The SUSMP priority development project categories have been dictated by the SWRCB in its precedential decision in Order wq 2000-11. A December 26, 2000 SWRCB memo from Craig M. Wilson to the Regional Board Executive Officers states that Order WQ 2000-11 "determined that SUSMPs appropriately applied to the following categories of development: single-family hillside residences, 100,000 square foot commercial developments, automotive repair shops, restaurants, home subdivisions with 10 to 99 housing units, home subdivisions with 100 or more housing units, and parking lots with 5, 000 square feet or more or with 25 or more parking spaces and potentially exposed to storm water runoff."

The SDRWQCB has expanded on this SWRCB guidance in a few instances. The instances are as follows:

1. The parking lot size criteria was changed from 25 or more parking spaces to 15 or more parking spaces. This change was based on a comment from the Port of San Diego during the April 13, 2000 SDRWQCB SUSMP Public Workshop. The comment noted that the other parking lot size criteria of 5,000 square feet actually corresponded more closely with the size of 15 parking spaces, rather than 25 parking spaces. In order to make the two parking lot size criteria as similar as possible, the criteria for 25 parking spaces was reduced to 15 parking spaces.

2. The single-family hillside residence category was changed to "All hillside development greater than 5,000 square feet." This change was made to reflect the urban runoff concerns generated by hillside development. The primary concern regarding hillside development is the potential for erosion resulting from changes in the flow regime caused by the development. While pollutants from hillside development (including single-family residences) can be significant, increases or changes in flow conditions provide the greatest potential for impacts to beneficial uses. Therefore, the type of development on a hillside is not at issue as much as the size of the development and the resulting changes in the flow regime. For this reason, rather than focus on the type of hillside development, the SDRWQCB SUSMP requirements focus on size. The size (5,000 square feet) was chosen based on SWRCB guidance in Order WQ 2000-11, which uses a size threshold of 5,000 square feet for significant redevelopment.

3. Retail gasoline outlets were added as a SUSMP priority development project category. Regarding retail gasoline outlets as a priority category, the SWRCB states in the December 26, 2000 memo that Order WQ 2000-11 "allows broader discretion by the Regional Water Boards to decide whether to include additional types of development in future SUSMPs. These areas for potential future inclusion in the SUSMPs include retail gasoline outlets […]." The Draft Fact Sheet/Technical Report for Tentative Order No. 2000-01 discusses the rationale for retail gasoline outlets to be designated a priority development project category.

4. Streets, roads, highways, and freeways were added as a SUSMP priority development project category. This is due to their potential to be a significant contributor of pollutants in urban runoff. A Federal Highway Administration "Pollutant Loading and Impacts from Highway Stormwater Runoff, Volume 3; Analytical Investigation and Research Report" (1990) finds that concentrations of total suspended solids, nitrate + nitrite nitrogen, and zinc exceed USEPA benchmark values for concentrations of these pollutants in urban runoff. Streets, roads, highways, and freeways also consist of extensive impervious surfaces, which alter flow regimes and increase potential for downstream erosion.

5. Projects within, directly adjacent to, or discharging directly to Environmentally Sensitive Areas (ESAs) were added as a SUSMP priority development project category. While the SWRCB withdrew Environmentally Sensitive Areas as a priority development project category from the LARWCB SUSMP, Order WQ 2000-11 provides discretion to Regional Boards in adding Environmentally Sensitive Areas in future permits. The primary reason the SWRCB withdrew ESAs as a LARWQCB SUSMP category was because the ESAs were in conflict with other language within the LARWQCB permit. This is not the case for the SDRWQCB Tentative Order. Furthermore, the SWRCB stated that a size threshold should be placed on the ESA category. The SDRWQCB has provided such a threshold in the Tentative Order, and has held three public workshops and participated in SUSMP stakeholder group meetings where no other size threshold has been formally suggested.

Section: F.1 Subsection: F.1.b.2.a.i

Comment: The two SUSMP Priority Project Categories covering home subdivisions should be merged into one category for home subdivisions larger than 10 housing units. (Carlsbad, SANDAG)

Response: The two SUSMP priority project development categories covering home subdivisions are kept distinct to allow for different sets of pollution prevention and source control BMPs to be identified and applied at the two different categories. While different pollution prevention and source control BMPs can be applied for the two categories, it should be noted that the structural treatment BMP numeric sizing criteria requirement for the two categories is the same. The two distinct priority project development categories were upheld by the SWRCB in Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.a.iii

Comment: The SUSMPs should apply to automotive dealerships. (McKenna & Cuneo)

Response: While automotive dealerships would generally fall under the SUSMP priority category "Commercial developments greater than 100,000 square feet," due to the size of their impervious surfaces and the number of sources (autos) present at the dealerships, they will be included in the list of applicable commercial developments for clarification.

See change at permit section F.1.b.2.a.iii.

Section: F.1 Subsection: F.1.b.2.a.v

Comment: What is the rationale for the restaurant size criteria? The Copermittees should be allowed to determine the size threshold for restaurants to be subject to SUSMP requirements. (La Mesa, McKenna & Cuneo)

Response: The size threshold for restaurants to be subject to SUSMP requirements has essentially been determined by the SWRCB. The LARWQCB SUSMP provisions, which the SWRCB upheld in a precedential decision in Order WQ 2000-11, includes the statement "[r]estaurants, where the land area for

development or redevelopment is less than 5,000 square feet, are excluded from the numerical structural or treatment control BMP design standard only." The size threshold for restaurants included in the Tentative Order matches this statement. Restaurants smaller than 5, 000 square feet are excluded from the numeric sizing criteria requirement to prevent small restaurants with BMP siting restrictions and minimal exposure to urban runoff from being subject to numeric sizing criteria.

Section: F.1 Subsection: F.1.b.2.a.vi

Comment: The hillside development SUSMP priority project category should not be included in the Tentative Order because it is not a significant source of pollutants after construction. (County of San Diego, BIASC)

Response: The hillside development SUSMP priority project category is necessary due to the high potential for erosion caused by hillside development. The primary concern regarding hillside development is the potential for erosion both on-site and downstream resulting from changes in the flow regime caused by the development, as discussed in Finding 4. This on-site and downstream erosion can be a significant source of pollutants after construction. Therefore, post-construction structural treatment BMPs are still needed to catch as well as prevent this accelerated on-site and downstream erosion.

The SWRCB supports post-construction structural treatment BMPs for hillside development in Order WQ 2000-11, which includes single-family hillside residences as a SUSMP priority project category. The SDRWQCB has expanded this category to include all hillside development greater than 5,000 square feet since the type of development on a hillside is not at issue as much as the size of the development and the resulting changes in the flow regime. While pollutants from hillside development can be significant, increases or changes in flow conditions provide the greatest potential for impacts to beneficial uses. For this reason, rather than focus on the type of hillside development, the SDRWQCB SUSMP requirements focus on size. The size (5,000 square feet) was chosen based on SWRCB guidance in Order WQ 2000-11, which uses a size threshold of 5,000 square feet for significant redevelopment.

Section: F.1 Subsection: F.1.b.2.a.vii

Comment: The SDRWQCB should include all San Diego County area Reserves, Preserves, Outstanding National Resources Waters, State National Resources Waters, Wildlife Refuges, and the South San Diego Bay National Wildlife Refuge as designated Environmentally Sensitive Areas. (EHC, San Diego Baykeeper, Port of San Diego)

Response: The list of Environmentally Sensitive Areas included in the Tentative Order was developed during SDRWQCB public workshops and City of San Diego stakeholder group meetings on SUSMPs. The SDRWQCB has left the identification and addition of Environmentally Sensitive Areas beyond those listed in the Tentative Order to the discretion of the Copermittees, since the Copermittees are most familiar with the natural resources within their jurisdictions. The Tentative Order's list of Environmentally Sensitive Areas includes "any other equivalent environmentally sensitive areas which have been identified by the Copermittees" to allow for additional designations of Environmentally Sensitive Areas by the Copermittees. Since most Copermittees have already identified Environmentally

Sensitive Areas within their jurisdictions, it is expected that Environmentally Sensitive Areas similar or identical to those listed in the comment will be included in the Copermittees' SUSMP programs.

Section: F.1 **Subsection: F.1.b.2.a.vii**

Comment: Environmentally Sensitive Areas (ESAs) should not be a SUSMP category for the following reasons:
1. The SDRWQCB does not have legal authority to create ESAs.
2. ESAs are already heavily regulated.
3. The Tentative Order does not provide for or require any nexus between the potential harm created to the "ESA" by urban runoff.
4. There is no support for the development threshold. (County of San Diego, BIASC, BIASD)

Response: The categorization of "all development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area" as a SUSMP priority development project category is a necessary layer of protection for these valuable resources. Each designated environmentally sensitive area (ESA) is either a valuable receiving water resource which should be protected from the impacts of urban runoff, or a degraded receiving water resource which should be protected from additional impacts. The geographic location of a development project can impact an ecologically fragile area. A sensitive habitat has a much lower capacity to withstand pollutants shocks than might be acceptable in the general circumstance, and so deserves attention. In essence, a project that is ordinarily insignificant in its impact on the environment may, in a particularly sensitive environment, be significant (LARWQCB, 2000). USEPA, in discussing storm water controls, notes: "Sensitive area protection is an important element of conservation design […] These areas are particularly susceptible to degradation by storm water runoff" (USEPA, 1999a).

The potential for new urban runoff discharges from new development and redevelopment to impact receiving waters within environmentally sensitive areas is clear. Urban runoff has been found to be a leading cause of water quality impairment in the San Diego Region and nationwide. Untreated pollutants in urban runoff, indiscriminate of dry or wet weather conditions, routinely find their way to our creeks, lagoons, bays, and ocean as easily from over watering of residential lawns as from rainstorms. San Diego area urban runoff is commonly contaminated with pesticides, fertilizers, animal droppings, trash, food wastes, automotive byproducts, and many other toxic substances which are generated by our urban environment. Water that flows over streets, parking lots, construction sites, and industrial, commercial, residential, and municipal areas carries these untreated pollutants through storm drain networks directly to the receiving waters of the region.

The United States Environmental Protection Agency (USEPA) recognizes urban wet weather flows as the number one source of estuarine pollution in coastal communities (USEPA, 1999b). This trend is reflected locally by the 1998-1999 City of San Diego and Co-Permittee NPDES Stormwater Monitoring Program Report, which names urban runoff as one of the most significant contributors of pollution to our waterways and coastal areas. Furthermore, this document reports that monitoring efforts indicate that instream concentrations of pathogen indicators (fecal coliform and streptococcus) and heavy metals (such as cadmium, copper, lead, and zinc) exceed state and federal water quality criteria. Storm water within the region has also been found to contain the pesticides diazinon and chlorpyrifos (Dursban) at levels that can cause chronic or acute toxicity. As this evidence suggests, San Diego's urban runoff is frequently

contaminated; application of SUSMP provisions to new development and redevelopment within or near environmentally sensitive areas will help protect these areas from its impacts.

In requiring that new development and redevelopment within or near environmentally sensitive areas meet SUSMP provisions, the SDRWQCB has not created ESAs. It has simply identified water bodies that have previously been determined to be sensitive to discharges of waste (Areas of Special Biological Significance, 303(d) listed waterbodies, etc.) and required that appropriate BMPs be implemented at development sites which are located near these areas. ESAs at a level which is appropriate for the protection of such a valuable or degraded resource. It is important to note that the intent of identifying ESAs as a SUSMP was to protect receiving waters within the ESA. In order to clarify this intent, the Tentative Order will be revised to indicate that only developments which discharge to a receiving water within an ESA have the potential to be subject to the SUSMP provisions.

While some ESAs may be heavily regulated, it is not clear that this regulation pertains to development directly adjacent or directly discharging to ESAs. Nor is it clear that this regulation always relates to water quality. The SUSMP provisions for ESAs are meant to complement regulatory activities of other agencies, and fill in any gaps with regards to urban runoff and water quality.

The development threshold of 2,500 square feet for projects near ESAs to be subject to SUSMPs is based on CEQA development thresholds relating to projects in ESAs. CEQA exempts from its requirements projects located in environmentally sensitive areas if additions to existing structures are less than 2,500 square feet (19 CCR 15301).

Section: F.1 **Subsection: F.1.b.2.a.vii**

Comment: Please clarify the definition of "discharging directly to". The terms "predominantly" and "not commingled with" are contradictory. (Imperial Beach, Chula Vista)

Response: The appearance of the terms “predominantly” and “not commingled with” in the definition of “discharging directly to” appears to be contradictory. Therefore, the term “predominantly” will be deleted from the Tentative Order.

See change in permit section F.1.b.2.a.vii.

Section: F.1 **Subsection: F.1.b.2.a.vii**

Comment: By including Environmentally Sensitive Areas as a priority category under SUSMPs, the SDRWQCB is attempting to regulate matters outside of water quality, thereby exceeding its legal authority. (County of San Diego)

Response: The intent of the SUSMP Environmentally Sensitive Area priority development project category is to protect receiving waters within Environmentally Sensitive Areas. The Tentative Order will be changed to clarify that Environmentally Sensitive Areas must contain receiving waters which are receiving the subject discharges.

See change in permit section F.1.b.2.a.vii.

Section: F.1 **Subsection: F.1.b.2.a.viii**

Comment: Why was the criteria for the number of parking spaces required to trigger SUSMP requirements reduced to 15 parking spaces, when the LA SUSMP criteria was 25 parking spaces? (County of San Diego, BIASD, BIASC)

Response: The parking lot size criteria was changed from 25 or more parking spaces to 15 or more parking spaces. This change was based on a comment from the Port of San Diego during the April 13, 2000 SDRWQCB SUSMP Public Workshop. The comment noted that the other parking lot size criteria of 5,000 square feet actually corresponded more closely with the size of 15 parking spaces, rather than 25 parking spaces. In order to make the two parking lot size criteria as similar as possible, the criteria for 25 parking spaces was reduced to 15 parking spaces.

Section: F.1 **Subsection: F.1.b.2.a.ix**

Comment: The Copermittees should not be required to control runoff from streets, roads, highways, and freeways which they do not have authority over. (County of San Diego)

Response: The Tentative Order does not require the Copermittees to control runoff from freeways, etc. over which they do not have jurisdiction, provided that discharges from such sources do not enter their MS4s. Municipalities cannot arrogate to themselves the authority to regulate discharges from facilities or activities beyond their jurisdiction, e.g., discharges from state and federal facilities including highways and Indian reservations directly to waters of the state that are not part or tributary to the municipality's MS4. Municipalities are required, however, to have or develop legal authority to regulate storm water discharges and urban runoff within their jurisdictions, including discharges that may be subject to concurrent regulation by the state and federal governments. In addition, where municipalities control access to MS4 infrastructure for the accommodation of discharges from entities within their physical jurisdiction (including school districts, state and federal facilities, construction sites and industrial facilities) municipalities must exercise such control in a manner consistent with their obligation under the Regional Board's requirements to reduce pollutants in their MS4 to the maximum extent practicable.

Section: F.1 **Subsection: F.1.b.2.a.ix**

Comment: Due to its late addition as a SUSMP category, the Roads, Streets, Highways, and Freeways priority project category should be either deleted from the permit or the RWQCB should extend the

written review period to allow for more adequate discussion prior to permit adoption. (County of San Diego, La Mesa)

Response: Streets, roads, highways, and freeways were added as a SUSMP priority development project category due to their potential to be a significant contributor of pollutants in urban runoff. A Federal Highway Administration "Pollutant Loading and Impacts from Highway Stormwater Runoff, Volume 3; Analytical Investigation and Research Report" (1990) finds that concentrations of total suspended solids, nitrate + nitrite nitrogen, and zinc exceed USEPA benchmark values for concentrations of these pollutants in urban runoff. Streets, roads, highways, and freeways also consist of extensive impervious surfaces, which alter flow regimes and increase potential for downstream erosion.

Streets, roads, highways, and freeways were addressed in Tentative Order No. 2001-01. The written comment period for the Tentative Order was approximately 50 days, while the oral comment period was approximately 63 days. The SDRWQCB also held three public workshops on the Tentative Order. The SDRWQCB has provided sufficient time and opportunity for comment and discussion on this SUSMP priority project development category.

Section: F.1 **Subsection: F.1.b.2.a.x**

Comment: Retail Gasoline Outlets should be a SUSMP priority development category subject to numeric sizing criteria. At a minimum, if Retail Gasoline Outlets are not held to meeting the numeric sizing criteria, they should be required to implement a separate, stringent and specific set of BMPs. (EHC)

Response: Comment noted.

Section: F.1 **Subsection: F.1.b.2.a.x**

Comment: RGOs should not be a SUSMP priority category. (County of San Diego, WSPA, Alliance for Water Quality)

Response: A WSPA sponsored study, "Results of a Retail Gasoline Outlet and Commercial Parking Lot Stormwater Runoff Study ", concludes that pollutant concentrations from RGO runoff are similar to concentrations from commercial parking lots, restaurants and other urban developments that are properly regulated under Federal and State storm water pollution laws. Therefore, discharges from RGOs should be given the same level of priority. The fact that significant discharges were found in the study indicates that the current source control measures are not working and structural controls are needed. Use of structural controls such as filtration or treatment inserts is also technically and economically feasible. In an EPA funded study of four inserts ("The Rouge River National Wet Weather Demonstration Project") it was concluded that, "these devices are applicable for use in gas stations … and they have a relatively low cost".

Section: F.1 Subsection: F.1.b

Comment: For the purposes of establishing vesting of a tentative map: Does "grading or construction activities" include mass grading or site clearing?

Further definition of the activities that would allow a priority project to escape SUSMP requirements is necessary, or is it strictly the Copermittees' call as to when a project is vested under current requirements? (City of Chula Vista)

Response: Grading or construction activities includes mass grading and site clearing. Projects approved after adoption of Tentative Order 2001-01 will be expected to meet SUSMP requirements if they are in a SUSMP category.

Section: F.1 Subsection: F.1.b

Comment: In addition, because F.1.b. appears to set conditions of approval for all development projects, not just priority projects, it appears that section F.1.b(1)(g) (which concerns no net increase in run-off, compliance with water quality standards, and pollutant discharges to CWA section 303(d) water bodies) is inappropriately included as a permit condition for all projects. In other provisions (e.g., Prohibition A.4. and section F.1.a(9)), this requirement is specifically limited to new development and significant redevelopment projects. Is it the Regional Board's intent that this requirement apply to all new development? Further, requiring such controls for all projects regardless of their size or threat to water quality inappropriately dictates the manner in which the City is required to comply with the general objectives of the Tentative Order, contrary to Cal. Water Code § 13360(a). (City of San Diego)

Response: Language in section F.1.b.1.g concerning no net increase in runoff and pollutant discharges to 303(d) water bodies has been removed and therefore does not apply to all development projects. However, language regarding compliance with water quality standards does apply to all development projects. Compliance with water quality standards is a basic requirement of the Tentative Order (see section A.2) regardless of the size of the site. Requiring compliance with water quality standards does not specify the means by which compliance must be achieved and therefore does not violate CWC § 13360(a).

Section: F.1 Subsection: F.1.b

Comment: F.1.b states that all development comply with the requirements of F.1.b.1. Presumably this applies to any project regardless of whether it is listed as a SUSMP category in F.1.b.2. Is this the RWQCB's intent? (County of San Diego)

Response: F.1.b.1 applies to all development projects irregardless of whether they are subject to SUSMPs.

Section: F.1 Subsection: F.1.b

Comment: The tentative order should provide guidance when waste discharge requirements are needed for a project. (Port of San Diego)

Response: In accordance with the Porter- Cologne Water Quality Control Act, any person proposing to discharge waste, other than to a sanitary sewer system, must file a report of waste discharge (application) to obtain waste discharge requirements at least 120 days prior to commencing the discharge. The Regional Board will review the application and determine if waste discharge requirements are needed or if the discharge complies with the criteria for a conditional waiver of waste discharge requirements as described in Table 4-4 of the Water Quality Control Plan San Diego Basin. Regional Board staff are not recommending the Tentative Order 2001-01 be modified to include guidance on when waste discharge requirements are needed.

Section: F.1 Subsection: F.1.b

Comment: A justification for imposing significant new requirements on all development projects has not been provided. In spite of the significance of these changes, the Technical Report offers no explanation or justification. Some factual justification must be provided along with supporting findings. (County of San Diego)

Response: The Staff Report adequately establishes a link between urban development and water quality degradation.

Section: F.1 Subsection: F.1.b

Comment: The requirement to "review each individual proposed project plan" could eliminate the ability of Copermittees to issue ministerial permits. The cost and time associated with administering discretionary permits can be significantly higher than for ministerial permits. The County's preliminary estimate is that 36 additional County staff would be needed. Costs of $2.7 million would be passed through to permit applicants. The County recommends that the RWQCB work with Copermittees to simplify section F.1. to an extent that allows them to retain their ability to establish local permit conditions that can be administered ministerially. (County of San Diego)

Response: The requirement is not intended to eliminate the ability of the Copermittees to issue ministerial permits. It is intended to ensure that each project incorporates water quality considerations. The Tentative Order has been changed to clarify this intent. See change at permit section F.1.b.

Section: F.1 Subsection: F.1.b.1

Comment: The Copermittees only have authority under CEQA and the Subdivision Map Act to impose requirements for improvements and mitigation measures that are found to be necessary and sufficient to reduce impacts to less than significant levels. (City of Chula Vista)

Response: Municipalities are responsible for actions that determine the volume and character of wastes and pollutants discharged in (or as) urban runoff to their MS4s and are required by the Clean Water Act and NPDES regulations to prevent discharges of non-storm water pollutants to their MS4s.

Storm water permits are issued to municipalities because of their land use authority. The ultimate responsibility for the pollutant discharges, increased runoff, and inevitable long-term water quality degradation that results from urbanization lies with local governments. This responsibility is based on the fact that it is the local governments that have authorized the urbanization (i.e., conversion of natural pervious ground cover to impervious urban surfaces) and the land uses that generate the pollutants and runoff. Furthermore, the MS4 through which the pollutants and increased flows are conveyed, and ultimately discharged into receiving waters, are owned and operated by the same local governments. In summary, the municipal Copermittees under Order No. 2001-01 are responsible for discharges into and out of their storm water conveyance systems because (1) they own and operate the MS4; and (2) they have the legal authority that authorizes the very development and land uses which generate the pollutants and increased flows in the first place.

Section: F.1 Subsection: F.1.b.1

Comment: Section F.1.b (1) - Page 14 - Conditions of Approval: This section requires that receiving water quality objectives are not violated throughout the life of the project." It will be impossible to enforce this section. (City of La Mesa)

Response: The purposes of conditions of approval which contain water quality requirements is to ensure that pollutant discharges from the development are reduced to the maximum extent practicable and do not cause or contribute to an exceedance of water quality objectives. Section F.1.b.1 does not require any enforcement; rather, it requires that conditions of approval be designed to ensure these two purposes.

Section: F.1 Subsection: F.1.b.1

Comment: How do Copermittees respond to changes in beneficial uses or changes in projects when implementing the tentative order? (McKenna & Cuneo, L.L.P.)

Response: Beneficial uses are designated by the SDRWQCB in a Water Quality Control Plan (Basin Plan). The Basin Plan is reviewed every three years and amendments can only take place after these reviews. Most development projects have a much shorter life span than three years. Given that, it is highly unlikely that a designated beneficial use will change.

Section: F.1 Subsection: F.1.b.1

Comment: Page 15, after F. 1.b.(1) (g), add:
(h) Require project proponent to submit plans and specifications for any proposed structural BMP to the Local Vector Control Agency or StateDepartment of Health Services for review and approval prior to construction. Where appropriate a "Mosquito Vector Prevention and Control Plan" may also be required". (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: F.1 Subsection: F.1.b.1

Comment: F.1.b (1) page 14 - This section requires "that receiving water quality objectives are not violated throughout the life of the project. This has no nexus to the issue of concern, will be impossible to enforce and of questionable legality. This portion of the sentence should be deleted. (City of Carlsbad)

Response: Requirements to ensure that pollutants in runoff from development are reduced to the maximum extent practicable and do not cause or contribute to an exceedance of water quality standards is in line with SWRCB guidance. The SWRCB upheld such requirements in SWRCB Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.1

Comment: SDBK and SDSF strongly support the proposed shift in project approval process. It is our belief that this shift should have occurred when the current stormwater permit was promulgated more than ten years ago. At the very least, planning stage consideration of runoff impacts should have begun following EPA guidance in 1992. Given the length of time since the notion was brought forward, and the overwhelming lack of compliance with the measure, contrary arguments by Copermittees citing costs and logistical difficulties should carry little or no weight. Now, consideration of runoff controls at the planning stage will appropriately defer Copermittee costs of permit compliance to project developers. The current paradigm of tax-payer subsidy for private development pollution must end. (Surfrider Foundation)

Response: Comment noted.

Section: F.1 Subsection: F.1.b.1.a

Comment: Require project proponents to implement ...BMPs for all development projects. The IEA recommends language be added to allow for future advances in technology. Such language might be " equivalent alternative" after the word BMP. (Industrial Environmental Association)

Response: Advances in technology would still fall under the definition of BMP, as defined in Attachment D of the Tentative Order.

Section: F.1 Subsection: F.1.b.1.a

Comment: The pollution prevention requirements contained in section F.1.b.(1)(a) are not feasible to implement. The practical implications of requiring post-construction pollution prevention practices

through a land development / redevelopment program are fundamentally different than those of requiring source control and/or treatment control BMPs. While BMPs that will become a permanent post-construction feature can be addressed prior to construction (with some limitations), exercising control over the specific activities of future occupants or users is considerably less feasible and does not appear to have been adequately considered.

Section F.1.b.(1)(a) would require Copermittees to ensure that post-construction pollution prevention BMPs are implemented by the parties for all local permits, including any permit involving the construction or refurbishment of any residential property. Not only would this include the subdivisions subject to the section F.1.b.(2)(a)(i) – (ii) SUSMP requirements, but also all new single family residences, and in fact all local permits, including a permit to install a small retaining wall is residential landscaping. This implies that (1) pollution prevention plans, agreements, and/or contracts would be needed as a condition of occupancy, and/or (2) that the County would need to monitor the activities of these people to ensure compliance. Neither of these approaches could be effectively implemented in the real world. This section also contrasts sharply with permit section F.3.d. which encourages the use of pollution prevention methods in existing residential areas. This would establish a double standard that would be difficult, if not impossible, to enforce. It also raises doubts about whether Regional Board has fully considered the practical implications of implementing the section. For instance, how long would the requirement apply? Would it be applicable only for the first occupant? If the house is re-sold, would we then only be required to encourage pollution prevention BMPs of subsequent owners?

Section F.1.b.(1)(a) also requires that post-construction pollution prevention BMPs be implemented by the occupants of any new commercial or industrial facility that the County permits, regardless of whether the permit is discretionary or nondiscretionary. As before, how would we be expected to require and enforce this provision in seeking permits? It would virtually eliminate all ministerial permits. Has the RWQCB considered the potential staffing levels that would be necessary to develop a program to enforce this requirement? If so, why is this issue not addressed in the Technical Report?

Finally, the application of this section to streets, roads, highways, and freeways (F.1.b.(2)(a)(ix)) and parking lots (F.1.b.(2)(a)(viii)) presents significant concerns which have not been considered. How would post-construction pollution prevention be required for streets and roads? Would we be required to reduce or eliminate vehicles or the pollutants they generate? Would we be expected to require (or provide) tuneups or repairs for the vehicles that use our roads? Would we be expected to reduce the numbers of trips on local roads? How would we verify compliance? Additionally, would we be expected to apply these requirements to highways and freeways that we don't construct or maintain (e.g., Caltrans facilities already under a separate NPDES permit)? How would this requirement apply to parking lots? Would we be expected to restrict the number of vehicles using them? If so, where would they park? Further, has the Regional Board considered the fact that we do not have the authority to regulate Caltrans in this area? (County of San Diego)

Response: While the SDRWQCB supports consideration of pollution prevention BMPs during the planning process, it acknowledges that requiring pollution prevention BMPs in the project approval process may not always be possible. For this reason, the requirement for pollution prevention BMPs has been removed from section F.1.b.1.a. See change at permit section F.1.b.1.a. and Finding 12.

Section: F.1 Subsection: F.1.b.1.a

Comment: Recommend modifying the first sentence to: "The SUSMPs shall require structural treatment BMPs "or equivalent alternative" to be implemented at all priority development projects." (Port of San Diego)

Response: The definition of BMP in Attachment D of the Tentative Order is broad and inclusive. It is likely that most "equivalent alternative" would already fall under this broad definition, making the inclusion of the term unnecessary.

Section: F.1 Subsection: F.1.b.1.b

Comment: F.1.b.(1)(b) "Require project proponents to implement site design / landscape characteristics where feasible which maximize infiltration, provide retention, slow runoff, and minimize impervious land coverage for all development projects." This condition should be amended to "recommend" or "encourage" the use of these principles where that is consistent with other environmental goals. Maximizing infiltration would have adverse impacts on wetlands and riparian habitats, and on groundwater. Accordingly, rather than mandatory prescriptions, this condition should be amended to account for situations in which infiltration would adversely affect the pertinent environmental condition. (County of San Diego)

Response: The provision only requires the described site design/landscape characteristics where it is feasible. If the Copermittee determines that such measures are infeasible at a given site, they need not require them. Therefore, relaxing this requirement to "recommendation" status is not warranted.

Section: F.1 Subsection: F.1.b.1.c

Comment: BUFFER ZONES FOR NATURAL WATER BODIES Paragraph F. l.b(l)(c) requires that a project proponent implement buffer zones for natural water bodies. This requirement needs to be more specific about what is meant by a buffer and by a natural'water body. We have heard a developer claiming that a wall at the edge of a wetland can be considered an adequate buffer. An adequate buffer needs to preserve the full functions and values of the water body. The buffer needs to be adequate to stop such impacts as inappropriate water flows, disturbances to wildlife, night lighting, intrusion by pets, and it should provide adequate high water refuge habitat, appropriate transition vegetation for foraging, roosting, and nesting, natural inputs of nutrients from bank vegetation, a diversity of vegetation to assure ecological viability, etc. This one line requirement must be expanded to allow it be effective. (San Diego Audubon Society)

Response: SDRWQCB encourages the Permittees to include the above mentioned criteria in their buffer zone management. It is expected that the natural buffer zone will be designed to protect water quality. However, the SDRWQCB will not make such provisions a requirement of the Tentative Order as doing so will deny the Permittees flexibility in their approach to natural buffer zones.

Section: F.1 Subsection: F.1.b.1.c

Comment: What is used to determine a "natural water body" and the "size and nature of a buffer?" (City of Carlsbad)

Response: A natural water body is any water body that supports beneficial uses. In an attempt to provide the Copermittees flexibility, the Tentative Order does not specify size natural buffer areas. It is expected that the Copermittees will set criteria for natural buffer zones for their benefits in protecting water quality. However, the Tentative Order does not make such provisions a requirement as doing so would deny the Copermittees flexibility in their approach to natural buffer zones.

Section: F.1 Subsection: F.1.b.1.c

Comment: This condition should be amended to "recommend" or "encourage" the inclusion of buffer zones. While the County agrees that the establishment of buffer zones is generally a valuable objective, it is not realistic to require it as a condition of approval for all projects. This condition cannot be implemented in all instances, and shouldn't equate to a prohibition on the development of properties where it cannot be implemented. (County of San Diego)

Response: While buffer zones for water bodies may not always be feasible, some sort of buffer is. For example, trees, noise constraints, lighting constraints, and access limitations can all provide buffering for natural water bodies where extreme limitations of space exist. For this reason, section F.1.b.1.c will be modified to allow for buffers in place of buffer zones where extreme limitations of space exist. See change at permit section F.1.b.1.c.

Section: F.1 Subsection: F.1.b.1.c

Comment: F.1.b.1.c.
Please clarify if a buffer zone would be necessary for a redevelopment project when the previous development had none and other F. 1. b. 1. conditions are met. (Port of San Diego)

Response: The Tentative Order does not specify to this level of detail what course of action the Copermittees should take. It is expected that the Copermittee will consider natural buffer zones whenever possible for their benefits in protecting water quality. However, Tentative Order does not make such provisions a requirement as doing so will deny the Copermittees flexibility in their approach to natural buffer zones.

Section: F.1 Subsection: F.1.b.1.e

Comment: Section F.1.b.1.e. conflicts with finding 22 which states that "the RWQCB is responsible for enforcing both statewide general permits and this Order within the San Diego region." (County of San Diego)

Response: Tentative Order section F.1.b.1.e. (development of SUSMPs [Standard Urban Storm Water Mitigation Plans]) does not conflict with Finding No. 22 of the same order. The requirement that Copermittees develop SUSMPs (a plan to reduce pollutants and runoff flows from all new development

and significant redevelopment projects) does not conflict with the SDRWQCB's role in regulating these activities under statewide general permits. Section 402(p)(3)(B)(iii) of the CWA requires municipalities to implement "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." The SDRWQCB's responsibility is to translate this section of the CWA into the form of waste discharge requirements. The tentative Order's required programs are consistent with the CWA because they reduce the discharge of pollutants to the maximum extent practicable (MEP). Furthermore, the CWA and federal regulations describe only minimal storm water program components. Although the tentative Order may describe portions of program components that are not specifically addressed in the federal requirements and regulations, the SDRWQCB has made express findings that these components are significant sources of storm water pollution. Since the CWA and federal regulations do not exclude sources that are significant pollutant contributors, it is appropriate to cover these sources in the tentative Order.

The federal regulations in 40 CFR 122.26 establish a dual system for regulation of industrial and construction site discharges through municipal storm water conveyance systems. Industries and construction sites are permitted under statewide general NPDES industrial or construction storm water permits. These permits require industries and construction sites to do the following: (1) to reduce pollutants to comply with best available technology (BAT) and best conventional technology (BCT) performance standards and (2) to not cause or contribute to violations of applicable water quality objectives. In addition, industries and construction sites are subject to regulation by municipalities through storm water ordinances developed according to municipal storm water permits issued by the state. Pursuant to Clean Water Act section 402(p)(3)(iii) municipalities are required to implement controls to reduce the discharge of pollutants from municipal storm water conveyance systems to the maximum extent practicable (MEP). Because storm water from industrial facilities may be a major contributor of pollutants to municipal storm water conveyance systems, municipalities are obligated to develop controls for storm water discharges associated with industrial activity through their system in their urban runoff management program. (See Federal Register preamble, Volume 55, No. 222, November 16, 1990, page 48000.)

The US EPA intended that the municipalities and delegated states share the responsibility of regulating storm water discharges from industrial and construction site activities. The US EPA believed that this dual approach would result in the most effective regulation. Since municipalities are ultimately responsible for discharges from their municipal storm water conveyance systems, it is in their best interest to regulate what is discharged into their system.

Section: F.1 Subsection: F.1.b.1.e

Comment: F.1.b.(1)(e) "Require project proponent to ensure its grading or other construction activities meet the provisions specified in Section F.2. of this Order." This section is unnecessary since section F.2. already specifies the projects to which it applies. This language also presents a significant potential for conflicts between the two sections since both specify their own separate criteria for project inclusion. (County of San Diego)

Response: Section F.1.b.1.e reiterates the requirements of section F.2 in order to place emphasis on the importance of the construction phase as a source of pollutants. The earlier project proponents are notified of their construction responsibilities, the more prepared they will be when construction begins.

Since section F.1.b.1.e and section F.2 generally apply to all development projects and construction projects, conflicts should not occur.

Section: F.1 Subsection: F.1.b.1.f

Comment: Paragraph F.1.b.(1)f, page 15, requires that the proponent of a project insure long term maintenance of all post-construction BMPs in perpetuity. But, in many cases the project proponent will not be associated with the project after construction. We urge that the paragraph be augmented to also require subsequent owners and operators to ensure long-term maintenance. (San Diego Audubon Society)

Response: Many developers may not be associated with developments for the long term. Therefore it will be difficult for them to ensure long-term maintenance of post-construction BMPs. However, it is possible for developers to provide a mechanism which will ensure long term BMP maintenance. For these reasons, the Tentative Order will be changed from requiring developers to ensure long term BMP maintenance to requiring developers to provide a mechanism which will ensure long term BMP maintenance.

Language included in the LARWQCB SUSMP regarding BMP maintenance, as upheld by SWRCB Order WQ 2000-11, can serve as guidance to the Copermittees regarding mechanisms which will ensure long term BMP maintenance. The LARWQCB SUSMP states:

"[T]he Permittee shall require that the applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements and/or Conditional Use Permits.

For all properties, the verification will include the developer's signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The transfer of property to a private of public owner must have conditions requiring the recipient to assume responsibility for maintenance of any Structural or Treatment Control BMP to be included in the sales or lease agreement for that property, and will be the owners responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year and retain proof of inspection. For residential properties where the Structural or Treatment Control BMPs are located within a common area which will be maintained by a homeowner's association, language regarding the responsibility for maintenance must be included in the projects conditions, covenants and restrictions (CC&R). Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the Permittee can provide. The transfer of this information shall also be required with any subsequent sale of the property.

If Structural of Treatment Control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by the County of other appropriate public agency. Structural or Treatment control BMPs proposed for transfer must meet design standards adopted by the public entity for the BMP installed and should be approved by the County or other appropriate public agency prior to its installation."

See change in permit section F.1.b.1.f.

Section: F.1 Subsection: F.1.b.1.g

Comment: F.l.b.(l)(g) page 14; Clarify that these runoff requirements apply only to Priority Development Project Categories. (Sempra Energy)

Response: The language in section F.1.b.1.g regarding control of peak flow rates has been removed form the Tentative Order. Therefore this issue has been resolved.

Section: F.1 Subsection: F.1.b.1.g

Comment: Section F.1.b (1)(g): Does the requirement regarding post-development runoff apply to both direct and indirect discharges to a 303(d) water body? (City of Chula Vista)

Response: Yes, the requirement regarding post development runoff applies to all urban runoff discharges to a 303(d) listed water body.

Section: F.1 Subsection: F.1.b.1.g

Comment: The performance standards in section F.1.b.(1)(g) are not applicable to individual dischargers within Copermittee jurisdictions. These standards are applicable only to discharges from Copermittee MS4s. The RWQCB lacks the legal authority to apply these standards to third parties through Tentative Order No. 2001-01. 40 CFR § 122.26(d)(2)(iv)(A)(2) very clearly limits the MEP standard to discharges from MS4s. CWC section 13263(a) similarly establishes regional board authority to prescribe requirements "as to the nature of any proposed discharge" Again, the proposed discharge is from, not into, Copermittee MS4s. Requiring on a site-specific basis that developers (a) reduce pollutants to the MEP and (b) do not cause or contribute to exceedances of water quality objectives, both exceeds these authorities and violates CWC section 13360 by excluding from Copermittees other potential means of lawfully complying (including regional treatment plants if we so choose). Please note that nothing precludes Copermittees from requiring the same standards of individual dischargers that we must meet ourselves. It is simply beyond the authority of the RWQCB to compel Copermittees to do so. (County of San Diego)

Response: Requirements to ensure that pollutants in runoff from development are reduced to the maximum extent practicable and do not cause or contribute to an exceedance of water quality standards is in line with SWRCB guidance. The SWRCB upheld such requirements in SWRCB Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.b

Comment: It is inappropriate and the SDRWQCB lacks the legal authority to require the Copermittees to implement, or require implementation by third parties of, particular types of BMPs or BMP standards

(i.e., pollution prevention, source control, and treatment control BMPs). The SDRWQCB does not have the legal authority to require implementation of one category of BMPs (i.e., pollution prevention) at all sites, or the legal authority to require implementation of all categories of BMPs (i.e., pollution prevention, source control, and treatment control BMPs) at one site. These types of requirements violate California Water Code section 13360. Justification for this requirement is needed. Which type of BMPs are to be implemented should be at the discretion of the Copermittees. (City of San Diego, County of San Diego)

Response: The most prescriptive requirements in the Tentative Order regarding the types of BMPs to be implemented are included in the SUSMP provisions. In the SUSMP provisions, source control and structural treatment BMPs are required at all priority development projects. The requirements for pollution prevention BMPs during the planning phase have been removed from the Tentative Order. This prescriptive application of source control and structural treatment BMPs in the SUSMP provisions was found to be appropriate by the SWRCB in Order WQ 2000-11. The SUSMP provisions were also determined by the SWRCB to not be in violation of CWC section 13360. Since the SUSMP provisions were the most prescriptive in the Tentative Order, it can be inferred that other BMP requirements in the Tentative Order are also appropriate and in compliance with CWC section 13360.

In fact, for the Construction, Municipal, Industrial, Commercial, and Residential Components of the Jurisdictional Urban Runoff Management Program, which types of BMP are to be implemented is left largely to the Copermittees. The only type of BMP required by the Tentative Order for each of these types of land uses is pollution prevention BMPs. However, the Tentative Order does not require pollution prevention BMPs at each site falling under these land use categories, but rather only requires their use at sites as determined by the Copermittees. Clearly these requirements provide flexibility and do not specify which BMPs must be used at which sites.

Widespread use of pollution prevention BMPs is required because of the benefits they provide with little cost. By limiting the generation of pollutants by urban activities, less pollutants are available to be washed from urban areas, resulting in reduced pollutant loads in storm water discharges from these areas. In addition, there is no need to control or treat pollutants which are not initially generated. Furthermore, pollution prevention BMPs are generally more cost effective than removal of pollutants by treatment facilities or cleanup of contaminated media.

In the Pollution Prevention Act of 1990, Congress established a national policy that emphasizes pollution prevention over control and treatment. California Water Code section 13263.3(a) also supports pollution prevention, stating "The Legislature finds and declares that pollution prevention should be the first step in a hierarchy for reducing pollution and managing wastes, and to achieve environmental stewardship for society. The Legislature also finds and declares that pollution prevention is necessary to support the federal goal of zero discharge of pollutants into navigable waters." Finally, the Basin Plan also supports this finding by stating that "[T]o eliminate pollutants in storm water, one can either clean it up by removing pollutants or prevent it from becoming polluted in the first place. Because of the overwhelming volume of storm water and the enormous costs associated with pollutant removal, pollution prevention is the only approach that makes sense."

The SDRWQCB has legal authority to require implementation of particular types of BMPs under the Clean Water Act and California Water Code. The CWA requires in section 402(p)(3)(B)(iii) that 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." California Water Code section 13377 provides that "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 (Clean Water 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 anymore stringent effluent standards or limitation necessary to implement water quality control plans, or for the protection of beneficial uses, or to prevent nuisance."

Section: F.1 Subsection: F.1.b.2.b

Comment: Who will be responsible for maintaining BMPs? How will maintenance be monitored and enforced? There should be more detail regarding BMP maintenance to ensure that it is performed. (San Diego Audobon Society, Downstream Services, University of California Natural Reserve System)

Response: The party responsible for maintaining BMPs required under the SUSMP provisions is left to the discretion of the Copermittees. The monitoring and enforcement of BMP maintenance is also the responsibility of the Copermittees, with oversight from the SDRWQCB. The requirement in the Tentative Order that BMPs have proof of ongoing maintenance is the same basic requirement as that which was included in the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11.

More detailed requirements included in the LARWQCB SUSMP regarding BMP maintenance can serve as guidance to the Copermittees. The LARWQCB SUSMP states:

"[T]he Permittee shall require that the applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements and/or Conditional Use Permits.

For all properties, the verification will include the developer's signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The transfer of property to a private of public owner must have conditions requiring the recipient to assume responsibility for maintenance of any Structural or Treatment Control BMP to be included in the sales or lease agreement for that property, and will be the owners responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year and retain proof of inspection. For residential properties where the Structural or Treatment Control BMPs are located within a common area which will be maintained by a homeowner's association, language regarding the responsibility for maintenance must be included in the projects conditions, covenants and restrictions (CC&R). Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the Permittee can provide. The transfer of this information shall also be required with any subsequent sale of the property.

If Structural of Treatment Control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by the County of other appropriate public agency. Structural or Treatment control BMPs proposed for transfer must meet design

standards adopted by the public entity for the BMP installed and should be approved by the County or other appropriate public agency prior to its installation."

Section: F.1 **Subsection: F.1.b.2.b.i**

Comment: Section F.1.b.2.b.i. is redundant and should be deleted. (County of San Diego)

Response: Section F.1.b.2.b.i. is included to ensure that SUSMP implementation includes management of flows and their potential impacts.

Section: F.1 **Subsection: F.1.b.2.b.ii**

Comment: The requirement to conserve natural areas is beyond the SDRWQCB's legal authority and should therefore be left to the determination of the Copermittees, rather than required in the Tentative Order. (County of San Diego)

Response: The SWRCB has upheld that Regional Boards can require conservation of natural areas for the protection of water quality. The LARWCB SUSMP requirements, which were upheld by the SWRCB in Order WQ 2000-11, include the provision that all SUSMP priority project categories "conserve natural areas."

Section: F.1 **Subsection: F.1.b.2.c**

Comment: There should be a standardized formula by which developers or co-permittees must determine how the numeric sizing criteria translates into a runoff number (from a precipitation number) for a specific property.

If afforded the freedom to choose their own science, property owners might very well pick a model which underestimated the amount of runoff from their property, effectively relaxing the BMP requirements. At the very least, we encourage the Regional Board to establish an exclusive list of acceptable conversion models.

We request the Regional Board add the following language: "For determining the exact sizing requirements that numeric sizing criteria place on individual developments, the SUSMP shall require the use of one of the following models to convert precipitation to runoff volume or flow rate: [List Approved Models]. The SUSMP may include other conversion models subject to public review and Regional Board approval." (EHC)

Response: A formula by which developers or Copermittees must determine how numeric sizing criteria translates into a runoff volume or flow rate for a specific property is left to the discretion of the Copermittees. Such a formula should be included in the model and local SUSMPs, which will be

considered by the SDRWQCB in a public process. Guidance on such a formula can be obtained from other areas which have implemented similar programs, such as Los Angeles County, the State of Washington, and the State of Maryland. The SDRWQCB can aid the Copermittees in contacting applicable agencies and obtaining such documents.

Section: F.1 **Subsection: F.1.b.2.c**

Comment: Inclusion of numeric sizing criteria in the Tentative Order exceeds the SDRWQCB's legal authority and is not consistent with state and federal regulations. (County of San Diego, BIASD)

Response: Pursuant to the Clean Water Act and Federal NPDES regulations, municipal storm water permits must require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including controls which address pollutant discharges resulting from new development and significant redevelopment. In a precedential decision (Order WQ 2000-11) the SWRCB found that the SUSMP provisions (including numeric sizing criteria) constitute MEP for addressing pollutant discharges resulting from new development and significant redevelopment. In a December 26, 2000 memo from Craig M. Wilson to the Regional Board Executive Officers, the SWRCB states that Order WQ 2000-11 "finds that the design standard [numeric sizing criteria] in the SUSMPs, which essentially requires that 85 percent of the runoff from specified categories of development be infiltrated or treated, reflects MEP."

Section: F.1 **Subsection: F.1.b.2.c**

Comment: The Tentative Order's numeric sizing criteria should be maintained as requiring treatment of the 24-hour 85th percentile storm event. (San Diego Audobon Society, Surfers Tired of Pollution)

Response: Comment noted.

Section: F.1 **Subsection: F.1.b.2.c**

Comment: We support the use of numerically sized structural treatment controls to control the discharge of pollutants from areas of new development and significant redevelopment to the MEP. (County of San Diego)

Response: Comment noted.

Section: F.1 **Subsection: F.1.b.2.c**

Comment: The 24-hour 80th percentile storm event, as proposed by APWA, should be the basis for numeric sizing criteria. Treatment of the 24-hour 80th percentile storm event is considered to meet the MEP standard for semi-arid regions, as noted by Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual and Report on Engineering Practice No. 87. (County of San Diego, APWA, ASCE, BIASD, BIASC, Lemon Grove, Imperial Beach, SDCAA, Nolte, IEA, Port of San Diego,SD Chapter of Consulting Engineers & Land Survey)

Response: The APWA proposal for determination of the amount of runoff to be treated under SUSMPs raises two issues: (1) The SUSMPs requirement for the treatment of the 85th percentile storm event should be reduced to the 80th percentile storm event; and (2) hourly rainfall data from Lindbergh Field should be applied to precipitation contour maps to determine the size of the storm which must be treated.

(1) First of all, reducing the requirement for the treatment of the 85th percentile storm event to the 80th percentile storm event is inappropriate for the San Diego Region. The sole reasoning provided by APWA for reducing the size of the design storm which must be captured is that the City of Denver has chosen to capture the 80th percentile storm event. It is doubtful that the City of Denver has a more than $1.2 billion tourism economy as closely tied to water quality as that of the San Diego Region (a SANDAG memo states that projections by the California Department of Boating and Waterways find nearly $1.2 billion in direct revenue and $1.2 billion in indirect revenue is pumped into the San Diego area economy each year by out-of-state visitors) (SANDAG, 1996).

Capture of the 80th percentile storm event is equivalent to capture of runoff form approximately 0.4 inch of rainfall in the City of San Diego, as calculated by APWA. This is a smaller amount of rainfall than must be treated in Austin, Virginia, Delaware, Maryland, New Jersey, Chicago, New Jersey, Florida, and the Puget Sound Basin. More importantly, the 80th percentile storm event is less than what has been determined to constitute MEP by the SWRCB in Order WQ 2000-11. The SWRCB states "The Order finds that the design standard in the SUSMPs, which essentially requires that 85 percent of the runoff from specified categories of development be infiltrated or treated, reflects MEP" (SWRCB, 2000b). While Denver may arguably have a climate which is somewhat similar to San Diego's, certainly criteria developed by the SWRCB for the Los Angeles region are more applicable to San Diego than criteria used by Denver, Colorado.

In addition, capture of the 80th percentile storm event ignores the concept of diminishing returns. The 85th percentile storm event is representative of the point of diminishing returns for the San Diego Region. The 85th percentile storm event represents the BMP capacity beyond which, insignificant increases in runoff capture will occur, relative to additional costs. Even a cursory look at APWA's graphed data (Exhibit A of their proposal, which is item B of Attachment 13 of the Executive Officer Summary Report for the December 13, 2000 Public Hearing) shows that capture of a 0.4 inch storm is well below the "knee of the curve," or the point of diminishing returns.

(2) The APWA proposal also recommends a different method for calculation of the design storm event from that proposed in the Tentative Order. Where the Tentative Order proposes use of 24-hour rainfall data from several locations, the APWA proposal uses hourly rainfall from one location (Lindbergh Field). The Tentative Order proposes that each Copermittee use 24-hour rainfall data from its area to calculate its design size storm. While use of 24-hour rainfall data is not as rigorous as use of hourly rainfall data, 24-hour data is typically much more available, thereby allowing Copermittees to use local data to calculate the design storm to be used in their jurisdictions. In fact, a lengthy record of hourly rainfall data is only available in one place within San Diego County: Lindbergh Field. The APWA proposal uses this hourly rainfall data from Lindbergh Field and applies it to the entire county through the use of precipitation

contour (isopluvial) maps. While there may be potential inaccuracies in applying data from one site to the entire county, use of such precipitation contour maps is common practice.

In light of the increased rigorousness of using hourly data, as well as the common practice of using precipitation contour maps, the Tentative Order will be modified to allow for the 85th percentile storm event to be calculated by applying hourly rainfall data from Lindbergh Field to precipitation contour maps.

See change at permit section F.1.b.2.c.

Section: F.1 **Subsection: F.1.b.2.g**

Comment: All restaurants should be required to meet numeric sizing criteria requirements, irregardless of their size. (EHC, Surfrider Foundation)

Response: The size threshold for restaurants to be subject to SUSMP requirements has essentially been determined by the SWRCB. The LARWQCB SUSMP provisions, which the SWRCB upheld in a precedential decision in Order WQ 2000-11, includes the statement "[r]estaurants, where the land area for development or redevelopment is less than 5,000 square feet, are excluded from the numerical structural or treatment control BMP design standard only." The size threshold for restaurants included in the Tentative Order matches this statement.

Section: F.1 **Subsection: F.1.b.2.h**

Comment: We recommend that the Tentative Order provide clearer guidelines for the SUSMP waiver and its corresponding mitigation fund. (Port of San Diego)

Response: Waiver guidelines provided in the Tentative Order are based on those provided by the SWRCB in Order WQ 2000-11. The level of detail of the guidelines was reduced to provide flexibility and discretion to the Copermittees in developing the waiver and its corresponding fund. In the Tentative Order, the Copermittees are provided with one year to develop the waiver and its corresponding fund, with another six months provided for their implementation.

Section: F.1 **Subsection: F.1.b.2.i.**

Comment: Requirements for infiltration of urban runoff have the potential to adversely impact groundwater quality. The restrictions staff has placed on infiltration are poorly thought out and should be reconsidered, rather than force the Copermittees to solve the problem. (County of San Diego)

Response: Focusing infiltration of large volumes of water in small areas has the potential to adversely impact groundwater quality. For this reason, infiltration restrictions have been placed on the use of

structural infiltration BMPs in section F.1.b.2.i. These restrictions are to apply to structural infiltration BMPs only. These restrictions on structural infiltration BMPs are appropriate and are based directly on USEPA guidance. The restrictions are predominantly recommended by the USEPA Risk Reduction Engineering Laboratory (USEPA, 1994). Other infiltration restrictions are based on restrictions used elsewhere, such as Los Angeles, the State of Washington, and the State of Maryland. Furthermore, the restrictions are supported by the SWRCB in Order WQ 2000-11. The Order states: "The Regional Board did consider the potential impacts to groundwater from infiltration, and included appropriate limitations and guidance on its use as a BMP." The limitations and guidance the SWRCB refers to in Order WQ 2000-11 include most of the restrictions on infiltration included in the Tentative Order.

However, the SDRWQCB acknowledges that infiltration restrictions may not be necessary in all cases. For this reason, the Tentative Order will be changed to allow the Copermittees to develop their own restrictions on the use of structural infiltration BMPs in the model SUSMP, for approval by the SDRWQCB.

See change at permit section F.1.b.2.i.

Section: F.1 Subsection: F.1.b.2.i.

Comment: The SDRWQCB does not have legal authority to include restrictions on infiltration in the Tentative Order since the discharges neither originate in nor pass through the Copermittees' MS4s. Furthermore, for the Copermittees to regulate infiltration and protect ground water quality would be beyond the legal authority they possess or could likely obtain. (County of San Diego)

Response: The Tentative Order requires the implementation of structural treatment BMPs, of which infiltration is one option. Where the Copermittees choose to allow infiltration/redirection of flows which would otherwise enter their MS4s, restrictions are appropriate. The Copermittees cannot choose to redirect flows away from their MS4s and claim no responsibility for the potential impacts of such actions. In addition, the SWRCB upheld in Order WQ 2000-11 the infiltration restrictions included in the LARWQCB SUSMP, on which the infiltration restrictions in the Tentative Order are based.

Section: F.1 Subsection: F.1.b.2.i.

Comment: The Technical Report does not adequately address the infiltration provisions. (County of San Diego)

Response: The infiltration provisions are discussed in the draft Fact Sheet/Technical Report in the discussion for Finding 35 on page 59.

Section: F.1 Subsection: F.1.b.2.i.

Comment: Requirements of the Tentative Order which promote infiltration are inconsistent with the infiltration restrictions of F.1.b.2.i. (Imperial Beach, County of San Diego, Carlsbad, La Mesa)

Response: The requirements promoting infiltration are not inconsistent with the infiltration restrictions of section F.1.b.2.i. The infiltration restrictions included in section F.1.b.2.i. were intended to apply to structural infiltration BMPs only. During the public workshops for the Tentative Order, interested parties noted to the SDRWQCB that this intent was not clear. In order to clarify that the infiltration restrictions of section F.1.b.2.i. were only to apply to structural infiltration BMPs, the SDRWQCB developed new language in the December 13, 2000 Proposed Changes document (Attachment 9 of the Executive Officer Summary Report for the December 13, 2000 Public Hearing).

By making the infiltration restrictions of section F.1.b.2.i. apply to structural infiltration BMPs only, requirements which promote infiltration are consistent with the infiltration restrictions. Infiltration restrictions are necessary for structural infiltration BMPs due to the large volume of storm water they are designed to infiltrate in a small area. By concentrating infiltration into a small area, structural infiltration BMPs can concentrate any pollutants which may be in storm water. This can lead to relatively high levels of pollutants in the soil of such structural infiltration BMPs. Furthermore, by infiltrating large volumes of storm water, the structural infiltration BMPs can help transport these pollutants. The combined potential for the concentration and transport of pollutants in structural treatment BMPs can pose a risk to groundwater quality. Therefore, restrictions on the use of structural infiltration BMPs are needed. These restrictions are included in section F.1.b.2.i. of the Tentative Order.

The inclusion of these restrictions is not inconsistent with other parts of the Tentative Order which promote infiltration, however. Other sections of the Tentative Order which promote infiltration do so by promoting the preservation of natural infiltration conditions (see Finding 34, section F.1.a.1, and section F.1.b.1.b). Preservation of natural infiltration conditions does not focus infiltration in one area, but rather provides for infiltration throughout a project by natural means. Therefore, potential pollutants are not concentrated in any one area, and infiltration rates are not accelerated. Infiltration under such circumstances poses minimal risk of groundwater contamination, and infiltration restrictions are not typically warranted.

For these reasons, infiltration requirements within the Tentative Order are consistent. Restrictions on infiltration are only required for structural infiltration BMPs.

See change at permit section F.1.b.2.i.

Section: F.1 **Subsection: F.1.b.2.i.ii**

Comment: The requirements for infiltration BMPs will severely limit the use of this BMP. The requirement that all urban runoff must undergo pretreatment prior to infiltration totally disregards the runoff quality. Copermittees should be allowed to determine when and where pretreatment is required. (Orange County, County of San Diego, BIASC, Metro Commission)

Response: Focusing infiltration of large volumes of water in small areas has the potential to adversely impact groundwater quality. For this reason, infiltration restrictions have been placed on the use of structural infiltration BMPs in section F.1.b.2.i. These restrictions are to apply to structural infiltration BMPs only. These restrictions on structural infiltration BMPs are appropriate and are based directly on

USEPA guidance. The restrictions are predominantly recommended by the USEPA Risk Reduction Engineering Laboratory (USEPA, 1994). Other infiltration restrictions are based on restrictions used elsewhere, such as Los Angeles, the State of Washington, and the State of Maryland. Furthermore, the restrictions are supported by the SWRCB in Order WQ 2000-11. The Order states: "The Regional Board did consider the potential impacts to groundwater from infiltration, and included appropriate limitations and guidance on its use as a BMP." The limitations and guidance the SWRCB refers to in Order WQ 2000-11 include most of the restrictions on infiltration included in the Tentative Order.

However, the SDRWQCB acknowledges that infiltration restrictions may not be necessary in all cases. For this reason, the Tentative Order will be changed to allow the Copermittees to develop their own restrictions on the use of structural infiltration BMPs in the model SUSMP, for approval by the SDRWQCB.

See change at permit section F.1.b.2.i.

Section: F.1 Subsection: F.1.b.2.i.iii

Comment: The infiltration of dry weather flows should be allowed where appropriate. It would replenish groundwater. The Copermittees should be allowed to determine when dry weather flow infiltration restrictions are necessary. Furthermore, no rationale has been provided for the blanket exclusion of dry weather flows from infiltration devices. Given all of the other restrictions on dry weather flows, it is unlikely that infiltrated dry weather flows would impact groundwater quality. (BIASC, Orange County, County of San Diego, Port of San Diego, Chula Vista)

Response: Focusing infiltration of large volumes of dry weather flows in small areas has the potential to adversely impact groundwater quality. For this reason, restrictions have been placed on the infiltration of dry weather flows in section F.1.b.2.i.iii. These restrictions are to apply to structural infiltration BMPs only. These restrictions on dry weather flow infiltration are appropriate and are based directly on USEPA guidance. The restrictions are recommended by the USEPA Risk Reduction Engineering Laboratory (USEPA, 1994). Furthermore, the restrictions are supported by the SWRCB in Order WQ 2000-11. The Order states: "The Regional Board did consider the potential impacts to groundwater from infiltration, and included appropriate limitations and guidance on its use as a BMP." The guidance the SWRCB refers to in Order WQ 2000-11 includes USEPA's recommendation against the infiltration of dry weather flows.

However, the SDRWQCB acknowledges that dry weather flow infiltration restrictions may not be necessary in all cases. For this reason, the Tentative Order will be changed to allow the Copermittees to develop their own restrictions on the use of structural infiltration BMPs in the model SUSMP, for approval by the SDRWQCB.

See change at permit section F.1.b.2.i.

Section: F.1 Subsection: F.1.b.2.i.vi

Comment: Does the requirement for 10 feet of separation between infiltration BMPs and groundwater preclude coastal cities with low elevations from using infiltration as a structural BMP? (Imperial Beach, Carlsbad)

Response: Many coastal cities have high groundwater near the coast. However, groundwater resources near the coast often do not support beneficial uses. Where groundwater resources do not support beneficial uses, the minimum vertical distance between the base of any infiltration structural treatment BMP to the seasonal high groundwater mark may be reduced, provided that the water quality of the groundwater resources is maintained.

See change in permit section F.1.b.2.i.vi.

Section: F.1 Subsection: F.1.b.2.vii

Comment: Does "directly adjacent" in F.1.b.(2)(a)vii apply if the development in question is hydrologically disconnected from the sensitive area? (Chula Vista)

Response: Situations regarding the application of SUSMP provisions at this level of detail will be left to the discretion of the Copermittees.

Section: F.1 Subsection: F.1.b.2

Comment: Copermittees should be encouraged to implement interim measures to ensure smooth transition upon adoption of individual SUSMPs. (Surfrider Foundation)

Response: The Tentative Order encourages a smooth transition to local SUSMP implementation. The requirement for the collective development of a model SUSMP by the Copermittees in a public process will help ensure that stakeholders will be familiar with the pending local SUSMP requirements. The development of the model SUSMP will ease the transition to full SUSMP implementation.

Section: F.1 Subsection: F.1.b.2

Comment: Deadlines for implementation of SUSMP provisions contained in the Permit are substantially longer than other Permit requirements and will allow unacceptable levels of pollution from development in the interim. (San Diego Baykeeper)

Response: The deadlines for implementation of the Standard Urban Storm Water Mitigation Plans under Tentative Order 2001-01 are based on realistic and achievable time frames for the Copermittees to develop the SUSMP requirements, subject to SDRWQCB approval.

Section: F.1 Subsection: F.1.b.2

Comment: The permit should contain concrete, aggressive time frames in order to achieve the stated goals of the SUSMPs. As written, it is somewhat unclear what steps must be taken within the 365 day period for collective development of a model SUSMP. (Surfrider Foundation)

Response: The deadlines for implementation of the Standard Urban Storm Water Mitigation Plans under Tentative Order 2001-01 are based on realistic and achievable time frames for the Copermittees to develop and implement the SUSMP requirements, subject to SDRWQCB approval. The Copermittees are provided discretion during this time to develop the SUSMP following their jurisdictional procedures. The amount of time following submittal of the SUSMP to the SDRWQCB necessary for the public process and adoption by the SDRWQCB cannot be dictated in the Tentative Order.

Section: F.1 Subsection: F.1.b.2

Comment: The Treatment Control BMPs proposed to implement the SUSWMP frequently require significant changes to traditional building and development codes. Thus, the project proponent is faced with a dilemma. If the Copermittees do not revise their building and development codes and ordinances before the date that the Treatment Control BMPs in the SUSWMP become a requirement, compliance becomes much more expensive, if not impossible.

Proposal
The Regional Board shall use its enforcement authority to assure that Copermittees modify their building and development codes and ordinances to allow for the use of Treatment and Source Control BMPs before the enforcement of the SUSWMP; and
The Regional Board shall grant the Copermittees any reasonable additional time necessary to modify their building and development codes and ordinances if it is shown at a publicly noticed hearing to the satisfaction of the Regional Board, that such modifications require additional time in order to comply with other regulations including but not limited to CEQA. (McKenna & Cuneo, L.L.P.)

Response: The Tentative Order requires the Copermittees to modify the building and development codes and ordinances as necessary to comply with the Tentative Order. The Tentative Order states "Within 180 days of approval of the model SUSMP in the public process by the SDRWQCB, each Copermittee shall adopt its own local SUSMP, and amended ordinances consistent with the approved model SUSMP, and shall submit both (local SUSMP and amended ordinances) to the SDRWQCB." The Copermittees are provided 365 days to develop the model SUSMP and an additional 180 days for the local SUSMP. One and a half years should be sufficient to develop the necessary ordinances.

Section: F.1 Subsection: F.1.b.2

Comment: We strongly support the permits emphasis on using natural processes such as wetlands and vegetated filters for water treatment. We urge that the implementation of these natural processes also be designed to inherently restore the ground water recharge value that existed prior to the hardening of our watersheds, wherever it can be done without risk of contamination. (San Diego Audubon Society)

Response: Comment noted.

Section: F.1 Subsection: F.1.b.2

Comment: Modify the SUSMP provisions to allow Co-permittees to develop a regional SUSMP and determine the mitigation plan categories, BMPs, Numeric Sizing Criteria, Pollutants of Concern, and Implementation Process, over a three-year period. (San Diego Co-permittees)

Response: The SUSMP provisions, including priority development project categories, have been upheld by the SWRCB in a precedential decision in Order WQ 2000-11. These provisions allow for the Copermittees to develop and determine BMPs, pollutants of concern, and implementation processes. Flexibility in the calculation of numeric sizing criteria is also provided. Furthermore, the time frame for development and implementation of the SUSMP provisions is sufficient. The Copermittees are provided with at least a year and a half before SUSMPs must be implemented. Considering the rapid development within the region, extension of the implementation of SUSMPs to three years would result in construction of significant development without adequate post-construction BMPs, causing additional long-term impacts to the region's receiving waters.

Section: F.1 Subsection: F.1.b.2

Comment: We very much support the standard urban storm water mitigation plans and the numeric sizing criteria and the requirements for new streets and highways. We know these to be reasonable and achievable. (USEPA)

Response: Comment noted.

Section: F.1 Subsection: F.1.b.2

Comment: The City supports the development of a model SUSMP.

The Stakeholder group recommended that the soon to be issued Tentative Order provide flexibility and discretion by allowing the City and other Copermittees to implement the requirements of the SUSMP. (City of San Diego)

Response: The SUSMP requirements allow for the Copermittees to develop processes to determine pollutants of concern and selection of appropriate BMPs. Section F.1.b.2.e of the Tentative Order states "[a]s part of the model SUSMP, the Copermittees shall develop a procedure for pollutants of concern to be identified […]." Section F.1.b.2.b states "[t]he SUSMP shall include a list of recommended pollution prevention, source control, and structural treatment BMPs." Both of these sections of the Tentative Order allow the Copermittees discretion in developing these particular parts of the SUSMP program.

Section: F.1 Subsection: F.1.b.2

Comment: Upon adoption of local SUSMPs, requirements should apply to all uncompleted priority projects or phases of priority projects regardless of whether grading or construction activities have begun. (Surfrider Foundation)

Response: Requiring SUSMPs to apply to development projects which have already begun construction could require significant retrofitting of already constructed facilities. Costs for retrofitting may in some cases be prohibitive, as opposed to implementation of BMPs in the planning phase, when BMP implementation is most cost effective. While the SDRWQCB strongly supports retrofitting of BMPs in areas of existing development where water quality conditions warrant, potential retrofitting requirements which may result from applying SUSMPs to projects already under construction may not be cost-effective in all cases. For this reason, SUSMP requirements will be applied only to development projects which have not yet begun construction.

Section: F.1 Subsection: F.1.b.2.

Comment: Page 19, F. 1.b.(2) (i) vii., revise:
The soil through which infiltration is to occur shall have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, sand content, and infiltration rate) which are adequate for proper infiltration duration and treatment of urban runoff for the protection of groundwater for beneficial uses, and to prevent ponding of water in the infiltration basin for more that 72 hours. Soil characteristics and infiltration rates shall be confirmed through field testing. (State Department of Health Services)

Response: Requirements regarding infiltration durations are left to the discretion of the Copermittees.

Section: F.1 Subsection: F.1.b.2.a

Comment: Increase in gross floor area where the amount of impervious surface does not increase beyond the threshold (i.e., 5,000 square feet) should be excluded from SUSMP requirements. (Sempra Energy)

Response: An increase in gross floor area which does not result in an increase in impervious surfaces of 5,000 square feet is not subject to the SUSMP requirements. Significant redevelopment is defined in the Tentative Order as "the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site." The list of examples of significant redevelopment provided in the Tentative Order, including "increases in gross floor area," must only meet the SUSMP provisions if they increase impervious surfaces by 5,000 square feet or more.

Section: F.1 Subsection: F.1.b.2.a

Comment: DEFINING SIGNIFICANT REDEVELOPMENT: DRAFT PERMIT SECTION F.1.b.(2)(a)

Based upon the proposed definition above, the Urban Core is already 90% developed. Thus, most construction activity occurring in the Urban Core constitutes redevelopment. Therefore, the definition of "significant redevelopment" is critical to CCDC.

A. Background
SUSWMPs are applicable to development and "significant redevelopment." The definition of significant redevelopment is obviously of great concern to CCDC because it will determine which of its projects are subject to the SUSMP requirements and to what extent. The definition of significant redevelopment was very contentious at the State Board hearings on the Los Angeles SUSWMP plan. The LA RWQCB reworked their definition in response to that hearing in an attempt to clarify the intent. Their definition is as follows:

[Significant redevelopment means] On an already developed site, the creation or addition of 5,000 square feet or more of impervious surfaces. If the creation or addition of impervious surfaces is fifty percent or more than the existing impervious surface area, then storm water runoff from the entire area (existing and additions) must be considered for purposes of storm water mitigation. If the creation or addition is less than fifty percent of the existing impervious area, then storm water run off from only the addition area needs mitigation. Redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces.

This definition only further confuses the reader. What are the distinctions between replacement, creation, and addition? What is the difference, if any, between expansion and structural development? What is routine maintenance? What are land disturbing activities? What else is included in the definition of redevelopment?

The SD RWQCB touched on the definition of significant redevelopment in its Draft Responses to Comments Received at Numeric Sizing Criteria Public Workshop 11, held April 13, 2000. Workshop participants asked: "When a site is under redevelopment, will the whole site have to meet the numeric sizing criteria or only the part of the site, which is to be redeveloped?" The RWQCB Staff responded:

If the redevelopment involves improvements for fifty percent or more of the site, then the entire site area becomes subject to numeric sizing criteria. If less than fifty percent of the area is to be redeveloped, then only the area that is improved is subject to the criteria.

This guidance also leaves many questions unanswered. For example, what is an improvement? Do improvements include repair and expansion? What the SD RWQCB appears to be saying is that if more than 50% of the site remains untouched then only that modified area are subject to SUSWMPs. Whether the SD RWQCB intended any other distinctions concerning the type or scale or redevelopment remains unclear.

The Permit proposes yet another definition:
Significant redevelopment includes, but is not limited to: the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where significant redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSWMP

requirements, the numeric sizing criteria discussed in section F. 1.b. (2)(c) applies only to the addition, and not the entire development.

This definition does not appear to encompass the SDRWQCB Staff s entire concept of significant redevelopment given it uses the language includes, but is not limited to all of the items listed. This is difficult to understand because the proposed definition appears to include all construction, remodeling, and replacement of impervious surfaces or land disturbing activities - seemingly an all-encompassing list of reconstruction activities. Thus, for example, the addition of an enclosure for trash receptacles or a bus enclosure could, under this definition, impose SUSWMP requirements on all or some of the property.

B. Proposed Definition
We propose the following, more understandable definition:
"Significant Redevelopment" is:
1. The construction of a replacement structure that includes more
than 5000 square feet of impervious surface area;
2. The addition of more than 5000 square feet to an existing structure;
3. The repair of an impervious surface greater than 5000 square feet at an existing structure; or
4. Where the total square footage of the replacement, addition or repair exceeds 50% of the total impervious area of the completed redevelopment project, then storm water from the entire project must be considered for the purposes of storm water mitigation. Where the total square footage of the replacement, addition or repair is less than or equal to 50% of the total impervious area of the completed redevelopment project, only storm water from the replacement, addition or repair need be considered.

Discussion C.
This definition of "significant redevelopment" is more workable because it clearly defines the obligations of the Copermittees. It also makes technical and economic sense. Small additions at a project site will have little impact on water quality through the creation of additional impervious areas. Imposing the SUSWMP on projects less the 5,000 square feet will have significant cost implications. Further, the unintended consequence of requiring the SUSWMP for de minimis projects may well be to worsen water quality. No one is going to put up a ten-by-ten shed to house waste containers if they are then going to be faced with the added costs of capturing and treating the resulting storm water. (McKenna & Cuneo, L.L.P.)

Response: The definition for significant redevelopment in the Tentative Order is identical to that included in SWRCB Order WQ 2000-11. The Tentative Order states “Significant redevelopment is defined as the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site.” Following this definition of significant redevelopment is a list of examples of significant redevelopment, which includes "replacement of a structure." None of the listed examples, including "replacement of a structure," constitute significant redevelopment unless they result in an increase of at least 5,000 square feet of impervious surface.

Section: F.1 Subsection: F.1.b.2.a

Comment: Definition of "Significant Redevelopment". Section F.1.b(2)(a) of the Tentative Order, found at page 15, provides a definition of "significant redevelopment." If this definition is to be applied uniformly throughout the Order, it should be set forth at the very beginning of the Order, preferably when the term "significant redevelopment" is first used (i.e., Section A.4 at page 8). (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: Comment noted.

Section: F.1 Subsection: F.1.b.2.a

Comment: Matters are further complicated by the discussion regarding Environmentally Sensitive Areas in section F.1.b(2)(a)vii., on page 16, which appears to include a different definition of significant redevelopment areas. This section provides as follows:

"Environmentally Sensitive Areas. All development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area, which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition."

What happened to the 5,000 square foot threshold for "significant redevelopment"? Is that threshold reduced to 2,500 square feet in "Environmentally Sensitive Areas"? Please clarify. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The definition of what constitutes significant redevelopment when the redevelopment is occurring within, or directly adjacent to, or discharging directly to an environmentally sensitive area is included in section F.1.b.2.a.vii. This section states "Environmentally Sensitive Areas. All development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area, which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its naturally occurring condition." The 2,500 square foot size threshold applies to redevelopment within or near environmentally sensitive areas. The 5,000 square foot size threshold applies to redevelopment elsewhere.

Section: F.1 Subsection: F.1.b.2.a

Comment: F.1.b.(2)(b)iv: BMP Requirements - "Significant redevelopment" includes road-widening projects. In many cases structural BMP's are not a reasonable requirement for lineal redevelopment. (SANDAG)

Response: BMPs are a reasonable requirement for roads. Caltrans, as part of a BMP Pilot Study, has installed many structural BMPs to treat runoff from freeways in Southern California. Furthermore, BMPs for roads are necessary due to the concentrations of pollutants in runoff from roads. A Federal Highway Administration “Pollutant Loading and Impacts from Highway Stormwater Runoff, Volume 3; Analytical Investigation and Research Report” (1990) finds that concentrations of total suspended solids, nitrate + nitrite nitrogen, and zinc exceed USEPA benchmark values for concentrations of these pollutants in urban runoff. Streets, roads, highways, and freeways also consist of extensive impervious surfaces, which alter flow regimes and increase potential for downstream erosion.

Section: F.1 Subsection: F.1.b.2.a

Comment: The amount of land that may be temporarily disturbed during redevelopment activities, but not necessarily made more impervious, should not be included in the calculation to determine if the project exceeded 5,000 square feet and therefore is subject to SUSMP requirements. This language should be revised to clarify that this is not its intent. (Sempra Energy)

Response: Redevelopment is only considered significance redevelopment and subject to SUSMPs when it results in an increase in impervious surfaces of 5,000 square feet. This size limit for impervious surfaces is included in the significant redevelopment definition to prevent SUSMP provisions from applying to insignificant redevelopment projects which will not result in an impact to water quality. The definition of significant redevelopment included in the Tentative Order is identical to the definition developed by the SWRCB in its precedential Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.a

Comment: This provision should be amended to mandate SUSMP compliance for entire facilities any time there is an increase in at least 10% of the impervious surfaces of a previously existing development. (Surfrider Foundation)

Response: The limited SUSMP applicability to partial redevelopment projects is included in the significant redevelopment definition to prevent SUSMP provisions from applying to large areas when only relatively minor redevelopment occurs. The definition of significant redevelopment included in the Tentative Order is identical to the definition developed by the SWRCB in its precedential Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.a

Comment: Add redevelopment areas to significant redevelopment definition in F.l.b.(2)(a) pg.15 using the following language: ". . . SUSMP requirements shall apply to all new development and significant redevelopment projects falling under the priority project categories listed below and to all significant redevelopment in designated Redevelopment Areas. . .". (Environmental Health Coalition)

Response: Any redevelopment in "redevelopment areas" will be subject to SUSMP provisions (as required for significant redevelopment) if the redevelopment results in an increase in impervious surfaces of 5,000 square feet. Therefore, most redevelopment occurring in "redevelopment areas" will be subject to the SUSMP provisions. Applying SUSMP provisions to all redevelopment in "redevelopment areas" irregardless of size may result in the application of SUSMP provisions to insignificant redevelopment projects where meeting the SUSMP provisions may be unnecessary or infeasible. The significant redevelopment definition included in the Tentative Order is identical to that developed in the SWRCB's precedential Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.a

Comment: Is it correct that a commercial development of 100,000 sq ft of impervious surface does not need an SUSMP if the building foot print is not increasing? (Vasquez, Ralph)

Response: The condition of the building footprint is not a trigger for SUSMP redevelopment requirements. SUSMP redevelopment requirements apply only if 5,000 square feet of impervious surface has been added. Of course, if the expansion of a building footprint results in a 5,000 square feet increase in impervious surface, SUSMP requirements would also apply. Any new commercial development in which the land area for development is larger than 100,000 square feet must meet the SUSMP requirements. Any redevelopment of a commercial development greater than 100,000 square feet must meet SUSMP requirements if the redevelopment results in an increase in impervious surfaces of 5,000 square feet.

Section: F.1 **Subsection: F.1.b.2.a**

Comment: How is "significant development" defined? (Anonymous Workshop 1)

Response: Significant redevelopment is defined in Tentative Order Section F.1.b.2.a.

Section: F.1 **Subsection: F.1.b.2.a**

Comment: Page 17, after F. 1.b.(2)(a) xv. add,

xvi. Be designed to prevent vector breeding. (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: F.1 **Subsection: F.1.b.2.a**

Comment: We do not feel it is feasible to require structural treatment BMPs to be implemented at all the Permit listed priority development projects. These priority development projects were not selected based on any scientific basis, merely on the thought of which developments should be of higher priority than others. Structural treatment BMPs should be required on developments that will discharge pollutants of concern at levels that would negatively impact receiving water bodies. (Building Industry Association of Southern CA)

Response: The SUSMP priority development project categories have been dictated by the SWRCB in its precedential decision in Order wq 2000-11. A December 26, 2000 SWRCB memo from Craig M. Wilson to the Regional Board Executive Officers states that Order WQ 2000-11 "determined that SUSMPs appropriately applied to the following categories of development: single-family hillside residences, 100,000 square foot commercial developments, automotive repair shops, restaurants, home subdivisions with 10 to 99 housing units, home subdivisions with 100 or more housing units, and parking lots with 5, 000 square feet or more or with 25 or more parking spaces and potentially exposed to storm water runoff."

The SDRWQCB has expanded on this SWRCB guidance in a few instances. The instances are as follows:

1. The parking lot size criteria was changed from 25 or more parking spaces to 15 or more parking spaces. This change was based on a comment from the Port of San Diego during the April 13, 2000 SDRWQCB SUSMP Public Workshop. The comment noted that the other parking lot size criteria of 5,000 square feet actually corresponded more closely with the size of 15 parking spaces, rather than 25 parking spaces. In order to make the two parking lot size criteria as similar as possible, the criteria for 25 parking spaces was reduced to 15 parking spaces.

2. The single-family hillside residence category was changed to "All hillside development greater than 5,000 square feet." This change was made to reflect the urban runoff concerns generated by hillside development. The primary concern regarding hillside development is the potential for erosion resulting from changes in the flow regime caused by the development. While pollutants from hillside development (including single-family residences) can be significant, increases or changes in flow conditions provide the greatest potential for impacts to beneficial uses. Therefore, the type of development on a hillside is not at issue as much as the size of the development and the resulting changes in the flow regime. For this reason, rather than focus on the type of hillside development, the SDRWQCB SUSMP requirements focus on size. The size (5,000 square feet) was chosen based on SWRCB guidance in Order WQ 2000-11, which uses a size threshold of 5,000 square feet for significant redevelopment.

3. Retail gasoline outlets were added as a SUSMP priority development project category. Regarding retail gasoline outlets as a priority category, the SWRCB states in the December 26, 2000 memo that Order WQ 2000-11 "allows broader discretion by the Regional Water Boards to decide whether to include additional types of development in future SUSMPs. These areas for potential future inclusion in the SUSMPs include retail gasoline outlets […]." The Draft Fact Sheet/Technical Report for Tentative Order No. 2000-01 discusses the rationale for retail gasoline outlets to be designated a priority development project category. Also see responses to comments ( ).

4. Streets, roads, highways, and freeways were added as a SUSMP priority development project category. This is due to their potential to be a significant contributor of pollutants in urban runoff. A Federal Highway Administration "Pollutant Loading and Impacts from Highway Stormwater Runoff, Volume 3; Analytical Investigation and Research Report" (1990) finds that concentrations of total suspended solids, nitrate + nitrite nitrogen, and zinc exceed USEPA benchmark values for concentrations of these pollutants in urban runoff. Streets, roads, highways, and freeways also consist of extensive impervious surfaces, which alter flow regimes and increase potential for downstream erosion.

Section: F.1 Subsection: F.1.b.2.a.iii

Comment: And does F.1.b. (2)(a) iii and F.1.b. (2)(a) viii apply to redevelopment projects also? (City of Chula Vista)

Response: Redevelopment of any site falling under the SUSMP priority development project categories which increases impervious surfaces by 5,000 square feet or more is subject to the SUSMP provisions.

Section: F.1 Subsection: F.1.b.2.a.iii

Comment: Are the SUSMP requirements applied to 100,000 sq ft gross floor area or total land area for a development? (Hamilton, Julie)

Response: The Tentative Order states "Commercial developments greater than 100,000 square feet. This category is defined as any development on private land that is not for heavy industrial or residential uses where the land area for development is greater than 100,000 square feet. The category includes, but is not limited to: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; and other light industrial facilities."

Section: F.1 Subsection: F.1.b.2.a.iii

Comment: The commercial developments must be considered priority projects under the SUSMP requirement. But, given the likelihood of cumulatively significant pollutant discharges from all types of commercial developments, the limitation of this category to developments greater than 100,000 square feet is unwarranted. Copermittees should assess impervious cover percentages by watershed, and where more than 10% of the natural filtration is lost, all commercial development of any size should have to adopt SUSMP urban runoff controls. (Surfrider Foundation)

Response: The 100,000 square feet size threshold for commercial development will result in most commercial development being subject to the SUSMP provisions. This size threshold is included in the commercial development definition to prevent SUSMP provisions from applying to small commercial projects which most likely will not result in a significant impact to water quality. The definition of commercial development included in the Tentative Order is identical to the definition upheld by the SWRCB in its precedential Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.a.iii

Comment: Does the entire impervious area of a redevelopment project fall subject to numeric sizing requirements if impervious area is added that is over 50% of the existing developments impervious area? And does F.1.b. (2)(a) iii and F.1.b. (2)(a) viii apply to redevelopment projects also?

Redevelopment may correct pollution problems inherent in existing development, and it also may reduce the need for developing new lands for housing and commercial space. However, stringent requirements that tend to reduce the viability of redevelopment projects can work to restrict these benefits and should be carefully considered. (City of Chula Vista)

Response: The Tentative Order states "[w]here significant redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to SUSMP requirements, the numeric sizing criteria discussed in section F.1.b.(2)(c) applies only to the addition, and not to the entire development."

Section: F.1 Subsection: F.1.b.2.a.ix

Comment: The IEA recommends emergency provisions be included in the permit and language exempting firebreaks, unpaved public utility access roads, and temporary roads. (Industrial Environmental Association)

Response: The SUSMP requirements are intended to apply to long-term developments. The requirements are therefore limited to paved streets, roads, highways, and freeways. Streets, roads, highways, and freeways are defined in the Tentative Order as "any paved surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles. To the extent that the above roads are not paved, they are not required to meet the SUSMP conditions.

Section: F.1 Subsection: F.1.b.2.a.ix

Comment: F. 1.b.(2)(a)(ix) page 16; Streets, roads, highways, and freeways.
The language (i.e., "...any paved surface...") is all-inclusive and would potentially require even short paved access roads and/or roads that are gated (and therefore have limited access and use) to be subject to SUSMP requirements. This section should be revised to exclude short access roads and gated roads that have limited access and use. (Sempra Energy)

Response: The intent of the "streets, roads, highways, and freeways" SUSMP priority development project category is address such transportation corridors which have the potential to impact receiving waters, either through the discharge of pollutants or resulting changes in peak flow rates. Therefore, short access roads and gated roads which receive limited use need not be covered under SUSMPs. For this reason, a size threshold of 5,000 square feet will be placed on the "streets, roads, highways, and freeways" SUSMP priority development project category. For perspective, this threshold would allow for a SUSMP exemption for a 20 foot wide access road which was less than 250 feet long. The 5,000 square foot threshold was chosen based on the 5,000 square foot threshold for parking lots. Both roads and parking lots generate similar pollutants due to their similar sources of pollutants: automobiles. The 5,000 square foot threshold for parking lots was upheld by the SWRQCB in Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.a.ix

Comment: Are road construction projects included in sizing criteria? (Anonymous Workshop 1)

Response: Numeric sizing criteria will apply to all new road construction projects, as well as road redevelopment projects which result in an increase in impervious surfaces of 5,000 square feet.

Section: F.1 Subsection: F.1.b.2.a.ix

Comment: Are streets and highways subject to the numeric sizing criteria? (Coalition for Practical Regulation)

Response: Yes; streets, roads, highways, and freeways are a priority development project category under the SUSMP provisions.

Section: F.1 **Subsection: F.1.b.2.a.ix**

Comment: This plan must vigorously address roads, streets, and highways for new and for existing development to be meaningful, systematic, fair, or effective. These elements are a major direct contributor to our water quality problems. (San Diego Audubon Society)

Response: Comment noted.

Section: F.1 **Subsection: F.1.b.2.a.ix**

Comment: Is the requirement for existing streets or new streets? (Coalition for Practical Regulation)

Response: The requirement applies to new streets as well as redevelopment of any existing streets which results in an increase in impervious surfaces of 5,000 square feet or more.

Section: F.1 **Subsection: F.1.b.2.a.ix**

Comment: The Regional Board should amend the Caltrans Storm water Permit to be consistent with the SUSMP requirements in the Municipal Storm water Permits since the Copermittees have no authority over Caltrans roads. (San Diego Baykeeper)

Response: Comment noted.

Section: F.1 **Subsection: F.1.b.2.a.ix**

Comment: Please clarify the intent of SUSMP with regard to new or existing sidewalk construction, curb and gutter construction, and minor roadway work. (Anonymous Workshop 1)

Response: Since sidewalks are not "used for the transportation of automobiles, trucks, motorcycles, and other vehicles," they are not subject to SUSMPs under the Street, Roads, Highways, and Freeways priority development project category. Addition of curb and gutter to an existing road is essentially redevelopment of the road. Therefore construction of curb and gutter on an existing road would be subject to SUSMP requirements if it met the significant redevelopment size criteria of adding 5,000 square feet of impervious surfaces. Other minor roadway work would also be subject to SUSMPs if it met the significant redevelopment size criteria.

Section: F.1 Subsection: F.1.b.2.a.ix

Comment: The Order, which departs from other regional NPDES permits by requiring that streets, roads, highways and freeways be regulated by SUSMP's, is vague and raises questions on what structural BMP's for streets will remove the pollutants of concern. (Coalition for Practical Regulation)

Response: Caltrans is currently conducting a BMP pilot study on the effectiveness of various BMPs for controlling pollutants in highway runoff. Preliminary results indicate many of the BMPs included in the study were effective in removing pollutants of concern from highway runoff (such as metals and total suspended solids). The Caltrans study can be consulted to determine which BMPs are most effective (Caltrans, 2000).

Section: F.1 Subsection: F.1.b.2.a.v

Comment: How is a restaurant regulated by the permit when the restaurant is less than 5,000 sq ft but shares a larger parking lot with other tenants? (Vasquez, Ralph)

Response: How to address detailed specific situations such as the one described above is left to the discretion of the Copermittees. The model and local SUSMPs to be developed by the Copermittees should include provisions to address such situations. One way to address the above situation would be to calculate the restaurant's area as the area of the restaurant combined with the area of the parking spaces allotted to the restaurant.

Section: F.1 Subsection: F.1.b.2.a.vi

Comment: The permit is too indefinite with regard to what constitutes "hillside development." To clarify the matter, the permit should either define "known erosive soil conditions, or point to an existing regulation (i.e. a specific Copermittee's existing hillside development ordinance) containing a more detailed and expansive description. In addition, the provision should be modified to include development where grading will occur on any parcel where the natural slope is 15% or greater or where plans include cut or fill slopes that are 30 feet high or greater. (Surfrider Foundation)

Response: Hillside development is defined in the Tentative Order as "any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater." The identification of the location of erosive soil conditions is left to the discretion of the Copermittees, since they are most familiar with the soil conditions within their jurisdictions. The model and local SUSMPs to be developed by the Copermittees should identify areas or methods to identify areas with know erosive soil conditions within their jurisdictions. The definition of "hillside" included in the Tentative Order is identical to the definition included in the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.a.vii

Comment: DEFINING ENVIRONMENTALLY SENSITIVE AREAS
The Municipal Permit requires that all development or redevelopment whose storm water discharges to an environmentally sensitive area " will be subject to the SUSWMP.

The Draft Permit defines "Environmentally Sensitive Areas" as-
Environmentally sensitive areas include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); water bodies designated with the RARE beneficial use by the State Water Resources Control Board (Water Quality Control Plan for the San Diego Basin (1994) and amendments); areas designated as preserves or their equivalent under the Multi Species Conservation Program within the Cities and County of San Diego; and any other equivalent environmentally sensitive area which have been identified by the Copermittees. "Directly adjacent" means situated within 200 feet of the environmentally sensitive area. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely or predominantly of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.

By this definition, the SD RWQCB Staff resolves any remaining ambiguities. Everything is an environmentally sensitive area unless the Copermittee finds otherwise. Since it is unlikely that any Copermittee will wish to take on the expense or potential legal liability of determining that a property is not an environmentally sensitive area, it is likely under this definition that any construction or reconstruction project that adds 2500 square feet of impervious area or increases the impervious area by more than 10% will be required to capture and treat its storm water. Thus, a homeowner with a 2500 square foot house who adds a 200 square foot patio will be required to capture and treat her storm water before discharge. However, the real impact of this definition becomes apparent when read in connection with the property prioritization requirements of the Draft Permit.

We propose the following definitions:
Environmentally Sensitive Area 1. -"Environmentally Sensitive Area" means an area designated as an Area of Special Biological Significance by the State Water Resources Board, an area designated as a Significant Natural Area by the California Resources Agency or an area designated as an area of Ecological Significance by the County of San Diego.

"Directly adjacent to" means situated within 200 feet of the environmentally sensitive area provided however, that the Executive Officer shall prepare a map of the County clearly identifying those areas which are within 200 feet of environmentally sensitive areas for approval by the Regional Board prior to the implementation of the SUSWMP. The Regional Board shall review and approve the map only upon a noticed motion.

"Directly discharging to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject property, development, subdivision or industrial facility, and not commingled with the flows from adjacent lands. (McKenna & Cuneo, L.L.P.)

Response: The definition of Environmentally Sensitive Area is clear. Four specific types of Environmentally Sensitive Areas are identified in the definition. The definition also allows each Copermittee to identify any other equivalent Environmentally Sensitive Area. The commentor suggests that the Tentative Order defines all lands as Environmentally Sensitive Areas unless the Copermittees find otherwise. This is not the case. Only the four types of Environmentally Sensitive Areas listed in the definition, as well as any Environmentally Sensitive Areas identified by the Copermittees, are specified in the Tentative Order.

It is important to note that the definition of Environmentally Sensitive Area included in the Tentative Order is the result of the LARWQCB appeal process. The definition was refined over several months. While the SWRCB chose not to include Environmentally Sensitive Areas in the LARWQCB SUSMP, it was due to inconsistencies in the LARWQCB permit, not lack of a clear definition. SWRCB Order WQ 2000-11 states "The Regional Water Board may choose to consider the issue further when it reissues the permit."

Section: F.1 Subsection: F.1.b.2.a.vii

Comment: The definition for "directly adjacent to an environmentally area is unnecessarily limited. The provision should be expanded to include any proposed project within 1000 feet of a designated environmentally sensitive area. Further, "discharging directly" should be redefined to include any outflow from a drainage conveyance system that impacts the subject area, regardless of whether it is commingled with flows from adjacent lands. (Surfrider Foundation)

Response: The Environmentally Sensitive Area (ESA) priority development project category is meant to apply to projects which have the potential to cause a direct impact to an ESA. In other words, the inclusion of the ESA category in the Tentative Order is designed to provide additional protection of ESAs. For this reason, the ESA category is limited to projects which are "within or directly adjacent or discharging directly to" an ESA, where "discharging directly to" means flows that are "not commingled." For projects which are further away from an ESA, but still tributary to an ESA, the other Tentative Order provisions, including the other SUSMP priority development project categories, are expected to provide the necessary protection for the ESA from new development project impacts.

Section: F.1 Subsection: F.1.b.2.a.vii

Comment: PROTECTIONS FOR ENVIRONMENTALLY SENSITIVE AREAS Paragraph F.l.b.(2)(a)vii, on page 16 requires that projects be considered priority projects for implementation of SUSUMPs if they discharge directly into Environmentally Sensitive Areas. This is very appropriate. Unfortunately the last sentence appears to exempt cases in which the flow is commingled with flows from adjacent lands. We urge that this exemption be removed. A property should be considered a priority project if its outflow can potentially have a significant impact on a nearby Environmentally Sensitive Area. No exemptions should provided. (San Diego Audubon Society)

Response: The Environmentally Sensitive Area (ESA) priority development project category is meant to apply to projects which have the potential to cause a direct impact to an ESA. In other words, the inclusion of the ESA category in the Tentative Order is designed to provide additional protection of ESAs. For this reason, the ESA category is limited to projects which are "within or directly adjacent or discharging directly to" an ESA, where "discharging directly to" means flows that are "not commingled." For projects which are further away from an ESA, but still tributary to an ESA, the other Tentative Order provisions, including the other SUSMP priority development project categories, are expected to provide the necessary protection for the ESA from new development project impacts.

Section: F.1 Subsection: F.1.b.2.a.vii

Comment: Included among the categories of developments for which a SUSMP must be prepared are parking lots "5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff." (See, section F.1.b(2)(a)viii, at page 16). Does this definition include parking garages that are underground or beneath residential structures? Does it include parking spaces that are above ground but covered? (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The Tentative Order states the SUSMP provisions will apply to "[p]arking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to urban runoff." Therefore, if the specific parking lot situations described above are not potentially exposed to urban runoff, then they would not be subject to the SUSMP provisions.

Section: F.1 Subsection: F.1.b.2.a.vii

Comment: F. 1.b.(2)(a)(vii) page 16; Environmentally Sensitive Areas
"Environmentally sensitive areas include ... and any other equivalent environmentally sensitive areas which have been identified by the Copermittees. "

The above language in bold type would open the designation of "environmentally sensitive areas" to a non-formal determination process that could lead to arbitrary decisions and a lack of consistency in their application. Therefore this language should be deleted from the permit. (Sempra Energy)

Response: How "any other equivalent environmentally sensitive areas" are identified is left to the discretion of the Copermittees. Utilization of the public process to identify such areas is encouraged in the Tentative Order, which states in section F.6 that "[e]ach Copermittee shall incorporate a mechanism for public participation in the implementation of the Jurisdictional URMP." Furthermore, approval of the model SUSMP by the SDRWQCB will also undergo the public process, as stated in Tentative Order section F.1.b.2. Finally, the environmentally sensitive areas listed in the Tentative Order have been open for public comment during the Tentative Order adoption process.

Section: F.1 Subsection: F.1.b.2.a.vii

Comment: Under the definition of Environmentally Sensitive Areas, the Permit includes Areas of Special Biological Significance as areas where numeric sizing criteria should be utilized. However, the Ocean Plan with Proposed Amendments (amending 1997 Ocean Plan), recently approved by the State Board, provides that “waste shall not be discharged to areas designated as being of special biological significance.” (page B-22). Waste is then defined as “total discharge, of whatever origin.” (page B-32). Therefore, the Permit must explicitly prohibit discharges into ASBS areas, which should either be included in this section or in Sections A or C. Prohibitions of discharges into ASBS areas should also be included wherever there is discussions of prohibition of pollutants into 303(d)-listed waters. (San Diego Baykeeper)

Response: This issue has statewide significance and is currently scheduled to be addressed by the SWRCB. At the time the SWRCB has addressed the issue, the SDRWQCB will act accordingly.

Section: F.1 Subsection: F.1.b.2.a.vii

Comment: BMPs should be required rigorously for all environmentally sensitive areas. Greater weight should be placed on sensitivity of individual sites. (Environmental Health Coalition)

Response: Comment noted.

Section: F.1 Subsection: F.1.b.2.a.vii

Comment: Modify the first sentence to: "AlI development and redevelopment located within or directly adjacent to or discharging directly to an environmentally sensitive area, which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10% or more of its existing condition." (Port of San Diego)

Response: Section F.1.b.2.a.vii of the Tentative Order correctly refers to the increase of impervious area of greater than 10% of the naturally occurring condition because of the impact to receiving waters of impervious areas greater than 10% of a project area (Schueler 1994). Consequently, Regional Board staff recommend the language of Section F.1.b.2.a.vii be retained.

Section: F.1 Subsection: F.1.b.2.a.viii

Comment: Amend F.Lb.(2)(a)viii. pg.16 to include all open parking lots (instead of exempting non-commercial lots) as follows, "Parking lots 500 square feet or more or with 5 or more parking spaces and potentially exposed to urban runoff. . . ". (Environmental Health Coalition)

Response: The size threshold for parking lots of 5,000 square feet is the same as that included in the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11. While the number of parking spaces threshold in the Tentative Order was reduced to 15 parking spaces (as opposed to the 25 parking space threshold included in the LARWQCB SUSMP), this reduction was based on comments received at the SDRWQCB's April 13, 2000 SUSMP Public Workshop. The size thresholds were placed on the parking lot SUSMP category to prevent SUSMP provisions from applying to smaller parking lots where SUSMP implementation may be cost prohibitive.

Section: F.1 Subsection: F.1.b.2.a.viii

Comment: Copermittees should be encouraged to collect runoff mitigation fees from new and redeveloped parking lots smaller than 5,000 square feet or 15 spaces. Such fees could then be applied to SUSMP or JURMP controls implemented on adjacent roads. (Surfrider Foundation)

Response: The Tentative Order requires the Copermittees to address urban runoff from parking lots of all sizes in sections F.3.a.3.b.i, F.3.c.2.g, and F.3.d.2. How the Copermittees address urban runoff from parking lots is left to their discretion in order to provide them with flexibility. Therefore, while the

SDRWQCB supports innovative measures such as runoff mitigation fees, they are not required by the Tentative Order.

Section: F.1 Subsection: F.1.b.2.a.viii

Comment: Would slurry sealing a parking lot constitute redevelopment, or would that be routine maintenance? (Industrial Environmental Association)

Response: Slurry sealing a parking lot would only constitute significant redevelopment, and therefore be subject to the SUSMP provisions, if the slurry sealing resulted in the creation or addition of 5,000 square feet of impervious surfaces or more.

Section: F.1 Subsection: F.1.b.2.a.x

Comment: If RGOs are forced to implement active control measures (exceeding the "maximum extent practicable" criterion) CEQA, APA and Unfunded Mandate requirements would have to be applied. (Western States Petroleum Association)

Response: Structural controls meet the criterion of "maximum extent practicable", not merely "practicable". Practicability or practicality from a cost viewpoint is not exceeded. The typical costs for installation of a filtering unit is 400 to 800 dollars with yearly maintenance costs averaging about 240 dollars.

Section: F.1 Subsection: F.1.b.2.a.x

Comment: The Water Code only requires that storm water control measures be implemented to the maximum extent practicable. Numeric Sizing Criteria and the use of treatment technologies at RGOs are not, therefore, mandated when other BMPs may suffice. (Western States Petroleum Association)

Response: A WSPA sponsored study, "Results of a Retail Gasoline Outlet and Commercial Parking Lot Stormwater Runoff Study ", concludes that pollutant concentrations from RGO runoff are similar to concentrations from commercial parking lots, restaurants and other urban developments that are properly regulated under Federal and State storm water pollution laws. Therefore, the discharges are significant. The fact that significant discharges were found in the study indicates that the current source control measures are not working and structural controls are needed to meet the criterion of "maximum extent practicable".

Section: F.1 Subsection: F.1.b.2.a.x

Comment: Sophisticated treatment technologies for dealing with gasoline spills are impractical because these approaches typically involve the installation of underground vaults. Such vaults trap gasoline vapors and air to create an explosive environment. (Western States Petroleum Association)

Response: Oil-water separators have been in common use at gasoline stations for many years. These separators are in essence the same as underground vaults. Safety issues have not been raised in the past concerning the potential for explosive environments to occur in separators. It is not likely that the chambers holding stormwater would create any more of an explosive environment than oil-water separators or utility vaults that are also common near RGOs.

Section: F.1 Subsection: F.1.b.2.a.x

Comment: Filtration and treatment technologies used at RGOs are ineffective as BMPs. The BMP Guide states that these technologies did not pass peer review. A Sacramento study found that these approaches were generally not acceptable. (Western States Petroleum Association)

Response: The study by Larry Walker and Associates does indeed indicate that 13 of 14 of the devices tested were "not acceptable". In all but one case, the listed "deficiencies" (the entire basis for concluding that the devices were "not acceptable") were deficiencies of the study, not the devices themselves. In nearly every case, the deficiencies cited were the lack of the number of storms or lack of a sufficient number of sites to justify any conclusion. Therefore, the conclusion that the devices are "not acceptable" is not only misleading. It is false. The data simply did not justify a determination of acceptability. An EPA funded study, "The Rouge River National Wet Weather Demonstration Project" evaluated four filtration/treatment storm drain inserts. This study concluded that "all four filters performed well … and were relatively easy to maintain". The study also stated that, "these devices are applicable for use in gas stations … and they have a relatively low cost". None of the four devices tested in this study were considered in the Larry Walker study and this study was ignored in the BMP Guide.

Section: F.1 Subsection: F.1.b.2.a.x

Comment: Numeric Sizing Criteria of the SUSMP promotes infiltration as a BMP for storm water runoff, but this is inappropriate for RGOs because it is not desirable to promote the infiltration of gasoline into soil and groundwater. (Western States Petroleum Association)

Response: SDRWQCB staff agree that infiltration BMPs should not be employed at RGOs. Numeric Sizing Criteria can be applied using other structural BMPs involving filtration or treatment.

Section: F.1 Subsection: F.1.b.2.a.x

Comment: RGOs are not a significant source of stormwater pollution. There is no evidence that stormwater runoff from well-maintained RGOs results in any significant adverse water quality impact. A study performed by Geomatrix provides evidence that most contaminant levels in stormwater runoff from RGOs are below EPA's benchmark levels and therefore RGOs are not a significant source of stormwater pollution. (Western States Petroleum Association)

Response: The cited WSPA sponsored study, "Results of a Retail Gasoline Outlet and Commercial Parking Lot Stormwater Runoff Study ", concludes that pollutant concentrations from RGO runoff are

similar to concentrations from commercial parking lots, restaurants and other urban developments that are properly regulated under Federal and State storm water pollution laws. Therefore, the discharges are significant. The cited study employed of six selected (I.e. not randomly chosen) RGOs and four parking lots. This study clearly was not broad enough in scope to justify the conclusion that, "contaminant levels in stormwater runoff from RGOs show most contaminants are below EPA's benchmark levels and therefore RGOs are not a significant source of stormwater pollution".

Section: F.1 Subsection: F.1.b.2.a.x

Comment: RGOs are a unique source category and should not be treated identically with other types of sources. This was acknowledged by the State Water Board when they determined that RGOs should not be subject to numerical standards in the Los Angeles Region. The Board ordered that all BMPs listed in the BMP Guide be mandated. (Western States Petroleum Association)

Response: As noted in the comment, the Board allowed for the possible future addition of RGOs in the SUSMP design standards if it were shown proper justification for doing so at a later date. The Los Angeles Regional Board is currently in the process of providing such a justification. Since this issue is pending, it is not accurate to say that it has been determined that all BMPs in the BMP Guide are mandated. No evidence has been presented to support the argument that RGOs are unique or deserving of special treatment.

Section: F.1 Subsection: F.1.b.2.a.x

Comment: SDBK and SDSF absolutely support the inclusion of Retail Gasoline outlets as priority projects subject to SUSMP requirements. (Surfrider Foundation)

Response: Comment noted.

Section: F.1 Subsection: F.1.b.2.a.x

Comment: The BMP Guide set out standards that are consistent with the requirement for reducing discharges "to the maximum extent practicable". The criterion of practicability implies the need for cost-effective measures. The proposed requirements of the tentative order - for example, the requirement regarding peak discharge rates, and the numerical design standards - go beyond those of the BMP Guide and are therefore, not cost-effective. (Western States Petroleum Association)

Response: An EPA funded study, "The Rouge River National Wet Weather Demonstration Project" evaluated four filtration/treatment storm drain inserts. This study concluded that "all four filters performed well … and were relatively easy to maintain". The study also stated that, "these devices are applicable for use in gas stations … and they have a relatively low cost". The typical costs for installation of the filtering units being studied is 400 to 800 dollars with yearly maintenance costs averaging about 240 dollars per device. These are clearly reasonable and manageable costs for facilities such as RGOs.

Section: F.1 Subsection: F.1.b.2.b

Comment: Shall priority projects, from the outset of the establishment of the SUSMP, be conditioned to use all three forms of BMPs?

The intent of Section F.1.b. (2)(b) and (c) in particular is that new development shall begin to install and maintain structural BMPs immediately upon adoption of the local SUSMPs and supporting ordinance amendments. There are serious questions about our ability to do this without the necessary findings that the controls: 1) are required to address a significant impact, 2) are feasible mitigation measures that are necessary to substantially reduce adverse impacts, and 3) are capable of reducing the impact to a less than significant level according to adopted threshold criteria. (City of Chula Vista)

Response: The SUSMP provision that requires implementation of pollution prevention, source control, and structural treatment BMPs has been upheld by the SWRCB in Order WQ 2000-11. The LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11, requires all three types of BMPs at all sites meeting the SUSMP priority development project category criteria. For example, pollution prevention BMPs (such as conservation of natural areas) are required at all SUSMP sites. Source control BMPs, such as properly designed trash storage areas, are also required. Furthermore, structural treatment BMPs which meet numeric sizing criteria are required at all SUSMP sites as well.

Findings 3, 4, and 5, as well as their corresponding discussions in the Draft Fact Sheet/Technical Report, address the impacts to receiving waters caused by urban development. Findings 11 and 12 discuss the effectiveness of BMPs in "substantially reduc[ing] adverse impacts," including data on the ability of various BMPs to reduce concentrations of pollutants in urban runoff. Furthermore, the feasibility of implementing such BMPs is addressed in the SDRWQCB's "Staff Report for Standard Urban Storm Water Mitigation Plans and Numerical Sizing Criteria for Best Management Practices," which found that structural BMP implementation could amount to less than 0.7% of project costs. Regarding similar cost calculations by the LARWQCB in the LARWQCB SUSMP, the SWRCB states in Order WQ 2000-11 that "[t]he Regional Board found that the cost to include BMPs that will meet the mitigation criteria will be one to two percent of the total development cost. This amount appears reasonable, especially in light of the amount of impervious surface already in Los Angeles County and the impacts on impaired water bodies."

Section: F.1 Subsection: F.1.b.2.b

Comment: Will the adequacy of BMPs for certain land uses and conditions be left solely to the municipal plan reviewer or will the RB specify adequacy of BMPs? (Anonymous Workshop 2)

Response: Determination of which BMPs are to be implemented is left to the discretion of the Copermittees, to provide the Copermittees flexibility in developing and implementing their programs.

Section: F.1 Subsection: F.1.b.2.b

Comment: Modify the first sentence to: "The SUSMP shall include a list of recommended pollution prevention, source control, and structural treatment BMPs or their equivalent." (Port of San Diego)

Response: The definition of BMP in Attachment D of the Tentative Order is broad and inclusive. It is likely that most equivalent or alternative BMPs would fall under this broad definition, making the inclusion of such terms unnecessary.

Section: F.1 Subsection: F.1.b.2.b

Comment: The allegations of The County of San Diego that the SUSMP BMP provision violates State Water Code Section 13360 is not valid. While the permit does mandates numerous goals and objectives that must be achieved through implementation of post-construction BMPs, it does not mandate what specific types must be used to meet the new standards. Furthermore It is important to note that the permit is required by the Federal Clean Water Act and cannot be preempted by a state water code. Even if the permit would violate section 13360, which it would not, the Clean Water Act allows the EPA Administrator, or here the RWQCB, to require numerical sizing criteria as a form of numerical effluent limitation for NPDES permits (Surfrider Foundation)

Response: Comment noted.

Section: F.1 Subsection: F.1.b.2.b

Comment: The permit should consider the economic viability of the measure being maintainable in perpetuity. The Permit allows the flexibility for the construction of manufactured BMPs. Many of these measures require a long term and high level of maintenance. (San Diego Audubon Society)

Response: In order to provide the Copermittees with flexibility, the Tentative Order does not specifically implementation of specific BMPs. Which BMPs are to be implemented at a particular site is left up to the Copermittees and developers. In deciding which BMPs are to be implemented, consideration of BMP maintenance is necessary. The Tentative Order ensures that BMP maintenance is considered during BMP implementation by requiring that a mechanism for the BMP maintenance be in place (section F.1.b.2.b.x).

Section: F.1 Subsection: F.1.b.2.b

Comment: Retain draft language for F.l.b. (2) (b)(c) because it is well-determined and well-supported by the facts and analysis. (Environmental Health Coalition)

Response: Comment noted.

Section: F.1 Subsection: F.1.b.2.b.I

Comment: The BMP requirement of Section F.1.b.2.b.i. to "Maintain pre-development peak storm water runoff discharge rates and velocities" is unnecessary unless there is a potential for downstream

erosion. Water quality effects of velocity are considered elsewhere in the permit. (Building Industry Association of Southern CA)

Response: The intent of requirement F.1.b.2.b.i. is to protect against downstream erosion. Where there is not potential for downstream erosion, such as for discharges which directly enter the bay, the requirement need not apply.

See permit change at F.1.b.2.b.i.

Section: F.1 Subsection: F.1.b.2.b.ii

Comment: How will the tentative order define and implement the "conservation of natural areas?" (City of Carlsbad)

Response: How natural areas are to be conserved is left to the discretion of the Copermittees, who are responsible for developing and implementing their programs. Conservation of natural areas was also a requirement of the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11.

Details regarding the application of natural area conservation included in the LARWQCB SUSMP can provide guidance to the Copermittees. The LARWQCB SUSMP states:

"1. Concentrate or cluster development on portions of the site while leaving the remaining land in a natural undisturbed condition.
2. Limit clearing and grading of native vegetation at a site to the minimum amount needed to build lots, allow access, and provide fire protection.
3. Maximize trees and other vegetation at each site by planting additional vegetation, clustering tree areas, and promoting the use of native and/or drought tolerant plants.
4. Promote natural vegetation by using parking lot islands and other landscaped areas.
5. Preserve riparian areas and wetlands."

Section: F.1 Subsection: F.1.b.2.b.ii

Comment: As drafted, this requirement is too broad and undefined to be implemented. If read literally (and permits generally are), this equates to a prohibition on development since conservation and development are opposites. The County recommends amendment to state “Encourage the conservation of natural areas where feasible”. Conservation is an important objective which should be considered whenever possible. The County’s commitment to habitat conservation and land acquisition is longstanding. But, it is infeasible to require conservation as a standard condition of development project approval. (County of San Diego)

Response: Conservation of natural areas can provide significant protection to receiving waters from potential impacts from new development and significant redevelopment. For example, conservation of natural areas can be useful in helping maintain natural erosion and runoff rates. For these reasons, conservation of natural areas will be required in the SDRWQCB SUSMP provisions, as well as the LARWQCB SUSMP provisions, which were upheld by the SWRCB in Order WQ 2000-11. However, conservation of natural areas may not always be feasible, such as for small sites or redevelopment

projects. Therefore, Section F.1.b.2.b.ii of the Tentative Order will be changed to require conservation of natural areas only where feasible.

Section: F.1 Subsection: F.1.b.2.b.ii

Comment: Define conserve natural areas on page 17. (City of Carlsbad)

Response: To conserve natural areas is to use or manage natural areas wisely.

Section: F.1 Subsection: F.1.b.2.b.iii

Comment: What does "consideration of any pollutants for which the development's receiving water bodies are listed as impaired under CWA section 303(d)" mean? Section F.1.b.(1)(g) prohibits their discharge in any amount above pre-development levels. "Consideration" and "prohibition" are not synonymous. This section therefore implies a degree of flexibility which is precluded by section F.1.b.(1)(g). The inconsistency in its permit, moreover, creates an ambiguity in the permit. (County of San Diego)

Response: Language in section F.1.b.1.g which refers to the prohibition of discharges of pollutants in any amount above predevelopment levels has been removed. Therefore, the language in this section regarding consideration of pollutants is appropriate.

Section: F.1 Subsection: F.1.b.2.b.iii

Comment: The first sentence of this section misstates the function of source control BMPs. They do not minimize pollutants. They minimize or prevent their contact with stormwater. (County of San Diego)

Response: The first sentence of the requirement will be changed to clarify its intent. See change at permit section F.1.b.2.b.iii.

Section: F.1 Subsection: F.1.b.2.b.iii

Comment: "The development's receiving water bodies" is grammatically incorrect unless the RWQCB purports to assign ownership of receiving waters to the developments discharging to them. (County of San Diego)

Response: See change at permit section F.1.b.2.b.iii.

Section: F.1 Subsection: F.1.b.2.b.iii

Comment: "Increased runoff flow rate from the development and its potential downstream impacts" does not belong in this section since it has nothing to do with minimizing pollutants of concern or with the use of pollution prevention and source control BMPs. The County recommends its deletion. (County of San Diego)

Response: While increased runoff flow rates are a concern regarding new development and significant redevelopment, they are not controlled by pollution prevention and source control BMPs. Therefore, language in this section referring to increased runoff flow rates has been removed. See change at permit section F.1.b.2.b.iii.

Section: F.1 Subsection: F.1.b.2.b.iii

Comment: Section F.1.b (2)(b)iii: Does this provision refer to 303(d) water bodies within a development? (City of Chula Vista)

Response: Section F.1.b(2)(b)iii applies to all 303(d) listed water bodies that may be receiving waters for urban runoff discharges from areas subject to SUSMP requirements, including but not limited to 303(d) listed water bodies within a development.

Section: F.1 Subsection: F.1.b.2.b.iii

Comment: "Any pollutant associated with the land use type of the development" and "any pollutant commonly associated with urban runoff" are too broad and inclusive to have any chance of meaningful implementation. The goal of this program is not the removal of all identifiable substances. The County recommends deletion of everything after the first sentence or that this statement be amended to better reflect a process to identify contaminants that present a significant potential for beneficial use impairment. (County of San Diego)

Response: The Tentative Order states "[I]dentification of pollutants of concern should include consideration of any pollutants for which the development's receiving water bodies are listed as impaired under Clean Water Act section 303(d), any pollutant associated with the land use type of the development, any pollutant commonly associated with urban runoff, and increased runoff flow rate from the development and its potential downstream impacts." The key to this sentence is the terms "should include consideration." These words indicate that when a Copermittee or project proponent is identifying pollutants of concern, they should analyze "any pollutant associated with the land use type of the development" and "any pollutant commonly associated with urban runoff" to determine whether they might be a pollutant of concern. The Tentative Order does not state that "any pollutant associated with the land use type of the development" or "any pollutant commonly associated with urban runoff" is to be identified as a pollutant of concern, but rather that these types of pollutants must be assessed for their potential to be pollutants of concern during the identification process.

Section: F.1 Subsection: F.1.b.2.b.iv

Comment: In addition, the requirement to construct structural BMP's will increase the risk of vectors such as
mosquitoes and rats. Structural BMP's should be encouraged but not required. (SANDAG)

Response: This issue has been addressed in the revised Tentative Order in Finding 36. Although structural BMPs are a necessary component of the Standard Urban Storm Water Mitigation Plan, the Copermittees have the discretion to select and implement BMPs in such a way as to reduce the risk of vectors such as mosquitoes and rats.

Section: F.1 Subsection: F.1.b.2.b.iv

Comment: Revise the language "remove pollutants" to include the phrase "to the maximum extent practicable." (Building Industry Association of San Diego County)

Response: Controlling the discharge of pollutants to the maximum extent practicable is one basic standard of the Tentative Order. To the extent that it is a basic standard, it need not be reiterated on every line of the Tentative Order. Section F.1.b.2.b.iv requires that BMPs "[r]emove pollutants of concern from urban runoff […]". It does not require that all pollutants of concern be removed. While the MEP standard applies to this section, as well as throughout the permit, the language of the section in question is not conflict with the MEP standard.

Section: F.1 Subsection: F.1.b.2.b.iv

Comment: This requirement is open ended and exceeds the State's authority under the CWA. First "remove" should be amended to control the discharge of pollutants to its maximum extent practicable. Otherwise, its language exceeds the State's authority under the CWA. Second, if the definition of pollutants of concern used in section F.1.b.(2)(b)(iii) also applies here, this could amount to a mandate to remove everything detectable or imaginable. (County of San Diego)

Response: Controlling the discharge of pollutants to the maximum extent practicable is one basic standard of the Tentative Order. To the extent that it is a basic standard, it need not be reiterated on every line of the Tentative Order. Section F.1.b.2.b.iv requires that BMPs "[r]emove pollutants of concern from urban runoff […]". It does not require that all pollutants of concern be removed. While the MEP standard applies to this section, as well as throughout the permit, the language of the section in question is not conflict with the MEP standard.

Regarding the discussion of pollutants of concern in section F.1.b.2.b.iii, this section does not define pollutants of concern, but rather outlines the types of pollutants which must be considered when pollutants of concern are identified. That various types of pollutants must be considered during the identification of pollutants of concern does not indicate that these various types of pollutants must also be identified as pollutants of concern in all (or even most) cases.

Section: F.1 Subsection: F.1.b.2.b.iv

Comment: Section F. 1.b.2.b.iv lists "Remove pollutants of concern from urban runoff (through implementation of structural treatment BMPs)" should be reworded to acknowledge that there is no guarantee that implementing the BMPs will remove the pollutants of concern because the BMPs being implemented at this time have little or no effect on the majority of the pollutants of concern. (Building Industry Association of Southern CA)

Response: The wide range of BMPs available have been exhibited to be effective in removing pollutants of concern from urban runoff, both when used alone and in combination. Structural BMP performance data has been compiled and summarized by USEPA (USEPA, 1999a). This data indicates that structural BMPs can be effective in reducing pollutants of concern in urban runoff discharges. The summary provides the performance ranges of various types of structural BMPs for removing suspended solids, nutrients, pathogens, and metals from storm water flows. These pollutants are in general the pollutants of most concern in storm water in the San Diego Region. For suspended solids, the least effective structural BMP type was found to remove 30-65% of the pollutant load, while the most effective was found to remove 65-100% of the pollutant load. For nutrients, the least effective structural BMP type was found to remove 15-45% of the pollutant load, while the most effective was found to remove 65-100% of the pollutant load. For pathogens, the least effective structural BMP type was found to remove <30% of the pollutant load, while the most effective was found to remove 65-100% of the pollutant load. For metals, the least effective structural BMP type was found to remove 15-45% of the pollutant load, while the most effective was found to remove 65-100% of the pollutant load.

Section: F.1 Subsection: F.1.b.2.b.v

Comment: The County recommends amendment to state “Encourage the minimization of directly connected impervious areas where feasible”. This should really be a performance objective established by Copermittees, not a condition of approval set by the RWQCB. (County of San Diego)

Response: As discussed in Finding 5, numerous studies have demonstrated a direct correlation between the degree of imperviousness of a watershed and the degradation of its receiving water quality. Minimization of directly connected impervious areas is an effective means to reduce the impacts of increased imperviousness on receiving waters by helping to maintain or restore the natural flow regime of a developed property. For this reason, minimization of directly connected impervious areas is a requirement of the Tentative Order. However, there may be conditions where minimization of directly connected impervious areas may not be appropriate, such as where there may be a potential for groundwater contamination. Therefore, the directive shall be worded as "Minimize directly connected impervious areas where feasible."

Section: F.1 Subsection: F.1.b.2.b.vii

Comment: As a blanket requirement on all sites, this requirement is intrusive and excessive. The County recommends amendment to state “Encourage developers to stencil or label storm drain inlets where appropriate and feasible”. There is no evidence to show that labeling every storm drain on every new facility is worth the effort. Copermittees should be allowed to decide how they will utilize this in their programs. (County of San Diego)

Response: Storm drain stenciling and signage is a basic education measure widely used throughout the State. The effort needed to meet this requirement is minimal. In fact, volunteer groups are frequently utilized in the stenciling of storm drains. Regarding the pertinence of storm drain stenciling, USEPA states "Surrogate measures of the effectiveness of education and outreach programs include: […] the percentage of storm drains that have been stenciled" (USEPA, 1999a). Stenciling of storm drains is also a requirement of the LARWQCB SUSMP, the requirements of which were upheld by the SWRCB in Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.b.x

Comment: F.1.b.(2)(b)(x) "Include proof of a mechanism for ongoing long-term BMP maintenance"

The County recognizes and acknowledges the role of BMP maintenance in preventing the discharge of stormwater contaminants from new facilities. However, we object to the specification by the RWQCB of this or any other condition of approval for local permits. Such conditions are most appropriately determined by the Copermittees. Moreover, other than requiring appropriate maintenance through amendments to Codes, the co-permittees have no legal means to require "proof of a mechanism" for ongoing long-term BMP maintenance. (County of San Diego)

Response: BMPs which are not maintained eventually become ineffective in removing pollutants from urban runoff. In other words, BMPs which are not maintained adequately will not remove pollutants in urban runoff to the maximum extent practicable. For this reason, BMP maintenance is a requirement of the Tentative Order. The requirement in the Tentative Order that BMPs have proof of ongoing maintenance is the same basic requirement as that which was included in the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11.

The LARWQCB SUSMP can provide guidance on requiring proof of a mechanism for ongoing long term BMP maintenance. The LARWQCB SUSMP states:

"[T]he Permittee shall require that the applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements and/or Conditional Use Permits.

For all properties, the verification will include the developer's signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The transfer of property to a private or public owner must have conditions requiring the recipient to assume responsibility for maintenance of any Structural or Treatment Control BMP to be included in the sales or lease agreement for that property, and will be the owners responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year and retain proof of inspection. For residential properties where the Structural or Treatment Control BMPs are located within a common area which will be maintained by a homeowner's association, language regarding the responsibility for maintenance must be included in the project's conditions, covenants and restrictions (CC&R). Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed,

and assistance that the Permittee can provide. The transfer of this information shall also be required with any subsequent sale of the property.

If Structural or Treatment Control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by the County of other appropriate public agency. Structural or Treatment control BMPs proposed for transfer must meet design standards adopted by the public entity for the BMP installed and should be approved by the County or other appropriate public agency prior to its installation."

Section: F.1 Subsection: F.1.b.2.b.x

Comment: Section F.1.b(2)(b)x. requires "proof of a mechanism for ongoing long-term BMP maintenance". As discussed below with respect to section F.8. (Fiscal Analysis Component), however, the realities of municipal governance preclude "proof" of ongoing BMP maintenance in perpetuity. The City's ability to appropriate funding for future BMP maintenance efforts is severely constrained by state laws restricting the imposition and collection of fees, taxes and assessments at the local level. Although the City may be able to obtain agreements from developers to install certain BMPs and to provide a means of funding their ongoing maintenance, such private mechanisms, too, are subject to uncertainty. For example, if a developer agrees to retain responsibility for funding ongoing BMP maintenance, such a mechanism would be of little value if the developer were to go out of business. Therefore, at the very least, we request that the Regional Board delete the phrase "proof of" from this requirement, such that it would read simply "Include a mechanism for ongoing long-term BMP maintenance," in recognition of the issues described above. (City of San Diego)

Response: Proof of a mechanism for ongoing long term BMP maintenance can be provided by either the project proponent or the Copermittee. If a Copermittee finds that it shall have difficulty ensuring maintenance, it can require proof of a mechanism of BMP maintenance from the project proponent. This does not mean that the project proponent must be responsible for the BMP maintenance in perpetuity, but rather will be responsible for providing a mechanism which will ensure BMP maintenance in perpetuity. The requirement in the Tentative Order that BMPs have proof of ongoing maintenance is the same basic requirement as that which was included in the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11.

More detailed requirements included in the LARWQCB SUSMP regarding BMP maintenance can serve as guidance to the Copermittees. The LARWQCB SUSMP states:

"[T]he Permittee shall require that the applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements and/or Conditional Use Permits.

For all properties, the verification will include the developer's signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The transfer of property to a private of public owner must have conditions requiring the recipient to assume responsibility for maintenance of any Structural or Treatment Control BMP to be included in the sales or lease agreement for that property, and will be the owners responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year

and retain proof of inspection. For residential properties where the Structural or Treatment Control BMPs are located within a common area which will be maintained by a homeowner's association, language regarding the responsibility for maintenance must be included in the projects conditions, covenants and restrictions (CC&R). Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the Permittee can provide. The transfer of this information shall also be required with any subsequent sale of the property.

If Structural of Treatment Control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by the County of other appropriate public agency. Structural or Treatment control BMPs proposed for transfer must meet design standards adopted by the public entity for the BMP installed and should be approved by the County or other appropriate public agency prior to its installation."

Section: F.1 Subsection: F.1.b.2.b.x

Comment: What does "proof of a mechanism" mean? What kind of proof would the RWQCB expect? (County of San Diego)

Response: The requirement in the Tentative Order that BMPs have proof of ongoing maintenance is the same basic requirement as that which was included in the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11. The LARWQCB SUSMP can provide guidance on requiring proof of a mechanism for ongoing long term BMP maintenance. The LARWQCB SUSMP states:

"[T]he Permittee shall require that the applicant provide verification of maintenance provisions through such means as may be appropriate, including, but not limited to legal agreements, covenants, CEQA mitigation requirements and/or Conditional Use Permits.

For all properties, the verification will include the developer's signed statement, as part of the project application, accepting responsibility for all structural and treatment control BMP maintenance until the time the property is transferred and, where applicable, a signed agreement from the public entity assuming responsibility for Structural or Treatment Control BMP maintenance. The transfer of property to a private or public owner must have conditions requiring the recipient to assume responsibility for maintenance of any Structural or Treatment Control BMP to be included in the sales or lease agreement for that property, and will be the owners responsibility. The condition of transfer shall include a provision that the property owners conduct maintenance inspection of all Structural or Treatment Control BMPs at least once a year and retain proof of inspection. For residential properties where the Structural or Treatment Control BMPs are located within a common area which will be maintained by a homeowner's association, language regarding the responsibility for maintenance must be included in the projects conditions, covenants and restrictions (CC&R). Printed educational materials will be required to accompany the first deed transfer to highlight the existence of the requirement and to provide information on what storm water management facilities are present, signs that maintenance is needed, how the necessary maintenance can be performed, and assistance that the Permittee can provide. The transfer of this information shall also be required with any subsequent sale of the property.

If Structural or Treatment Control BMPs are located within a public area proposed for transfer, they will be the responsibility of the developer until they are accepted for transfer by the County of other

appropriate public agency. Structural or Treatment control BMPs proposed for transfer must meet design standards adopted by the public entity for the BMP installed and should be approved by the County or other appropriate public agency prior to its installation."

Section: F.1 Subsection: F.1.b.2.b.xi

Comment: This statement should be amended to include "as needed". Otherwise, we would be required to include additional provisions for each category regardless of whether a need exists. (County of San Diego)

Response: Each SUSMP priority development project category has specific pollution prevention and source control BMPs which are applicable to it, but may not be applicable to the other priority development project categories. For example, properly designed kitchen mat washdown areas are necessary source control BMPs for restaurants, but are not applicable elsewhere. Similar SUSMP category specific BMPs exist for all SUSMP categories. Therefore, additional provisions are required for each SUSMP category. This is in line with the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11. The LARWQCB SUSMP identified additional provisions to be required of each SUSMP priority development project category.

Section: F.1 Subsection: F.1.b.2.b.xii

Comment: This provision exceeds the MEP standard. (County of San Diego)

Response: The intent of this requirement was not to require BMPs to be designed to remove all pollutants beyond what is considered practical, but rather to ensure that BMPs be designed correctly so that they are effective in removing pollutants. Therefore, Section F.1.b.2.b.xii of the Tentative Order will be clarified to express this intent.

Section: F.1 Subsection: F.1.b.2.b.xii

Comment: In combination with the guidance for identifying pollutants of concern in section F.1.b.(2)(b)(iii) above, this requirement could result in significant costs that provide little or no environmental gain. Would the Copermittees have to identify all pollutants associated with runoff and design their BMPs to the most restrictive standard? Has there been a cost/benefit analysis? (County of San Diego)

Response: As stated elsewhere, the Tentative Order provides that "[I]dentification of pollutants of concern should include consideration of any pollutants for which the development's receiving water bodies are listed as impaired under Clean Water Act section 303(d), any pollutant associated with the land use type of the development, any pollutant commonly associated with urban runoff, and increased runoff flow rate from the development and its potential downstream impacts." The key to this sentence is the terms "should include consideration." These words indicate that when a Copermittee or project proponent is identifying pollutants of concern, they should analyze "any pollutant associated with the land use type of the development" and "any pollutant commonly associated with urban runoff" to determine whether

they might be a pollutant of concern. The Tentative Order does not state that "any pollutant associated with the land use type of the development" or "any pollutant commonly associated with urban runoff" is to be identified as a pollutant of concern, but rather that these types of pollutants must be assessed for their potential to be pollutants of concern during the identification process.

Therefore, BMPs are not required under this directive to maximize their pollutant removal capabilities for all pollutants, but rather for pollutants which have been identified as pollutants of concern. This directive seeks to ensure that BMPs are designed properly, so as to be effective in removing these pollutants of concern. Designing BMPs to maximize their capability for removing pollutants of concern will provide most environmental gain, contrary to the commentor's assertions. This in turn will increase the benefit of the BMP implementation.

Section: F.1 Subsection: F.1.b.2.b.xiii

Comment: This requirement violates CWC section 13360. With respect to F.1.b.(2)(b)(xiii), the CWC section 13360 is violated because RWQCB staff have attempted to specify (in this case to restrict) the location of controls (on-site, and prior to entry into the MS4 or receiving waters), thereby eliminating other viable and lawful approaches (for example, off-site and/or after entry into the MS4). The County continues to assert that regional and sub-regional approaches are legally valid, and in many instances can be more cost-effective than the site-specific approach advocated by RWQCB staff. This position was emphasized by the SWRCB during the LA County SUSMP appeal (State Board Order No. WP 2000-11, p. 21), and is consistent with the USEPA's Final Phase II Rule (Federal Register/Vol.. 64, No. 235,p. 68760) which states: "Each new development and redevelopment should have a BMP component. It is also required by State Law. (See Cal. Water Code § 13225(i).) If an approach is chosen that primarily focuses on regional or nonstructural BMPs, however, then, the BMPs may be located away from the actual development site (e.g., a regional water quality pond)." (County of San Diego)

Response: As stated elsewhere, "sub-regional" or "sub-watershed" or "neighborhood" BMPs implemented upgradient from any receiving waters supporting beneficial uses may be a viable option for addressing urban runoff from development. While the SDRWQCB strongly supports implementation of post-construction BMPs as close to the source as possible, it recognizes that this may not always be feasible. Therefore, the directive has been changed to reflect this. See change at permit section F.1.b.2.b.xiii.

Section: F.1 Subsection: F.1.b.2.b.xiii

Comment: This statement is grammatically incorrect. "[I]nto the MS4 or other receiving waters" should be amended to "into the MS4." As previously stated, MS4s are not receiving waters. (County of San Diego)

Response: While it is possible that a portion of an MS4 can also be considered a receiving water (see Finding 8), this is not always the case. Therefore, the commentors assertion that MS4s do not equate with receiving waters is correct. The directive has been changed to reflect this difference. See change in permit section F.1.b.2.b.xiii.

Section: F.1 Subsection: F.1.b.2.b.xv

Comment: Section F.1.b (2(b) xv: Does the requirement regarding runoff from developments apply only to direct discharges to a 303(d) water body? (City of Chula Vista)

Response: No, the requirement regarding post development runoff applies to all urban runoff discharges to a 303(d) listed water body.

Section: F.1 Subsection: F.1.b.2.c

Comment: As regards the SUSMP requirement, and especially the inclusion of numeric sizing criteria, the County of San Diego has taken the position that the RWQCB must conduct CEQA review to assess environmental impacts of the proposed permit. This position is totally untenable. Section 13389 of the California Water Code provides a specific CEQA exemption applicable to the adoption of any waste discharge requirement (WDR). CEQA Guidelines section 15307 and section 15308 also exempt the RWQCBs when the activities do not include a relaxation of standards leading to environmental degradation. (Surfrider Foundation)

Response: Comment noted.

Section: F.1 Subsection: F.1.b.2.c

Comment: Modify the first sentence to: "The SUSMP shall require structural treatment BMPs or their equivalent to be implemented at all priority development projects. In addition to meeting the BMPs requirements listed in item F. l. b. (2) (b) above, all structural BMPs or their equivalent for a single priority development project shall collectively be sized to with the following numeric sizing criteria:" (Port of San Diego)

Response: The definition of BMP in Attachment D of the Tentative Order is broad and inclusive. It is likely that any equivalent alternative would fall under this definition, making the inclusion of such terms unnecessary.

Section: F.1 Subsection: F.1.b.2.c

Comment: The permit will create hundreds of costly small-scale treatment facilities. The dependence on infiltration is flawed considering SD has limited infiltration capabilities. (Building Industry Association of San Diego County)

Response: The Tentative Order does not require that structural treatment BMPs infiltrate stormwater. The Tentative Order states that structural treatment BMPs "shall be designed to mitigate (infiltrate, filter, or treat) […]." This requirement provides flexibility in which type of BMP is to be implemented. Therefore, where infiltration is limited due to soil conditions, other types of BMPs can be used, such as detention or filtration BMPs.

Section: F.1 Subsection: F.1.b.2.c

Comment: Add a baseline numeric sizing criteria to F.Lb.(2)(c) pg.18. A minimum required numeric sizing criteria would mitigate polluted non-storm water runoff (dry weather flows) and insure against the potential misuse of flexibility in the numeric sizing criteria where insufficient mitigation may be allowed. We feel that an appropriate baseline numeric sizing standard, below which no discharger would be able to fall, would strengthen the permit and still afford local municipalities more than adequate flexibility to determine their own standards (which could be more protective) and how to meet them.

We request the Regional Board add the following language to the end of the subsection: "BUT Baseline Criteria vi. at a minimum, volume-based BMPs must collectively be sized for the volume of runoff produced by. 6 inches of rainfall in a 24- hour period; and vii. at a minimum, flow-based BMPs must collectively be sized for the maximum flow rate of runoff produced from rainfall intensity of 0.2 inches of rainfall per hour. " (Environmental Health Coalition)

Response: The requirement for capture of the 85th percentile storm event is based on the concept of diminishing returns. The 85th percentile storm event represents the BMP capacity beyond which, insignificant increases in pollutant removal (and hence water quality protection) will occur, relative to the additional costs. Therefore, it would not be cost effective to require municipalities to size BMPs to capture storm events larger than the 85th percentile storm event. A minimum numeric sizing criteria, as proposed, has the potential to require municipalities to capture runoff from storm events beyond the point of diminishing returns, thereby reducing the cost effectiveness of numeric sizing criteria. For example, the 85th percentile 24-hour storm event for Lindbergh Field is roughly 0.5 inches. Requiring BMPs at Lindbergh Field to capture 0.6 inches of rainfall would cost more, yet provide little water quality benefit. For this reason, a minimum numeric sizing criteria will not be included in the Tentative Order.

Section: F.1 Subsection: F.1.b.2.c

Comment: SDBK and SDSF strongly support the inclusion of numeric sizing criteria in the permit. All of the Copermittees have failed to adequately implement the past permit to a degree sufficient to protect receiving waters. The numerous beach closures, during periods of even moderate rain, make it clear that current practices are insufficient to protect receiving waters from pollutants in stormwater and urban runoff. (Surfrider Foundation)

Response: Comment noted.

Section: F.1 Subsection: F.1.b.2.c

Comment: Modify the first sentence to: "Volume-based BMPs or their equivalent shall be designated to mitigate (infiltrate, filter, or treat) either:" (Port of San Diego)

Response: The definition of BMP in Attachment D of the Tentative Order is broad and inclusive. It is likely that any equivalent alternative would fall under this definition, making the inclusion of such terms unnecessary.

Section: F.1 Subsection: F.1.b.2.c

Comment: Delete section F.1.b(2)(c) because it has no relationship to pollutant loading or water quality objectives. Each watershed should be given the flexibility to establish design criteria and programs that address pollutants of concern in relationship to basin objectives and facts on the ground. The section establishes a one size fits all approach of costly facilities, which may or may not address a demonstrated concern. (City of Carlsbad)

Response: Numeric sizing criteria for structural treatment BMPs is directly related to pollutant loading and water quality objectives. Section F.1.b.2.b.iv of the Tentative Order states "[r]emove pollutants of concern from urban runoff (through implementation of structural treatment BMPs)." Identification of pollutants of concern includes consideration of pollutant loading from various types of development, as well as consideration of pollutants which may cause or contribute to an exceedance of water quality objectives. Once pollutants of concern have been identified, the Tentative Order requires that BMPs be implemented which will address these pollutants of concern. Numeric sizing criteria essentially ensures that the BMPs implemented are adequately sized so as to be effective in removing the pollutants of concern.

The numeric sizing criteria section of the Tentative Order (which requires treatment of the 85th percentile storm event) is essentially the same as that of the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11. A December 26, 2000 SWRCB memo states "[t]he Order finds that the design standard in the SUSMPs, which essentially requires that 85 percent of the runoff from specified categories of development be infiltrated or treated, reflects MEP" (SWRCB, 2000b).

Section: F.1 Subsection: F.1.b.2.c

Comment: Modify the first sentence to: "Flow-based BMPs or their equivalent shall be designated to mitigate (infiltrate, filter, or treat) either:" (Port of San Diego)

Response: The definition of BMP in Attachment D of the Tentative Order is broad and inclusive. It is likely that any equivalent alternative would fall under this definition, making the inclusion of such terms unnecessary.

Section: F.1 Subsection: F.1.b.2.c

Comment: Additionally, we recognize the need to periodically re-evaluate these and any other design criteria that we choose to utilize as part of our management programs. This is especially true since design criteria are only indirectly related to program performance objectives. As we continue to evaluate this nexus over time, it may become necessary to re-evaluate the use of particular criteria, especially in light of potential unintended environmental consequences. As such, we recommend that this section be moved

to the Technical Report as suggested guidance, and that flexibility be permitted in the application of the sizing criteria to particular developments. (County of San Diego)

Response: Inclusion of numeric sizing criteria in the Tentative Order has essentially been dictated by the SWRCB in its precedential decision in Order WQ 2000-11. The SWRCB states: "Several of the conclusions reached in the Order are likely to recur, and future municipal storm water permits must be consistent with the principles set forth therein. […] The Order finds that the design standard in the SUSMPs, which essentially requires that 85 percent of the runoff from specified categories of development be infiltrated or treated, reflects MEP" (SWRCB, 2000b).

Section: F.1 Subsection: F.1.b.2.c

Comment: The mandate that all new development and redevelopment adhere to structural numeric sizing BMPs is excessive, unwarranted, and bureaucratic overkill. (Building Industry Association of San Diego County)

Response: Numeric sizing criteria for structural treatment BMPs is directly related to pollutant loading and water quality objectives. Section F.1.b.2.b.iv of the Tentative Order states "[r]emove pollutants of concern from urban runoff (through implementation of structural treatment BMPs)." Identification of pollutants of concern includes consideration of pollutant loading from various types of development, as well as consideration of pollutants which may cause or contribute to an exceedance of water quality objectives. Once pollutants of concern have been identified, the Tentative Order requires that BMPs be implemented which will address these pollutants of concern. Numeric sizing criteria essentially ensures that the BMPs implemented are adequately sized so as to be effective in removing the pollutants of concern.

The numeric sizing criteria section of the Tentative Order (which requires treatment of the 85th percentile storm event) is essentially the same as that of the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11. A December 26, 2000 SWRCB memo states "[t]he Order finds that the design standard in the SUSMPs, which essentially requires that 85 percent of the runoff from specified categories of development be infiltrated or treated, reflects MEP" (SWRCB, 2000b).

Section: F.1 Subsection: F.1.b.2.c

Comment: Reject the recommendation in the APWA September 21, 2000 Letter to the Regional Board
The APWA analysis is severely flawed on several fronts, is not adequately protective of our water quality, and should not be adopted by the Board. It is fatally flawed in that it uses an inappropriate MEP parameter, inadequate sampling, and mistaken comparative analysis to recommend a insufficient numeric sizing criteria for the new permit that does not provide adequate protection for water quality. Most essentially, the APWA bases its entire analysis on the assumption that the 80" percentile runoff event as the design event that achieves the MEP definition under the Clean Water Act. It bases its assumption on a single reference -- a popular engineering manual. The choice of a MEP parameter is the most determinative step in calculating the volume or flow criteria yet APWA affords it the most cursory research or explanation. While determining the percentile runoff event that best represents the design event for MEP is both technically and politically controversial, it is critical if the efforts for SUSMPS are

to yield the benefit we need. Yet, APWA pulls a number from a single reference with no defense of that position.

The APWA recommendations are also unsupportable because they rely on a single sample and incorrect comparisons. For its analysis of the whole of San Diego County, the APWA relies on weather monitoring data from Lindbergh Field. For these purposes, Lindbergh Field does not geographically or climactically represent the entire San Diego County. Moreover, any scientific analysis attempting to extrapolate conclusions from a single sample demonstrates crippling statistical weakness. In the alternative, the Regional Board staff's proposed method considers rainfall through out the County in its calculations.

Then, the APWA attempts to substantiate these faulty conclusions with inappropriate comparative analysis. The APWA takes the ratio of precipitation at a single location in Los Angeles County with precipitation at a single location in San Diego County and implies that they have calculated a universal conversion for precipitation and runoff between the two counties. They then proceed to calculate a San Diego volume criteria from the Los Angeles volume criteria as if rainfall to storm event frequency graphs are all linear. Frankly, their comparative analysis has little foundation in either science or common sense.

We request the Regional Board to reject the recommendations of the APWA September 10, 2000 letter and retain its current numeric sizing criteria provisions notwithstanding our other comments on those provisions. The 85' percentile is practicable and we support the staff finding that it may be the point of diminishing returns. Other proposal for flow and volume should not be considered unless they provide equivalent protection, not less. (Environmental Health Coalition)

Response: The APWA proposal for determination of the amount of runoff to be treated under SUSMPs raises two issues: (1) The SUSMPs requirement for the treatment of the 85th percentile storm event should be reduced to the 80th percentile storm event; and (2) hourly rainfall data from Lindbergh Field should be applied to precipitation contour maps to determine the size of the storm which must be treated.

(1) First of all, reducing the requirement for the treatment of the 85th percentile storm event to the 80th percentile storm event is inappropriate for the San Diego Region. The sole reasoning provided by APWA for reducing the size of the design storm which must be captured is that the City of Denver has chosen to capture the 80th percentile storm event. It is doubtful that the City of Denver has a more than $1.2 billion tourism economy as closely tied to water quality as that of the San Diego Region (a SANDAG memo states that projections by the California Department of Boating and Waterways find nearly $1.2 billion in direct revenue and $1.2 billion in indirect revenue is pumped into the San Diego area economy each year by out-of-state visitors) (SANDAG, 1996).

Capture of the 80th percentile storm event is equivalent to capture of runoff form approximately 0.4 inch of rainfall in the City of San Diego, as calculated by APWA. This is a smaller amount of rainfall than must be treated in Austin, Virginia, Delaware, Maryland, New Jersey, Chicago, New Jersey, Florida, and the Puget Sound Basin. More importantly, the 80th percentile storm event is less than what has been determined to constitute MEP by the SWRCB in Order WQ 2000-11. The SWRCB states “The Order finds that the design standard in the SUSMPs, which essentially requires that 85 percent of the runoff from specified categories of development be infiltrated or treated, reflects MEP” (SWRCB, 2000b). While Denver may arguably have a climate which is somewhat similar to San Diego’s, certainly criteria developed by the SWRCB for the Los Angeles region are more applicable to San Diego than criteria used by Denver, Colorado.

In addition, capture of the 80th percentile storm event ignores the concept of diminishing returns. The 85th percentile storm event is representative of the point of diminishing returns for the San Diego Region. The 85th percentile storm event represents the BMP capacity beyond which, insignificant increases in runoff capture will occur, relative to additional costs. Even a cursory look at APWA's graphed data (Exhibit A of their proposal, which is item B of Attachment 13 of the Executive Officer Summary Report for the December 13, 2000 Public Hearing) shows that capture of a 0.4 inch storm is well below the "knee of the curve," or the point of diminishing returns.

(2) The APWA proposal also recommends a different method for calculation of the design storm event from that proposed in the Tentative Order. Where the Tentative Order proposes use of 24-hour rainfall data from several locations, the APWA proposal uses hourly rainfall from one location (Lindbergh Field). The Tentative Order proposes that each Copermittee use 24-hour rainfall data from its area to calculate its design size storm. While use of 24-hour rainfall data is not as rigorous as use of hourly rainfall data, 24-hour data is typically much more available, thereby allowing Copermittees to use local data to calculate the design storm to be used in their jurisdictions. In fact, a lengthy record of hourly rainfall data is only available in one place within San Diego County: Lindbergh Field. The APWA proposal uses this hourly rainfall data from Lindbergh Field and applies it to the entire county through the use of precipitation contour (isopluvial) maps. While there may be potential inaccuracies in applying data from one site to the entire county, use of such precipitation contour maps is common practice.

In light of the increased rigorousness of using hourly data, as well as the common practice of using precipitation contour maps, the Tentative Order will be modified to allow for the 85th percentile storm event to be calculated by applying hourly rainfall data from Lindbergh Field to precipitation contour maps.

See change at permit section F.1.b.2.c.

Section: F.1 Subsection: F.1.b.2.c

Comment: Because it imposes an arbitrary requirement that the first .2 inches of storm water be captured and treated, the SUSMP will make it extremely difficult to develop new affordable housing, and, again, it could impose significant costs on local businesses and taxpayers. (Alliance for Water Quality)

Response: Comment noted. The requirement that flow-based BMPs be designed to mitigate runoff generated by a rainfall intensity of 0.2 inches per hour is based on hourly rainfall data from Lindbergh Field in San Diego. The 85th percentile hourly rainfall intensity was calculated from this data to be 0.1 in/hr. In developing the numeric sizing criteria for flow-based BMPs, this number was doubled to account for intense bursts of rainfall which may occur within an hour period. The 0.1 in/hr rainfall intensity assumes that rain falls at an even rate over an hour period. This is frequently not the case. Rainfall often occurs in intense bursts over periods of time shorter than an hour in duration. If 0.1 inches of rainfall were to occur in a short intense burst, as opposed to falling at an even rate over an hour, the flow rate resulting from the short intense burst of rainfall would be greater than the flow rate generated by the steady hour-long rain. Therefore, a BMP sized to treat or filter the peak flow rate resulting from a steady hour-long 0.1 in rainfall would be inadequately sized to treat peak flows from a 0.1 in rain event falling over a 30 minute period. For this reason, the 85th percentile hourly rainfall intensity was doubled to develop the numeric sizing criteria for flow-based BMPs. A flow-based BMP sized to treat or filter runoff resulting from a 0.2 in/hr rainfall intensity (as the proposed numeric sizing criteria would require) would be adequately sized to capture most peak flow rates resulting from 0.1 inch of rain falling over time

periods shorter than one hour. It is worth noting that this approach of doubling the design hourly rainfall intensity for developing numeric sizing criteria for flow based BMPs is supported by APWA (APWA, 2000) and the LARWQCB.

Section: F.1 Subsection: F.1.b.2.c

Comment: The Draft Permit appears to divide the world into "Source Control BMPs" and "Treatment Control BMPs." An unanswered question is why Regional Board Staff do not consider Source Control BMPs as part of the strategy for achieving SUSWMP MEP. The current SUSWMP proposal appears to reject Source Control BMPs.

Source Control BMPs are a necessary and essential strategy for the Urban Core. Here where infiltration is both economically and technically infeasible, the only Treatment Control BMPs that remain are filtration. While filtration may be effective in removing cigarette butts and Styrofoam cups from storm water, their usefulness in removing fecal coliform or dissolved metals is limited at best. Without equal recognition and emphasis for Source Control BMPs achieving storm water quality goals in the Urban Core will be prohibitively expensive. First, urban project proponents will be forced to install Treatment Control BMPs that have been shown not to work. Then, the project proponent inevitably will be required to implement Source Control BMPs at an additional cost.

We propose Copermittees may treat Source Control BMPs equally with Treatment Control BMPs for achieving compliance with the SUSWMP in the Urban Core. If a project proponent proposes only Source Control BMPs to achieve the removal of Pollutants of Concern to the Maximum Extent Practicable, the Copermittee should have to make the following findings before approval:
1. The proposed project is in the Urban Core;
2. The Copermittee projects that the removal rates achieved for the pollutants of concern are equivalent to or more stringent than those achievable through permissible Treatment Control BMPs in the Urban Core (i.e. no infiltration);
3. The project proponent has made adequate financial and technical provisions for the analysis of storm water discharges to assure that the predicted removal rates for pollutants of concern are achieved; and
4. The project proponent has made adequate provisions for the installation of Treatment Control BMPs if later storm water analysis shows that the Source Control BMPs are not achieving the projected removal rates.

Source Control BMPs are recognized to be the most cost-effective means of protecting storm water quality. Thus, by giving equal treatment to Source Control BMPs, project proponents have the opportunity to maximize the removal of pollutants of concern. However, if the Source Control BMPs are inadequate to achieve MEP, this proposal provides for the necessary resources to fall back on Treatment Control BMPs. (McKenna & Cuneo, L.L.P.)

Response: The Tentative Order explicitly includes source control BMPs as part of the SUSMP strategy for addressing urban runoff from new development. The Tentative Order states “[t]he SUSMP shall require all new development and significant redevelopment projects falling under the above priority project categories or locations to implement a combination of BMPs selected from the recommended BMP list, including at a minimum (1) pollution prevention BMPs, (2) source control BMPs, and (3) structural treatment BMPs.”

A combination of source control and structural treatment BMPs is the most effective means for controlling pollutant discharges in urban runoff coming from development. While source control BMPs can be effective, they do not assure that pollutants have been removed (or never generated). Structural treatment BMPs provide this assurance as a second line of defense. USEPA addresses the uncertainty of the effectiveness of source control BMPs by stating "BMPs such as street sweeping, public education and outreach, collection of lawn debris, etc., are conceptually very effective means of controlling the generation of pollutants that can enter storm water runoff. However, it is often very difficult to develop a representative means of monitoring or evaluating their effectiveness. Additional work in this area is needed in order to measure the effectiveness of these controls" (USEPA, 1999a).

In light of this uncertainty, the SUSMP requires structural treatment BMPs in addition to source control BMPs. Due to the heavy use of areas within the urban core, structural treatment BMPs are needed there as well as other locations. Structural treatment BMPs can be used to remove pollutants of concern quite effectively within the urban core. Sand and other media filters, which can be installed underground, have been found to remove 50-80% of metals, while porous pavement has been found to remove 65-100% of pathogens (USEPA, 1999a). Furthermore, the cost of implementation of such BMPs is reasonable. The capital cost for a sand filter for a 5-acre commercial site has been estimated at $35,000-70,000. The overall cost of development of a 5-acre commercial site could cost $6 million (see Attachment E of the SDRWQCB "Staff Report for Standard Urban Storm Water Mitigation Plans and Numerical Sizing Criteria for Best Management Practices"). The cost of the sand filter would therefore constitute approximately 1% of the total project cost. Regarding such costs, the SWRCB states in Order 2000-11 "[t]he Regional Board found that the cost to include BMPs that will meet the mitigation criteria will be one to two percent of the total development cost. This amount appears reasonable, especially in light of the amount of impervious surface already in Los Angeles County and the impacts on impaired water bodies."

Section: F.1 Subsection: F.1.b.2.c.

Comment: The permit should contain a more protective volume of rainfall capture requirement pending site specific determinations of the 85th percentile. Until such numbers are derived, the .75 inch standard adopted by the SWRCB for the Los Angeles Region should be used. (Surfrider Foundation)

Response: The SDRWQCB has calculated the 0.6-inch 24-hour storm as the rough average 85th percentile storm for San Diego County. Since this average is based on rainfall data from 4 areas within San Diego County, it is more applicable for use in San Diego County than criteria developed for the Los Angeles area using Los Angeles rainfall data.

Section: F.1 Subsection: F.1.b.2.d

Comment: Section F.1.b(2)(d), found at page 18, allows Copermittees to develop "any equivalent numeric sizing criteria or performance-based standard for post-construction structural treatment BMPs as part of the model SUSMP." However, this section does not indicate which entity -- the Copermittee or the Regional Board -- determines whether a proposed "equivalent" standard actually complies with the conditions of the Order. Please clarify. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: Any equivalent numeric sizing criteria put forward by the Copermittees must be part of the model SUSMP. Approval of the model SUSMP by the SDRWQCB will undergo a public process. Therefore, the SDRWQCB would authorize the use of an equivalent numeric sizing criteria. The Tentative Order has been changed to clarify this. See change at permit section F.1.b.2.d.

Section: F.1 Subsection: F.1.b.2.d

Comment: F.1.b.(2)(d) "Equivalent Numeric Sizing Criteria"
The County is very interested in the potential for flexibility this section could provide. Unfortunately, as its currently drafted, this section is extremely confusing. Section F.1.b.(2)(d) allows Copermittees to develop "any equivalent numeric sizing criteria or performance-based standard for post construction BMPs as part of the model SUSMP." For this section to have meaning, "Equivalency" must be defined. Numeric sizing criteria are a design criteria, yet this section seems to imply that an alternative performance standard could be proposed. This section seems to be confusing the meaning of the two terms. If both are meant, the section heading should be amended to reflect both.

Since minimum standards are already prescribed, it is difficult to see where the flexibility might occur. For instance, would a 70th percentile event be considered if a rational justification were proposed? What about after SUSMP model completion? If new information becomes available after SUSMP completion that suggests that we were headed in the wrong direction, how will flexibility be provided in the future? (County of San Diego)

Response: The intent of the "equivalent numeric sizing criteria" provision was to provide the Copermittees with flexibility in choosing methods for calculating the 85th percentile storm event. For example, APWA has proposed using isopluvial maps for determining what size storms BMPs must be sized to capture. The provision was not meant to provide means for reduction of the 85th percentile criteria. The SWRCB has found in Order WQ 2000-11 that capture of the 85th percentile storm event constitutes MEP for structural treatment BMPs at new development sites. The Tentative Order has been modified to clarify this intent.

See change at permit section F.1.b.2.d.

Section: F.1 Subsection: F.1.b.2.d

Comment: The Regional Board should delete section F.l.b.(2)(d) pg.18, or amend it as follows: ". . . Such equivalent sizing criteria may be authorized subject to public review and Regional Board action for use in place of the above criteria. . . ". Oversight is needed to prevent local authorization of inadequate numeric sizing criteria. (Environmental Health Coalition)

Response: Any equivalent numeric sizing criteria put forward by the Copermittees must be part of the model SUSMP. Approval of the model SUSMP by the SDRWQCB will undergo a public process.

Section: F.1 Subsection: F.1.b.2.d

Comment: Sections F.l.b (2) (d) (e) (f) (g) page 18 - Delete these sections. This whole approach of dictating a blanket criterion for the whole county should be eliminated in favor of an element developed as a part of the Watershed Urban Run-off Management Program. A section should be added to Section J.2. Watershed Co-permittees shall establish numeric sizing criteria to apply to new development, which will assist in assuring water quality objectives in pollutants of concern to the watershed by January 2005. (City of Carlsbad)

Response: The SWRCB upheld the general SUSMP requirements in Order WQ 2000-11. Furthermore, in a December 26, 2000 memo, the SWRCB stated "[t]he general principles of the Order [Order WQ 2000-11] - that design standards for BMPs for new development and redevelopment are required - must be implemented." In light of this guidance, the SUSMP provisions are included in the Tentative Order. In addition, based on the current rate of development within San Diego County, postponing SUSMPs and numeric sizing criteria implementation until a watershed program can be developed in 2005 is not warranted.

Section: F.1 Subsection: F.1.b.2.d

Comment: Any equivalent numeric sizing criteria put forward by a Copermittee must be subjected to public review, comment, and hearing. (Surfrider Foundation)

Response: Any equivalent numeric sizing criteria put forward by the Copermittees must be part of the model SUSMP. Approval of the model SUSMP by the SDRWQCB will undergo a public process.

Section: F.1 Subsection: F.1.b.2.e

Comment: Recommend providing definition for "pollutants of concern" that is consistent with the federal Clean Water Act and California Water Code. (Port of San Diego)

Response: Defining and identifying pollutants of concern is the responsibility of the Copermittees. The Copermittees are responsible for reducing pollutant discharges into and from their MS4s to the maximum extent practicable. Part of this responsibility is identifying the pollutants in the discharges, since it is difficult to remove pollutants if it is not known which pollutants are present. Data from the Copermittees dry and wet weather monitoring programs, as well as from other published sources, can be useful in identifying pollutants of concern. The SDRWQCB can help the Copermittees in locating applicable sources of information.

Section: F.1 Subsection: F.1.b.2.e

Comment: F. 1.b.(2)(e) Pollutants of concern, page 18. This section in part states "The procedure shall include, at a minimum, consideration of (1) receiving water quality (including pollutants for which receiving waters are listed as impaired under the Clean Water Act section 303 (d)..." The concern with this language is that "consideration" can be ineffectual in achieving the goal to clean up impaired waters. To this end we recommend a separate section devoted to impaired waters and how the Copermittee should address this issue. TMDL's are notably absent from the Tentative Order. In this case concerning the

impaired waters, we recommend that TMDL's be addressed in the permit. The permit should have a tie in with the TMDL programs. Paragraph F.3.a.(4)(c) on page 26 addresses this but it would be more direct to have BMP's for impaired waters in F. 1 .b. (Sierra Club)

Response: Currently, there are no USEPA approved TMDLs for the San Diego Region, and therefore no limitations that can be explicitly included in the Tentative Order at this time. However, 40 CFR 122.44 (d)(vii)(B) requires that NPDES effluent limitations be consistent with any waste load allocation for the discharge prepared by the state (Regional Board) and approved by USEPA. In other words, once TMDL limits are established and approved by USEPA, NPDES permits must include effluent limitations that are consistent with the TMDL. Furthermore, USEPA's guidance for developing TMDLs in California includes a recommendation that the state (State and Regional Boards) evaluate how waste load allocations will be translated into NPDES permits as part of the development of the TMDL implementation plan.

Section: F.1 Subsection: F.1.b.2.e

Comment: A number of the permit requirements, such as the SUSMP requirement, should be developed after the pollutants of concern have been identified. (County of San Diego)

Response: The overall impacts of runoff from urban development have been widely documented (see Findings 3, 4, 5, 6, 7, and 9, as well as their corresponding discussions in the Draft Fact Sheet/ Technical Report). Controls on new development and significant redevelopment are clearly needed, irregardless of which pollutants are identified to be of principal concern. SUSMPs provide the framework for addressing urban runoff from new development and significant redevelopment, while allowing for the details of implementation to be addressed after pollutants of concern have been identified. For example, the SUSMP requirements provide a framework by providing that structural BMPs must be implemented. However, the details of the SUSMP requirements, such as which particular BMPs are to be implemented, is left to be determined after pollutants of concern have been identified.

It is important to note SWRCB Order WQ 2000-11 supports the SUSMP approach.

Section: F.1 Subsection: F.1.b.2.e

Comment: The RWQCB should be the one to determine the pollutants of concern instead of the Copermittees. They have the expertise and have been receiving the monitoring data necessary to make such decisions. (Building Industry Association of Southern CA)

Response: The Copermittees are responsible for reducing pollutant discharges into and from their MS4s to the maximum extent practicable. Part of this responsibility is identifying the pollutants in the discharges, since it is difficult to remove pollutants if it is not known which pollutants are present. Therefore, defining and identifying pollutants of concern is the responsibility of the Copermittees. Data from the Copermittees dry and wet weather monitoring programs, as well as from other published sources, can be useful in identifying pollutants of concern. The SDRWQCB can help the Copermittees in locating applicable sources of information.

Section: F.1 Subsection: F.1.b.2.e

Comment: The Draft Permit requires that Copermittees will regulate all proposed and existing development to remove "Pollutants of Concern" to the "Maximum Extent Practicable. Thus, in order for Copermittees to assure compliance within their jurisdiction and thereby avoid the specter of costly litigation, they must have a clear understanding of what the term of art "Pollutant of Concern" means. Neither the Draft Permit nor the Glossary attached thereto defines the term.

We propose the following definition:
A "Pollutant of Concern" is a physical or chemical characteristic of the receiving water into which the Copermittee directly discharges its storm water for which the Regional Board determined the receiving water is "impaired" at the time the project proponent applies for a tentative map from the Copermittee. For the purposes of this definition, the term "receiving water" shall be defined as the first waters of the State, or of the United States, into which the Copermittee's storm water discharges. For the purposes of this definition, a finding of "impairment" by the Regional Board shall be defined as the placement of the water body on the 303(d) list for the pollutant in question or in the alternative, by a finding in the Regional Board's Basin Plan that a specific water segment is impaired for a specific beneficial use because the water quality objective for a specific pollutant has been exceeded.

Requiring the regulatory agencies primarily charged with the obligation to protect waters of the State and United States to define pollutants of concern significantly improves the SUSWMP process. It limits the potential liability of both Copermittees and project proponents. It provides clarity to the Copermittees. It places the obligation to set water quality standards on the agencies empowered to do so. Further, it assures consistency in implementation of the SUSWMP across the Basin. Further, this definition avoids later misunderstandings and second-guessing. Each Copermittee can determine the completeness of an application simply by comparing the application's discussion of pollutants of concern with the list of impairments to the appropriate receiving water in the 303(d) list and/or the Basin Plan. If the project proponent considers each of these pollutants in its proposal, both the proponent and the Copermittee will know that they have met the minimum requirements of this element of the SUSWMP. Further, this definition does not prevent a Copermittee from setting higher standards for itself following local ordinances. Thus, the definition defines a floor and not a ceiling. (McKenna & Cuneo, L.L.P.)

Response: The Copermittees are responsible for reducing pollutant discharges into and from their MS4s to the maximum extent practicable. Part of this responsibility is identifying the pollutants in the discharges, since it is difficult to remove pollutants if it is not known which pollutants are present. Therefore, defining and identifying pollutants of concern is the responsibility of the Copermittees.

The Tentative Order contains guidance for the identification of pollutants of concern in section F.1.b.2.e. It includes consideration of other pollutants besides those simply identified as a potential threat to 303(d) listed water bodies. These other pollutants must also be addressed in order to meet the MEP standard and antidegradation policy. The Copermittees are to develop a standard procedure for pollutants of concern to be identified in the model SUSMP. Development of such a standard procedure in the model SUSMP will help ensure consistency and clarity for the development project application process.

Data from the Copermittees dry and wet weather monitoring programs, as well as from other published sources, can be useful in identifying pollutants of concern. The SDRWQCB can help the Copermittees in locating applicable sources of information.

Section: F.1 Subsection: F.1.b.2.g

Comment: This exemption is meaningless unless section F.1.b.(1)(g) is deleted. These restaurants would still have to meet the requirement to maintain pre-development velocity / flow rates. They could not do this without numerically sized structural controls. (County of San Diego)

Response: The intent of this provision was to exempt restaurants smaller than 5,000 square feet from the structural treatment BMP requirements, including requirements for the control of flow rates. The language of section F.1.b.2.g has been clarified to address this. As discussed elsewhere, requirements for the control of flow rates from new development will be limited to development projects falling under the SUSMP categories. Section F.1.b.1.g. has been changed to reflect this, and therefore does not conflict with this provision. See change at permit sections F.1.b.1.g and F.1.b.2.g.

Section: F.1 Subsection: F.1.b.2.h

Comment: What is the criteria to be used in order to qualify for a waiver? (Anonymous Workshop 1)

Response: The Tentative Order states "A waiver of infeasibility shall only be granted by a Copermittee when all available structural treatment BMPs have been considered and rejected as infeasible." The Copermittees have discretion in identifying in their model and local SUSMPs applicable specific situations for waivers. However, it is important to note that the waiver fund requirement (for project proponents who have received a waiver to transfer their cost savings to a storm water mitigation fund) precludes findings of infeasibility based on cost.

The Los Angeles RWQCB SUSMP provides guidance on situations where waivers may apply, stating "[r]ecognized situations of impracticability include, (i) extreme limitations of space for treatment on a redevelopment project, (ii) unfavorable or unstable soil conditions at a site to attempt infiltration, and (iii) risk of groundwater contamination because a known unconfined aquifer lies beneath the land surface or an existing or potential underground source of drinking water is less than 10 feet from the soil surface."

Section: F.1 Subsection: F.1.b.2.h

Comment: Aside from that, the cost savings should be used in the Co-permittee's jurisdiction first, at the Co-permittee's discretion, before being used in the Co-permittee's watershed. (City of Coronado)

Response: How waiver funds are used is at the discretion of the Copermittees, provided funds "be used on projects to improve urban runoff quality within the watershed of the waived project."

Section: F.1 Subsection: F.1.b.2.h

Comment: The waiver funding requirement under the SUSMP provisions is unworkable and should be stricken.

The Tentative Order includes a "waiver funding" provision that allows a Copermittee to exempt a project from the numeric sizing requirements upon a showing of "infeasibility." In such instances, the Copermittees are required to develop a program "to require project proponents who have received waivers to transfer the savings in costs, as determined by the Copermittees(s) to a storm water mitigation fund. The problem with this waiver fund provision, in part, arises out of the obligation of the Copermittees to set up a fund that is equivalent to the total amount of savings in costs to the project applicant, irrespective of whether or not the finding of infeasibility was based on economics, i.e., if the waiver was granted because of the economics, the waiver will be ineffective as the same savings in costs apparently will have to be transferred to the waiver fund. Such a provision is impracticable and should be modified to provide discretion to the Copermittee to set the amount of the fund based on the use and purposes of the fund, and the projects to be carried out with the funds. (County of San Diego)

Response: The criteria included in the Tentative Order upon which a waiver may be issued is based upon the waiver criteria in the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11. The LARWQCB SUSMP states “A waiver of impracticability shall be granted only when all other Structural and Treatment Control BMPs have been considered and rejected as infeasible.” When discussing situations where a waiver may be issued, the LARWQCB SUSMP does not include cost considerations. Cost considerations are not a valid reason for waiver issuance, since the SDRWQCB and LARWQCB have exhibited that structural BMP implementation is generally less than 1% of total project cost. The SWRCB finds that this cost is “reasonable” in Order WQ 2000-11. Since waivers are not to be issued based on cost considerations, the requirement for project proponents who have received a waiver to transfer the resulting savings to a storm water mitigation fund is appropriate.

The waiver provision in the Tentative Order provides the Copermittees considerable discretion in how the dollar amount of fund contributions will be determined and spent. However, a waiver cannot be granted in order to save a project proponent money.

Section: F.1 Subsection: F.1.b.2.h

Comment: The Copermittee must show infeasibility of all available structural treatment BMPs including those not recommended in the local SUSMP. (Surfrider Foundation)

Response: It is anticipated that the list of structural treatment BMPs included in the model and local SUSMPs will be complete, wide-ranging, and thorough. While the list is not designed to exclude the use of any applicable BMPs, it should be adequate to assess the feasibility of BMP implementation at a site. In addition, requiring project proponents to show infeasibility of all BMPs in existence may be impractical.

Section: F.1 Subsection: F.1.b.2.h

Comment: Page 19, SectionF.1.b. (2) (h) Waiver Provision- Please include language to provide for public participation in the Waiver Provision process, and allow the public to comment on the validity of the waiver as well as how and where money from the stormwater mitigation fund will be spent. (Surfers Tired of Pollution)

Response: The SDRWQCB strongly encourages the Permittees to include public participation in their waiver and budget processes. However, in an attempt to provide the Permittees with flexibility no such requirement will be included in the Tentative Order. However, it is important to note that when a waiver is approved by a Permittee, that Permittee is required to notify us. The public is then welcome to review our files that contain these waiver notifications.

Section: F.1 Subsection: F.1.b.2.h

Comment: A waiver provision would be unnecessary if the permit provided sufficient flexibility to allow Copermittees to design and implement their programs. This section should be deleted and replaced with a provision to allow Copermittees to develop and submit a proposed waiver program. Copermittees should be allowed to propose, with sufficient rationale, a program that considers and addresses the full range of situations in which waivers might be needed and/or allowable (including regional strategies). (County of San Diego)

Response: The waiver provision provides significant flexibility to the Copermittees in identifying situations where waivers are applicable. The issuance of waivers is left entirely to the Copermittees, provided that "all available structural treatment BMPs have been considered and rejected as infeasible." The Copermittees have discretion in identifying in their model and local SUSMPs applicable situations for waivers. However, it is important to note that the waiver fund requirement (for project proponents who have received a waiver to transfer their cost savings to a storm water mitigation fund) precludes findings of infeasibility based on cost.

The LARWQCB SUSMP provides guidance on situations where waivers may apply, stating "[r]ecognized situations of impracticability include, (i) extreme limitations of space for treatment on a redevelopment project, (ii) unfavorable or unstable soil conditions at a site to attempt infiltration, and (iii) risk of groundwater contamination because a known unconfined aquifer lies beneath the land surface or an existing or potential underground source of drinking water is less than 10 feet from the soil surface."

Section: F.1 Subsection: F.1.b.2.h

Comment: Change or Delete F.1b.(2)(h) Waiver Provision pg.19.
We are very wary of the allowance of any waiver provision for numeric sizing criteria and think that at a minimum any such a provision must be based on negligibility of water quality impacts and not on feasibility. Land use law is simply all about public and environment protection overriding individual economic interest. Ideally, it is development interest that should accommodate regulatory requirements and not vice versa. If a project is infeasible under the requirements of the law, it shouldn't be built. We apply this simple calculus to earthquake and fire safety provisions all the time. The extreme interest in preventing the harms of noncompliance obviates the inclusion of any provision for waiver. Water quality protection rises to the same level of public and environmental concern, thereby precluding the availability of a waiver.

If the Regional Board chooses to permit waivers, we strongly encourage that such provisions require a lower on-site numeric sizing criteria in addition to off-site mitigation or fund contribution. For example, in addition to the transfer of savings in cost provisions, the model SUSMP must require project proponents who have received waivers to mitigate 80% of the volume or flow rate set by the numeric

sizing criteria. That way, at least we still protect against most of the dry weather flows and some of the first flush. (Environmental Health Coalition)

Response: A waiver provision is necessary for certain specific situations where compliance with numeric sizing criteria is infeasible. For example, it is conceivable that a project may have such extreme limitations of space that no room for structural treatment BMPs exists. Where a waiver is granted, the project proponent is still required to implement the other provisions of the SUSMP. Furthermore, a contribution to a storm water mitigation fund is required if a waiver is received. These two requirements will ensure that the project does not result in a cumulative impact to the watershed. Finally, inclusion of a waiver provision was supported by the SWRCB in Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.h

Comment: Use of the word "infeasible" without an explanatory definition makes it another "I know it when I see it" concept that is inherently problematic.

We propose that the Draft Permit's Waiver Provisions be modified as follows:
A Copermittee may, through adoption of an ordinance or code incorporating the Treatment Control BMPs of the SUSWMP, provide for a waiver from the requirement if impracticability for a specific property can be established. Recognized situations of impracticability include, but are not limited to: (i) redevelopment in the Urban Core; (ii) extreme limitations of space for treatment on a redevelopment project outside the Urban Core; (iii) unfavorable or unstable soil conditions at a site to attempt infiltration; and (iv) risk of ground water contamination because an underground source or potential source of drinking water is less than 10 feet from the soil surface.

If a waiver is granted for impracticability, the Permittee shall first require the project proponent to propose one or more Source Control BMPs to reduce Pollutants of Concern to the Maximum Extent Practicable. Any savings in cost between the approved Source Control BMPs and the waived Treatment Control BMPs, but not exceeding 0.7% of the total cost of the project shall be transferred to a Storm Water Utility District encompassing the watershed in which the waiver was granted. The Storm Water Utility District shall use the transferred funds to develop and implement regional alternative solutions for storm water pollution in the storm watershed.

These modifications to the waiver language are intended to clarify the language of San Diego's SUSWMP. Second, they place time limits on the procedures which may be necessary. The revisions also recognize that Source Control BMPs as a viable part of the solution to storm water pollution. Finally, the proposed modifications encourage the development and funding of watershed Storm Water Utility Districts as the legitimate vehicle to expand storm water protection from individual projects to watersheds. (McKenna & Cuneo, L.L.P.)

Response: What constitutes infeasibility is at the discretion of the Copermittees, in order to provide them flexibility in developing and implementing their SUSMPs. The Copermittees' model and local SUSMPs should include criteria for the determination of infeasibility. However, it is important to note that the waiver fund requirement (for project proponents who have received a waiver to transfer their cost savings to a storm water mitigation fund) precludes findings of infeasibility based on cost. Also, due to the heavy use development projects receive in the urban core, infeasibility simply based on a project's location within the urban core (as proposed by the commentor) is not appropriate. While certain projects within the urban core may be eligible for a waiver, certainly many other projects have the capability for

structural treatment BMP implementation. For example, the proposed ballpark in downtown San Diego has extensive plans for structural BMP implementation. A blanket exemption of urban core projects is not adequately protective of receiving water quality.

It is also important to note that receipt of a waiver does not constitute a waiver from the entire SUSMP requirements. It is merely a waiver from the requirement that structural treatment BMPs be implemented which meet numeric sizing criteria. Therefore, the source control BMPs in section F.1.b.2.b are still required of projects which receive a waiver. For this reason, calculations to determine waiver fund contributions which include consideration of dollars spent on source control BMPs are inappropriate.

Finally, nothing in the Tentative Order precludes the Copermittees from developing a storm water utility district.

Section: F.1 Subsection: F.1.b.2.h

Comment: Section F.1.b(2)(h), found at page 19, provides that if a project cannot feasibly implement the required structural treatment BMPs, the Copermittee may grant that project a waiver from those requirements. However, the Tentative Order then states that "[a]s part of the model SUSMP, the Copermittees shall develop a program to require project proponents who have received waivers to transfer the savings in cost, as determined by the Copermittees, to a storm water mitigation fund." The problem here is that most project proponents seeking the waiver will do so on the grounds that the required structural BMPs are too expensive and therefore infeasible. It would make no sense to grant the waiver and then demand that the project proponent pay the amount "saved" into a storm water mitigation fund. The entire point of granting the waiver -- to avoid potentially devastating costs -- would be defeated. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The point of the waiver is not to avoid asserted potentially devastating costs, but rather to allow flexibility "when all available structural treatment BMPs have been considered and rejected as infeasible" due to situations such as extreme limitations of space or dangerous soil conditions.

The criteria included in the Tentative Order upon which a waiver may be issued is based upon the waiver criteria in the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11. The LARWQCB SUSMP states “A waiver of impracticability shall be granted only when all other Structural and Treatment Control BMPs have been considered and rejected as infeasible.” When discussing situations where a waiver may be issued, the LARWQCB SUSMP does not include cost considerations. Cost considerations are not a valid reason for waiver issuance, since the SDRWQCB and LARWQCB have exhibited that structural BMP implementation is generally less than 1% of total project cost. The SWRCB finds that this cost is “reasonable” in Order WQ 2000-11. Since waivers are not to be issued based on cost considerations, the requirement for project proponents who have received a waiver to transfer the resulting savings to a storm water mitigation fund is appropriate.

The waiver provision in the Tentative Order provides the Copermittees considerable discretion in how the dollar amount of fund contributions will be determined and spent. However, a waiver cannot be granted in order to save a project proponent money.

Section: F.1 Subsection: F.1.b.2.h

Comment: This waiver provision should only be granted when not doing so would constitute a "taking", denying an owner all economic Use of his property. As stated, a huge portion of projects are likely to routinely submit applications for waivers. The labor force and legal resources needed to evaluate them would be overwhelming. (San Diego Audubon Society)

Response: Waivers may only be issued "when all available structural treatment BMPs have been considered and rejected as infeasible." Due to the wide range and adaptability of BMPs available, it is anticipated that waiver issuance will be relatively rare. Where a waiver is granted, the project proponent is still required to implement the other provisions of the SUSMP. Furthermore, a contribution to a storm water mitigation fund is required if a waiver is received. These two requirements will ensure that the project does not result in a cumulative impact to the watershed. Finally, inclusion of a waiver provision was supported by the SWRCB in Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.h

Comment: Further, this provision is confusing and ambiguous as it appears to require the same amount in cost savings for SUSMP compliance to be deposited into the Fund. As the State Board found with the LARWQCB sump, the Fund terms have not been sufficiently developed. (State Board Order WP 2000-11, p. 2.) (County of San Diego)

Response: The criteria included in the Tentative Order upon which a waiver may be issued is based upon the waiver criteria in the LARWQCB SUSMP, which was upheld by the SWRCB in Order WQ 2000-11. The LARWQCB SUSMP states “A waiver of impracticability shall be granted only when all other Structural and Treatment Control BMPs have been considered and rejected as infeasible.” When discussing situations where a waiver may be issued, the LARWQCB SUSMP does not include cost considerations. Cost considerations are not a valid reason for waiver issuance, since the SDRWQCB and LARWQCB have exhibited that structural BMP implementation is generally less than 1% of total project cost. The SWRCB determined in Order WQ 2000-11 that this cost is “reasonable”. Since waivers are not to be issued based on cost considerations, the requirement for project proponents who have received a waiver to transfer the resulting savings to a storm water mitigation fund is appropriate. The waiver provision in the Tentative Order provides the Copermittees considerable discretion in how the dollar amount of fund contributions will be determined and spent. However, a waiver cannot be granted in order to save a project proponent money.

The Tentative Order gives the Copermittees significant discretion in determining the terms of the waiver fund and in developing and implementing the fund. The terms of the fund which the Tentative Order requires the Copermittees to identify are based on SWRCB Order WQ 2000-11. The waiver fund terms included in the Tentative Order are terms the SWRCB identified in Order WQ 2000-11 as terms which need to be resolved. The Copermittees are provided one year from date of adoption of the Order to develop these waiver fund terms, and an additional six months to implement them.

Section: F.1 Subsection: F.1.b.2.h

Comment: If a cost estimate can be generated for a structural treatment BMP, how can that same BMP then be considered infeasible? From an engineering standpoint, what is infeasible is that which simply cannot be built, no matter how much is spent; therefore, no savings can be estimated.

Also, doesn't the waiver provision violate a fundamental premise that polluters shall not buy their way out of mitigation responsibilities? (City of Chula Vista)

Response: The primary criteria for infeasibility is that "all available structural treatment BMPs have been considered and rejected as infeasible" for implementation. The point of the waiver is not to avoid asserted high costs, but rather to allow flexibility "when all available structural treatment BMPs have been considered and rejected as infeasible" due to situations such as extreme limitations of space or dangerous soil conditions. In situations such as these, where a waiver is issued, the Copermittees have discretion with regard to "how the dollar amount of fund contributions will be determined," as stated in the Tentative Order. One way to determine the dollar amount to be contributed to the fund would be to simply assess how much a similar site (which doesn't have the same constraints) has spent on its structural treatment BMPs.

The waiver fund does not allow developers to buy their way out of mitigation, indeed, just the opposite. The waiver fund assures that even if a waiver is received, the developer must contribute to mitigation of urban runoff within the watershed of their development.

The waiver provision provides significant flexibility to the Copermittees in identifying situations where waivers are applicable. The issuance of waivers is left entirely to the Copermittees, provided that "all available structural treatment BMPs have been considered and rejected as infeasible." The Copermittees have discretion in identifying in their model and local SUSMPs applicable situations for waivers. However, it is important to note that the waiver fund requirement (for project proponents who have received a waiver to transfer their cost savings to a storm water mitigation fund) precludes findings of infeasibility based on cost.

The LARWQCB SUSMP provides guidance on situations where waivers may apply, stating "[r]ecognized situations of impracticability include, (i) extreme limitations of space for treatment on a redevelopment project, (ii) unfavorable or unstable soil conditions at a site to attempt infiltration, and (iii) risk of groundwater contamination because a known unconfined aquifer lies beneath the land surface or an existing or potential underground source of drinking water is less than 10 feet from the soil surface."

Section: F.1 Subsection: F.1.b.2.h

Comment: Section F. 1.b.(2)(h): Waiver Provision: The waiver provides for the transfer of any cost savings due to a determination of the unfeasibility of all structural treatment BMPs to a storm water mitigation fund. The amount of such transfer could be difficult to determine and could be open to wide interpretations. (City of Coronado)

Response: The dollar amounts of waiver mitigation fund transfers have large potential for a wide range of interpretations. The Tentative Order therefore requires, as part of the model SUSMP, that the Copermittees develop a waiver program which identifies how the dollar amount of fund contributions will be determined.The Copermittees are provided one year to develop the waiver program, with an additional six months for its implementation. Once a regionwide method for implementing the waiver program is developed by the Copermittees, consistency in waiver fund transfers should be achieved.

Section: F.1 Subsection: F.1.b.2.h

Comment: Any consideration for a waiver must also be based largely on what the pollution impact would result from granting the waiver. As it is currently written, the Copermittee, or the Regional Board would have no ability to require that a different type or magnitude of development be considered in lieu of the waiver. As written, this weak provision could largely undermine the implementation of this Permit. We urge that the waiver provision be limited to "takings" situations and that it incorporate a consideration of the water quality impact. In a situation where the two conflict the only viable alternative might be for the public to reject the project and acquire the property. (San Diego Audubon Society)

Response: Waivers may only be issued "when all available structural treatment BMPs have been considered and rejected as infeasible." Due to the wide range and adaptability of BMPs available, it is anticipated that waiver issuance will be relatively rare. Where a waiver is granted, the project proponent is still required to implement the other provisions of the SUSMP. Furthermore, a contribution to a storm water mitigation fund is required if a waiver is received. These two requirements will ensure that the project does not result in a cumulative impact to the watershed. Finally, inclusion of a waiver provision was supported by the SWRCB in Order WQ 2000-11.

Section: F.1 Subsection: F.1.b.2.h

Comment: If the waiver system is instituted, the proceeds should go only to mitigating pollution from existing sources, or for watershed-focused prevention programs. The Copermittees should resist proposals to use the Storm Water Mitigation Fund to offset pollution from new priority sources, unless there is a compelling rationale for doing so. (City of Chula Vista)

Response: Application of waiver funds is left to the discretion of the Copermittees, provided that the funds "be used on projects to improve urban runoff quality within the watershed of the waived project."

Section: F.1 Subsection: F.1.b.2.I

Comment: The Regional Board should not prohibit infiltration structural BMPs for areas subject to high vehicular traffic, but rather should ensure that proper siting and maintenance requirements are included in the permit. (San Diego Baykeeper)

Response: Focusing infiltration of large volumes of water in small areas has the potential to adversely impact groundwater quality. For this reason, infiltration restrictions have been placed on the use of structural infiltration BMPs in section F.1.b.2.i. These restrictions are to apply to structural infiltration BMPs only. These restrictions on structural infiltration BMPs are appropriate and are based directly on USEPA guidance. The restrictions are predominantly recommended by the USEPA Risk Reduction Engineering Laboratory (USEPA, 1994). Other infiltration restrictions are based on restrictions used elsewhere, such as Los Angeles, the State of Washington, and the State of Maryland. Furthermore, the restrictions are supported by the SWRCB in Order WQ 2000-11. The Order states: "The Regional Board did consider the potential impacts to groundwater from infiltration, and included appropriate limitations

and guidance on its use as a BMP." The limitations and guidance the SWRCB refers to in Order WQ 2000-11 include most of the restrictions on infiltration included in the Tentative Order.

However, the SDRWQCB acknowledges that infiltration restrictions may not be necessary in all cases. For this reason, the Tentative Order will be changed to allow the Copermittees to develop their own restrictions on the use of structural infiltration BMPs in the model SUSMP, for approval by the SDRWQCB.

See change at permit section F.1.b.2.i.

Section: F.1 Subsection: F.1.b.2.I

Comment: In regards to the use of infiltration structural treatment BMPs, the requirement to guarantee that an exceedance of groundwater water quality objectives will not occur should be removed because a property owner can only design the infiltration BMPs in compliance with the guidelines established by the RWQCB. They don't have the expertise to predict how well the BMPs will perform. (Building Industry Association of Southern CA)

Response: The Tentative Order states "Use of infiltration structural treatment BMPs shall not cause or contribute to an exceedance of groundwater quality objectives." If this requirement cannot be met, infiltration structural treatment BMPs should not be implemented.

Section: F.1 Subsection: F.1.b.2.I

Comment: This section is in conflict with Finding No. 34. Subsection (ii) implies that sedimentation occurs in an impervious basin. Subsection (iii) would indicate that wash water or irrigation run-off on parking lots could not be diverted onto landscaped areas. This appears to conflict with other parts of the permit and desirable practices. Subsection (iv) would appear to be adequate to address the concern addressed in section g). Subsection (vi) should not apply to degraded ground waters, which have no beneficial use to protect. Subsection (viii) appears to eliminate infiltration for any industrial use in Carlsbad. Subsurface geology needs to be taken into consideration to avoid consequences discussed above. (City of Carlsbad)

Response: Focusing infiltration of large volumes of water in small areas has the potential to adversely impact groundwater quality. For this reason, infiltration restrictions have been placed on the use of structural infiltration BMPs in section F.1.b.2.i. These restrictions are to apply to structural infiltration BMPs only. These restrictions on structural infiltration BMPs are appropriate and are based directly on USEPA guidance. The restrictions are predominantly recommended by the USEPA Risk Reduction Engineering Laboratory (USEPA, 1994). Other infiltration restrictions are based on restrictions used elsewhere, such as Los Angeles, the State of Washington, and the State of Maryland. Furthermore, the restrictions are supported by the SWRCB in Order WQ 2000-11. The Order states: "The Regional Board did consider the potential impacts to groundwater from infiltration, and included appropriate limitations and guidance on its use as a BMP." The limitations and guidance the SWRCB refers to in Order WQ 2000-11 include most of the restrictions on infiltration included in the Tentative Order.

However, the SDRWQCB acknowledges that infiltration restrictions may not be necessary in all cases. For this reason, the Tentative Order will be changed to allow the Copermittees to develop their own restrictions on the use of structural infiltration BMPs in the model SUSMP, for approval by the SDRWQCB.

See change at permit section F.1.b.2.i.

Section: F.1 Subsection: F.1.b.2.i.ii

Comment: Section F.l.b.(2).(i).ii and iii - Page 19 - Urban Runoff and Dry Weather Infiltration: The statement that all dry weather flows be pretreated or be diverted from infiltration devices conflicts with the requirement to mitigate the 85 th percentile flow or volume of a storm event. Technically, it may not be possible to capture one and divert the other. The permit shall allow agencies to exempt some dry weather flows from the permit requirements. (City of La Mesa)

Response: Focusing infiltration of large volumes of water in small areas has the potential to adversely impact groundwater quality. For this reason, infiltration restrictions have been placed on the use of structural infiltration BMPs in section F.1.b.2.i. These restrictions are to apply to structural infiltration BMPs only. These restrictions on structural infiltration BMPs are appropriate and are based directly on USEPA guidance. The restrictions are predominantly recommended by the USEPA Risk Reduction Engineering Laboratory (USEPA, 1994). Other infiltration restrictions are based on restrictions used elsewhere, such as Los Angeles, the State of Washington, and the State of Maryland. Furthermore, the restrictions are supported by the SWRCB in Order WQ 2000-11. The Order states: "The Regional Board did consider the potential impacts to groundwater from infiltration, and included appropriate limitations and guidance on its use as a BMP." The limitations and guidance the SWRCB refers to in Order WQ 2000-11 include most of the restrictions on infiltration included in the Tentative Order.

However, the SDRWQCB acknowledges that infiltration restrictions may not be necessary in all cases. For this reason, the Tentative Order will be changed to allow the Copermittees to develop their own restrictions on the use of structural infiltration BMPs in the model SUSMP, for approval by the SDRWQCB.

See change at permit section F.1.b.2.i.

Section: F.1 Subsection: F.1.b.2.i.iii

Comment: In many areas of the County there are no sanitary sewers into which dry weather flows can be diverted. Requiring the diversion of dry weather flows in these areas could not be feasibly implemented, and there is no support for its requirements. (County of San Diego)

Response: Diversion of dry weather flows away from infiltration devices, as the Tentative Order provides, does not require that all dry weather flows be diverted to the sanitary sewer. Rather, the dry weather flows are to be diverted to other categories of BMPs, such as swales or filters, where the primary function is not to infiltrate large quantities of water.

Section: F.1 Subsection: F.1.b.2.i.iii

Comment: All dry weather flows shall be diverted Page 19 of 50 - paragraph F. l.b.(2)(i)(iii) - from infiltration devices. Does this mean that non-prohibited water discharges from sources such as irrigation and residential car washes (sources of dry weather flows) must be diverted from lawns or grassy swales or other infiltration devices? If so, why? (City of Imperial Beach)

Response: Focusing infiltration of large volumes of dry weather flows in small areas has the potential to adversely impact groundwater quality. For this reason, restrictions have been placed on the infiltration of dry weather flows in section F.1.b.2.i.iii. These restrictions are to apply to structural infiltration BMPs only. These restrictions on dry weather flow infiltration are appropriate and are based directly on USEPA guidance. The restrictions are recommended by the USEPA Risk Reduction Engineering Laboratory (USEPA, 1994). Furthermore, the restrictions are supported by the SWRCB in Order WQ 2000-11. The Order states: "The Regional Board did consider the potential impacts to groundwater from infiltration, and included appropriate limitations and guidance on its use as a BMP." The guidance the SWRCB refers to in Order WQ 2000-11 includes USEPA's recommendation against the infiltration of dry weather flows.

However, the SDRWQCB acknowledges that dry weather flow infiltration restrictions may not be necessary in all cases. For this reason, the Tentative Order will be changed to allow the Copermittees to develop their own restrictions on the use of structural infiltration BMPs in the model SUSMP, for approval by the SDRWQCB.

See change at permit section F.1.b.2.i.

Section: F.1 Subsection: F.1.b.2.i.iii

Comment: Section F.1.b (2)(i) iii: Where shall dry weather flows be diverted? (City of Chula Vista)

Response: Where dry weather flows need to be diverted, they should be diverted to other BMPs, which do not have the principal function of infiltrating large quantities of water in a concentrated area. For example, filters and swales could be effective.

Section: F.1 Subsection: F.1.b.2.I.iv

Comment: Modify this sentence to: "Pollution prevention and source control BMPs or their equivalent shall be implemented at a level appropriate to protect groundwater quality at sites where infiltration structural treatment BMPs are to be used." (Port of San Diego)

Response: The definition of BMP in Attachment D of the Tentative Order is broad and inclusive. It is likely that any equivalent alternative would fall under this definition, making the inclusion of such terms unnecessary.

Section: F.1 Subsection: F.1.b.2.i.v

Comment: This section should be deleted. It violates the MEP standards under the CWA. (County of San Diego)

Response: The intent of this requirement is not meant to require removal of all pollutants but rather to ensure that infiltration BMPs be adequately maintained so as to be effective in removing pollutants. Section F.1.b.2.i.v of the Tentative Order is recommended to be changed to clarify this intent.

Section: F.1 Subsection: F.1.b.2.i.vi

Comment: This requirement cannot be feasibly implemented in all instances. In areas throughout the County, the seasonal high groundwater mark is within 10 feet of natural ground. The construction of detention basins to reduce stormwater discharge rates and velocities will naturally infiltrate in these areas. The discharge of roadway catch basins and down drains into natural water courses will also infiltrate these areas. (County of San Diego)

Response: Focusing infiltration of large volumes of water in small areas has the potential to adversely impact groundwater quality. For this reason, infiltration restrictions have been placed on the use of structural infiltration BMPs in section F.1.b.2.i. These restrictions are to apply to structural infiltration BMPs only. These restrictions on structural infiltration BMPs are appropriate and are based directly on USEPA guidance. The restrictions are predominantly recommended by the USEPA Risk Reduction Engineering Laboratory (USEPA, 1994). Other infiltration restrictions are based on restrictions used elsewhere, such as Los Angeles, the State of Washington, and the State of Maryland. Furthermore, the restrictions are supported by the SWRCB in Order WQ 2000-11. The Order states: "The Regional Board did consider the potential impacts to groundwater from infiltration, and included appropriate limitations and guidance on its use as a BMP." The limitations and guidance the SWRCB refers to in Order WQ 2000-11 include most of the restrictions on infiltration included in the Tentative Order.

However, the SDRWQCB acknowledges that infiltration restrictions may not be necessary in all cases. For this reason, the Tentative Order has been changed to allow the Copermittees to develop their own restrictions on the use of structural infiltration BMPs in the model SUSMP, for approval by the SDRWQCB. See change at permit section F.1.b.2.i.

Section: F.1 Subsection: F.1.b.2.i.vii

Comment: What physical and chemical characteristics of soil are adequate? What constitutes proper infiltration duration and treatment of urban runoff? (City of Chula Vista)

Response: Determination of whether a site has adequate soil characteristics for significant infiltration is the responsibility of the project proponent or the Copermittees. Numerous guidance documents are available such as "Storm Water Management in Washington State" (Washington State Department of Ecology, 1999), "Guidance Manual for On-Site Stormwater Quality Control Measures" (City of Sacramento, 2000), and "2000 Maryland Stormwater Design Manual" (Maryland Department of the Environment, 1999).

Section: F.1 Subsection: F.1.b.2.i.viii

Comment: Definition of "areas of industrial or light industrial activity" is needed. Would this be based on the specific facility type (e.g., SIC code), land use or zoning, or a particular area within a development boundary (a process area rather than an office)? What if the facility does not have significant exposure (e.g., an "industrial" facility with all activities indoors and properly contained)? (County of San Diego)

Response: The Tentative Order would leave to the discretion of the Copermittees designation of light industrial areas and activities for which structural infiltration BMPs should not be implemented.

Section: F.1 Subsection: F.1.b.2.i.viii

Comment: A rationale for the blanket exclusion of flows from infiltration devices in these areas should be provided. As before, flows must already meet an MEP standard for pollutant reduction, cannot cause or contribute to an exceedance of groundwater quality objectives, must be subjected to pollution prevention, source control, and pre-treatment BMPs, must be vertically separated from groundwater by at least 10 feet, and must be at least 100 feet from any supply well. If dischargers can (and must) meet these other conditions, why does the RWQCB believe it can and should lawfully impose these additional restrictions? No findings and evidence is provided in this regard. (County of San Diego)

Response: Focusing infiltration of large volumes of water in small areas has the potential to adversely impact groundwater quality. For this reason, infiltration restrictions have been placed on the use of structural infiltration BMPs in section F.1.b.2.i. These restrictions are to apply to structural infiltration BMPs only. These restrictions on structural infiltration BMPs are appropriate and are based directly on USEPA guidance. The restrictions are predominantly recommended by the USEPA Risk Reduction Engineering Laboratory (USEPA, 1994). Other infiltration restrictions are based on restrictions used elsewhere, such as Los Angeles, the State of Washington, and the State of Maryland. Furthermore, the restrictions are supported by the SWRCB in Order WQ 2000-11. The Order states: "The Regional Board did consider the potential impacts to groundwater from infiltration, and included appropriate limitations and guidance on its use as a BMP." The limitations and guidance the SWRCB refers to in Order WQ 2000-11 include most of the restrictions on infiltration included in the Tentative Order.

However, the SDRWQCB acknowledges that infiltration restrictions may not be necessary in all cases. For this reason, the Tentative Order has been changed to allow the Copermittees to develop their own restrictions on the use of structural infiltration BMPs in the model SUSMP, for approval by the SDRWQCB. See change at permit section F.1.b.2.i.

Section: F.1 Subsection: F.1.b.1.g

Comment: Although a requirement for structural treatment BMPs is not explicitly stated in this section, part F.1.b.(1)(g) imposes a requirement to maintain pre-development runoff rates and velocities, as well as similar requirements for pollutant reduction. Since it is not possible to meet these standards

without the use of structural controls, this equates to a mandate for their use on all development sites. (County of San Diego)

Response: The language regarding peak flow rates and velocities in F.1.b.1.g has been removed. Control of peak flow rates and velocities shall instead apply only to SUSMP priority development projects.

Section: F.1 Subsection: F.1.c

Comment: The word ""would" should be changed to ""could" in the CEQA Checklist questions. (Surfrider Foundation)

Response: The revised Tentative Order will use "could" in place of "would" in Section F.1.c.

Section: F.1 Subsection: F.1.c

Comment: We would note, though, that the Regional Board, despite being a "Responsible Agency" under CEQA, rarely comments on projects undergoing CEQA review. Such comments from the Regional Board would be helpful to municipalities attempting to evaluate and mitigate the water quality impacts of proposed projects. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: The Regional Board is aware of its responsibility to comment on CEQA projects that may have an impact on water quality. Currently, all CEQA documents received by the Regional Board office are logged into a database, and all staff are provided a list of these documents monthly. Staff reviews the list of CEQA documents to identify those that may have water quality issues, and comments on these documents as appropriate. However, due to limited staff resources, the Regional Board generally does not comment on CEQA documents that do not have identified water quality issues.

Section: F.1 Subsection: F.1.c.1.g

Comment: Section F.1.c (1)(g): How would this provision affect the Multiple Species Conservation Plan? (City of Chula Vista)

Response: Areas acquired and set aside for mitigation under the Multiple Species Conservation Plan would be considered environmentally sensitive areas.

Section: F.1 Subsection: F.1.c

Comment: What is required for CEQA compliance is well established by statute and the legislation there under, and the Regional Board has no authority to modify or amend the requirements of CEQA. Recommend coordinating the CEQA Checklist Form changes with the Governor's Office of Planning and

Research so they can be implemented consistently throughout California. (County of San Diego, Port of San Diego, Anonymous, La Mesa, Procopio, Cory, Hargreaves & Savitch)

Response: The intent of section F.1.c was for the Copermittees to consider water quality impacts in their environmental review processes. The requirement that CEQA initial study checklists be revised to consider water quality impacts was incorporated into the Tentative Order directly from SANDAG's Water Quality Element of its Regional Growth Management Strategy. However, since the Copermittees do not have authority to change CEQA checklists, language referring to CEQA checklists will be removed from section F.1.c.

See change at permit section F.1.c.

Section: F.1 Subsection: F.1.c.1.k

Comment: Add: (1) Will the project create new mosquito/vector breeding sites? and
Does it require a Mosquito/Vector Prevention Control Plan? (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: F Subsection: F.1.d.

Comment: Add: (d) Mosquito/vector control impacts (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: F.1 Subsection: F.1.d.2

Comment: Add: (e) Mosquito/vector impacts (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: F.1 Subsection: F.1.d.2

Comment: Page 20, Section F.1.d.(2) External: Project Applicants, Developers,

Contractors, Property Owners- Please add Community Planning Groups, Planning Boards, and Elected Officials to those who should be included in the educational program. (Surfers Tired of Pollution)

Response: The SDRWQCB agrees that project applicants, developers, contractors, and property owners should all be included in the education program because of their influence over land use decisions. The SDRWQCB will make permit changes based on your suggestions.

See changes to Permit Section F.1.d.2.

Section: F.2 Subsection: F.2

Comment: Permit compliance should not be predicated on compliance with the plan. The actual status of grading will vary daily throughout the project until complete. The inspector needs the flexibility to adjust measures as required by weather condition. Effective measures require daily inspection to insure effectiveness of erosion control measures. Performance criteria are required to fairly enforce violation. It is suggested that the permit adopt a criteria that restricts construction sedimentation to fifty percent of the erosion potential in the before site conditions utilizing with Conservation Service Methods of analysis. For purpose of this section MEP should be defined as a 50 % reduction of sedimentation of the pre construction conditions. (La Mesa, Carlsbad (1), Carlsbad (2), Carlsbad (3), Carlsbad (4))

Response: Permit compliance is necessarily not determined by assessing a site's compliance with its erosion control/grading plan. It is more important to ensure that BMPs are implemented in the field. However, a upkept erosion control/grading plan can be a useful tool for both the contractor and the inspector. Both contractors and inspectors should utilize erosion control/grading plans. In addition, Copermittees are encouraged to develop performance standards for construction site runoff.

Section: F.2 Subsection: F.2

Comment: Implementation of F.2.a, F.2.b, F.2.c, F.2.d will take longer than 180 days. Infeasible implementation schedule. Copermittee grading ordinances updates cannot be completed within 180 days. The time needed for completing revisions, providing adequate public review, and conducting CEQA would extend well beyond the period proposed by staff. The County recommends that this implementation schedule be deleted from the permit and replaced with a requirement for the Copermittees to develop and submit a schedule for review and revision (if necessary) of their ordinances to comply with the permit as finally amended. (County of San Diego (1), County of San Diego (2), County of San Diego (3), County of San Diego (4), County of San Diego (5), County of San Diego (6))

Response: The implementation schedule for the Jurisdiction Urban Runoff Management Program, excluding Section F.1, has been extended in the revised Tentative Order from 180 days to 365 days.

Section: F.2 Subsection: F.2.b

Comment: "[S]hall review and update its grading ordinances as necessary for compliance with its stormwater ordinances and this Order" implies a relationship between stormwater and grading ordinances which does not exist. While Copermittees may choose to provide linkages between ordinances to bolster their effectiveness, they may just as often choose not to do so. The CWA only requires the Copermittees have in place sufficient legal authority to enforce the permit. Whether the authority exists, or whether it is in a "grading" ordinance or some other ordinance, is irrelevant. This statement should be deleted from the permit. Even assuming the RWQCB can compel Copermittees to require pollution prevention, source control, and structural BMPs on all project sites, which it cannot, such conditions need not be included in grading ordinances. This requirement should be deleted. (County of San Diego (355), County of San Diego (356))

Response: Grading ordinances and storm water ordinances are closely related. Grading activities and the ordinances which regulate them have the potential to significantly impact construction site runoff water quality. For example, a grading ordinance which does not place any restrictions on the amount of area which can be cleared at any time can result in hundreds of acres of exposed soil. When this much soil is exposed, it is nearly impossible to control the water quality of the runoff. To the extent that grading ordinances have the potential to impact water quality, they should be updated.

The provision does not require that the grading ordinances include ordinances which are better suited as storm water ordinances. Rather, the provision requires that the grading ordinances be in compliance with storm water ordinances. In other words, the requirement ensures that conflicts do not exist between the two types of ordinances.

USEPA provides legal authority for this requirement, stating that "A description of the local erosion and sediment control law or ordinance is needed to satisfy this requirement [i.e., Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(2)]" (1992). Regarding Copermittee approval of construction activities, the US EPA further states that "applicants must propose site review and approval procedures that address sediment and erosion controls, storm water management, and other appropriate measures. Approvals should be clearly tied to commitments to implement structural and nonstructural BMPs during the construction process" (1992).

Furthermore, in its Phase II Final Rule, US EPA requires small municipalities to develop and implement for construction sites "An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance […]" (1999). Due to the greater water quality concerns generally experienced by larger municipalities, Phase II Final Rule requirements for small municipalities are also applicable to larger municipalities such as the Copermittees.

Section: F.2 Subsection: F.2.b

Comment: F.2.e Threat to Water Quality Prioritization (Construction)
Grading will occur during the rainy season. Making any project that has grading in the rainy season a high priority project will put many small projects on the high priority list. This may place single-family residence room additions on that list. This would be extremely cumbersome and make the list less valuable. A minimum size of project that has grading in the wet season should be considered. (SANDAG (782), County of San Diego (375))

Response: The construction site prioritization language of the Tentative Order has been modified in order to help ensure that insignificant projects are not designated as high priority, thereby requiring frequent inspections.

See change at permit section F.2.e.2.

Section: F.2 Subsection: F.2.c.1.b

Comment: The construction component conditions of approval says dry seasonal grading only. This is overly restrictive since grading is also restricted during other times for environmental concerns.

F.2.b. - Grading Ordinance Update (Construction)
The statewide permit for Caltrans does not have a restriction on grading m the coastal areas of the San Diego region. This permit should be aligned with the Caltrans permit. If seasonal grading restrictions are required, it potentially reduces the window available for grading to just a few months a year because of other environmental criteria already in
place. (Anonymous, BIASC, Chula Vista, SANDAG, County of San Diego, Associated General Contractors of America)

Response: The language of Section F.2.c.1.b has been changed to provide greater flexibility to allow wet season grading.

Section: F.2 Subsection: F.2.f.2

Comment: "[I]ncluding BMPs which are more stringent than those required under the statewide General Construction Permit" (section F.2.f.(2)) is beyond the State's authority. It would be impossible to require more stringent BMPs for a construction site than those required under the statewide General Construction Permit since the compliance level, in theory, required of construction sites for pollution prevention and elimination is identical for the statewide General Construction Permit and the Municipal Permit. This provision appears to be designed to transfer statewide General Construction Permit responsibilities to local agencies. (County of San Diego, Chula Vista)

Response: In order to comply with Order No. 2001-01 requirements, implemented BMPs may need to be more stringent than those required under the statewide General Construction Permit. The US EPA implies that local sediment and erosion control requirements may be more stringent than statewide General Construction Permit requirements when it states that "construction sites covered under NPDES permit regulations must indicate whether they are in compliance with State and local sediment and erosion control plans" (1992).

While minimum BMPs will be required at all construction sites, implementation of particular BMPs will be site specific in order to address various conditions at different sites. Regarding site specific BMPs, the US EPA states "Appropriate structural and nonstructural control requirements will vary by project.

Project type, size, and duration, as well as soil composition, site slope, and proximity to sensitive receiving waters will determine the appropriate structural and nonstructural BMPs" (1992).

Section: F.2 Subsection:

Comment: Recommend a separate section be added that is devoted to pollutant controls for staging areas to give this matter the attention it deserves. (Sierra Club)

Response: The Tentative Order provides the Copermittee flexibility in developing the specific BMPs of their URMP. Each Copermittee is required implement a Construction Component of its Jurisdictional URMP to reduce pollutants in runoff from construction sites during all construction phases. This includes a pollution prevention section. Pollution prevention implies source controls for all areas of the construction site, including staging areas. It is not necessary to add a section devoted to staging areas.

Section: F.2 Subsection:

Comment: Are street maintenance activities (slurry seal, resurfacing, sidewalk repair) considered to be construction under this permit? (Anonymous Workshop 2)

Response: Yes. Street maintenance activities are considered construction under the Tentative Order.

Section: F.2 Subsection:

Comment: We need aggressive construction site inspections for erosion control, and their enforcement of tougher ordinances regarding grading. Both the cities and the county needs to be leaders in this with the support of their elected officials. (USEPA)

Response: Comment noted.

Section: F.2 Subsection:

Comment: The permit should establish a performance standard that plans be implemented that reduce erosion potential to 50 percent of the before construction erosion potential. Erosion control performance standards should be established. Co-permittees should not be punished for minor technical infractions that have little or no impact on water quality objectives. (City of Carlsbad)

Response: The Copermittees have the discretion to develop and implement performance standards for construction sites. As part of their Jurisdictional Urban Runoff Management Programs, the Copermittees are required to describe the BMPs which will be required to be implemented at construction sites within their jurisdictions. This description of BMPs can be used to describe the BMPs which will be required by the Copermittee to ensure that performance standards developed by the Copermittee will be met.

Section: F.2 Subsection: F.2

Comment: The County disagrees with the Regional Board's contention that CWA sections 402(p)(3)(B)(ii-iii), CWC section 13377, and 40 CFR 122.26(d)(2)(i)(B,C,E, and F) and 40 CFR 122.26(d)(2)(iv) provide blanket authority to prescribe the detailed programs in section F.2. (County of San Diego)

Response: California Water Code section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Section 402(p)(3)(B)(iii) of the CWA requires municipalities to implement "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." The SDRWQCB's responsibility is to translate this section of the CWA into the form of waste discharge requirements. The Tentative Order's required programs are consistent with the CWA because they reduce the discharge of pollutants to the maximum extent practicable (MEP). Furthermore, the CWA and Federal regulations describe only minimal storm water program components, such as the construction component at 40 CFR 122.26(d)(2)(iv)(D). Although the Tentative Order may describe portions of program components that are not specifically addressed in the Federal requirements and regulations, the SDRWQCB has made express findings that these components are be necessary to address significant sources of storm water pollution. For example, most of the lagoons in San Diego are impaired for sediment. Construction is a significant source of sediment. Therefore, the SDRWQCB has required specific detail regarding the Copermittees' responsibility for oversight at construction sites. Since the CWA and Federal regulations do not exclude sources that are significant pollutant contributors, it is appropriate to cover the sources in the Tentative Order.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.2 in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F.2 Subsection: F.2.a

Comment: A requirement to implement pollution prevention BMPs exceeds the requirements for sites subject to the State General Construction Permit. Under the General permit, sites are required to develop a SWPPP that describes the implementation of BMPs to reduce or prevent pollutants in stormwater discharges and authorized non-stormwater discharges. Requirement of pollution prevention BMPs would therefore establish a general state of non-compliance even for sites already subject to significant regulation. (County of San Diego)

Response: It is the responsibility of each Copermittee to reduce pollutants in storm water discharges to the maximum extent practicable. The Statewide General Construction Permit requires that construction sites greater than 5 acres implement BMP to reduce the discharge of pollutants to the BAT/BCT level.

Section: F.2 Subsection: F.2.b

Comment: Modify the first sentence to read: "Each Copermittee shall review and update its grading and/or stormwater ordinances as necessary for compliance with this order." This modification is consistent with 40 CFR 122.26 (d) (2) (1). (Port of San Diego)

Response: Comment noted. Although both grading and stormwater ordinances are required to implement the Tentative Order, the grading ordinances are considered a subset of the Copermittees' storm water ordinances.

Section: F.2 Subsection: F.2.b

Comment: The County of San Diego must reconsider its grading ordinance as it pertains to the clearing and brushing of land for agricultural purposes. It is our understanding that many agricultural grading practices are currently exempted from environmental review due to the alleged economic hardship that would befall small farmers if forced to comply with CEQA. Under the permit, the County should be required to develop a grading ordinance that will allow adequate consideration of water quality (both surface and ground) impacts prior to all land alteration. Water quality impacts should not be balanced ,against any Copermittee's desire to promote agriculture locally or regionally. (Surfrider Foundation)

Response: The Tentative Order does not regulate grading or clearing and brushing of land for agricultural purposes. The Copermittees have the discretion to develop a grading ordinance with respect to agriculture that will allow adequate consideration of water quality (both surface and ground) impacts prior to all land alteration.

Section: F.2 Subsection: F.2.b

Comment: Grading Ordinance Update. Section F.2.b, set forth on page 21 of the Tentative Order, requires that each Copermittee review and update its grading ordinances to meet the storm water standards of the Order. Again, the Regional Board may be able to suggest changes to a municipality's grading ordinance, but it cannot dictate those changes. The same goes for the Order's requirement that Copermittees modify their construction and grading approval processes. (Section F.2.c, at page 22.) (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: While the Copermittees are not responsible for enforcing or overseeing the General Statewide Industrial or Construction Permits, they are required to adopt and enforce ordinances that implement the requirements of Tentative Order 2001-01, including the prohibitions against illicit discharges. The SDRWQCB will enforce the General Statewide Industrial and Construction Permits. The Copermittees have local regulatory authority over the majority of construction and industrial sites since they issue the development and land use permits for the sites. In other words, the Copermittees are responsible for the water quality consequences of their planning, construction, and land use decisions. In some cases, the Copermittees may be required to implement or require the implementation of BMPs at construction or industrial sites that exceed the minimum requirements of the General Statewide Industrial or Construction Permits in order to achieve compliance with the requirements of the Tentative Order. USEPA supports this approach, clearly placing responsibility for the control of discharges from

construction and industrial sites with municipalities. The USEPA notes in the preamble to the Storm Water Regulations that municipalities are in the best place to enforce compliance with storm water discharge requirements:

"Because storm water from industrial facilities may be a major contributor of pollutants to MS4s, municipalities are obligated to develop controls for storm water discharges associated with industrial activity through their system in their storm water management program…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 noted in the Fact Sheet/Technical Report, the USEPA felt it so important to control the discharge of pollutants from construction and industry that it established a double system of regulation over construction and industrial sites. Two parallel regulatory systems were established with the same common objective of keeping pollutants from construction and industrial sites out of the MS4. A structure was created where local governments must enforce their local ordinances and permits as required under their municipal storm water permits, while the SDRWQCB (State) must enforce its statewide general construction and industrial storm water permits. The two regulatory systems were designed to complement and support each other in the shared goal of minimizing pollutant discharges in runoff from construction and industrial sites.

Regarding construction sites, USEPA also places enforcement responsibility on municipalities, requiring small municipalities to develop and implement "[a]n ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance […]" (40 CFR 122.34(b)(4)(ii)(A)). Additionally, The US EPA suggests that local ordinance be used to require implementation of BMPs, stating that "A description of the local erosion and sediment control law or ordinance is needed to satisfy this requirement [i.e., Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(2)]" (1992).

In its guidance for the Phase II regulations, US EPA goes on to support increased municipality responsibility, stating "Even though all construction sites that disturb more than one acre are covered nationally by an NPDES storm water permit, the construction site runoff control minimum measure for the small MS4 program is needed to induce more localized site regulation and enforcement efforts, and to enable operators of regulated small MS4s to more effectively control construction site discharges into their MS4s." While these above citations refer to small municipalities under Phase II of the NPDES program, USEPA recommendations to small municipalities are applicable to larger municipalities such as the Copermittees, due to the typically more serious water quality concerns attributed to such larger municipalities.

Furthermore, Copermittees must reduce pollutant discharges in storm water from construction sites to the maximum extent practicable. In order to achieve this level of pollution reduction, BMPs must be implemented. An effective means for ensuring BMP implementation at construction sites is through the development and implementation of grading ordinances which require pollution prevention, source control, and structural treatment BMPs. Updated grading ordinances which adequately address water quality considerations will provide Copermittees with the necessary legal authority to require effective BMPs at construction sites.

Regarding Copermittee approval of construction activities, the US EPA further states that "applicants must propose site review and approval procedures that address sediment and erosion controls, storm water

management, and other appropriate measures. Approvals should be clearly tied to commitments to implement structural and nonstructural BMPs during the construction process" (1992).

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.2.b in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F.2 Subsection: F.2.b

Comment: The Grading Ordinance Update should distinguish "natural hydrologic features" by some parameter.

"Retention of sediments and other construction pollutants on-site" should be followed by: "Specific provisions for disposing of all retained sediments and construction pollutants shall be proposed and subject to City approval" (City of Chula Vista)

Response: Natural hydrologic features should be determined on a site by site basis by the Copermittees authorizing the construction activity.

A requirement has been added (to the list of requirements in F.2.b.) that the Copermittees adopt a grading ordinance specifying that "Specific provisions for disposing of all retained sediments and construction pollutants shall be proposed and subject to City approval."

Section: F.2 Subsection: F.2.b

Comment: Page 24, Section F.2.b. Grading Ordinance Update (Construction)- Please provide language to ensure that the public has the ability to review and comment on the adequacy of the BMPs for the grading permit prior to project approval, since the public currently has no opportunity to comment on the SWPPPs and the pre- and post-construction BMPs being proposed for the project. (Surfers Tired of Pollution)

Response: Review of grading and storm water control plans by the public is left to the discretion of the Copermittees.

Section: F.2 Subsection: F.2.b.

Comment: Add: (10) Prevention of mosquito/vector breeding (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: F.2 Subsection: F.2.b.5

Comment: F.2.b (5) page 21 - Revegetation as early as feasible is one of the more effective measures to accomplish early site stabilization. Stabilizing with finish landscaping is the optimum condition. Implementation of this provision requires flexibility in time constraints and a long-term approach to the erosion strategy i.e. Multi Year Program. (City of Carlsbad)

Response: Comment noted.

Section: F.2 Subsection: F.2.c

Comment: F.2.c. "Modify Construction and Grading Approval Process"

Section F.2.c. requires a stormwater quality review for all construction and grading permits. This would eliminate the ability of Copermittees to issue these permits ministerially. This section should be replaced with the following: "The Copermittee shall amend its construction and grading approval process as needed to ensure compliance with the provisions of this section." (County of San Diego)

Response: The language of Section F.2.c has been revised in the Tentative Order for greater clarity and to permit ministerial approval.

Section: F.2 Subsection: F.2.c.1.a

Comment: Non-storm water discharges should be removed from regulation unless they are a significant source of pollution. (Building Industry Association of Southern CA)

Response: Only non-storm discharges specifically identified in Section B.2 of the Tentative Order are conditionally exempt. Non-storm water discharges listed in Section B. 2. only need to be prohibited if the Copermittee identifies them as a significant source of pollutants to water of the United States. Section F.2.c.1.a., referred to in this comment, gives examples of conditions of approval for local grading and construction permits to ensure that pollutant discharges from construction sites are reduced to the maximum extent practicable. Non-storm water discharges listed under Section B.2 may need to be managed on-site prior to discharge, whereas, non-storm water discharges not exempt under Section B.2 must be managed on-site to prevent from being discharged to a MS4.

Section: F.2 Subsection: F.2.c.1.j

Comment: Section F.2.c (1)(j): When would evidence of N.P.D.E.S. General Construction Permit be required? (City of Chula Vista)

Response: Evidence of coverage is a condition of approval under Tentative Order 2001-01. The Tentative Order requires that the Copermittees review evidence of coverage under the statewide NPDES General Construction Storm Water Permit and to review all proposed construction and grading plans (e.g.

the required Storm Water Pollution Prevention Plan) as well as to require measures to ensure that pollutants from the site will be reduced to the MEP and will not cause or contribute to an exceedance of water objectives.

Section: F.2 Subsection: F.2.c.I

Comment: Stabilization of all slopes infers that slopes under construction would also require stabilization at all times. This is not a requirement of the Statewide Permit with Caltrans. Again, these permits should be consistent with one another. (SANDAG)

Response: The mission of the RWQCBs and SWRCB is to preserve and enhance the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. The "benefit" to which this mission statement refers is expressed in terms of the beneficial uses designated in regional water quality control plans (basin plans). Each RWQCB develops these plans for its own region, in keeping with California Water Code § 13240 et seq. Since the mission of the RWQCBs involves protecting beneficial uses that are designated by region or portion thereof, it is appropriate for the actions of a RWQCB to be specific to its region or portions thereof. In other words, in carrying out its mission, it is more important that the SDRWQCB take actions as necessary and appropriate to protect beneficial uses in the San Diego region than it is to achieve multi-regional or statewide permit consistency. The Tentative Order is intended first and foremost to protect beneficial uses in the area to which it applies, not to be consistent with permits adopted in the past that are applicable to other areas. Therefore, the slope stabilization requirement will not be changed.

Section: F.2 Subsection: F.2.d

Comment: Each Copermittee, shall annually develop... a watershed based inventory of all construction sites ... regardless of size. The IEA strongly urges the RWQCB to set minimum exemptions. (Industrial Environmental Association)

Response: The Copermittees are being asked to inventory all construction sites. This inventory will help the Copermittee determine which sites are high priority and it will also be an important tool in watershed planning and management.

Section: F.2 Subsection: F.2.d

Comment: Inclusion of “all construction sites” in the inventory is too broad. While the intent here may be to use the inventory as a basis for prioritization in section F.2.e., it would be prudent to allow Copermittees to conduct some initial prioritization (e.g., based on project type) prior to assembling the inventory. Only those sites that have the potential for site or soil disturbance, rather than interior tenant improvements or remodels for example should be included in the inventory. (County of San Diego)

Response: The Copermittees are being asked to inventory all construction sites. This inventory will help the Copermittee determine which sites are high priority and it will also be an important tool in watershed planning and management.

Section: F.2 Subsection: F.2.e

Comment: Is the NPDES "threat to water quality/complexity" rating, similar or different than the water quality prioritization? (Zachary, Karen)

Response: The Threat to Water Quality Prioritization is similar to the waste discharge threat to water quality and complexity categorization scheme for state waste discharge requirements and NPDES permits. Threat to Water Quality Prioritization allows the Copermittee to rate which site (construction, municipal, industrial, residential) will receive more of their oversight resources due to the sites ability to cause an greater negative impact to the receiving water quality in the event of a discharge. Sites that receive high priority ratings would be inspected more frequently than a medium or low rated site and if the Copermittee so chooses be charged a higher fee for oversight.

Section: F.2 Subsection: F.2.e

Comment: Section F.2.e.(1) provides a list of criteria that must be addressed by Copermittees in determining construction site priorities. Presumably, the RWQCB used this prioritization methodology in determining the minimum list of high priority sites in section F.2.e.(2). Is this correct? If not, why? If so, why were the results of this assessment not provided in the Technical Report? If this assessment has not been conducted, the County recommends that the RWQCB delete section F.2.e.(2) from the permit. There is insufficient evidence to support the inclusion of such a requirement. (County of San Diego)

Response: Section F.2.e.(1) provides a list of criteria that the Copermittees should use in evaluating threat to water quality of construction sites. Section F.2.e (2) sets minimum criteria for determining if a construction site is a high priority site. The Tentative Order has been revised to define high priority sites as a site meeting either of the following criteria or equivalent criteria:
a. >50 acres and grading during the raining season
b. >5 acres and a tributary to a 303(d) impaired water body for sediment.
This change will allow the Copermittee greater flexibility in determining which sites within their jurisdiction are of the highest priority thus reducing the burden of potentially having all of their construction sites fall within the high priority classification. Also, the Copermittees have the option in its Jurisdiction URMP to propose an equivalent method to determine which sites they believe fall in the high priority classification.

Construction sites with large amounts of exposed sediment during the raining season pose a significant threat to water quality. Since these sites have a greater chance of discharging sediment they require frequent site visits to ensure the discharger is properly implementing BMP to prevent a discharge to the MS4. Sites greater than 5 acres and located near a tributary to a Clean Water Act section 303(d) impaired water body for sediment require frequent site visits to ensure the water body does not receive additional sediment. These are minimum requirements and this does not limit the Copermittee from developing additional criteria or equivalent criteria.

Section: F.2 Subsection: F.2.e

Comment: The RWQCB's proposed assignment of high priority sites is too broad and inclusive. The inclusion of several open-ended and poorly defined categories (e.g., hillside development, "tributary to" CWA 303(d) waterbodies, etc.) could make most or all sites high priority. Since this obviously has significant financial implications both for Copermittees and the parties they regulate, a closer and more reasoned examination of the methodology and results of this assessment must be conducted prior to permit adoption. (County of San Diego)

Response: Section F.2.e.(1) provides a list of criteria that the Copermittees should use in evaluating threat to water quality of construction sites. Section F.2.e (2) sets minimum criteria for determining if a construction site is a high priority site. The Tentative Order has been revised to define high priority sites as a site meeting either of the following criteria or equivalent criteria:
a. >50 acres and grading during the raining season
b. >5 acres and a tributary to a 303(d) impaired water body for sediment.
This change will allow the Copermittee greater flexibility in determining which sites within their jurisdiction are of the highest priority thus reducing the burden of potentially having all of their construction sites fall within the high priority classification. Also,
the Copermittees have the option in its Jurisdiction URMP to propose an equivalent method to determine which sites they believe fall in the high priority classification.

Section: F.2 Subsection: F.2.e.2

Comment: ... high priority construction sites shall at a minimum be defined as ...
After (2)(d) the word "and" should be replaced with "or" (Industrial Environmental Association)

Response: Comment noted.

See change at permit section F.2.e.2.d.

Section: F.2 Subsection: F.2.e.2

Comment: Page 23, Section F.2.e (2). Threat to Water Quality Prioritization-Please include as a high priority construction site: (f) any site that is located directly adjacent to or within 500 feet of wetlands, vernal pools, coastal salt marsh or estuaries that could discharge pollutants directly to or into a tributary of a waterbody that could impact the beneficial uses of those areas. (Surfers Tired of Pollution)

Response: Section F.2.e (2) does not preclude the Copermittee from including sites located directly adjacent to or within 500 feet of wetlands, vernal pools, coastal salt marsh or estuaries that could discharge pollutants directly to or into a tributary of a water body that could impact the beneficial uses of those areas. This section sets minimum criteria while allowing the Copermittees flexibility to determine which areas are high priority within their jurisdiction.

Section: F.2 Subsection: F.2.f

Comment: The SDRWQCB lacks legal authority to compel Copermittees to require year-round implementation of BMPs by project proponents. (County of San Diego)

Response: CWA 402(p)(3)(iii) requires controls to reduce the discharge of pollutants to the maximum extent practicable, including management practice, control techniques and system, design and engineering methods, and such provisions as the Administrator or the State determines appropriate for the control of such pollutants. Discharges of pollutants to the MS4 could occur year-round and are not limited to the rainy season. Construction sites typically use large amounts of water for activities including but not limited to, dust control, planting of vegetation on slopes and irrigation. These activities coupled with large amounts of exposed sediment, topsoil, and fertilizer can lead to discharges regardless of the time of year.

Section: F.2 Subsection: F.2.f.4

Comment: Page 23 of 50 F.2.f.(4), Page 28 of 50 F.3.b.(4)(c) – What kind of additional controls are required? Are the controls required if they exceed the Maximum Extent Practicable (MEP)? (City of Chula Vista)

Response: Additional controls may be necessary at construction sites where the discharge may be tributary to a 303(d) listed water body, coastal lagoon, or other sensitive water bodies as necessary to comply with the Tentative Order. The type and implementation of the additional controls will be determined by the Copermittee and will be dependent on the pollutant(s) of concern for the 303(d) listed water body, coastal lagoon or other sensitive water body and the potential source(s) of the pollutant(s) of concern at construction sites or related activities. The additional controls could include, but are not limited to, more stringent BMPs, more frequent inspections, grading ordinance restrictions, etc. The additional controls will be specified in the Copermittees' Jurisdictional Urban Runoff Management Documents and Annual Reports as well as during the construction authorization and inspection programs.

CWA section 303(d) water bodies are impaired water bodies which are not achieving the water quality objectives necessary to protect their beneficial uses. As discussed in Finding 3, urban runoff discharges from MS4s are a leading cause of receiving water quality impairment in the San Diego Region and throughout the United States. Since discharges which cause or contribute to an exceedance of water quality standards are prohibited (see section C.1. of Order No. 2001-01), any discharges to CWA section 303(d) waterbodies of pollutants for which the waterbody is impaired are prohibited. Therefore, construction sites and activities tributary to these water bodies must implement additional controls to ensure that they are not discharging the pollutants which are causing or contributing to the impairment of these water bodies.

With regards to coastal lagoons and other sensitive water bodies, additional controls are needed to protect these valuable and unique resources. In their Nonpoint Source Program Strategy and Implementation Plan, the SWRCB and California Coastal Commission support additional controls for critical coastal areas, stating “the State will seek to attain and maintain applicable water quality standards, and protect waters threatened by land uses, or by substantial expansion of existing land uses, by implementing additional management measures.”

Furthermore, US EPA supports additional controls for construction sites tributary to impaired or sensitive water bodies, stating "The proximity and sensitivity of the receiving water to which the construction site discharges is an important consideration. For construction sites that discharge to receiving waters that do not support their designated use or other waters of special concern, additional construction site controls are probably warranted and should be strongly considered" (1992).

Section: F.2 Subsection: F.2.g.1.a

Comment: Section F.2.g (1)(a): Is there a criterion for weekly inspections? (City of Chula Vista)

Response: As discussed in Finding 24, inspections provide a necessary means by which Copermittees can evaluate compliance with their ordinances. Inspections are especially important at high risk areas for pollutant discharges, such as industrial and construction sites. To ensure that BMPs are properly installed, US EPA states MS4 operators should "develop procedures for site inspection and enforcement of control measures to deter infractions" (2000). Regarding inspections, US EPA further states "Inspections give the MS4 operator an opportunity to provide additional guidance and education, issue warnings, or assess penalties" (2000).

Construction site inspections shall be conducted to determine compliance with applicable ordinances and permits, including Order No. 2001-01. To this effect, the US EPA states that "Site inspections are expected to be the primary enforcement mechanism by which erosion and sediment controls are maintained" (1992). When inspections result in findings of noncompliance, follow-up by the Copermittee to ensure compliance is necessary. The US EPA states "Effective inspection and enforcement requires […] intervention by the municipal authority to correct violations" (1992).

Construction site inspection frequencies are to be based on threat to water quality prioritization. US EPA supports this, stating that site inspection procedures should "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" (2000). For example, construction sites which are considered a high threat to water quality are to be given a high priority for inspection. This will allow for limited inspection and monitoring time to be most effective. Weekly to monthly inspection of high threat sites is necessary due to the dynamic nature of construction activities. Medium and low threat construction sites can be inspected less frequently, due to their reduced risk of negatively impacting receiving waters. Review of SWPPPs can be one effective tool for determining frequency of site inspections. Construction sites which effectively implement the measures of a comprehensive SWPPP may not need to be inspected as frequently as less diligent sites.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.2.g in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F.2 Subsection: F.2.g.2.a

Comment: RWQCB staff have failed to assess the potential staffing and cost implications of this section. Section F.2.g(2)(a) would require weekly inspections of all high priority construction sites during the wet season, and additional inspections. The County has only had time to estimate increased inspection costs for single family dwellings. For cost estimation purposes, the County also assumed that

inspection would only be required from the time ground was disturbed, until permanent BMPs were in place. This would still require that County inspections of single family homes be approximately tripled. This would require 40 additional staff and other supporting expenditures. First year costs (in this case, including office space) would be $5 million, and subsequent year costs $3.6 million per year.

Additionally, the difficulty of significantly increasing staffing levels for the wet season only have not been considered. Assuming that this extra work could be contracted, it would not be possible to find qualified temporary help in these numbers, especially if the competition with neighboring Copermittees is considered, and the provisions were otherwise found to be legal.

Monthly inspections would be allowed only if the County could and would take on the burden of directly enforcing general permits issued by the state, which is inappropriate. (County of San Diego)

Response: In response to comments and to provide the Copermittees with greater flexibility and discretion in implementing the Tentative Order, Section F.2.g has been revised to lower costs by reducing the number of high priority sites to be inspected. The criteria in Section F.2.e, which set the minimum criteria by which a site is determined to be a high threat to water quality, have been revised to reduce the number of high priority sites to be inspected. Also, the Copermittees have the discretion under F.2.e.2 to propose "equivalent criteria" by which to prioritize sites as high threats to water quality. The Tentative Order still requires weekly inspections of high priority construction sites in order to address frequently changing conditions on construction sites. However, the number of sites requiring inspections should be reduced due to the Tentative Order modifications.

The SDRWQCB has the authority to assign site priorities for oversight by the Copermittees. The Federal NPDES regulations clearly place an emphasis on the prioritization of sites of various land uses. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(3) provides that the proposed management program include "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." Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(5) provides that the proposed management program include "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." Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(C)(1) provides that the Copermittee must "identify priorities and procedures for inspections and establishing and implementing control measures for such discharges."

The Tentative Order's requirements regarding site prioritization are more detailed than those in the Federal NPDES regulations. The SDRWQCB has increased the detail of the site prioritization requirements under Clean Water Act section 402(p)(3)(b)(iii), which states that a storm water program "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."

This increased detail is necessary due to the continued degradation of the region's receiving waters caused by urban runoff. The "1998-1999 City of San Diego and Co-Permittee NPDES Stormwater Monitoring Program Report" indicates that the typical urban runoff coming from residential, commercial, industrial, and roadway land uses frequently contains such pollutants as Total Phosphorus, Nitrate + Nitrite Nitrogen, Total Suspended Solids, Lead, Copper, and Zinc at concentrations which exceed USEPA benchmark values for storm water (City of San Diego, 1999). Construction sites are also a significant concern due to the impairment caused by sediment of such valuable water resources within the region as

Agua Hedionda Lagoon, Buena Vista Lagoon, San Elijo Lagoon, and Los Penasquitos Lagoon. Increased detail in the prioritization of sites is further supported by USEPA's "Interim Permitting Approach" which supports expansion of permit requirements where necessary to attain water quality standards (USEPA, 1996).

Finally, the SWRCB upheld in Order WQ 2000-11 prioritization of sites by a Regional Board in the LARWQCB SUSMP. The LARWQCB SUSMP identified various priority development project categories which are high priority. The SWRCB found that identification of high priority sites was appropriate.

Furthermore, Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(3) requires construction site inspections by the Copermittees, stating their programs shall include "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." USEPA places importance on inspections, stating "Site inspections are expected to be the primary enforcement mechanism by which erosion and sediment controls are maintained" (USEPA, 1992). Since USEPA places high priority on inspections, and since the majority of the lagoons within the region are impaired for sediment, the Tentative Order has placed high priority on construction site inspections. The SDRWQCB has authority to require these inspections under USEPA's "Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits" (USEPA, 1996). This guidance states "The interim permitting approach uses best management practices (BMPs) in first-round permits, and expanded or better-tailored BMPs in subsequent permits, where necessary, to provide for the attainment of water quality standards."

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.2.in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F.2 Subsection: F.2.j

Comment: This section is ambiguous and redundant. It should be deleted. (County of San Diego)

Response: Comment noted. As discussed in Finding 23, implementation of an education program is an important best management practice for construction sites and activities. The SWRCB Technical Advisory Committee (TAC) "recognizes that education with an emphasis on pollution prevention is the fundamental basis for solving nonpoint source pollution problems." The TAC points out several target communities for education efforts, including "Government: Educate agencies and officials to achieve better communication, consistency, collaboration, and coordination at the federal, state and local levels" and "Development Community: Educate the development community, including developers, contractors, architects, and local government planners, engineers, and inspectors, on nonpoint source pollution problems associated with development and redevelopment and construction activities and involve them in problem definitions and solutions."

The US EPA also supports education efforts for parties involved in construction, stating "technical information on how to incorporate storm water management with erosion and sediment control and other BMP training courses are recommended for municipal employees and construction site operators."

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.2.j. in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F.2 Subsection: F.2.j

Comment: Page 24, Section F.2.j. Education Focused on Construction Activities (Construction) Please add Community Planning Groups, Planning Boards and Elected Officials to those who should be included in the education process. (Surfers Tired of Pollution)

Response: With respect to Section F.2.j Education Focused on Construction Activities (Construction), "Community Planning Groups, Planning Boards and Elected Officials" could be considered "responsible parties" by the Copermittees and do not need to be further specified in the Tentative Order.

Section: F.3 Subsection: F.3

Comment: A requirement to implement storm water pollution prevention BMPs exceeds the requirements of the State General Industrial Permit. Because the General Industrial permit allows applicants to choose the BMPs they will use to comply, a specific requirement to use pollution prevention BMPs would put virtually all of them out of compliance. This requirement for the Copermittees to develop pollution prevention techniques for all industries within their jurisdictions may not be as thorough as those developed by specific industries because they know the intricacies of their businesses. (Port of San Diego, County of San Diego)

Response: The Copermittees have the discretion under the revised Tentative Order to require industrial pollution prevention BMPs for cases where they decide they are appropriate.

Section: F.3 Subsection: F.3.a

Comment: The requirements for "all municipal land use areas, the inclusion of roads, street etc., muni waste facilities, and corporate yards" are vague and ill defined. The level of effort to include all of these facilities is objectionable and unnecessary, inappropriate, and are not based upon adequate data from either the Regional Board or data from the Copermittees. (County of SD)

Response: Section F.3.a. covers Municipal areas and is designed to address those properties and areas for which the Permittees have the most direct influence over land use and management decisions. The level of effort to include these facilities should be among the most reasonable and easily accomplished in the municipal storm water permitting program. Therefore, the requirements will not be changed.

Section: F.3 Subsection: F.3.a.3

Comment: The threat to water quality prioritization is not supported by the legal authorities cited, are not within the provisions of the federal and state statutes and regulations, and are overly broad. (County of San Diego)

Response: The municipal threat to water quality prioritization is supported by the federal NPDES regulations, as well as USEPA guidance.

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(1) provides that the proposed management program include "A description of maintenance activities and a maintenance schedule for structural controls to reduce pollutants (including floatables) in discharges from municipal separate storm sewers."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(3) provides that the proposed management program include "A description 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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(4) provides that the proposed management program include "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(5) provides that the proposed management program include "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."

Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(6) provides that the proposed management program include "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."

Identification of high priority municipal pollutant areas and activities allows for limited pollution reduction resources to be most effective. Targeting high priority municipal areas and activities for BMP implementation, inspection, and monitoring provides the greatest reduction in risk of degrading receiving waters per expenditure.

Items (i), (ii), and (iv) above are considered to be high priority sources since they are specifically addressed in Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(3-5). Regarding roads, highways, and parking facilities, the US EPA states "Road maintenance practices, especially snow management and road repair, and traffic are significant sources of pollutants in storm water discharges. […] Municipal equipment yards and maintenance shops that support road maintenance activities can also be significant sources of pollutants" (USEPA, 1992). Regarding flood management projects and flood control devices, the USEPA states "Storm water management devices and structures that focus solely on water quantity are usually not designed to remove pollutants, and may sometimes harm aquatic habitat and aesthetic

values" (USEPA, 1992). Regarding municipal waste facilities, the USEPA states "Applicants must describe programs that identify measures to monitor and reduce pollutants in storm water discharges from facilities that handle municipal waste, including sewage sludge. […] The types of facilities that should be included are: active or closed municipal waste landfills; publicly owned treatment works, including water and wastewater treatment plants; incinerators; municipal solid waste transfer facilities; land application sites; uncontrolled sanitary landfills; maintenance and storage yards for waste transportation fleets and equipment; sites for disposing or treating sludge from municipal treatment works; and other treatment, storage, or disposal facilities for municipal waste" (USEPA, 1992).

Areas and activities included in item (iii) are considered high priority due to their location in relation to CWA section 303(d) water bodies and environmentally sensitive areas. Pollutant loading of these water bodies must be avoided to aid in their recovery and ensure against their further degradation. The intent of this requirement was not to include all sites which were tributary to any 303(d) water body, but rather to include sites which had pollutants on site which were tributary to 303(d) water bodies impaired for the same pollutants. In addition, the intent regarding environmentally sensitive areas was to provide these areas protection from municipal areas and activities within or directly adjacent to the environmentally sensitive areas. For these reasons, the Tentative Order will changed to clarify this intent.

See change at permit section F.3.a.3.b.iii.

Section: F.3 Subsection: F.3.a.3

Comment: The prioritization criteria for construction site threat to water quality does not include a method for the process. The Fact Sheet/Technical Report does not provide an assessment matrix and Order should allow the Copermittees to develop the methodology that will ensure the criteria are met and stabilize the sites as quickly as possible. The frequencies stipulated are not adequate for most cases. Prioritization of basin has no operational value and should be eliminated. The approach outlined will likely lengthen the time of site exposure and maximize the opportunities for violation and the accompanying enforcement processes.

The County agrees with this approach, but questions whether the RWQCB has employed it in assigning their minimum frequencies. Since the Technical Report has not addressed the issue, we are specifically requesting an explanation of how staff determined the particular minimum inspection frequencies that it has assigned. What is the nexus between a high priority status and a weekly inspection frequency? Why are monthly inspections deemed to be equivalent to weekly if the Copermittees enforce the General Construction Permit? What is the reasoning for two inspections of medium and low priority sites during the wet season? Why not one or seven? If medium and low priority sites warrant the same inspection frequency, why are they ranked differently? Is there a Threat to Water Quality threshold below which inspection frequencies can all be the same? If so, how was it determined that high priority sites are above it? The Findings, the evidence, and the law do not support the inclusion of such a requirement. (County of San Diego, Carlsbad (1084), County of San Diego (385)

Response: The SDRWQCB has the authority to assign site priorities for oversight by the Copermittees. The Federal NPDES regulations clearly place an emphasis on the prioritization of sites of various land uses. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(3) provides that the proposed management program include "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." Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(A)(5) provides that the proposed management program include "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." Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(C)(1) provides that the Copermittee must "identify priorities and procedures for inspections and establishing and implementing control measures for such discharges."

The Tentative Order's requirements regarding site prioritization are more detailed than those in the Federal NPDES regulations. The SDRWQCB has increased the detail of the site prioritization requirements under Clean Water Act section 402(p)(3)(b)(iii), which states that a storm water program "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."

This increased detail is necessary due to the continued degradation of the region's receiving waters caused by urban runoff. The "1998-1999 City of San Diego and Co-Permittee NPDES Stormwater Monitoring Program Report" indicates that the typical urban runoff coming from residential, commercial, industrial, and roadway land uses frequently contains such pollutants as Total Phosphorus, Nitrate + Nitrite Nitrogen, Total Suspended Solids, Lead, Copper, and Zinc at concentrations which exceed USEPA benchmark values for storm water (City of San Diego, 1999). Construction sites are also a significant concern due to the impairment caused by sediment of such valuable water resources within the region as Agua Hedionda Lagoon, Buena Vista Lagoon, San Elijo Lagoon, and Los Penasquitos Lagoon. Increased detail in the prioritization of sites is further supported by USEPA's "Interim Permitting Approach" which supports expansion of permit requirements where necessary to attain water quality standards (USEPA, 1996).

Finally, the SWRCB upheld in Order WQ 2000-11 prioritization of sites by a Regional Board in the LARWQCB SUSMP. The LARWQCB SUSMP identified various priority development project categories which are high priority. The SWRCB found that identification of high priority sites was appropriate.

Furthermore, Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(D)(3) requires construction site inspections by the Copermittees, stating their programs shall include "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." USEPA places importance on inspections, stating "Site inspections are expected to be the primary enforcement mechanism by which erosion and sediment controls are maintained" (USEPA, 1992). Since USEPA places high priority on inspections, and since the majority of the lagoons within the region are impaired for sediment, the Tentative Order has placed high priority on construction site inspections. The SDRWQCB has authority to require these inspections under USEPA's "Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits" (USEPA, 1996). This guidance states "The interim permitting approach uses best management practices (BMPs) in first-round permits, and expanded or better-tailored BMPs in subsequent permits, where necessary, to provide for the attainment of water quality standards."

It should be noted that the designation for high priority construction sites has been modified. This was to allow the Copermittees more discretion in their inspections. The Tentative Order still requires weekly inspections of high priority construction sites in order to address frequently changing conditions on

construction sites. However, the number of sites requiring inspections should be reduced due to the Tentative Order modifications.

See change at permit section F.2.e.2.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.2.g in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F.3 Subsection: F.3.a.4.b.i.

Comment: The requirement to retrofit where needed is open-ended and is not completely supported by statutes or regulations. The language should require an evaluation and then begin a process to retrofit. (County of San Diego, City of San Diego)

Response: The requirement to retrofit where needed is broad in order to provide Copermittees flexibility in maintaining their systems. Determination of necessity of retrofitting is left to the discretion of the Copermittees. The provision does require an evaluation, stating "Each Copermittee shall evaluate feasibility of retrofitting […]". Again, the process of retrofitting is the responsibility of the Copermittees.

Section: F.3 Subsection: F.3.a.4.b.i.

Comment: This section is unclear with regards to retrofits. Work with co-permittees for clarity and implementation schedule. (County of San Diego (1), County of San Diego (2))

Response: The Tentative Order says, "Each Copermittee shall evaluate feasibility of retrofitting existing structural flood control devices and retrofit where needed." In the phrase "where needed," SDRWQCB is giving the Permittees the opportunity to develop a schedule based on their needs. Therefore, SDRWQCB will not develop an implementation schedule as doing so would result in decreased flexibility given to the Permittees.

Section: F.3 Subsection: F.3.a.5

Comment: The requirement for annual inspections and removal of waste from urban streams is unfeasible and ambiguous. The total length of all the streams is very large and a cost/benefit analysis has not been conducted. Other regulatory requirements, such as, Fish and Game or Corps, permits will conflict with this requirement. Additional cleaning as necessary does not make sense. The scheduling of the cleaning is not clear and the requirement for proper disposal of waste is over regulation and repeats other statutory requirements and unnecessary. (County of San Diego)

Response: Section F.3.a.5 of the Tentative Order requires that each Copermittee implement a schedule of maintenance activities at all structural controls designed to reduce pollutant discharges to or

from its MS4 and related drainage structures, as well as a schedule of maintenance for the MS4. This requirement does not necessitate the maintenance of the entire MS4 system and related drainage structures every year, but rather that the Copermittee develop and submit as part of its Jurisdictional Urban Runoff Management Program Document and Annual Reports a schedule of maintenance activities for the MS4 system and related drainage structures. The Copermittees have the discretion under the Tentative Order to identify the 20% of the system that requires more frequent maintenance and schedule the remaining 80% as they determine is necessary to comply with the Tentative Order. The frequency of maintenance for lined channels necessary to comply with the Tentative Order is also left to the discretion of the Copermittees to determine.

Section: F.3 Subsection: F.3.a.6

Comment: The language used for the requirement of BMPs, such as at "important municipal area and activities," is unclear and unfeasible. (County of San Diego)

Response: The entire sentence reads, "Important municipal areas and activities include municipal facilities, public rights-of-way, parks, recreational facilities, golf courses, cemeteries, botanical or zoological gardens and exhibits, landscaped areas, etc." The phrase, "important municipal area and activities" is clarified by a subsequent list indicating what the SDRWQCB sees as "important."

Section: F.3 Subsection: F.3.b

Comment: Requiring the Copermittees to develop pollution prevention methods, F.3.b.(1) and to evaluate threat to water quality in F.3.b.(3) is a violation of CWC and CWA. (County of San Diego)

Response: Under the CWA, the Copermittees are required to reduce pollutants in urban runoff discharges to the maximum extent practicable. Pollution prevention is an important part of meeting the MEP standard. However, in order to provide the Copermittees discretion in implementing their urban runoff management programs, pollution prevention will only be required where the Copermittees deem it appropriate. By not specifying its use in any particular instance, and not specifying types of pollution prevention to be used, the requirement for pollution prevention does not violate the CWC and CWA.

The Federal NPDES regulations and USEPA guidance emphasize prioritization of industrial sites. Regarding prioritizing industrial sites, Federal NPDES regulation 40 CFR 122.26(d)(2)(ii) provides that the Copermittee “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.”

Regarding industrial site priority designation, the US EPA states that “When municipalities develop criteria for identifying additional priority industrial facilities, they are advised to consider, at a minimum: (1) The type of industrial activity (SIC codes can help characterize the type of industrial activity); (2) The use and management of chemicals or raw products at the facility and the likelihood that storm water

discharge from the site will be contaminated; and (3) The size and location of the facility in relation to sensitive watersheds" (USEPA, 1992).

The SDRWQCB has identified high priority industrial sites based on their potential to be sources of pollutants, as well as their proximity to sensitive water bodies. High priority designation is included in the Tentative Order under CWA section 402(p)(3)(B)(iii) and CWC section 13377.

Section: F.3 Subsection: F.3.b.

Comment: The responsibility for enforcing the state general industrial permit and this Order, and inspecting industrial facilities is the responsibility of the RWQCB not the Copermittees. (County of San Diego)

Response: The Tentative Order does not require the Copermittees to enforce the General Industrial Permit. The Tentative Order requires the Copermittees to implement their responsibility to inspect industrial facilities as required by Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(C)(1), which states "Identify priorities and procedures for inspections and establishing and implementing control measures for such discharges."

Routine inspections provide an effective means by which Copermittees can evaluate compliance with their ordinances. Inspections are especially important at high risk areas for pollutant discharges, such as industrial and construction sites. Industrial site inspection frequencies are to be based on threat to water quality prioritization. For example, industrial sites which are considered a high threat to water quality are to be given a high priority for inspection. This allows for limited inspection resources to be most effective. Annual or bi-annual inspection of high threat sites is necessary to ensure that changes to the site which may be detrimental to water quality are identified and addressed.

Review of a facility's Storm Water Pollution Prevention Plan (SWPPP) can be an effective tool in inspecting the facility's storm water controls. The US EPA recommends that municipalities review SWPPPs during inspections when it states "Municipalities are urged to evaluate pollution prevention plans and discharge monitoring data collected by the industrial facility to ensure that the facility is in compliance with its NPDES storm water permit. Site inspections should include (1) an evaluation of the pollution prevention plan and any other pertinent documents, and (2) an onsite visual inspection of the facility to evaluate the potential for discharges of contaminated storm water from the site and to assess the effectiveness of the pollution prevention plan" (1992).

Regarding industrial site inspections, the US EPA finds that "The proposed management program should describe the inspection procedures that will be followed.[…] Proposed management programs should address minimum frequency for routine inspections. For example, how often, how much of the site, and how long an inspection may take are appropriate to explain in this proposed management program component. Applicants should also describe procedures for conducting inspections and provide an inspector's checklist" (1992). The US EPA also finds that follow-up actions are to be implemented based upon site inspection findings: "The results of inspection may be used as a basis for requiring storm water management controls and enhanced pollution prevention measures" (1992).

Due to the large number of industrial sites within the region, sites which have been inspected by the SDRWQCB do not need to be re-inspected by a Copermittee within the same year. This provision has been included in the Tentative Order to ease the burden of inspections for the Copermittees.

Section: F.3 **Subsection: F.3.b.3**

Comment: The threat to water quality prioritization is too complex and the minimum list in F.3.b.(3) should be deleted to allow for the Copermittees to develop the methodology for the threat to water quality. Not all sites under the statewide permit pose a significant threat to water quality through storm water discharges. This also seems to require the municipalities to use a higher standard than the RWQCB uses. This section should be modified to exempt those sites not posing such a threat. (County of San Diego, Industrial Environmental Association)

Response: The designation of high priority industrial sites is reasonable and justified. Industrial sites that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) are identified in the Federal NPDES regulations as sites for which the Copermittees must provide oversight. USEPA has also placed high priority on industrial sites subject to the General Industrial Permit by requiring them to receive coverage under the permit.

Industries are also considered high priority due to their location in relation to CWA section 303(d) water bodies and environmentally sensitive areas. Pollutant loading of these water bodies must be avoided to aid in their recovery and ensure against their further degradation. The intent of this requirement was not to include all sites which were tributary to any 303(d) water body, but rather to include sites which had pollutants on-site which were tributary to 303(d) water bodies impaired for those same pollutants. In addition, the intent regarding environmentally sensitive areas was to provide these areas protection from industrial sites within or directly adjacent to the environmentally sensitive areas. For these reasons, the Tentative Order will changed to clarify this intent.

Annual or bi-annual inspection of high threat sites is necessary to ensure that changes to the site which may be detrimental to water quality are identified and addressed. However, due to the large number of industrial sites within the region, sites which have been inspected by the SDRWQCB do not need to be re-inspected by a Copermittee within the same year. This provision has been included in the Tentative Order to ease the Copermittees' inspection burden.

See change at permit section F.3.b.3.b.

Section: F.3 **Subsection: F.3.b.5**

Comment: Group monitoring should be allowed and the Copermittees should not be required to collect the data. (County of San Diego, Port of San Diego)

Response: The Tentative Order will be changed to allow for group monitoring. The Tentative Order does not require the Copermittees to collect data. The Copermittees can require industry to conduct monitoring and submit monitoring reports.

Section: F.3 Subsection: F.3.b.6

Comment: RWQCB staff have failed to assess the potential staffing and cost implications of this section. Section F.2.g(2)(a) would require annual inspections of all high priority industrial sites. The potential costs and staffing increases necessary to implement this provision are not addressed in the Technical Report. (County of San Diego, Procopio, Cory, Hargreaves & Savitch)

Response: USEPA places emphasis on the inspection of industrial sites. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(C)(1) provides that the Copermittee must "identify priorities and procedures for inspections and establishing and implementing control measures for such discharges." USEPA also finds that "The proposed management program should describe the inspection procedures that will be followed.[…] Proposed management programs should address minimum frequency for routine inspections. For example, how often, how much of the site, and how long an inspection may take are appropriate to explain in this proposed management program component. Applicants should also describe procedures for conducting inspections and provide an inspector's checklist" (USEPA, 1992).

Annual or bi-annual inspection of high threat sites is necessary to ensure that changes to the site which may be detrimental to water quality are identified and addressed. The SDRWQCB attempted to ease the burden of inspection by providing that sites which have been inspected by the SDRWQCB do not need to be re-inspected by a Copermittee within the same year.

Section: F.3 Subsection: F.3.b.6

Comment: The County has an inspection program. The Regional Board has not justified requiring another inspection program and the requirement is an unfunded mandate. (County of San Diego)

Response: The Tentative Order leaves the development of inspection programs largely to the discretion of the Copermittees. The Copermittees are allowed to designate and inspect medium and low priority sites at their discretion. The Tentative Order only assigns minimum high priority sites and requires their annual inspection.

The designation of high priority industrial sites is reasonable and justified. Industrial sites that are subject to section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) are identified in the Federal NPDES regulations as sites for which the Copermittees must provide oversight. USEPA has also placed high priority on industrial sites subject to the General Industrial Permit by requiring them to receive coverage under the permit.

Industries are also considered high priority due to their location in relation to CWA section 303(d) water bodies and environmentally sensitive areas. Pollutant loading of these water bodies must be avoided to aid in their recovery and ensure against their further degradation. The intent of this requirement was not to

include all sites which were tributary to any 303(d) water body, but rather to include sites which had pollutants on-site which were tributary to 303(d) water bodies impaired for those same pollutants. In addition, the intent regarding environmentally sensitive areas was to provide these areas protection from industrial sites within or directly adjacent to the environmentally sensitive areas. For these reasons, the Tentative Order will changed to clarify this intent.

Annual or bi-annual inspection of high threat sites is necessary to ensure that changes to the site which may be detrimental to water quality are identified and addressed. However, due to the large number of industrial sites within the region, sites which have been inspected by the SDRWQCB do not need to be re-inspected by a Copermittee within the same year. This provision has been included in the Tentative Order to ease the Copermittees' inspection burden.

See change at permit section F.3.b.3.b.

Section: F.3 Subsection: F.3.c.2

Comment: The priorities assigned by the SDRWCB "based on the number of complaints received by the RWQCB and Copermittees" do not appear to reflect our experience. Please provide documentation of the "analysis" of complaints that was used to assign these priorities. (County of San Diego, La Mesa)

Response: The assignment of high priority to the commercial sites and sources is based on several factors (as discussed in the draft Fact Sheet/ Technical Report). The primary factor considered was the presence of pollutants at the commercial sites/sources listed. All of the commercial sites/sources are associated with the use or generation of pollutants commonly found in urban runoff. These included oil, grease, and metals for categories a-h and u; Pesticides for categories i, o, p, q, r, and s; coliform for categories j and v; construction byproducts for categories l - n;detergents for category k; and chlorine for category t. In addition, the choice of categories was bolstered by years of professional experience receiving and reviewing complaints regarding illicit discharges. Other considerations included number of sites/sources and size of site/sources.

Section: F.3 Subsection: F.3.c.2

Comment: Section F.3.c.(2) - What is the RWQCB's expectation for inventorying mobile services? How do you require that a mobile service meet the requirements (and possibly permitting) of a number of agencies? If a mobile service obtains a countywide permit, who is responsible for enforcement if violations occur within city limits? (Coronado)

Response: In order to provide the Copermittees with the maximum amount of flexibility, a requirement for addressing interjurisdictional mobile services is left to their discretion. The Copermittees could address this issue through the interjurisdictional agreements the Tentative Order requires and through regional cooperative and collaborative efforts, which other commentors have cited and emphasized in their comments.

Section: F.3 Subsection: F.3.d.3

Comment: Further study the impact of the proposal with regard to the increased impact on existing residential uses. Our concerns center around the activities described in section F.3.d. (2) which out lines high level residential threats to water quality. These high threat activities include parking your car, washing your car, disposal of pet waste and the use of pesticides, herbicides and fertilizers. Section F.3.d. (3), which covers the implementation of BMPs, is so vague as to provide no guidance. In Section F.3.d (2) it is not clear why residential automobile washing and parking are included as high priority activities. The Order is confusing on the type of programs the cities are expected to implement in what the Order terms "existing high priority residential areas"; it is not clear if the Order is requesting that cities inventory every resident who either repairs or washes their own vehicle, and if the cities are supposed to cite or find residents who wash their own vehicles. (San Diego County Apartment Association, Lemon Grove, Coalition for Practical Regulation)

Response: SDRWQCB believes it is well established that these residential activities generate pollutants which find their way to surface waterways. By mere virtue of the materials and chemicals involved with these activities, the cumulative impact of hundreds of thousands of households are detrimental if done without water quality protection in mind. Further study of the impact of the proposal is not seen as necessary to establish a link to benefits that will be gained in addressing these pollutant sources. Due to the non specific nature of the many residential land uses in the San Diego Region, Section F.3.d. (3) is written to provide maximum flexibility to the Permittees. SDRWQCB feels that the Section is not vague but rather allows Permittees to design a program that is best for their locality. Again, in response to your comment, "...it is not clear if the Order is requesting that cities inventory every resident who either repairs or washes their own vehicle, and if the cities are supposed to cite or find residents who wash their own vehicles," the Tentative Order does not give a specific directive on the course of action the Permittees should take. In some instances, it will be necessary to survey residential activity. In other instances, it will be necessary to enforce ordinances when a resident contributes to illicit discharges. This discretion is left up to the local jurisdiction.

Section: F.3 Subsection:

Comment: The permit should speak as strongly as is legally possible to require Copermittees to take necessary steps to ban problematic chemical pest-control substances such as Diazinon (in F.3). (Environmental Health Coalition)

Response: The Tentative Order requires the Copermittees to address pesticides in Sections F.3.a.6 and F.3.d.2. The Copermittees are given the discretion and flexibility to track and report municipal pesticide use, to reduce commercial pesticide use, and to consider targeting percentile reductions for total use and the use of high priority (high risk) pesticides, through the use of ordinances, local policies, zoning and permitting processes, the letting of deeds and other “mechanisms” that may be used by local government to limit or eliminate pesticide use.

Section: F.3 Subsection:

Comment: 1. The Order does not specify what programs the cities are supposed to implement in "high priority" areas, leaving the Order open to speculation and litigation by the environmental community.

2. The permit lists "land application sites," but does not define what exactly this type of site consists of.

3. It is not clear what type of retrofitting the cities are supposed to evaluate, thus leaving the cites exposed to litigation from the environmental community, even when a city uses its best efforts to comply. (Coalition for Practical Regulation)

Response: The revised Tentative Order requires the Copermittees to identify high priority sites within the framework provided and specify the programs they will implement in high priority areas in their Jurisdictional Urban Runoff Management Program Document, which is subject to review and comment by the SDRWQCB. Land application sites are areas where wastes are applied onto or incorporated into the soil surface for treatment and disposal. With respect to retrofitting, the revised Tentative Order only requires the Copermittees to "evaluate feasibility of retrofitting existing structural flood control devices and retrofit where needed."

Section: F.3 Subsection: F.3.a

Comment: Add: (9) Disease prevention: mosquito and vector control (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: F.3 Subsection: F.3.a

Comment: The Permit should require dischargers to track and report municipal pesticide use in addition to requiring pesticide use reduction. Also, the Permit should require actual pesticide use reductions, quantifying target percentile reductions for total use and the use of high priority (high risk) pesticides, through the use of ordinances, local policies, zoning and permitting processes, the letting of deeds and other “mechanisms” that may be used by local government to limit or eliminate pesticide use. (San Diego Baykeeper)

Response: The Tentative Order requires the Copermittees to address pesticides in Sections F.3.a.6 and F.3.d.2. The Copermittees are given the discretion and flexibility to track and report municipal pesticide use, to reduce commercial pesticide use, and to consider targeting percentile reductions for total use and the use of high priority (high risk) pesticides, through the use of ordinances, local policies, zoning and permitting processes, the letting of deeds and other “mechanisms” that may be used by local government to limit or eliminate pesticide use.

Section: F.3 Subsection: F.3.a.3

Comment: In Section F.3.a (3) it is not clear why existing roads and streets should be included as high priority areas instead of medium or low priority areas. (City of Lemon Grove)

Response: Roads and streets are identified as high priority due to their potential to be a significant contributor of pollutants in urban runoff. A Federal Highway Administration "Pollutant Loading and Impacts from Highway Stormwater Runoff, Volume 3; Analytical Investigation and Research Report" (1990) finds that concentrations of total suspended solids, nitrate + nitrite nitrogen, and zinc exceed USEPA benchmark values for concentrations of these pollutants in urban runoff.

Section: F.3 Subsection: F.3.a.3.b

Comment: Airfields should be included as a source of pollutants. (Sierra Club)

Response: Section F.3.a.3 of the Tentative Order has been revised to include airfields as a high priority threat to water quality to be addressed in the Jurisdictional Urban Runoff Management Program.

Section: F.3 Subsection: F.3.a.3.b.I

Comment: How will the permits handle existing parking lots? Due to oils, antifreeze, silt, etc. in parking lots, even one small storm event will cause non-compliance. Are parking lots also assumed to need best management and to be included in the permit? (Anonymous Workshop 1)

Response: The tentative order requires the Copermittees to designate and implement or require the implementation of minimum BMPs for high priority threats to water quality including municipal, commercial, and residential parking lots in Sections F.3.a.3, F.3.c.2, and F.3.d.2.

Section: F.3 Subsection: F.3.a.3.b.ii

Comment: What are "Flood Management Projects & Flood Control Devices" that are high priority municipal areas? -Give some examples. (Anonymous Workshop 1)

Response: Flood Management projects and Flood Control Devices include structures designed to manage water quantity, but not necessarily quality. Such structures were usually not designed to remove pollutants and may sometimes harm aquatic habitat and aesthetic values through downstream erosion, elevated water temperatures, and increased pollutant loadings. This is considered a high priority since it is specifically addressed in the Federal NPDES regulations 40 CFR 122.26(d)(2)(iv)(A)(3-5).

Identification of high priority municipal pollutant areas and activities allows for limited pollution reduction resources to be most effective. Targeting high priority municipal areas and activities for BMP implementation, inspection, and monitoring provides the greatest reduction in risk of degrading receiving waters per expenditure.

Section: F.3 Subsection: F.3.a.5

Comment: Section F.3.a. (5).(c). i. Maintenance of MS4 (Municipal): It is Page 26 - -not feasible for the City to inspect its entire system each year between May 1 to Sept. 30. This window is restricted further by nesting season restrictions for the unlined channels. 20% of the system creates 80% of the problems-Copermittees should be allowed to identify the problem areas and schedule them for more frequent maintenance. Requirements relative to the entire system make maintenance efforts less effective. It is recommended to eliminate the section or reword it to provide flexibility in maintenance schedules. Limit channel cleaning on an annual basis to lined sections. (City of La Mesa)

Response: Section F.3.a.5 of the Tentative Order requires that each Copermittee implement a schedule of maintenance activities at all structural controls designed to reduce pollutant discharges to or from its MS4 and related drainage structures, as well as a schedule for maintenance of the MS4. This requirement does not necessitate the maintenance of the entire MS4 system and related drainage structures every year, but rather that the Copermittee develop and submit as part of its Jurisdictional Urban Runoff Management Program Document and Annual Reports a schedule of maintenance activities for the MS4 system and related drainage structures. The Copermittees have the discretion under the Tentative Order to identify the 20% of the system that requires more frequent maintenance and schedule the remaining 80% as they determine is necessary to comply with the Tentative Order. The frequency of maintenance for lined channels necessary to comply with the Tentative Order is also left to the discretion of the Copermittees to determine.

Section: F.3 Subsection: F.3.a.5

Comment: Does the Regional Board consider BMP maintenance a BMP? (City of Encinitas)

Response: No. This would fall under your BMP maintenance program. Many BMPs are properly designed, installed, and used; but then never maintained. Without all steps, the BMP is rendered useless and may itself become a source of pollution. Maintenance of BMPs are a necessary management practice intrinsic to the existence of the Best Management Practice.

Section: F.3 Subsection: F.3.a.5.c

Comment: Add: vi. Measures to prevent breeding of vectors. (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: F.3 Subsection: F.3.a.5.c.iv

Comment: The RWQCB lacks the legal authority to regulate the disposal of waste through this permit except as it pertains to the Copermittees' MS4s. There is no legal basis for requiring in this permit that wastes be disposed of lawfully. As per sections A and B of this Order, they may not be disposed of to the Copermittee's MS4. That is the limit of the RWQCB's authority on this matter. (County of San Diego)

Response: California Water Code § 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Since tentative Order No. 2001-01 is written to implement CWA requirements, it does not violate section 13360 (Regional Board prohibition from specifying the manner of compliance with waste discharge requirements) for the SDRWQCB to include specified programs of Best Management Practices (BMPs) to be implemented by the municipalities in order to carry out CWA requirements. Specificity is even more crucial in waste discharge requirements for storm water discharges given their lack of numerical effluent limits. Therefore the SDRWQCB can supply certain details of BMPs including their maintenance and the lawful disposal of accumulated wastes.

Section: F.3 Subsection: F.3.a.6

Comment: Page 26, Section F.3.a. (6) Management of Pesticides, Herbicides, and Fertilizers (Municipal) - Please include language to require the inclusion of NGOs and members of the public to participate in the discussion, preparation and implementation of BMPs. (Surfers Tired of Pollution)

Response: SDRWQCB encourages the Permittees to include public input in the preparation of BMPs. However, it will not make such a provision a requirement of the Tentative Order as doing so will deny the Permittees flexibility in their approach to best management procedures.

Section: F.3 Subsection: F.3.a.6

Comment: The minimum BMP program this section would establish is unsupported by Federal regulation and violates CWC section 13360. On this matter, 122.26(d)(2)(iv)(A)(6) states: "[The applicant must include 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."

Section F.3.a.(6) exceeds this authority in several important ways. First, it expands "application" to "application, storage, and disposal". Second, it specifically prescribes the municipal areas and activities to be included ("municipal facilities, public right-of-ways, parks, recreational facilities, golf courses, cemeteries, botanical or zoological gardens and exhibits, landscaped areas, etc."). Third, it specifies minimum BMPs that are applicable to each of these categories, and does so in a way that is so prescriptive that it violates CWC section 13360 by directing the manner of compliance toward RWQCB staff preferences. (County of San Diego)

Response: California Water Code (CWC) section 13360 generally prohibits the Regional Boards from specifying the manner of compliance with state waste discharge requirements. However, CWC section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Section 402(p)(3)(B)(iii) of the CWA requires municipalities to implement "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." The SDRWQCB's responsibility is to translate this section of the CWA into the form of waste discharge requirements. Since tentative Order No. 2001-01 is written to implement CWA requirements, it does not violate section 13360 for the SDRWQCB to include specified programs of Best Management Practices (BMPs) to be implemented by the municipalities in order to carry out CWA requirements. Specificity is even more crucial in waste discharge requirements for storm water discharges given their lack of numerical effluent limits. In order to reduce storm water pollution to the maximum extent practicable (MEP), the tentative order must require specific styles of BMPs (i.e., structural or source control), but that is not to say that the SDRWQCB is dictating one specific BMP to accomplish the task. The municipalities often have many BMPs available to get the job done.

Section: F.3 Subsection: F.3.a.6

Comment: The Port of SD supports the IPM program. (Port of San Diego)

Response: Comment noted.

Section: F.3 Subsection: F.3.a.6

Comment: The IEA strongly supports the development and use of Integrated Pest Management (IPM) programs. (Industrial Environmental Association)

Response: Comment noted.

Section: F.3 Subsection: F.3.b

Comment: Section F.3.b, Page 27 – Definition of Industry is not clear. The Permit needs to clarify which Standard Industrial Classification (SIC) categories are intended to be covered by this section. (City of Chula Vista)

Response: The definition of industry is satisfactory. The requirements in Section F.3.b refer to all industrial sites regardless of whether the industrial site is subject to the California statewide General NPDES Permit for Storm Water Discharges Associated With Industrial Activities Except Construction or other individual NPDES permit. The Tentative Order requires the Copermittees to include in their inventories the minimum information for each site including SIC codes that best reflect the principal products or services offered by each facility.

Section: F.3 Subsection: F.3.b

Comment: Where there are conflicting requirements in an existing NPDES Permit, which Permit takes precedence? (Industrial Environmental Association)

Response: The requirements of Tentative Order 20001-001 should not conflict with the requirements of Order No. 97-03-DWQ, NPDES No. CAS000001, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities. Order No. 97-03-DWQ applies to storm water and authorized non-storm water discharges associated with industrial activities. Tentative Order No. 2001-001 applies to discharges into Municipal Separate Storm Sewer Systems. But in the event that the requirements of Order No. 97-03-DWQ are in conflict with Tentative Order No. 2001-001 the SDRWQCB will conduct a thorough evaluation of individual conflicts and determine which requirement will prevail.

Section: F.3 Subsection: F.3.b

Comment: If the General Industrial Permit is inadequate, the Regional Board staff should tell the SWRB and the USEPA. (County of San Diego)

Response: The General Industrial Permit is not inadequate, but in order to adequately protect receiving water quality and allow Copermittees to meet their permit responsibilities under Order No. 2001-01, additional BMPs may be required, including BMPs more stringent than those required under the state wide General Industrial Permit.

Regarding additional BMP requirements of this type, the US EPA finds that "nothing in the Federal regulations would prohibit the municipality from requiring additional controls beyond the permit requirements for industrial activities. For this reason, the EPA recommends that municipal applicants incorporate a provision in the proposed storm water management program that allows the municipality to require priority industrial facilities to implement the controls necessary for the municipality to meet its permit responsibilities" (1992).

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program items F.3.b.(4)(a) and F.3.b.(4)(b) in Order No. 2001-01 under the broad legal authority cited in the Tentative Order.

Section: F.3 Subsection: F.3.b

Comment: This section would place additional and more restrictive requirements on facilities already subject to the statewide General Industrial Permit. (County of San Diego)

Response: CWA sections 402(p)(3)(B)(ii-iii) require each Copermittee to prohibit non-storm water discharges into its MS4 and to reduce the discharge of pollutants to the maximum extent practicable for all urban land uses. The purpose of these two broad requirements is to minimize the short and long-term impacts of urban runoff on receiving water quality. Land used for industrial activities is clearly identified

in the federal regulations as one of several high priority land uses from which pollutants in urban runoff discharges must be reduced to the maximum extent practicable by each Copermittee. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) requires the development of a proposed management program to reduce the discharge of pollutants in storm water to the maximum extent practicable. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv)(C) requires that this program include a component which addresses industrial sites.

Due to their numerous potential pollutant sources, industrial sites are relatively high risk areas for pollutant discharges to storm water. In order to control the discharge of pollutants from industrial sites to the maximum extent practicable, implementation of BMPs is necessary. As discussed in Finding 12, BMPs effectively reduce pollutants in urban runoff by emphasizing pollution prevention and source controls, followed by treatment controls. The industrial existing development component will provide a program for the development and implementation of BMPs to address pollutants in storm water discharges from industrial sites. The US EPA supports such a program, stating "NPDES permits for MS4s will establish responsibilities for municipal system operators to control pollutants from industrial storm water discharged through their system" (1992).

The revised Tentative Order requires the Copermittees to implement pollution prevention methods and require minimum BMPs for sites they determine to be high, medium and low threats to water quality based on their inventory and prioritization of sites. The Tentative Order requires minimum BMPs that are as industry-specific and site-specific as appropriate. The requirements of the pollution prevention methods and minimum BMPs must meet, but not necessarily exceed the requirements of the General Industrial Permit, unless the Copermittee determines that the BMPs must be more stringent to comply with the Tentative Order.

The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.3.b. in Order No. 2001-01 under the broad legal authority cited in the Fact Sheet/Technical Report.

Section: F.3 Subsection: F.3.b.1

Comment: Page 27, Section F.3.b.(1) - Pollution Prevention (Industrial) -
Please explain how the public can participate in this process, and if an education element will be required. (Surfers Tired of Pollution)

Response: The Copermittees are required under Section F.6 to incorporate a mechanism for public participation in the implementation of the Jurisdictional Urban Runoff Management Program. In order to provide the Copermittees with flexibility and discretion, the manner in which they implement a public participation component is left to their discretion.

Section: F.3 Subsection: F.3.b.2

Comment: The Watersheds should be given the flexibility to apply resources to the areas of highest concern and greatest potential to resolve problems. This whole section should be converted to a guidance document. (City of Carlsbad)

Response: CWA sections 402(p)(3)(B)(ii-iii) require each Copermittee to prohibit non-storm water discharges into its MS4 and to reduce the discharge of pollutants to the maximum extent practicable for all urban land uses. The individual Copermittee is held responsible for these requirements within its jurisdiction. The purpose of these two broad requirements is to minimize the short and long-term impacts of urban runoff on receiving water quality. Land used for industrial, commercial, and residential activities are clearly identified in the federal regulations as several high priority land uses from which pollutants in urban runoff discharges must be reduced to the maximum extent practicable by each Copermittee. Federal NPDES regulation 40 CFR 122.26(d)(2)(iv) requires the development of a proposed management program to reduce the discharge of pollutants in storm water to the maximum extent practicable.

The Tentative Order requires the Copermittees within a watershed to collaborate to develop a Watershed Urban Runoff Management Program in which they address the issues identified in the Jurisdictional Urban Runoff Management Program on a watershed level. The early cooperation and collaboration between Copermittees in a watershed within the framework provided in the Tentative Order will prevent the development of "inconsistent jurisdictional level activities" and ensure the "regional consistency" referred to by other commentors.

Section: F.3 Subsection: F.3.b.3

Comment: The State should provide a list of what industrial sites are considered high, medium or low threats to water quality (Page 28 of 50). Otherwise, the cities would be open to speculation and litigation from the environmental community due to the vagueness of the permit on the types of industrial sites which must be inventoried. (Coalition for Practical Regulation)

Response: Section F.3.b.2 of the revised Tentative Order does require the Copermittee to inventory and prioritize industrial sites as high, medium, or low priorities and provides specific criteria defining high priority industrial sites. The definition of low and medium priority sites will be made at the discretion of the Copermittees.

Section: F.3 Subsection: F.3.b.4

Comment: Subparagraph F.3.b.4 Proposed Wording:
(4) BMP implementation and proof of long-term maintenance. (Downstream Services)

Response: Comment noted.

Section: F.3 Subsection: F.3.b.4.a

Comment: Modify the first sentence to "Each Copermittee shall designate a set of minimum BMPs or their equivalent for high, medium, and low threat to water quality industrial sites (as determined under section F.3.b.(3)). (Port of San Diego)

Response: The definition of BMP in Attachment D of the Tentative Order is broad and inclusive. It is likely that any equivalent alternative would fall under this definition, making the inclusion of such terms unnecessary.

Section: F.3 Subsection: F.3.b.5

Comment: Where would Copermittees obtain the legal authority (1) to require them to monitor? and/or (2) to make them submit data they collected under a different permit? (County of San Diego)

Response: The Copermittees have the legal authority to require monitoring and pollution prevention BMPs under their individual authority to enact ordinances and issue permits for operation.

The Copermittee is ultimately responsible for discharges to and from their MS4. Each Copermittee must therefore develop and enforce storm water ordinances in order reduce pollutant discharges to the MS4 to the maximum extent practicable and comply with its permit responsibilities. These ordinances must be applied at all industrial sites to ensure that pollutant discharges to the MS4 are reduced to the maximum extent practicable and permit requirements are met. To this effect, the US EPA "recommends that municipal applicants incorporate a provision in the proposed management program that allows the municipality to require priority industrial facilities to implement the controls necessary for the municipality to meet its permit responsibilities" (1992). Regarding enforcement at industrial sites, the US EPA further states "The municipality, as a permittee, is responsible for compliance with its permit and must have authority to implement the conditions in its permit. To comply with its permit, a municipality must have the authority to hold dischargers accountable for their contributions to separate storm sewers" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.b.(7) in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F.3 Subsection: F.3.b.5

Comment: Provisions are made in the Statewide Permit to reduce sampling. This section does not allow for the same provision. It should be modified to conform to SRWCB guidelines. (Industrial Environmental Association)

Response: Group monitoring will be allowed in the Tentative Order.

See change at permit section F.3.b.5

Section: F.3 Subsection: F.3.b.5

Comment: If this section is interpreted to mean all industrial sites having or needing all NPDES Permit or
General Industrial Permit must sample, the impact on analytical laboratories should be addressed. The IEA recommends language reaffirming group application and monitoring processes be placed in this section. (Industrial Environmental Association)

Response: Group monitoring will be allowed in the Tentative Order.

See change at permit section F.3.b.5

Section: F.3 Subsection: F.3.b.5

Comment: The monitoring program would impact current monitoring programs for industrial facilities required by industrial and/or construction storm water permits. Would the monitoring program in the Order be in addition to, replace or supplement facilities' monitoring programs. (City of San Diego)

Response: In most instances, it is expected that the monitoring program required by the Tentative Order will supplement the monitoring currently being conducted for industrial facilities. However, since there a number of facilities which use industrial-type materials, but are unregulated under the General Industrial Permit there will be areas in which the municipal monitoring program will be conducted in addition to current industrial monitoring.

Section: F.3 Subsection: F.3.b.5

Comment: This section would also expand these industrial permit monitoring requirements to an unspecified larger group of other “industrial” facilities. Where are these “industrial” facilities and why aren’t they subject to the General Industrial permit? (County of San Diego)

Response: It is the Copermittees responsibility under Tentative Order 2001-01 to identify and inventory all industrial activities within their jurisdiction. During this process, the Copermittees may identify facilities that should be subject to the General Industrial permit that do not have the required coverage. Also, if the facility is not subject to the General Industrial permit, the Copermittee may determine that in order to control the discharge of pollutants from the facility in question to the maximum extent practicable, implementation of BMPs and the submittal of results from a monitoring program are necessary. The Copermittees are required to conduct or require the industry to conduct a monitoring program for runoff from each high threat to water quality industrial site.

Due to their numerous potential pollutant sources, industrial sites are high risk areas for pollutant discharges to storm water. In order to prohibit non-storm water discharges, reduce industrial pollutant sources to the maximum extent practicable, and ensure that adequate BMPs are implemented, each Copermittee must first identify all industrial sites within their jurisdiction. Development of an inventory of industrial sites within a watershed will help identify potential industrial sources of pollutants in storm water. By assessing information provided in the inventory (such as principal products, services provided, and location), sites with the highest risk to receiving water quality can be identified, and priority for inspection, monitoring, and enforcement can be placed on those sites. By focusing inspection and monitoring on high priority sites, the effectiveness of limited inspection and monitoring resources can be maximized.

In order to control the discharge of pollutants from industrial sites to the maximum extent practicable, implementation of BMPs is necessary. As discussed in Finding 12, BMPs effectively reduce pollutants in urban runoff by emphasizing pollution prevention and source controls, followed by treatment controls. The industrial existing development component will provide a program for the development and

implementation of BMPs to address pollutants in storm water discharges from industrial sites. The US EPA supports such a program, stating "NPDES permits for MS4s will establish responsibilities for municipal system operators to control pollutants from industrial storm water discharged through their system" (1992).

Section: F.3 Subsection: F.3.b.5

Comment: When the regulations conflict between the industrial permit, the construction permit or the municipal, which permit is enforced? (Sachse, Marvin)

Response: We do not anticipate conflicts arising between Tentative Order 20001-001 and Order No. 97-03-DWQ, NPDES No. CAS000001, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities or Order No. 99-08-DWG, NPDES No. CAS000002, National Pollutant Discharge Elimination System (NPDES) Permit, Statewide Storm Water Permit and Waste Discharge Requirements (WDRs) for the Discharges of Storm Water Runoff Associated with Construction Activity. Order No. 97-03-DWQ applies to storm water and authorized non-storm water discharges associated with industrial activities. Order No. 99-09-DWQ applies to storm water and non-storm water runoff associated with construction activity on sites greater than 5 acres. Tentative Order No. 2001-01 applies to discharges into Municipal Separate Storm Sewer Systems. At a minimum, the BMPs and other measures required for industrial and construction activities by the Copermittees must meet or exceed the requirements of the General Statewide Permits. The Copermittees may require more stringent measures be implemented at industrial or construction sites in order to comply with the Tentative Order. In the event that the requirements of Order No. 97-03-DWQ or Order No. 99-08-DWQ are in conflict with Tentative Order No. 2001-001 the SDRWQCB will conduct a thorough evaluation of individual conflicts and determine which requirement will prevail.

Section: F.3 Subsection: F.3.b.5

Comment: According to this section, Copermittees would have to require monitoring for all the listed constituents from at least two events every year. The General Industrial permit provides some flexibility with respect to monitoring requirements. For instance, some facilities participate in group monitoring programs in which they must only sample in two of the five years of the permit cycle. The General Industrial permit also allows other exemptions and reductions (Sampling and Analysis Exemptions and Reductions; Section B.12.). Tentative Order No. 2001-01 would not allow Copermittees to provide the same flexibility. (County of San Diego)

Response: The purpose of the monitoring program is to provide the information needed by each Copermittee to assess the effectiveness of its Industrial BMP Program. Quantitative data is required for two storm events per year in order to identify potential trends and/or anomalies in the data. The Copermittee may be able to obtain this monitoring information from some industrial sites by requesting submittal of the Annual Reports required under the General Industrial Storm Water Permit. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.b.(5) in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F.3 Subsection: F.3.b.5.b

Comment: Section F.3.b (5)(b): What testing standards are required? (City of Chula Vista)

Response: Sampling and testing standards for industrial sites may be found in Section B of the Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities (General Industrial Storm Water Permit) SWRCB Order No. 97-03-DWQ.

Section: F.3 Subsection: F.3.b.6

Comment: Does Section F.3.b(6) allow for third-party (contractor) inspections of industrial site? (City of San Diego)

Response: Provided the Copermittees can demonstrate that all of the requirements of Tentative Order Section F.3.b(6) are met, the Copermittees are permitted to conduct the inspections using third-parties (contractors). The Copermittees are, however, ultimately responsible for implementing or requiring the implementation of all requirements in the Tentative Order.

Section: F.3 Subsection: F.3.c

Comment: Commercial BMP, F.3.C., is not clear if every parking lot is included. (City of Poway)

Response: Because parking lots are a surface onto which vehicles deposit a significant load of pollutants, they are addressed in the Tentative Order in the Jurisdictional Urban Runoff Management Program Municipal, Commercial and Residential components. The specific comment on F.3.c refers to all parking lots associated with commercial activities.

Section: F.3 Subsection: F.3.c.2

Comment: Please provide examples of types of commercial facilities or activities that were considered but not included on the RWQCB's high priority list (County of San Diego)

Response: The categories of commercial activities and facilities included in the high priority list in Section F.3.c.2 were drawn from the lists of complaint investigations and detections of illicit discharges reported to the SDRWQCB by the Copermittees and the public. The sites and activities are identified as such due to their frequent use of substances often found to be present as pollutants in urban runoff, combined with frequent mismanagement of runoff from the sites and activities. Therefore, development of an inventory of these commercial sites within a watershed will help identify the location of potential sources of pollutants in storm water. Pollutants found to be present in receiving waters can then be traced to the sites which frequently use such substances. In this manner an inventory of commercial sites can help in targeting commercial sites for inspection, monitoring, and potential enforcement. This will allow for limited inspection, monitoring, and enforcement time to be most effective.

Some commercial activities that were considered but were not included are strip malls providing multiple services, dry cleaning establishments, and home improvement centers. The Copermittees are free, however, to cover these and other potentially serious pollutant sources under item (w) "Other Commercial sites/sources that the Copermittee determines may contribute a significant pollutant load to the MS4..."

Section: F.3 Subsection: F.3.c.2

Comment: Home improvement and building supply centers should be listed as they contain many of the sources listed here. (Sierra Club)

Response: Home improvement and building supply centers may be addressed by the Copermittees under several of the categories listed (e.g. landscaping, greenhouses and nurseries, masonry) or they may elect to cover these commercial activities under Section F.3.c.2.w "Other commercial sites/sources that the Copermittee determines may contribute a significant pollutant load to the MS4." The Regional Board does not recommend adding this category to Tentative Order 2001-01.

Section: F.3 Subsection: F.3.c.3

Comment: F.3.c.(3) "BMP Implementation"

The RWQCB lacks the legal authority to compel Copermittees to require implementation of BMPs at commercial facilities. (County of San Diego)

Response: California Water Code (CWC) section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Section 402(p)(3)(B)(iii) of the CWA requires municipalities to implement "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." The SDRWQCB's responsibility is to translate this section of the CWA into the form of waste discharge requirements. Therefore the SDRWQCB has the authority to require specified programs of Best Management Practices (BMPs) to be implemented by the municipalities in order to carry out CWA requirements. Furthermore, commercial facilities are specifically addressed at 40 CFR 122.26(d)(2)(iv)(A).

Section: F.3 Subsection: F.3.d.2

Comment: Threat to Water Quality Prioritization (Residential)- Automobile washing is listed here as a threat, but on Page 9 of the permit it is excluded unless it "is a significant source of pollutants." This seems incongruent and should be addressed. (Industrial Environmental Association)

Response: Automobile washing is appropriately identified as a threat to water quality because of the many pollutants associated with automobiles that may be washed into the MS4. This category of illicit

discharge is also correctly excluded from the list of prohibited illicit discharges until such time as the Copermittees identify this activity as a significant source of pollutants. Automobiles can be washed without discharging pollutants to the MS4 and so should not be prohibited without justification.

Section: F.3 Subsection: F.3.d.2

Comment: Section F.3.d (2): All residences in the City would be classified as "high priority" since the entire City is tributary to San Diego Bay. (City of Chula Vista)

Response: The City of Chula Vista is tributary to San Diego Bay, which is a 303(d) listed water body, and would be classified as high priority under Tentative Order 2001-01.

Section: F.3 Subsection: F.3.d.2

Comment: Section F.3.d.(2) - Page 31 - Threat to Water Quality Prioritization (Residential); and F.3.d.(3) - Page 32 - BMP Implementation (Residential): If automobile parking on the streets is determined to be a high priority residential activity, how do you mitigate (other than catch basin inserts which haven't proven to be too effective)? If some people park on the streets and others don't, who pays for the BMPs? (i.e., will residents who don't park on the streets be amiable to paying for those - other residents and visitors - who do?) How do you determine if parking or driving is the significant source? (City of La Mesa)

Response: The BMPs to be chosen for implementation is left to the discretion of the Copermittees. One method which might be effective is education. People could be educated on the impacts of their oil leaks, and potentially influenced to get the leaks fixed. Municipalities could also consider areas where cars are most heavily parked on the street, such as a downtown area, a choose to implement catch basin inserts in that particular area.

Section: F.3 Subsection: F.3.d.2

Comment: Section F.3.d. (2) - Page 31 - Threat to Water Quality Prioritization (Residential): It requires the Copermittees to identify a list of predetermined residential activities assumed to be threats to water quality. If any of these activities are not prohibited by the Copermittees (for being deemed a non-significant sources of pollutants) they should not be inventoried. (City of La Mesa)

Response: Section F.3.d.2 of the Tentative Order requires the Copermittees to identify high priority threats to water quality in their Jurisdictional Urban Runoff Management that include the categories in F.3.d.2 and to implement or require the implementation of minimum BMPs for high threat water quality residential areas and activities that are area or activity specific.

The above residential areas and activities are identified as high priority threats to water quality due to their wide distribution, their association with pollutants of concern in urban runoff, and their historical mismanagement of associated urban runoff. Identification of high priority residential areas and activities will help focus BMP implementation efforts on these areas and activities. By focusing efforts on high

priority areas and activities, the greatest potential for water quality improvements will result. Therefore, limited Copermittee staff time will be focused where it can be most effective. The SDRWQCB has discretion to require Jurisdictional Urban Runoff Program item F.3.d.(2) in Order No. 2001-01 under the broad legal authority cited in the Fact Sheet/Technical Report.

Section: F.4 **Subsection:**

Comment: Although cities share responsibility in increasing public awareness, the public would be better served by a State funded public education program. The State should approach this on a statewide basis to take advantage of major media outlets. A statewide-integrated program will be most cost effective and consistent. (Coalition for Practical Regulation, City of Carlsbad, City of Poway)

Response: SDRWQCB believes that public education is important at all levels of government. EPA develops and publishes storm water guidance materials. The State Water Quality Control Board also develops and distributes such guidance. This information is made available on several websites which are accessible to everyone. However, local entities need the flexibility to tailor public outreach to the efforts which are most pressing for that area. For instance, the land use activities and resulting water quality problems vary widely from urban centers to agricultural regions. The outreach must be tailored for the target audience and prioritized to local issues. A local entity would best be able to determine what those priorities should be. Such outreach is intrinsic to any storm water management plan. Therefore, the requirement for active municipal involvement in public education shall remain in the Tentative Order.

Section: F.4 **Subsection:**

Comment: Section F.4. establishment by the RWQCB of minimum target communities and minimum program content violates CWC section 13360. This also applies to Copermittee outreach programs. (County of San Diego)

Response: CWC Section 13360 specifies that the Regional Board shall not specify the design, location, type of construction, or particular manner in which a permittee shall comply with permit requirements. The education component of section F.4 of the draft permit specifies that communities are subject to the education component and which topics must be addressed. The draft permit, however, does not specify how the education component or outreach programs will be carried out. Copermittees will be required to design their own programs in order to comply with permit requirements; therefore Section F.4 of the draft permit is consistent with CWC 13360.

Section: F.4 **Subsection:**

Comment: What criteria will be used by the Regional Board to "measure" increases in knowledge and behavioral changes in target communities regarding MS4s, impacts of urban runoff, and potential BMP solutions, and judge whether a particular educational component is satisfactory? What is the RWQCB's expectation for measurably increasing the knowledge of transient target communities such as visitors (although not listed, they could possibly be identified as a "significant source of pollutants")? (Procopio, Cory, Hargreaves, & Savitch, L.L.P., Coronado)

Response: SDRWQCB believes that in order to provide the Permittees with maximum flexibility, they may develop their own criteria for which to measure their success. Some possible suggestions would be to conduct random baseline surveys of target audiences, followed by periodic follow-up surveys; charting the hits on Permittee-run informational internet sites over time; numbers of classroom presentations over time; measuring media attention on Permittee sponsored water quality protection issues; number of workshops participants overtime; etc. As these programs continue, it is expected that the Permittees will devise new and creative ways to measure increases in knowledge.

Section: F.4 Subsection:

Comment: Copermittees should consider partnerships with local environmental groups, such as SDBK and SDSF who are already engaged in programs of educating citizens regarding discharge impacts and requirements. (Surfrider Foundation)

Response: Comment noted.

Section: F.4 Subsection: F.4

Comment: Allowance should be made for water washing unsanitary conditions on side walks such as food spillage. (City of Lemon Grove)

Response: Washing of sidewalks, patios, etc. is permissible, provided BMPs are implemented. For example, the wash water could be captured and collected or absorbed, or directed towards pervious areas (as long as the washing is infrequent). Directing the wash water through a filter may also be acceptable. There are many guidance documents available regarding BMP implementation in such cases, such as the California Storm Water Best Management Practices Handbooks developed by the Storm Water Quality Task Force.

Section: F.4 Subsection: F.4.a

Comment: "F.4.a. All Target Communities"

This section is ambiguous and unworkable. It should be deleted. (County of San Diego)

Response: For at least eighteen categories, Section F.4.a specifically identifies the activities for which the Permittees must consider individuals as members of a "Target Community." This Section sets a clear minimum criteria for identifying the target communities to which the Permittees must direct public education efforts. Section F.4.a. is necessary to provide clarification, so it has not been deleted.

Section: F.4 Subsection: F.4.b

Comment: Add: Disease prevention, mosquito/vector awareness (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: F.5 Subsection:

Comment: The requirement that each Copermittee "…shall prevent, respond to, contain and clean up all sewage and other spills that may discharge into its MS4 from any source (including private laterals)." should be modified to state that this requirement is to be performed to the MEP or be deleted. Because private laterals are owned and operated by private parties (such as residential property owners), preventing spills from such laterals is beyond the Copermittees' ability to control and such a program would be unlikely to be effective in practice. The Copermittees will be logistically unable to respond to both private lateral blocks and sewer main blockage as resources will spread too thin. The main priority must be to prevent sewage spills from the City main lines. While there is no way to assure that the Copermittee is notified of all spills into its MS4, it is practicable for the Copermittees to establish programs (i.e. educational outreach, communication links, etc.) to require and enable citizens to notify the Copermittees of sewage spills from private laterals. This requirement should be removed or modified to require such programs be implemented to the MEP. (City of San Diego, Chula Vista, La Mesa, Imperial Beach, Metro Commission)

Response: Sewage and other spills frequently enter the MS4, to be carried and discharged to receiving waters. Such spills into and from the MS4 can severely impair receiving water quality and pose a significant threat to public health. To avoid these negative impacts, the proposed management program must describe procedures that the Copermittee will implement to prevent, contain, and respond to spills that may discharge into the MS4. The US EPA states "The goal of a spill prevention program is to reduce the frequency and extent of spills of hazardous materials which can cause water quality impairment. Spill containment programs may establish minimum chemical storage and handling requirements, require users to submit prevention and control plans, and ensure site inspections. […] Spill response teams should attempt to prevent or minimize contamination of surface water, groundwater, and soil. Spill response programs often require a coordinated response from a number of municipal departments. Municipalities should describe how response procedures within these programs attempt to mitigate potential pollutant discharges to surface waters and the MS4" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.5.f in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report pp. 157-158.

Section: F.5 Subsection: F.5.g

Comment: Citizens are extremely effective in assisting Copermittees to identify violators of local discharge prohibitions. However, citizens have experienced difficulty contacting local enforcement personnel on weekends or after hours, when many violations occur. To facilitate public reporting of violations, the Copermittees should be required to maintain a daily 24-hour "stormwater hotline," maintained by a live person during business hours and checked periodically after-hours. Moreover, the Copermittees should also facilitate the use of electronic mail as a means of reporting discharge violations.

The current hotline rolls over to the 911 emergency system after hours and on weekends. The IEA strongly feels this is an inappropriate use of the 911 emergency system, and may result in complaints or reports not being investigated in a timely manner. The IEA strongly urges the Board to direct the Copermittees to develop and properly staff a 24-hour hotline. (Surfrider Foundation, Industrial Environmental Association)

Response: The Copermittees have the discretion to implement the requirements of Section F.5.g of the Tentative Order in the manner they determine is the most effective. The revised Tentative Order does not direct the Copermittees to roll-over calls from their storm water hotline to the 911 emergency system. The Copermittees are not required, but do have the discretion, under the revised Tentative Order to facilitate the use of electronic mail as a means of reporting discharge violations.

Section: F.5 Subsection: F.5.h

Comment: The language in Section F.5.h “Facilitate Disposal of Used Oil and Toxic Materials” should be revised to clarify the SDRWQCB’s intent and add formal requirements or otherwise be deleted. Curbside collection of hazardous wastes may be a potential health risk and a source of contamination from leaky containers, improper handling and mixing, and irregular pick up, etc. Collection programs may increase public exposure to the risks of improperly handling and mixing of chemicals. Any mandate or encouragement by the Regional Board for curbside collection programs should include requirements for a formal collection program with authorized containers and educational programs.
To avoid these unintended consequences, we suggest the Regional Board add the following language: ". . . Formal curbside collection programs for the collection of household hazardous wastes deposited in secure authorized containers is encouraged. Such a curbside collection program must include a substantial educational component concerning the public handling and depositing of the household hazardous wastes. " The requirement is necessary, however, because the current programs for disposal of household toxic waste do not adequately facilitate the public's ability to dispose of their waste. There need to be more collection sites established with regular hours. It is difficult for many San Diegans to find disposal sites located in a convenient area. This discourages people from disposing of their wastes properly. (Environmental Health Coalition, Sierra Club, Surfers Tired Of Pollution)

Response: Curbside collection is only encouraged, not required, in the Tentative Order. The issues raised in the comment are pertinent and were addressed in the Public Workshops. It is the responsibility of the Copermittees to design and implement a program that meets or exceeds the requirements of Section F.5.h of the Tentative Order and does not result in a threat to human or environmental health.

The US EPA states "If private individuals find the proper disposal of used oil or toxic materials difficult, incidents of improper disposal (such as into the MS4) increase" (1992). Therefore Copermittees are required to propose a program component that will facilitate the proper disposal of used oil and toxics from households by establishing municipally operated collection sites, or ensuring that privately operated collections sites are available. The US EPA suggests this program component "should describe outreach plans to handlers of used oil and to the public, and operating plans for oil and household waste collection programs" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management Program item F.5.h in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F.5 Subsection:

Comment: Furthermore, we urge you to include specifically in Section F.5. coverage for failing septic systems as an illicit discharge. (USEPA)

Response: Section F.5 of the Tentative Order has been revised to specifically include failing septic systems as an illicit discharge.

Section: F.5 Subsection:

Comment: The Regional Board has not established that it has the jurisdictional authority to dictate the manner in which municipalities regulate illicit discharges into their MS4s. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: California Water Code (CWC) section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Section 402(p)(3)(B)(iii) of the CWA requires municipalities to implement "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." The SDRWQCB's responsibility is to translate this section of the CWA into the form of waste discharge requirements. Therefore the SDRWQCB has the authority to require specified programs to be implemented by the municipalities in order to carry out CWA requirements. Furthermore, illicit discharges are specifically addressed at 40 CFR 122.26(d)(2)(iv)(B).

Section: F.5 Subsection: F.5.g

Comment: We strongly support the requirement for all reporting hotlines in Spanish and English (Section F. 5. G). (Environmental Health Coalition)

Response: Comment noted

Section: F.5 Subsection: F.5.I

Comment: Similarly, section F.5.i. requires Copermittees to limit infiltration of seepage from municipal sanitary sewers to MS4s, and to conduct routine maintenance of both the MS4 and the sanitary sewers. However, routine preventive maintenance of the storm drain system will not result in less sanitary sewer infiltration – such infiltration can be addressed effectively only through maintenance and repair of the sanitary sewer system which is the source of such infiltration. Furthermore, the sanitary sewer system is regulated under a separate NPDES permit, and it would be more appropriate and effective to require maintenance and repair of the sanitary sewer in the NPDES permit applicable to the sanitary sewer system. Finally, for the reasons just discussed, the City also requests that the reference to sanitary sewer maintenance be removed from the definition of MEP contained in Attachment D to the Tentative Order (Glossary). (City of San Diego)

Response: Regarding seepage from sanitary sewers, the US EPA states "Raw sewage can seep from sanitary sewage collection systems through leaks and cracks in aging pipes, poorly constructed manholes and joints, and main breaks. Sewage from a leaky sanitary system can flow to storm sewers or contaminate ground water supplies. Interaction between sanitary sewers and separate storm sewers may occur at manholes and where sanitary sewer laterals and storm sewer trenches cross. Separate storm sewers and sanitary sewers may share the same trench, which is generally filled with very porous material such as gravel" (1992). Also, the Federal NPDES regulations 40 CFR 122.26(d)(7)(iv)(B)(7) requires "A description of controls to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewers…" When raw sewage enters the storm water system, it can reach receiving waters untreated, posing a threat to water quality and public health.

Municipalities that operate a MS4 often also operate or contract for the operation of a sanitary sewerage system as well. In such cases, the management and maintenance of the two systems should be coordinated to limit infiltration of seepage from the municipal sanitary sewer to the MS4s. The fact that the two activities are authorized under separate NPDES permits does not relieve the Copermittee in question of the requirement to perform or require the performance of routine and thorough preventative maintenance of both to limit infiltration from the municipal sanitary sewer into the MS4.

However, some Copermittees operate MS4s in service areas where a different entity operates or contracts for the operation of the municipal sanitary sewerage system. In such cases, the Tentative Order should not require those Copermittees to conduct thorough, routine preventive maintenance of the municipal sanitary sewer. Accordingly, the language of Section F.5.i has been revised (as written below) to require the thorough, routine preventive maintenance of the MS4 system of all Copermittees and the thorough, routine preventive maintenance of the municipal sanitary sewer only in those cases where the Copermittee has direct authority over the municipal sanitary sewer:

The definition of MEP contained in Attachment D of the Tentative Order has been revised to refer to the maintenance of the municipal separate storm water sewer system rather than the sanitary sewer system.

Section F.5.I has been revised as follows:
Each Copermittee shall implement controls to limit infiltration of seepage from municipal sanitary sewers to MS4s through thorough, routine preventive maintenance of the MS4. Each Copermittee that operates both a municipal sanitary sewer system and a MS4 shall implement controls and measures to limit infiltration of seepage from municipal sanitary sewers to MS4s that include overall sanitary sewer and MS4 surveys and thorough, routine preventive maintenance of both.

Section: F.5 Subsection: F.5.I

Comment: Paragraph F.5.i is another example. Padre Dam MWD owns and operates the wastewater collection system in Santee, and parts of El Cajon and the County of San Diego. We do not expect any one of these agencies to perform the acts specified in F.5, nor does the City of Santee have equipment and staffing to do this work.

Recommendation: (a) Ensure that this permit is not in conflict with other outstanding permits of agencies in the region. (b) Provide language excluding those Copermittee agencies from responsibilities of managing wastewater systems that are owned and operated by other agencies. (Padre Dam Municipal Water District)

Response: Municipalities that operate a MS4 often contract for the operation of a sanitary sewerage system as well. In such cases, the management and maintenance of the two systems should be coordinated to limit infiltration of seepage from the municipal sanitary sewer to the MS4s. The fact that the two activities are authorized under separate NPDES permits does not relieve a Copermittee of the requirement to perform or require the performance of routine and thorough preventative maintenance of both to limit infiltration from the municipal sanitary sewer into the MS4.

However, some Copermittees operate MS4s in service areas where a different entity operates or contracts for the operation of the municipal sanitary sewerage system. In such cases, the Tentative Order should not require those Copermittees to conduct thorough, routine preventive maintenance of the municipal sanitary sewer. Accordingly, the language of Section F.5.i has been revised (as written below) to require the thorough, routine preventive maintenance of the MS4 system of all Copermittees and the thorough, routine preventive maintenance of the municipal sanitary sewer only in those cases where the Copermittee has direct authority over the municipal sanitary sewer:

Regarding seepage from sanitary sewers, the US EPA states “Raw sewage can seep from sanitary sewage collection systems through leaks and cracks in aging pipes, poorly constructed manholes and joints, and main breaks. Sewage from a leaky sanitary system can flow to storm sewers or contaminate ground water supplies. Interaction between sanitary sewers and separate storm sewers may occur at manholes and where sanitary sewer laterals and storm sewer trenches cross. Separate storm sewers and sanitary sewers may share the same trench, which is generally filled with very porous material such as gravel” (1992). Also, the Federal NPDES regulations 40 CFR 122.26(d)(7)(iv)(B)(7) requires "A description of controls to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewers…" When raw sewage enters the storm water system, it can reach receiving waters untreated, posing a threat to water quality and public health.

The definition of MEP contained in Attachment D of the Tentative Order has been revised to refer to the maintenance of the municipal separate storm water sewer system rather than the sanitary sewer system.

Section F.5.I has been revised as follows:
Each Copermittee shall implement controls to limit infiltration of seepage from municipal sanitary sewers to MS4s through thorough, routine preventive maintenance of the MS4. Each Copermittee that operates both a municipal sanitary sewer system and a MS4 shall implement controls and measures to limit

infiltration of seepage from municipal sanitary sewers to MS4s that include overall sanitary sewer and MS4 surveys and thorough, routine preventive maintenance of both.

Section: F.7 Subsection: F.7.c

Comment: The requirement in Section F.7.c to include in the Individual Jurisdictional URMP Annual Reports a self-assessment of "overall percent compliance" with the Tentative Order should be deleted. It is inappropriate to require Copermittees to assess their own compliance. It is not possible for Copermittees to assess their own "percent compliance" without the establishment of objective criteria by which to gauge their performance. Such criteria do not exist, and it would be inappropriate for the Copermittees to establish them since this would present an obvious conflict. Also, not only would it be difficult and potentially impossible to meaningfully satisfy this requirement on an individual basis, but the self-assessments of each Copermittee taken together would be even less meaningful because of the inherently subjective nature of such self-assessments. Assessing the performance of Copermittees is the responsibility of the RWQCB, and should remain so. (City of San Diego, County of San Diego, Chula Vista, La Mesa, Imperial Beach, Port of San Diego)

Response: The SDRWQCB agrees with your point that a self assessment of overall percent compliance is arbitrary and will result in the generation of meaningless figures which will not serve to measure true compliance. Therefore, the Tentative Order will be changed to reflect your suggestion.

See Section F.7.c. for the changes.

Section: F.7 Subsection: F.7

Comment: The Regional Board needs to provide guidance by working collaboratively with Watersheds in defining watershed objectives and performance measures. (City of Carlsbad)

Response: As addressed during the workshops, SDRWQCB staff will participate in the development of the Watershed Urban Runoff Management Plans as well as the County Project Clean Water Program. The definition of watershed objectives and performance measures will be determined by the Copermittees based in part on receiving water quality objectives, the Copermittees Jurisdictional Urban Runoff Management Programs, and other factors the Copermittees may identify.

Section: F.7 Subsection: F.7.a

Comment: Require testing program to measure pollutants meet MEP standards, not specific sites standards which may be under water due to tide or under influence from Mexico or other sources. (City of Imperial Beach)

Response: Section F.7 requires that the Copermittee develop a long term strategy to assess the effectiveness of the Jurisdictional Urban Runoff Management Program (JURMP) using a number of

parameters proposed in the it's JURMP Document subject to SDRWQCB review. The Copermittees have the discretion to include direct and indirect measures that include, but are not limited to pollutant loading and receiving water quality monitoring data.

Section: F.7 Subsection: F.7.a

Comment: How is the pollution from Mexico included when calculating the effectiveness of the URMP in Imperial Beach? (City of Imperial Beach)

Response: Selection of sample sites and water quality constituents can be conducted to identify local sources of pollutants resulting from urban runoff discrete from pollutant loadings from Mexico. In addition, the Copermittees can develop other methods of evaluating the effectiveness of the Jurisdictional and Watershed Urban Runoff Management Programs.

Section: F.8 Subsection:

Comment: This requirement is not supported by Federal regulations and could be impossible to implement. It is clear that the agencies will be required to pay for the implementation of the Tentative Order and that the SDRWQCB has little concern for what the cost may be or how the agencies shall provide funding comply with the Tentative Order. This requirement should be deleted. (County of San Diego, Imperial Beach, Carlsbad)

Response: Federal NPDES regulation 40 CFR 122.26(d)(2)(vi) provides that "[The Copermittee must submit] 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."

A fiscal analysis can be an important planning tool. The US EPA finds that "examining the levels of proposed spending and funding allows the permitting authority to gauge the ability of the applicant to implement the program and predict its effectiveness. The fiscal analysis also will help the [SDRWQCB] determine whether the applicant has met the statutory requirement of reducing the discharge of pollutants to the MS4 to the maximum extent practicable. Finally, the estimates help the applicant evaluate the feasibility and cost-effectiveness of its program" (1992). The SDRWQCB has discretion to require Jurisdictional Urban Runoff Management item F.8 in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: F.8 Subsection:

Comment: The Copermittees' ability to obtain funding and effectively conduct a fiscal analysis, including securing the resources necessary to meet the requirements of this Tentative Order, is severely

constrained by state laws restricting the imposition and collection of fees, taxes and assessments at the local level, thereby inhibiting the Copermittees' ability to accurately forecast such receipts. For example, pursuant to Proposition 218, certain fees must be approved by City residents via the ballot process. Although Proposition 37 failed to pass in the recent election, a similar proposition could impact the City's ability to establish new fees or assessments. As a result, the City's ability both to obtain funding through this process, and to forecast the likely level of such funding, is highly unpredictable. Any fiscal analysis required by the Tentative Order needs to take account of these restrictions on municipal funding and planning efforts and include workable timelines. To help augment local programs, the City requests support by the Regional Board staff to work with the Copermittees to obtain state and federal funding. (City of San Diego, El Cajon, Escondido, Imperial Beach, Coalition for Practical Regulation)

Response: The implementation schedule for most of the Jurisdictional Urban Runoff Management Programs has been extended from 180 days to 365 days to provide the Copermittees additional time to secure adequate funding.

The SDRWQCB has recently undergone an extensive process to support the Copermittees attempts to securing funding resulting from passage of Proposition 13. The SDRWQCB also assists in securing funds from other state and federal sources.

Section: F.8 Subsection:

Comment: By what legal authority does the Regional Board impose the requirement that each Copermittee shall secure the fiscal resources necessary to meet the requirements of this Order? The order has no assessment of its economic and fiscal impacts on the Copermittees. (Procopio, Cory, Hargreaves, & Savitch, L.L.P.)

Response: California Water Code (CWC) section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Section 402(p)(3)(B)(iii) of the CWA requires municipalities to implement "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." The SDRWQCB's responsibility is to translate this section of the CWA into the form of waste discharge requirements. Therefore the SDRWQCB has the authority to require specified programs to be implemented by the municipalities in order to carry out CWA requirements. Furthermore, a fiscal analysis is specifically addressed at 40 CFR 122.26(d)(2)(vi).

Section: F.8 Subsection: F.8

Comment: How can the fiscal analysis of the Jurisdictional URMP be completed before the watershed URMP is completed? The BMP's that may result from the Watershed URMP might have significant costs that affect the Jurisdictional URMP. (Pountney & Associates)

Response: The fiscal analysis of the Jurisdictional Urban Runoff Management Program is an annual reporting requirement that is expected to be updated every year that new data (i.e. increased or decreased costs estimates related to the Watershed Urban Runoff Management Program) becomes available.

Section: G Subsection:

Comment: The date to implement the land use planning date and SUSMP conflict by 180 days, even though SUSMPs are part of land use planning. (Bartleman, W.)

Response: Comment noted. Regional Board staff recommend the Tentative Order be modified to correct this discrepancy.

See change at permit section G.

Section: H Subsection: H

Comment: The City questions the submittal of the Jurisdictional URMP Documents.
Requiring the City to submit the unified Documents to the Regional Board on the same day that the City and other Copermittees must begin implementing the Jurisdictional URMP is impractical. The City suggests that it submit the unified Documents at a reasonable time after adoption of the Tentative Order, but prior to the date implementation of the Jurisdictional URMP must commence.
The City, as Principal Permittee, also questions that it be required to prepare and submit, as an additional section of the unified Documents, a description of common activities conducted by the Copermittees. This activities will be addressed by the Copermittees in their individual Documents and the Watershed URMPs. (City of San Diego)

Response: The Copermittees have the discretion to submit their Jurisdictional Urban Runoff Management Program Documents prior to the implementation date. While the SDRWQCB will review and comment on the JURMP Documents, the Copermittees are expected to implement their JURMPs immediately, since the JURMPs are based on requirements largely derived from Order 90-42 and the NPDES regulations which have been in place for many years.

Compilation of the individual Jurisdictional URMP documents into a unified Jurisdictional URMP document by the Principal Permittee will simplify review and evaluation of the information contained in the documents. The Principal Permittee's provision of a summary covering common activities conducted collectively by the Copermittees will provide a useful overview of urban runoff management efforts within the County of San Diego. This type of compilation of the Copermittees' documents has been recommended by the Copermittees in the past.

The SDRWQCB has discretion to require Submittal of Jurisdictional URMP Document item H. in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: H Subsection: H

Comment: H. SUBMITTAL OF JURISDICTIONAL URMP DOCUMENT

The lists of reporting requirements in sections H.1.a. and H.1.b. are cumbersome and will likely be subject to significant change if the permit is amended. The County recommends that these lists be deleted and replaced with a requirement for the Copermittees to develop and submit report formats (including suggested content) at least 90 days prior to each submittal deadline. The deleted detail should instead be located in the Technical Report as suggested guidance. (County of San Diego)

Response: The reporting requirements in H.1.a and H.1.b are directly based on the requirements of the Jurisdictional Urban Runoff Management Programs. Reporting on all aspects of the Jurisdictional Urban Runoff Management Programs is necessary for the SDRWQCB to assess the Copermittees' compliance with the Tentative Order. Therefore, the requirements of H.1.a and H.1 b are appropriate.

Section: H Subsection: H

Comment: The City questions the need to prepare a unified Jurisdictional URMP annual report detailing the common activities of the Copermittees, as such activities will be set out in each Copermittee's individual Jurisdictional URMP annual report and more importantly, in the Watershed URMP Annual Report. (City of San Diego)

Response: The Tentative Order requires a Unified Jurisdictional Urban Runoff Management Program (JURMP) Annual Report to cover common activities conducted collectively by the Copermittees. The rest of the Unified JURMP Annual Report consists of the submitted JURMP Annual Reports submitted individually by the Copermittees. The Unified JURMP Annual Reports can also be useful tools for the Copermittees. They provide a focus to review, update, or revise the URMPs on an annual basis. Successful and unsuccessful measures can be identified, helping to focus efforts on areas or issues which provide the greatest results. Areas or issues which have received insufficient efforts can also be identified and improved.

The SDRWQCB has the discretion to require Submittal of Jurisdictional URMP Annual Report item I. in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: H Subsection: H.1.a

Comment: Add the following requirement to sections (1), (2), (3), (4) & (5): Procedures for preventing vector breeding in BMPs, including plan review and approval and surveillance processes. (State Department of Health Services)

Response: In recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: H Subsection: H.2.b

Comment: H.2.b. [Unified URMPs]
To which activities does "a section covering common activities conducted collectively by the Copermittees" refer? Is the SDRWQCB asking for a description of the activities leading to the development of the SUSMPs? If so, why? Shouldn't the completed SUSMPs suffice? (County of San Diego)

Response: This refers to activities on which Copermittees collaborate in implementing parts of their urban runoff management programs. Examples can include regional education efforts (Think Blue campaign), preliminary watershed efforts, etc.

Section: I Subsection: I.1.f

Comment: Section I.1.f, which requires that Copermittees report on annual expenditures from previous years, is inconsistent with section F.8, which only requires an evaluation of projected expenditures. Because reports on annual expenditures from previous years exceed the requirements of 40 CFR 122.26(d)(2)(vi), the submission of financial data from previous fiscal years therefore cannot be required under Tentative Order No. 2001-01. (County of San Diego)

Response: Comparison of expenditures would be useful to help determine the level of efforts implemented by each Copermittee. However, it is not critical to the assessment of each Copermittee's compliance with the requirements of the Jurisdictional Urban Runoff Management Program. Therefore, section I.1.f will be changed to only require an evaluation of projected expenditures.

Section: I Subsection: I.2

Comment: The requirement for the first report should be deleted and that the January 21, 2003 report cover the period of January 1, 2001 through June 30, 2002. This will avoid the unnecessary cost of generating an additional report for a 6-month period during which significant program amendments will be occurring. (County of San Diego, Anonymous)

Response: The revised Tentative Order requires the submittal of the first Jurisdictional Urban Runoff Management Plan (JURMP) Annual Report to the SDRWQCB on January 31, 2003. This revision is the result of the consolidation of the submittals of the first and second JURMP Documents and the extension of the implementation of the JURMP from 180 days to 365 days following the adoption of the revised Tentative Order.

Section: I Subsection: I.1.e

Comment: SUBMITTAL OF JURISDICTIONAL URMP ANNUAL REPORT"

"I.1.e."

Would these "special investigations" be voluntary or directed by the RWQCB pursuant to Tentative Order No. 2001-01? The RWQCB lacks the legal authority to require the submission of data or other monitoring information relating to investigations not required under this Order. (County of San Diego)

Response: Section I.1.e. of the tentative order requires the submission of "[a] summary of all urban runoff related data not included in the annual monitoring report (e.g., special investigations)," therefore it is a requirement and not a voluntary submission. The SDRWQCB does have adequate justification in requesting the submission of a summary data document pursuant to 40 CFR 122.42(c)(4) which states annual reports shall include a "summary of data, including monitoring data, that is accumulated throughout the reporting year." California Water Code (CWC) section 13377 provides that the Regional Boards shall issue waste discharge requirements which apply and ensure compliance with all applicable provisions of the Federal Water Pollution Control Act (33 U.S.C. §1251 et seq.), as amended, also known as the federal Clean Water Act (CWA). Section 402(p)(3)(B)(iii) of the CWA requires municipalities to implement "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." The SDRWQCB's responsibility is to translate this section of the CWA into the form of waste discharge requirements. Therefore the SDRWQCB has the authority to require specified programs to be implemented by the municipalities in order to carry out CWA requirements.

Section: I Subsection: I.1.g

Comment: I.1.g. / I.1.h. - How would conditions of "proven to be effective" and "proven to be ineffective" be determined? (County of San Diego)

Response: Under Order 90-42, the Copermittees have had ten years to identify BMPs that have proven or not proven to be effective in reducing pollutants in discharges to the MEP. As the Copermittees implement the requirements of the Tentative Order, additional information will be developed on specific BMPs or activities that are found to be effective or ineffective in reducing the pollutants in the discharges to the MEP and that do not cause or contribute to the exeedances of receiving water quality objectives. Section I.1.g and I.1.h require the Copermittees to include this information in their Jurisdictional Urban Runoff Management Program Annual Reports.

Section: I Subsection: I.1.I

Comment: This requirement is more appropriate for the Copermittees' monitoring reports. (County of San Diego)

Response: The Copermittees are expected to make use of their joint Receiving Water Monitoring Reports, but may also collect additional monitoring information that should be evaluated and reported. Identification of water quality improvements or degradation within a municipality's jurisdiction is an appropriate requirement of the Jurisdictional Urban Runoff Management Program Annual Report.

Section: I Subsection: I.3

Comment: It is unclear who would sign the certification statement on the Unified Report. It appears that there may be an expectation that the Principal Copermittee would certify data and information submitted to them by other Copermittees. This statement should be amended to clearly limit responsibility of all Copermittees to certifying their own reports or subsections of Unified Reports. (County of San Diego)

Response: The language of Section I.3 has been amended in the revised Tentative Order to clarify the certification signature requirements for the Unified Jurisdictional Urban Runoff Management Program(JURMP) Annual Report. The certification statement of the Unified JURMP Annual Report applies only to the material submitted by the Principal Permittee. Each Copermittee submits their individual Jurisdictional Urban Runoff Management Program Annual Report with a separate certification statement. The Principal Permittee is not expected to certify the data submitted to them by other Copermittees.

Section: J Subsection: J

Comment: The Tentative Order does not properly account for the different hydrology, soils, environments, jurisdictions, and other geographic features within a watershed. Applying the same requirements through the Watershed Urban Runoff Management Programs that disregard conditions between local water basins and topography is inappropriate. The Tentative Order does not consider existing efforts to manage local portions of watersheds. (Escondido)

Response: The Tentative Order's requirements for developing and implementing the Watershed Urban Runoff Management Programs (WURMP) are sufficiently flexible to allow the Copermittees to properly account for the different hydrology, soils, environments, jurisdictions, and other geographic features within a watershed as well as consider existing efforts to manage local portions of watersheds. Consistency of programs implemented under the WURMP within the guidelines provided is highly desirable as indicated by other commentors references to "regional consistency" and the threat of "inconsistent jurisdictional level activities."

Section: J Subsection: J

Comment: It is unlikely the local programs developed separately by the Copermittees in their Jurisdictional Urban Runoff Management Plans will provide the good basis for the transition to regional consistency and watershed URMPs that the Order envisions. During the first few years after final promulgation of the Order, each Copermittee will be forced by the prescriptive and detailed nature of the Order to focus attention on its own promulgation and implementation of mandatory program elements. The Order will lead to inconsistent jurisdictional level activities, and will make the transition from local programs to watershed-based programs more difficult than it needs to be. Cooperative study and planning by the Copermittees would provide a quicker path to excellent watershed-based storm water programs, but this Order would force Copermittees off of that path. (County of San Diego)

Response: Order No. 90-42 was drafted to provide the Copermittees with the maximum amount of flexibility to develop and implement their own jurisdictional storm water programs. Currently, each Copermittee focuses its attention on its own implementation of mandatory program elements, which has resulted in inconsistent jurisdictional level activities. The Tentative Order does not prevent the Copermittees from working together using cooperative study and planning to develop regional consistency and shared programs. It does, in fact, strongly encourage the Copermittees to develop regional and consistent management approaches to the management of storm water discharge. It is anticipated that future NPDES Permits for Storm Water will be issued by watershed rather than by jurisdiction. The elements of Section J are intended to transition the Copermittees into a watershed approach to storm water permitting and management.

Section: J Subsection: J

Comment: The additional requirement for the Watershed Urban Runoff Management Program is redundant with the Jurisdictional Urban Runoff Management Program and more importantly is in conflict with a stakeholder driven watershed approach. The proposed approach, without involvement from other stakeholders, will result in piece meal, redundant, and misdirected program producing little or no improvement in water quality. Generating another management program (i.e. the Watershed Urban Runoff Management Program) is redundant and inefficient as presently proposed and should be revised or deleted. (County of Orange)

Response: The Watershed Urban Runoff Management Program (WURMP) is not redundant with the Jurisdictional Management Program (JURMP) , but rather an extension of the JURMP and a means for each Copermittee to make the transition from jurisdictional storm water management programs to watershed based storm water management programs. The Tentative Order does not prevent the Copermittees from using a stakeholder driven approach and, in fact, requires and encourages public participation.

Section: J Subsection:

Comment: The permit's emphasis on "watershed-based" planning is appropriate and will result in efficient environmental management. (Environmental Health Coalition)

Response: Comment noted.

Section: J Subsection:

Comment: Why was the Tentative Order not based upon a watershed approach rather than a jurisdictional approach? (Aminpour, Khosro)

Response: The Tentative Order establishes that each Copermittee is responsible for the implementation of the Order within its jurisdiction. The Tentative Order, however, addresses the need for a watershed approach in urban runoff management and for consistency between jurisdictional level

programs. The requirement that within a watershed the Copermittees shall collaborate to develop and implement a Watershed Urban Runoff Management Program is intended to prepare the Copermittees for the anticipated watershed-delineated NPDES Storm Water Permits.

Section: J **Subsection:**

Comment: Are MS4s in more than one watershed subject to separate applications or regulations? (Mendoza, Carlos)

Response: The operators (Copermittees) of MS4s that are located in more than one watershed are subject to requirements for each watershed in which their MS4 is located. Several Copermittees will be required to participate in the development and implementation of more than one Watershed Urban Runoff Management Program.

Section: J **Subsection:**

Comment: Can the tentative order require the compilation of fertilizers and pesticides bought and applied per watershed from sales data? (San Diego Audubon Society)

Response: The compilation of fertilizers and pesticides purchased and applied per watershed from sales data can be performed at the Copermittees' discretion. The inclusion of this requirement in the Tentative Order is not necessary and would be too prescriptive.

Section: J **Subsection: J**

Comment: The City of Imperial Beach wants to implement lead watershed Copermittee responsibilities but wants financial and staffing assistance from the other watershed Copermittees. (City of Imperial Beach)

Response: Comment noted. The Copermittees are strongly encouraged to collaborate in the development of the Watershed Urban Runoff Management Programs.

Section: J **Subsection: J**

Comment: The City of El Cajon does not want to be the lead coordinator for the San Diego watershed because it is only a minor inland contributor to the watershed. (City of El Cajon)

Response: The selection of the Lead Permittees was based on a need to share the burden among all the Copermittees and to actively engage each Copermittee in the Watershed Urban Runoff Management Program development. The City of El Cajon is located within the watershed of a major tributary (Forrester Creek) of the San Diego River and has industrial and commercial parks located on the banks of this tributary. As indicated in the workshops, the Copermittees will be allowed discretion in selecting

Lead Permittees, but in the event that a Lead Permittee is not selected for a given watershed, the Copermittee indicated in the Tentative Order as the Lead Permittee will be designated the Lead Permittee by default.

Section: J **Subsection: J**

Comment: The City of Escondido does not want to be the lead watershed coordinator because it is a only a minor inland contributor in the watershed and a rationale should be developed to determine who the watershed lead coordinator should be. (City of Escondido)

Response: The selection of the Lead Permittees was based on a need to share the burden among all the Copermittees and to actively engage each Copermittee in the Watershed Urban Runoff Management Program development. As indicated in the workshops, the Copermittees will be allowed discretion in selecting Lead Permittees, but in the event that a Lead Permittee is not selected for a given watershed, the Copermittee indicated in the Tentative Order as the Lead Permittee will be designated the Lead Permittee by default.

Section: J **Subsection: J**

Comment: The BMP's that may result from the Watershed URMP might have significant costs that affect the Jurisdictional URMP. (Pountney & Associates)

Response: SDRWQCB recognizes that the implementation of BMPs may have significant costs. However, it does not expect that the implementation of the Watershed URMP will negatively impact the Jurisdictional URMP. These two programs were designed to compliment one another.

Section: J **Subsection: J**

Comment: Redundant phrase . . . to identify and mitigate. . . at p.41/50, paragraph J.1 should be deleted in favor of similar language in J.2.c which requires identification and prioritization of water quality problems. . . (City of Imperial Beach)

Response: Comment noted. Section J.1 of the Tentative Order identifies each of the Copermittees with their respective watershed(s) and requires collaboration to identify and mitigate the highest priority water quality issues/pollutants in the watershed(s). Section J.2 establishes the minimum requirements for the Watershed Urban Runoff Management Programs.

Section: J **Subsection: J**

Comment: Does the tentative Order allow a Storm Water Utility District be the lead watershed Copermittee? (Anonymous Workshop 1)

Response: A storm water utility district may be the lead watershed Copermittee. The formation of a storm water utility district, however, does not release the Copermittees from the individual and collective responsibilities to implement the requirements of the Tentative Order.

Section: J Subsection: J

Comment: When watershed URMP are in effect will jurisdiction URMP requirements be rescinded or modified? (Anonymous Workshop 1)

Response: The Jurisdictional Urban Runoff Management Program requirements will not be modified or rescinded by the SDRWQCB once the Watershed Urban Runoff Management Programs are in effect. The Watershed URMPs are an extension of the Jurisdictional URMPs and are meant to ensure consistency between programs within a watershed. The Watershed URMPs do not replace the Jurisdictional URMPs because each municipalities are individually responsible for their programs.

Section: J Subsection: J.1

Comment: Redundant phrase . . To identify and mitigate. . . at p.41/50, paragraph J.1 should be deleted in favor of similar language in J.2.c which requires identification and prioritization of water quality problems. . . (City of Imperial Beach)

Response: Comment noted. Section J.1 of the Tentative Order identifies each of the Copermittees with their respective watershed(s) and requires collaboration to identify and mitigate the highest priority water quality issues/pollutants in the watershed(s). Section J.2 establishes the minimum requirements for the Watershed Urban Runoff Management Programs.

Section: J Subsection: J.2.b

Comment: Water quality assessment is the responsibility of the RWQCB. While it is legal and appropriate to require Copermittees to monitor their own discharges, and the effects thereof, this requirement seems to reflect a different thinking. All monitoring data will be reported and interpreted in the Copermittees' monitoring reports. Also, the requirement to evaluate "[A]ll receiving waters in the watershed" is too broad a mandate. This does not allow for prioritization of efforts and would presumably open the door for a requirement for the collection of monitoring data from every receiving water in the County. Finally, the RWQCB cannot require Copermittees to assess "existing water quality data" unless it is collected pursuant to this Order. This requirement would be place the general responsibility for assessment and interpretation of water quality data on the Copermittees rather than the RWQCB. Section J.2.b should be deleted. (County of San Diego)

Response: The Tentative Order contains requirements for the development of Watershed Urban Runoff Management Programs. Most Copermittees have expressed strong support for the program, in that it allows for them to focus on the problems within their respective watersheds. However, to focus on problems within a watershed, one must know what those problems are. A water quality assessment that encompasses all of the receiving waters to which the Copermittees discharge urban Runoff is necessary.

An effective Watershed Urban Runoff Management Program should welcome consideration of all available data. Refusal to consider some data could lead to misguided programs. For this reason, section J.2.b was included in the Tentative Order.

Section 13225(c) of the California Water Code authorizes the Regional Board to "Require as necessary any state of 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."

Section: J Subsection: J.2.f

Comment: The language of sections F.6, H.1.a(8)(a), and J.2.f should be revised to add language that is more specific and will provide for better public participation. This is one of the most important components of the permit and needs to be expanded to facilitate public involvement in the decision making processes. (Chula Vista, Surfers Tired of Pollution)

Response: The requirements for public participation provide flexibilityand discretion to the Copermittees to determine when and in what manner the public will participate in the development and implementation of the Jurisdictional and Watershed Urban Runoff Management Plans. Adding more specific language will limit that flexibility unnecessarily.

Section: J Subsection: J.2.a

Comment: Where can a listing of impairments to the Pacific Ocean be found?
Is the Pacific Ocean considered to be bacteriologically impaired at all times? (City of Coronado)

Response: The listing of impaired water bodies for the State of California may be found on the State Water Resources Control Board website (http://www.swrcb/tmdl/index.html). The determination that certain defined areas of the Pacific Ocean along the coast of the San Diego Region are bacteriologically impaired (i.e. the Pollutant/Stressor is High Coliform Count) is based on the number of beach closure days posted by the County of San Diego. Beach closures affect the beneficial uses of the Pacific Ocean. Thus, although coliform counts may vary day to day, an area is still considered impaired until the number of beach closure days is reduced and the area is formally removed from the 303(d) list.

Section: J Subsection: J.2.c

Comment: This directive is not implementable. Identification of the “likely source(s) of the problem(s)” at a watershed scale and understanding the relationship of MS4 discharges to “major water quality problems” are both exceedingly complex tasks that are beyond the expertise and resources of the Copermittees. In the context of this section, such a task is unlikely to produce more than general statements. (County of San Diego)

Response: The requirements of Section J.2.c for the Copermittees to identify and prioritize major water quality problems in the watershed caused or contributed to by MS4 discharges and the likely source(s) of the problem(s) is based on the ten years experience that the Copermittees have acquired while implementing the requirements of Order 90-42. In particular, the Copermittees have conducted seven years of receiving waters monitoring, which included mass loading estimates of pollutants from several categories of land use, and are currently in the process of evaluating previous monitoring data and methods for the Previous Monitoring and Future Recommendations Report. Some commentors have requested greater Copermittee latitude and discretion in determining the requirements of the receiving waters monitoring program, the dry weather monitoring program, and the development of storm water programs, among other provisions, based upon their knowledge of their existing MS4 systems and watershed information. In fact one Copermittee specifically requested that "the Watersheds should be given the flexibility to apply resources to the areas of highest concern and greatest potential to resolve problems." Given that there is some confidence among the Copermittees that they can make these determinations, the identification and prioritization of major water quality problems in the watersheds caused or contributed to by MS4 discharges and the likely source(s) of the problem(s) should not be beyond the expertise and resources of the Copermittees.

Section: J Subsection: J.2.d

Comment: This section is contradictory. If these activities really are “recommended”, the Copermittees cannot schedule their completion with any certainty. (County of San Diego)

Response: Section J.2.d is not contradictory. Section J.2.d of the Watershed Urban Runoff Management Program requires the Copermittees to propose an implementation schedule for activities they recommend to address high priority water quality problems. These activities can be conducted collectively or individually, at the Copermittees discretion, to address the highest priority water quality problems. The Copermittees have the flexibility and are in the best position to determine which of their recommended activities they can complete within a time frame they determine is most reasonable with some degree of certainty.

Section: J Subsection: J.2.g

Comment: Page 41 of 50 J.2.g. – Who are the audiences that the watershed based education program apply to? (City of Chula Vista)

Response: The Copermittees have the discretion to determine the audiences for their watershed based education programs. In general, the audiences would be those identified in their Jurisdictional Urban Runoff Management Programs for that watershed.

Section: J Subsection: J.2.g

Comment: Is this a requirement for an additional collaborative program or can jurisdictional programs be amended to reflect watershed issues? (County of San Diego)

Response: Jurisdictional programs can be amended to reflect watershed issues.

Section: J **Subsection: J.2.h**

Comment: Ambiguous requirements. Subsection (h) requires the Copermittees to create a "mechanism to facilitate collaborative 'watershed-based'. . . land use planning with neighboring local governments in the watershed." Even though each local agency has independent land use planning authority and processes, the Copermittees should be able to create a mechanism that will facilitate collaboration. However, subsection (i) requires that collaborative watershed-based land use planning occur on a schedule beginning in January 2005. Requiring the such planning occurs is completely different than creating a mechanism to facilitate collaboration. Therefore, subsection (i) is inconsistent with subsection (h) and removes the needed flexibility provided by the use of "facilitate" in subsection (h). (County of San Diego)

Response: While the SDRWQCB strongly supports collaborative watershed-based land use planning, it acknowledges that it may not always be possible. In order to provide the Copermittees with discretion with their land use planning, section J.2.i. has been removed from the Tentative Order.

See change at permit section J.2.i.

Section: J **Subsection: J.2.i.**

Comment: These requirements exceed the Regional Board's authority and demands that the Copermittees exercise authority they do not possess. Subsection (i)'s requirement is an unlawful and unwarranted invasion by the Regional Board into the land use planning authority of the Copermittees. They also require the Copermittees to be in a position to interfere with or control the land use planning processes of the other Copermittees. Subsection (h) provides sufficient flexibility to be workable for the Copermittees. However, the mandate required by subsection (i) is not workable, nor lawful. (County of San Diego)

Response: While the SDRWQCB strongly supports collaborative watershed-based land use planning, it acknowledges that it may not always be possible. In order to provide the Copermittees with discretion with their land use planning, section J.2.i. has been removed from the Tentative Order.

See change at permit section J.2.i.

Section: L **Subsection: L**

Comment: Please comment on the need or benefit of the unified watershed URMP document & annual report. Since the RWQCB has designated 9 watersheds based on their individual needs/concerns, is a unified approach contrary to the watershed approach?
The City questions the need to prepare a unified Jurisdictional URMP annual report detailing the common activities of the Copermittees, as such activities will be set out in each Copermittee's individual

Jurisdictional URMP annual report and more importantly, in the Watershed URMP Annual Report. (County of San Diego (492) City of San Diego)

Response: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv) require each Copermittee to develop and implement an urban runoff management program. The SDRWQCB must assess the urban runoff management program to ensure that it is adequate to prohibit non-storm water discharges and reduce pollutant discharges to and from the MS4 to the maximum extent practicable. In order for the SDRWQCB to assess the urban runoff management program, each Copermittee must submit to the SDRWQCB a description of their program. The description must detail all activities the Copermittee is undertaking to implement the requirements of each component of the Jurisdictional URMP section of Order No. 2001-01.

The submittal schedule of 180 and 365 days for Jurisdictional URMP documents is designed to provide each Copermittee some time to develop its Jurisdictional URMP. However, this time is limited since the Jurisdictional URMP requirements are based on NPDES regulations which have been in place for many years. The vast majority of the requirements in the Jurisdictional URMP should already be implemented by each Copermittee. Therefore, the provided submittal schedule should be more than adequate for each Copermittee to rework its Jurisdictional URMP to meet the Jurisdictional URMP requirements of Order No. 2001-01.

Compilation of the individual Jurisdictional URMP documents into a unified Jurisdictional URMP document by the Principal Permittee will ease the effort needed to assess and digest the information contained in the documents. The Principal Permittee's provision of a summary covering common activities conducted collectively by the Copermittees will provide a useful overview of urban runoff management efforts within the County of San Diego. This type of compilation of the Copermittees' documents has been recommended by the Copermittees in the past.

The reporting requirements in H.1.a and H.1.b are directly based on the requirements of the Jurisdictional Urban Runoff Management Programs. Reporting on all aspects of the Jurisdictional Urban Runoff Management Programs is necessary for the SDRWQCB to assess the Copermittees' compliance with the Tentative Order. Therefore, the requirements of H.1.a and H.1 b are appropriate.

The SDRWQCB has discretion to require Submittal of Jurisdictional URMP Document item H. in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: L **Subsection: L**

Comment: City of Poway does not want to be the lead watershed Copermittee until extent of work and cost is identified. (City of Poway)

Response: The selection of the Lead Permittees was based on a need to share the burden among all the Copermittees and to actively engage each Copermittee in the Watershed Urban Runoff Management Program development. The City of Poway is partially located within the watersheds of Los Penasquitos Creek and its tributaries Poway, Beeler, and Rattlesnake Creeks. As indicated in the workshops, the Copermittees will be allowed discretion in selecting Lead Permittees, but in the event that a Lead Permittee is not selected for a given watershed, the Copermittee indicated in the Tentative Order as the Lead Permittee will be designated the Lead Permittee by default.

Section: M Subsection: M

Comment: As part of the unified Watershed Annual Report, the Principal Permittee, must a draft a description of common activities performed collectively by the Copermittees. This is unnecessary since such common activities already will be described in each watershed's Watershed Annual Report. The requirement to submit the unified Watershed Annual Report be deleted. The lists of reporting requirements in sections (M1)... are cumbersome and will likely be subject to significant change if the permit is amended these lists should be deleted and replaced with a requirement for the Copermittees to develop and submit report formats (including suggested content) at least 90 days prior to each submittal deadline. The deleted detail should instead be located in the Technical Report as suggested guidance. (City of San Diego, County of San Diego)

Response: Federal NPDES regulations 40 CFR 122.26(d)(2)(iv) require the Copermittees to develop and implement urban runoff management programs, of which the Watershed Urban Runoff Management Programs (WURMPs) are a part. The SDRWQCB must assess the WURMPs to ensure that they are adequate to assess and address the specific water quality problems within each watershed. In order for the SDRWQCB to assess the WURMPs, the Copermittees must submit to the SDRWQCB annual reports describing all of the activities undertaken to meet the requirements of the Watershed URMP section of Order No. 2001-01.

The Unified Watershed Urban Runoff Management Program Annual Report (WURMP) to cover common activities conducted collectively by the Copermittees under the Watershed URMP section of Order No. 2001-01. The rest of the Unified WURMP Annual Report consists of the submitted WURMP Annual Reports submitted by the Copermittees from each watershed. The Unified WURMP Annual Reports can also be useful tools for the Copermittees. They provide a focus to review, update, or revise the URMPs on an annual basis. Successful and unsuccessful measures can be identified, helping to focus efforts on areas or issues which provide the greatest results. Areas or issues which have received insufficient efforts can also be identified and improved.

The SDRWQCB has the discretion to require Submittal of Watershed URMP Annual Report item M. in Order No. 2001-01 under the broad and specific legal authority cited in the Fact Sheet/Technical Report.

Section: N Subsection:

Comment: The relative brevity of this section reflects a general underemphasis on regional activities in Tentative Order No. 2001-01. As a whole, this Order presents a significant potential for the concurrent development of numerous inconsistent programs. By rushing to develop compliant programs that are consistent with their legal obligations at the jurisdictional level, Copermittees will give short shrift to the regional consistency that is critical for long-term program success. The region's citizens and business community will demand the consistency not provided for here. The County recommends that Tentative Order No. 2001-01 be withdrawn, and that the RWQCB work with Copermittees to develop a program structure that gives adequate weight to regional, watershed, and jurisdictional issues, and fully considers the inter-relationship of each during program implementation. (County of San Diego)

Response: The Tentative Order does require Copermittee collaboration and consistency regionwide. The Tentative Order states in section N.1 that "Each Copermittee shall collaborate with all other Copermittees regulated under this Order to address common issues, promote consistency among Jurisdictional Urban Runoff Management Programs (Jurisdictional URMPs) and Watershed Urban Runoff Management Programs (Watershed URMPs), and to plan and coordinate activities required under this Order." Nothing in the Tentative Order precludes the Copermittees from collaborating as much as they wish. In fact, nothing has precluded the Copermittees from collaborating on regional consistency over the last 10 years.

Section: O Subsection:

Comment: Add: 4. Serve as a liaison between the Copermittees and the Local Vector Control Agency and State Department of Health Services to ensure that the BMPs used do not create public nuisances. (State Department of Health Services)

Response: The proposed requirement that the Principle Permittee serve as a liaison between the Copermittees and local vector control agencies and State Department of Health Services is unnecessary. Sufficient provisions exist in the Jurisdictional Urban Runoff Management Program for the Copermittees and local vector control agencies and the State Department of Health Services to participate in the development of the JURMP to prevent vector production and the creation of public nuisances. However, in recognition of the potential public health threat, an additional Finding is recommended to be added to the Tentative Order. The Finding (no. 36) identifies the potential vector issues related to BMP implementation and the role of collaborative program development between municipalities and vector control agencies in addressing an minimizing vector production.

Section: O Subsection: O

Comment: Responsibilities of the principal permittee should not be specified in detail in Tentative Order No. 2001-01. These details should be worked out and formalized amongst the Copermittees. (County of San Diego)

Response: The revised Tentative Order defines the minimum level of responsibility that must be assumed by the Principal Permittee. The SDRWQCB has discretion to require Principal Permittee Responsibilities in item O. of Tentative Order No. 2001-01 under the broad and specific legal authority in the Fact Sheet/Technical Report.

Section: O Subsection: O

Comment: As previously noted, the City would want to enter into an agreement with the Regional Board that clearly spells out each party's role and shared responsibilities concerning storm water discharges at permitted industrial and construction sites, as well as to establish and clarify the roles, responsibilities, and expectations as Principal Permittee to expressly limit liability and legal exposure for other Copermittees' non-compliance. If the City is unable to come to an agreement with the Regional Board concerning these agreements, the City would be unwilling to serve as Principal Permittee. (City of San Diego)

Response: The Copermittees are not responsible for enforcing or overseeing the General Statewide Industrial or Construction Permits. The SDRWQCB will enforce the General Statewide Industrial and Construction Permits. The Copermittees are however, responsible for enforcing their ordinances that implement the Tentative Order, including the prohibitions against illicit discharges. In some cases, the Copermittees may be required to implement or require the implementation of BMPs at construction or industrial sites that exceed the minimum requirements of the General Statewide Industrial or Construction Permits in order to achieve compliance with the requirements of the Tentative Order. USEPA supports this approach, clearly placing responsibility for the control of discharges from construction and industrial sites with municipalities. The USEPA notes in the preamble to the Storm Water Regulations that municipalities are in the best place to enforce compliance with storm water discharge requirements:

"Because storm water from industrial facilities may be a major contributor of pollutants to MS4s, municipalities are obligated to develop controls for storm water discharges associated with industrial activity through their system in their storm water management program…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 noted in the Fact Sheet/Technical Report, the USEPA felt it so important to control the discharge of pollutants from construction and industry that it established a double system of regulation over construction and industrial sites. Two parallel regulatory systems were established with the same common objective of keeping pollutants from construction and industrial sites out of the MS4. A structure was created where local governments must enforce their local ordinances and permits as required under their municipal storm water permits, while the SDRWQCB (state) must enforce its statewide general construction and industrial storm water permits. The two regulatory systems were designed to complement and support each other in the shared goal of minimizing pollutant discharges in runoff from construction and industrial sites.

Local governments have the primary regulatory authority over the majority of construction and industrial sites since they issue the development and land use permits for the sites. In other words, the Copermittees are responsible for the water quality consequences of their planning, construction, and land use decisions.

Regarding construction sites, USEPA also places enforcement responsibility on municipalities, requiring small municipalities to develop and implement "[a]n ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance […]" (40 CFR 122.34(b)(4)(ii)(A)). In its guidance for the Phase II regulations, US EPA goes on to support increased municipality responsibility, stating "Even though all construction sites that disturb more than one acre are covered nationally by an NPDES storm water permit, the construction site runoff control minimum measure for the small MS4 program is needed to induce more localized site regulation and enforcement efforts, and to enable operators of regulated small MS4s to more effectively control construction site discharges into their MS4s." While these above citations refer to small municipalities under Phase II of the NPDES program, USEPA recommendations to small municipalities are applicable to larger municipalities such as the Copermittees, due to the typically more serious water quality concerns attributed to such larger municipalities.

The language of the Tentative Order has been revised to more carefully describe the requirements of the Tentative Order with regard to the dual regulation of construction and industrial sites as discussed above. With the recent addition of resources and staff from budget augmentations in several programs, including storm water, the SDRWQCB will "vigorously administer and enforce" the General Statewide Industrial

and Construction permits as requested by one commentor. The language of Finding 24 of the Tentative Order has been revised to remove all discussion of what constitutes "good faith" in enforcing local legal authority. Furthermore, the Tentative Order does not "reward" Copermittees that enforce its storm water ordinances that implement the Tentative Order. Rather, the Section F.2.g.2 offers the Copermittees the discretion to voluntarily use the requirements of the General Construction Permit to implement and enforce its own storm water ordinances. The SDRWQCB will enforce the General Statewide Construction Permit; the Copermittees are enforcing their own storm water ordinances.

The Tentative Order clearly defines and describes the responsibilities of the Copermittees with regard to storm water and authorized non-storm water discharges from permitted industrial and construction sites. The Tentative Order is a NPDES Permit and Waste Discharge Requirements that specify the conditions under which discharges of urban runoff from municipal separate storm sewer systems is authorized and is not an "agreement" between the SDRWQCB and the Principle or Copermittees.

The SDRWQCB has the broad and specific legal authority cited in the Fact Sheet/Technical Report

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Section: O Subsection: O

Comment: What criteria was used to select the Principal Copermittee? (Anonymous Workshop 1)

Response: The Principal Permittee was selected based on the level of experience and organizational preparedness demonstrated by the Principal Permittee under Order 90-42. The revised Tentative Order provides the Copermittees the flexibility and discretion to select a Principle Permittee(s).

Section: R Subsection: R.1

Comment: Reference is made to Section B.7. of Attachment C - should this be B.6.? (City of Coronado)

Response: The reference should have been B.6. The revised Tentative Order contains the corrected reference to Section B.6 of Attachment C.

Section: Attachment B Subsection: Attachment B

Comment: It is premature to require Coastal Storm Drain Outfall Monitoring of the Copermittees in the Tentative Order. The San Diego County Department of Environmental Health should be responsible for conducting this monitoring since they are State funded under AB 411 and are familiar with the coastal areas and the monitoring requirements. By assigning this effort to the Copermittees, duplication of efforts and existing expertise would occur which doesn't seem to be a cost effective way to obtain the information.
1. As stated in the Draft Fact Sheet/Staff Report for the Tentative Order, this program should be "integrated and coordinated with similar monitoring programs."
2. The continuation of "routine monitoring" will not aid in the effective resolution of this problem.

3. The Tentative Order should be revised to require the development of a coordinated program between state, regional, and local entities to address water quality problems associated with coastal storm drains during dry and wet weathers.
4. It is recommended that the future monitoring program be based on the assessment being currently performed, that a coordinated coastal storm drain monitoring program be developed to address dry and wet weather water quality problems associated with coastal storm drains but not include it as a permit requirement at this time. (Anonymous, La Mesa, City of San Diego, San Diego Copermittees)

Response: Following adoption of the Order and the submittal and review of the Previous Monitoring and Recommendations Report, it was anticipated that the Copermittees would meet with the SDRWQCB and the County Department of Environmental Health to determine how to conduct the Coastal Storm Drain Outfall Monitoring. AB 411 only requires dry weather monitoring of storm drains that discharge onto public beaches visited by at least 50,000 people per year. This monitoring is not required during the wet weather months. The Coastal Storm Drain Outfall Monitoring was intended in part to fill in this gap in storm drain outfall monitoring while also serving as an assessment of compliance assessment.

Section: Attachment B **Subsection: Attachment B**

Comment: The Tentative Order should not specify that monitoring be performed by a single contractor.
1. The RWQCB does not possess the legal authority to specify contractual relationships between Copermittees and/or their contractors.
2. Given the number of new requirements specified in the receiving waters monitoring program, it is likely that a single contractor cannot perform the work efficiently or cost effectively.
3. This requirement would limit the co-permittees flexibility to get the work done cost effectively.
4. Protocols can be established and work executed successfully with several contractors. (Anonymous, City of San Diego, County of San Diego)

Response: The requirement has been deleted.

Section: Attachment B **Subsection: Attachment B**

Comment: The first reporting period specified in the Tentative Order (October 2000-September 2001) should be changed to reflect the adoption schedule of the Tentative Order and the submittal of the Previous Monitoring and Future Recommendations Report. (Anonymous, City of San Diego)

Response: The first reporting period has been changed to reflect the adoption schedule of the Tentative Order and the anticipated submittal of the Previous Monitoring and Future Recommendations Report.

Section: Attachment B **Subsection: Attachment B**

Comment: The SDRWQCB has not provided the necessary justification and cost/benefit analysis for the Receiving Waters Monitoring Program.
Technical Report provides little discussion of the proposed elements, and no discussion of how they support the four objectives stated in the introduction to Attachment B. The RWQCB has an obligation to provide this justification, and specifically to consider the potential costs of the program. These costs are clearly very significant, and therefore should not and cannot be imposed without adequate justification by the SDRWQCB. The Technical Report fails to provide this justification. The Order imposes monitoring requirements that cannot be compelled under state law because no cost/benefit analysis has been performed. Section 13267(b)(1) imposes a requirement that "[t]he 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." Similarly, sections 13165 and 13235 require that a cost/benefit analysis be conducted before certain investigation obligations and reporting requirements can be imposed on state and local entities. The Fact Sheet/Technical Report argues that the reports mandated by the Order are needed, and are related to program goals. However, the Technical Report does not estimate the burden, costs, or benefits of the required work. Therefore, the requirements of sections 13267(b)(1), 13165, and13235 have not been met. Moreover, federal law also requires the "maximum extent practicable" standard to be applied in a "site specific flexible manner, taking into account cost considerations as well as water quality effects." (See 64 Fed. Reg. 68735.) (County of San Diego,)

Response: The Tentative Order and Fact Sheet/Technical Report provides the necessary justification and cite the broad and specific legal authority to require the Receiving Waters Monitoring Program. A cost/benefit analysis is the responsibility of the Copermittees to determine and optimize. According to one estimate submitted by a commentor, the annual financial burden for receiving waters monitoring under Tentative Order 2001-01 will be approximately $70,000 per Copermittee. Currently, each Copermittee contributes approximately $35,000 each annually for receiving waters monitoring. In comparison, San Diego shipyards with NPDES permits are spending in excess of $200,000 annually each for receiving water quality monitoring in a significantly smaller geographic area. The Bight 1998 Summer Shoreline Microbiology Study (Noble et. al. 2000) found that expressed as a fraction of tourism dollars and per capita,among the Southern California counties, San Diego County spent the smallest and second smallest amount, respectively, on shoreline monitoring similar to that proposed in the Tentative Order. The discharge of storm water in San Diego represents the single largest discharge of pollutants in San Diego receiving waters and yet receives one of the smallest relative monitoring efforts regionally. Consequently, the relative increase in expected expenditure per Copermittee for receiving water monitoring is reasonable and regionally consistent.

Section: Attachment B **Subsection: Attachment B**

Comment: The requirement that Receiving Waters Monitoring Reports be reviewed by an independent committee is illegal and impracticable and should be deleted. This process would substantially increase the cost and time required to produce and submit monitoring reports, with little or no apparent benefit. Clarification is required on the requirements and qualifications that an independent committee of peers need to review the monitoring reports prior to submittal to the SDRWQCB. The RWQCB does not possess adequate legal authority to mandate that reports the Copermittees submit be reviewed by an external committee. (County of San Diego, City of San Diego, Anonymous, Chula Vista)

Response: The requirement has been revised to require only that the Receiving Waters Monitoring Report be reviewed by a committee. The review of monitoring reports prior to submittal is reasonable and necessary to ensure completeness and scientific accuracy.

Section: Attachment B **Subsection: Attachment B**

Comment: The RWQCB also has no authority to require Copermittees to contribute to the costs of monitoring waters that are not affected by that Copermittee's discharges of stormwater without further public notice. We request that additional language be added to this paragraph clarifying that, if the Regional Board so directs Copermittees, Copermittees' participation in such comprehensive regional monitoring activities shall take the place of all monitoring activities specified in Attachment B, and Copermittees shall no longer be required to comply with the provisions contained in Attachment B. Any requirement to share the costs of regional monitoring must include an exemption if a Copermittee can demonstrate that discharges from its MS4s do not affect the quality of the waters being monitored. (City of San Diego, County of San Diego, Carlsbad)

Response: The requirement has been modified to require participation in regional monitoring efforts (e.g. The Bight 1998 Summer Shoreline Microbiology Study) in lieu of specific Tentative Order 2001-01 monitoring requirements by order of the SDRWQCB Executive Officer. San Diego Copermittees collectively discharge urban runoff to the Southern California Bight and thus bear a responsibility for monitoring receiving water quality impacts in the Southern California Bight resulting from that discharge. Participation in multi-agency monitoring efforts that address specific regional problems resulting from these discharges is both reasonable and necessary to satisfactorily assess the impact of permitted urban runoff on the water quality of the Southern California Bight.

Section: Attachment B **Subsection: Attachment B**

Comment: The Receiving Waters Monitoring Program is inadequate and should include an evaluation of the effectiveness of the pollution control BMPs. This section should be revised to require corrective action in the event that the monitoring program has identified a given BMP not to be effective. The current Copermittee joint monitoring and reporting is insufficient to comply with the mandates of the existing permit and EPA regulations. Expanded monitoring is required by both coastal and inland Copermittees. (Sierra Club, Surfrider Foundation)

Response: The Receiving Waters Monitoring Program of Attachment B is a framework for the Copermittees to implement as they and their advisors indicate is most scientifically and cost effectively effective manner subject to SDRWQCB review. The Receiving Waters Monitoring Program will implicitly assess the effectiveness of the Copermittees pollution control BMPS. Expanded monitoring and assessment are implicit on the Tentative Order's Receiving Waters Monitoring Program. The SDRWQCB has the authority to require corrective action in the event that the monitoring program has identified discharges that are causing or contributing to an exceedance of receiving water quality objectives.

Section: Attachment B **Subsection: Attachment B**

Comment: The monitoring requirement for San Diego Bay Toxic Hot Spots should only apply to the nine Copermittees in the San Diego Bay watershed, and should not be required until after the review and assessment of existing storm water data and program tools. (Anonymous, La Mesa, El Cajon, San Diego Copermittees, Esondido)

Response: The Copermittees have the discretion to assign responsibility for various monitoring requirements as they see fit. This element of the Receiving Waters Monitoring Program was discussed with the Copermittees on August 18, 2000. The results of the Previous Monitoring and Future Recommendations Report will be considered with respect to how to implement and coordinate this element in the Receiving Waters Monitoring Program.

Section: Attachment B **Subsection: Attachment B**

Comment: The proposed program is inconsistent with previous SDRWQCB direction. On August 18, 2000, several Copermittees and SDRWQCB staff met to discuss ideas on the future direction of the Copermittees' wet weather monitoring program both for the 2000/2001 wet weather season and beyond. All present agreed that greater cooperation between Copermittees and the SDRWQCB was desirable, and that the best means of finding a common direction was through an in-depth assessment of existing data and potential program tools. At that meeting, the Copermittees agreed to conduct this assessment, and committed approximately $250,000 toward that end. At that time, SDRWQCB staff also agreed that the development of future program details should be delayed until the results of the assessment were available. The receiving waters monitoring program should be proposed by the Copermittees after the completion of the review and assessment of the existing storm water monitoring data and potential program tools in August 2001. Moreover, it is inappropriate for the Tentative Order to require the submittal of the Previous Monitoring and Future Recommendations Report, as the Copermittees are preparing this aforementioned report under the existing MS4 storm water permit with a previously agreed upon deadline (with Regional Board staff) of August, 2001. (County of San Diego, City of San Diego, San Diego Copermittees)

Response: The monitoring requirements are not premature or inconsistent with previous SDRWQCB direction. During the August 18, 2000 meeting, the representatives of the Copermittees were shown the draft Receiving Waters Monitoring Program, including the requirement for the Previous Monitoring and Future Recommendations Report. The various elements of that program were discussed. Staff indicated that these elements were expected to form the framework for the Receiving Waters Monitoring Program that would be implemented under Tentative Order 2001. The Copermittees proposal to conduct an assessment of previous monitoring data and available tools and techniques under 90-42 was considered to be an early start on the Previous Monitoring and Future Recommendations requirement of Attachment B of the Tentative Order. The Previous Monitoring and Future Recommendations Report, to be submitted in August 2001, was expected to specify how these elements would be implemented and coordinated, not whether to include them or not. Nonetheless, staff expects revisions can be made at the discretion of the SDRWQCB Executive Officer after submittal and review of the Copermittees Previous Monitoring and Future Recommendations Report.

Section: Attachment Subsection: B

Comment: Who has the financial responsibility for sampling a dry weather storm drain within a POTW footprint? (Anonymous Workshop 3)

Response: The Tentative Order anticipates that the Copermittees will meet with operators of POTWs to determine an equitable division of responsibility for monitoring coastal storm drain outfalls within POTW footprints. The Copermittees will be expected to conduct year-round monitoring of coastal storm drain outfalls under the Receiving Waters Monitoring Program.

Section: Attachment Subsection: B

Comment: Do all Copermittees need to participate in storm drain monitoring or is storm drain monitoring just for the coastal cities? (City of San Diego)

Response: Each of the Copermittees will be responsible for participating in the Coastal Storm Drain Outfall Monitoring component of the Receiving Waters Monitoring Program. This monitoring is necessary for evaluating the impact of the discharge of urban runoff into coastal receiving waters.

Section: Attachment Subsection: B

Comment: How are samples to be taken when a storm drain discharge at a beach immediately infiltrates into the sand? (City of Imperial Beach)

Response: Samples should be taken just upgradient of the point where the discharge infiltrates into the sand. This location would be in the storm drain prior to the discharge entering the sand.

Section: Attachment Subsection: B

Comment: What is the correlation between bioassessment and waters impaired by sediment loading? (Anonymous Workshop 1)

Response: Bioassessment is a direct measurement of the impact of the discharge of urban runoff on the benthic invertebrate community of the receiving waters. Excess sediment loading is one of many parameters that is directly correlated with the benthic invertebrate community composition and structure.

Section: Attachment Subsection: B

Comment: What QA/QCand what monitoring data base will the tentative order require to ensure that the monitoring data collected by the Copermittees will be transferable and reasonably useful in analyzing the water quality of the watershed and analyzing the actions taken to improve the water quality of the watershed? (City of Encinitas)

Response: sufficient directives exist in Attachment B of the Tentative Order, in addition to the certification requirements of environmental laboratories in California under the Environmental Laboratory Certification Program, and in the American Water Works Association Standard Methods for the Examination of Water and Waste Water to provide the Copermittees with guidance and standards regarding quality assurance and quality control requirements. The Copermittees will be required under Tentative Order 2001-01 to submit for SDRWQCB review a Previous Monitoring and Future Recommendations Report which will address both quality assurance and the implementation of a Receiving Waters Monitoring and Reporting Program that identifies impairments resulting from the discharge of urban runoff and actions on the part of the Copermittees necessary to address those impairments.

Section: Attachment B **Subsection: Attachment B**

Comment: Attachment B implies, but does not state, a requirement for a year-round monitoring effort. This is true in two places; first, the title of section II of the Attachment is "Receiving Waters Monitoring Program – Year Round"; second, section V.D. states a requirement for estimation of pollutant loads both during wet and dry weathers. This issue must be clarified. If it is the RWQCB's intention to expand the Copermittees' monitoring obligations to year-round, the County asserts that this is unsupported by Federal regulations. (County of San Diego)

Response: Some elements of the Receiving Waters Monitoring Program (I.e. urban stream bioassessment and sediment toxicity) are best performed before and after the wet weather season rather during storm events. In addition, the Receiving Waters Monitoring Program also requires dry and wet season analytical monitoring of coastal storm drain outfalls. The SDRWQCB has the broad and specific legal authority cited in the Fact Sheet/Technical Report to require these elements of the Receiving Waters Monitoring Program.

Section: Attachment B **Subsection: Attachment B**

Comment: The Receiving Waters Monitoring Program objectives are too general and should be more specific. (City of Chula Vista)

Response: In order to provide the Copermittees with flexibility and discretion, the Receiving Waters Monitoring Program has been largely limited to general descriptions of program elements. During a meeting on August 18, 2000, the representatives of the Copermittees were shown the draft Receiving Waters Monitoring Program, including the requirement for the Previous Monitoring and Future Recommendations Report. The various elements of that program were discussed. The Previous Monitoring and Future Recommendations Report, to be submitted in August 2001, is expected to specify how these elements would be implemented and coordinated.

Section: Attachment B **Subsection: Attachment B.II.C.4**

Comment: Attachment B-4 II.C.4. – How often are the samples to be taken during the wet season and dry seasons? (City of Chula Vista)

Response: In order to provide the Copermittees flexibility and discretion to implement the Receiving Waters Monitoring Program, sampling frequency will be determined by the Copermittees following review of the Previous Monitoring and Future Recommendations Report.

Section: Attachment C **Subsection: B.6**

Comment: The proposed requirement to require Copermittees to report all non-compliance orally within 24 hours and in writing within 5 days is not supported by 40 CFR 122.44(I)(6). Although staff cite this section in support of a blanket 24 hour / 5 day reporting requirement, it is clearly limited to those events endangering health or the environment. First, all instances of noncompliance do not necessarily endanger health or the environment. Second, and more importantly, noncompliance in this instance refers to that of the Copermittee, not of third party dischargers within our jurisdictions (unless we determine that they endanger health or the environment). Copermittees are fully capable of determining when a violation is most appropriately referred to other agencies, including the RWQCB. The Copermittees have the discretion in determining when referrals of noncompliance should be made to the RWQCB. The proposed requirement to require Copermittees to report all violations orally within 24 hours and in writing within 5 days is impractical, would create a huge paper trail, and would have no benefit.

Non-compliance notification should be limited to major issues, otherwise much effort and resources will be spent without great water quality benefit. Are minute discharges required to be reported? Does the requirement refer to working or calendar days? How should violations that occur on weekends or holidays be detected and reported? Would it not be better to have comprehensive reporting of non-compliance and actions taken by Copermittee in the annual report? This section should also describe what actions Regional Board staff will undertake following the submittal of this information. (City of San Diego, SANDAG, Poway, La Mesa, County of San Diego, San Diego Co-permittees, Imperial Beach, Carlsbad, Chula Vista, Coronado)

Response: The language of Attachment C Section B.6 has been revised to require the Copermittees to develop criteria by which to evaluate events of non-compliance may pose a threat to human or environmental health. These criteria shall be submitted in the Copermittees Jurisdictional Urban Runoff Management Program Documents and Annual Reports. Events of non-compliance that are identified and evaluated by the Copermittees with these criteria and are found to pose a threat to human or environmental health must be reported by the Copermittees under the requirements of Attachment C, Section B.6.

Section: Attachment **Subsection: C.8.a**

Comment: Please provide a definition for "bypass" in Attachment D - Glossary. (Port of San Diego)

Response: "The term bypass, is defined in Attachment C.8(a), as follows

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

Section: Attachment Subsection: C.9

Comment: Please clarify if letters complying with Attachment C.9 reporting requirements need to be signed by either a principal executive officer or ranking elected official? (Port of San Diego)

Response: Reporting Requirement C.9(a)3 describes signatory requirements applicable to the Port of San Diego.

Section: Attachment Subsection: D

Comment: Should define "storm event". The definition should be the same as the Los Angeles County and Cities in Los Angles County (LA County) municipal permit definition. Where a "Storm Event"is a rainfall event that produces more than 0. I inch of precipitation and that which, is separated from previous storm event by at least 72 hours of dry weather. (Sempra Energy)

Response: Since the Tentative Order allows for various methods of calculating numeric sizing criteria, different definitions of storm event may apply. For this reason, the definition of storm event is left to the discretion of the Copermittees, to be included in the model SUSMP.

Section: Attachment Subsection: D

Comment: Pollution Prevention Definition Recommend revising the definition to: "practices and processes that recycle, reuse, reduce, or eliminate the generation of pollutants, in contrast to source control, treatment, or disposal." (Port of San Diego)

Response: The definition of Pollution Prevention is appropriate and is recommended to be retained in the revised Tentative Order. Although recycling and reusing are appropriate methods of managing waste, they are more characteristic of "treatment" rather than prevention. Pollution prevention refers to reducing or eliminating pollutant generating activities.

Section: Attachment D Subsection: Attachment D

Comment: A clear definition of the term "Maximum Extent Practicable" is essential to the selection and sizing of BMPs. An attempt should be made to define as dearly a possible "maximum extent practicable." Recommend providing definition for "maximum extent practicable."
Who determines when MEP has been achieved? (McKenna & Cuneo, L.L.P., SANDAG, Port of San Diego, Oceanside)

Response: The definition of the term "MEP" (Maximum Extent Practicable) in Attachment D Glossary is based upon and supported by direction from the Federal regulations and guidance, the

USEPA, and SWRCB. It is as narrowly defined as possible without prescribing for the Copermittees exact conditions. In order to provide the Copermittees with flexibility and discretion, the Tentative Order avoids as much as possible too prescriptive language in defining MEP.

In essence, the Copermittees are given the discretion, within an overall framework, to evaluate the totality of conditions and propose MEP in their Jurisdictional Urban Runoff Management Program Documents and Annual Reports, subject to review and comment by the SDRWQCB. Thus, both through the JURMP and an iterative BMP implementation process, the definition of MEP for a given set of circumstances is determined, after which, the Copermittees are responsible for determining and reporting that MEP is being met through implementation of BMPs under their JURMPs, and later, their joint WURMPS. Ultimately, the SDRWQCB is responsible for determining when MEP has not been met and taking appropriate action.

Section: Attachment D **Subsection: Attachment D**

Comment: B. Proposed Definition
We propose the following definition:
"Maximum Extent Practicable" (MEP) is achieved when:
The project proponent demonstrates that for each pollutant of concern a range of BMPs have been evaluated and one or more selected which together achieve the following criteria:
1. The project proponent selects BMPs designed to remove a significant portion of the mass of the pollutant of concern. (Note that this is a mass standard in harmony with the TMDL concept rather than a concentration standard.)
2. The addition or substitution of other BMPs would not yield a significant increase in mass removal rates at a cost less than or equal to 0.7% of the cost of the entire project. (McKenna & Cuneo, L.L.P.)

Response: The source of the definition in the tentative order is based on State Water Resource Control Board and U.S. EPA promulgated definitions. Regional Board staff is not recommending further modification to the definition in the tentative order.

Section: Attachment E **Subsection: Attachment E**

Comment: The collection and analysis of 2 samples per site in the Dry Weather Monitoring Program is unnecessary, will not produce significantly different results, be too expensive and should not be required for ponded water. Should the Board wish to retain multiple sampling within the new permit, we would recommend mixing the two samples and performing laboratory testing on the mixed sample only. The Copermittees should be permitted to submit a dry weather monitoring program for approval by the Regional Board based on threat to water quality rather than be required to implement a “blanket” monitoring program that ignores local conditions. (Nolte, D-Max, City of San Diego)

Response: The revised Dry Weather Monitoring Program requires only a single sample and provides more discretion on the part of the Copermittees to design and implement their Dry Weather Monitoring Programs subject to SDRWQCB review.

Section: Attachment E **Subsection: Attachment E**

Comment: The sampling frequency specified in the Analytical Dry Weather Monitoring Program (20% per year) is inadequate. The outfalls with no detected pollutants will not be investigated for the life of the permit. Due to the transient nature of non-storm water flow, there is no guarantee that these outfalls will be free of pollutants in the next dry weather season. This approach provides a snapshot of a limited number of outfalls at a single time. An effective program includes more frequent observations of the major outfalls within each municipality. This will provide a chronological data set, which reflects different activities within the drainage area. Some Copermittees currently perform two or more rounds of dry weather field screening sampling; the costs and other limitations of the Analytical Dry Weather Monitoring Program would limit the Copermittees to only one sampling per year. The scope of the Analytical Dry Weather Monitoring needs to be clarified with respect to the types of pollutants being identified and frequency of monitoring. The Copermittees should be allowed to design their own programs and submit them to the SDRWQCB for review. (D-Max, SANDAG)

Response: The Dry Weather Monitoring Program has been revised to permit greater discretion for the Copermittees to design and implement their own program subject to SDRWQCB review. The emphasis in the revised Dry Weather Monitoring Program is to encourage more frequent and widely distributed sampling on an annual basis to facilitate the detection and elimination of illicit discharges and illegal connections.

Section: Attachment E **Subsection: Attachment E**

Comment: The SDRWQCB has not shown that it has the authority to require dry weather monitoring. The analytical monitoring effort (vs. field screening) and list of constituents are not supported by 40 CFR 122.26(d)(2)(iv)(B)(3). The Dry Weather Monitoring Program should remain a field screening program to identify illicit discharges and illegal connections and should not include analytical monitoring to characterize runoff. The costs of the analytical monitoring have not been considered by the SDWQCB. The Analytical Dry Weather Monitoring Program section should be deleted. (Procopio, Cory, Hargreaves, & Savitch, L.L.P., County of San Diego)

Response: The Tentative Order and Fact Sheet/Technical Report contain citations of the broad and specific legal authority of SDRWQCB to require a dry weather monitoring program. Some degree of analytical monitoring is necessary since the field screening test kits typically have high detection levels that fail to detect pollutants in any but the highest concentrations. The Dry Weather Monitoring Program has been revised to lower costs and provide greater discretion on the part of the Copermittees to design and implement it.

Section: Attachment E **Subsection: Attachment E**

Comment: The Analytical Dry Weather Monitoring Program as written will be too expensive for the Copermittees to implement. Laboratory costs are estimated between $1,000 and $1,300 per sample.

Further, 40 CFR 122.26(d)(2)(iii)(A) requires 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. Anything beyond this requirement is clearly an unfunded mandate. Permitting Copermittees to design their own Dry Weather Monitoring Programs will still identify sources and locations of pollution, while eliminating unnecessary and costly monitoring. (D-Max, San Juan Capistrano, Pountney & Associates)

Response: The Dry Weather Monitoring Program has been revised to lower costs and provide greater discretion on the part of the Copermittees to design and implement it. The Dry Weather Monitoring requirement is a waste discharge requirement and not an unfunded mandate.

Section: Attachment E **Subsection: Attachment E**

Comment: Many of the requirements of the Analytical Dry Weather Monitoring Program provide the Copermittees too little flexibility to perform dry weather monitoring based on threat to water quality. The Copermittees present Dry-Weather testing is more effective. The Tentative Order be revised to allow the Copermittees to design (with justification) a Dry Weather Monitoring Program (number of sampling sites, frequency, and analysis) based upon their knowledge of the existing system and watershed information (business types, general land use, % impervious). This will reduce the cost of the program substantially and provide better coverage of the municipality outfalls. Limit the comprehensive laboratory analyses to the outfalls that indicate the potential for existing non-storm water pollution during the field screening program. Increase the frequency of outfall monitoring to assure that the major outfalls are monitored at least once per year. The field screening still could include pH, temperature, total chlorine, total copper, phenols, detergents and ammonia. The revisions should include a provision for Co-permittees to reduce sampling or delete a constituent test when there is “nondetect” historical data. (D-Max, San Diego Copermittees, Anonymous, City of San Diego, Poway, Chula Vista, La Mesa)

Response: The Dry Weather Monitoring Program has been revised to permit greater discretion for the Copermittees to design and implement their own program subject to SDRWQCB review. The emphasis in the revised Dry Weather Monitoring Program is to encourage more frequent and widely distributed sampling on an annual basis to facilitate the detection and elimination of illicit discharges and illegal connections. The revisions do not include a provision for Copermittees to reduce sampling or delete a constituent test when there is “nondetect” historical data, because the dynamic and episodic nature of illicit discharges do not support a limited assessment that no future discharges or "detects" will occur at any given location.

Section: Attachment E **Subsection: Attachment E**

Comment: Sampling of ponded water twice over a four-hour period would be unnecessary duplication. It is suggested that ponded water be exempted from sampling. This will be a costly process which seems greatly to outweigh the benefits. It is more appropriate and reasonable for the Copermittees to be required to sample such ponded water once and analyze the samples based on sample location or other knowledge, such as land uses, historical information, etc. Water characteristics in ponded conditions during hot weather change drastically within a few hours. Presence or absence of pollutants in ponded

water does not necessarily correspond to the discharge of polluted water or vice versa. (City of San Diego, Chula Vista, San Diego Copermittees)

Response: The requirement to collect and analyze two samples was derived from the Federal NPDES regulations. The Dry Weather Monitoring Program has been revised to require only a single sample. The Dry Weather Monitoring Program has been revised to permit greater discretion for the Copermittees to design and implement their own program subject to SDRWQCB review. The emphasis in the revised Dry Weather Monitoring Program is to encourage more frequent and widely distributed sampling on an annual basis to facilitate the detection and elimination of illicit discharges and illegal connections. However, the requirement to sample ponded water remains in the Tentative Order. It is the responsibility of the Copermittees to determine the source of water impounded in their respective MS4s. There is no reason that an illicit discharge cannot appear within the MS4 as ponded water and only monitoring can determine the nature of the impounded waters. Otherwise, contaminated water ponded within the MS4 may be discharged to receiving waters and cause or contribute to an exceedance of receiving water quality objectives or a constitute a threat to human or environmental health.

Section: Attachment E **Subsection: Attachment E**

Comment: The requirement for analytical monitoring of 31 parameters exceeds the SDRWQCBs authority to require dry weather field screening to detect illicit discharges and will result in a very expensive program and would not likely provide any more valuable information. The Dry Weather Monitoring Program should be designed by the Copermittees for review by the SDRWQCB and should require only the constituents in 40 CFR 122.26(d)(2)(iii)(A)(3). Residential versus commercial or industrial testing will need to have different parameters. The list of constituents be consistent with 40 CFR 122.26 (d) (2) (iii) (A) (3)"Total suspended solids, total dissolved solids, COD, BOP, oil and grease, fecal coliform, fecal streptococcus, pH, total kjeldahl nitrogen, nitrate/nitrite, dissolved phosphorus, total ammonia plus organic nitrogen and total phosphorus." The full range of laboratory testing of these samples should only be required if the source and the pollutants in the flow can not be reasonably determined. Placing emphasis on frequent field screening and more extensive upstream investigations will be more effective than comprehensive laboratory testing. It is suggested that the list of 27 laboratory tests be provided as suggested tests to be performed in the case of suspect discharges as determined from field observations, field screening tests, and upstream land use, etc.
Clarification is needed on whether in subsequent years the analytical monitoring is to be carried out only on the constituents that exceeded criteria in previous tests, or all 27 tests will need to be repeated. In the latter case what is the reason? (San Diego Copermittees, Port of San Diego, Poway, Imperial Beach, Chula Vista, County of San Diego, La Mesa, IEA)

Response: The Analytical Monitoring requirement of the Dry Weather Monitoring Program was suggested by staff from County of San Diego as a proposed improvement to the field screening techniques, which have the potential to fail to detect constituents that increased flow and dilution from other sources has masked. Nonetheless, the Dry Weather Monitoring Program has been revised to permit greater discretion for the Copermittees to design and implement their own program subject to SDRWQCB review. The emphasis in the revised Dry Weather Monitoring Program is to encourage more frequent and widely distributed sampling on an annual basis to facilitate the detection and elimination of illicit discharges and illegal connections. The SDRWQCB has the broad and specific legal authority cited in the Fact Sheet/Technical Report to require a dry weather monitoring program.

Section: Attachment Subsection: E

Comment: Can the definition of "dry weather" be changed to include storms with rainfall at a lower precipitation rate such as 0.60" to 0.10" of rain which can produce urban runoff? (Wilkins, George)

Response: The definition of dry weather runoff is based on an antecedent dry period of 72 hours. Regional Board staff do not recommend changing the definition in the Tentative Order.

Section: Attachment Subsection: E

Comment: The Order does not specify which criterion is preferred for selecting the number of monitoring stations, whether it would be based on the municipality classification (large, medium or small) or classification based mainly on the interrelationships with the neighboring cities. (D-Max Engineering)

Response: The Dry Weather Monitoring Program has been revised to permit greater discretion for the Copermittees to design and implement their own program, including the selecting the number and location of sampling stations, subject to SDRWQCB review. The emphasis in the revised Dry Weather Monitoring Program is more frequent and widely distributed sampling on an annual basis to facilitate the detection and elimination of illicit discharges and illegal connections.

Section: Attachment Subsection: E

Comment: Attachment E does not specify the dry weather period. Previously, the dry weather period had been defined as the period from May 1 to September 30. (D-Max Engineering)

Response: The Dry Weather Monitoring Program has been revised to specify a dry weather period of May 1st to September 30th of each year. Nonetheless, the Copermittees are encouraged to evaluate year-round dry weather flows since illicit discharges in San Diego are not limited to summer months.

Section: Attachment Subsection: E-4

Comment: 2 grab samples, 4 hours apart in a 24 hr period. Are they analyzed separately or combined? (Anonymous Workshop 1)

Response: The Tentative Order requires separate collection and analysis of 2 samples 4 hours apart at each Dry Weather Monitoring Site. The purpose of 2 sampling events on the same day is to address daily changes in flow resulting from illicit discharges from businesses and residences.

Section: Attachment Subsection: E.2.f

Comment: If co-permittees and other municipal separate storm sewer system municipalities use the grid system that the State Plane Coordinate System, NAD83 be used as the baseline grid anchor. Following this system will allow municipalities to interface their data and will be useful in the watershed coordination efforts. (Port of San Diego)

Response: The Dry Weather Monitoring Program has been revised to permit greater discretion for the Copermittees to design and implement their own program subject to SDRWQCB review. The emphasis in the revised Dry Weather Monitoring Program is more frequent and widely distributed sampling on an annual basis to facilitate the detection and elimination of illicit discharges and illegal connections. The Copermittees are strongly encouraged to collaborate in developing and implementing their Dry Weather Monitoring programs to allow interfacing of the data and be useful for watershed coordination efforts.

Section: Attachment E Subsection: Attachment E

Comment: The City also questions the requirement that it submit dry weather monitoring maps and procedures and implement the dry weather monitoring program within 180 days of the adoption of the Tentative Order. These deadlines are unrealistic and likely unachievable. The City recommends instead that it first develop a more appropriate and reasonable dry weather program based on threat to water quality, which also includes a reasonable implementation schedule, and submit the program to the Regional Board for its review. (City of San Diego)

Response: The Dry Weather Monitoring implementation schedule was based on the existing requirement under Order 90-42 for dry weather field screening, which under Federal regulations, included developing a map of each Copermittees' MS4. With the benefit of ten years dry weather monitoring experience, the submittal of dry weather monitoring maps and procedures and the implementation of the Dry Weather Monitoring Program within 180 days is not unrealistic or unachievable. Under the revised Dry Weather Monitoring Program in Attachment E of the Tentative Order, the Copermittees are provided increased flexibility and discretion to develop a program and submit it for SDRWQCB review and comment. The submittal and implementation timeline for this requirement, however, is not recommended to be extended.

Section: Attachment E Subsection: Attachment E.2.b

Comment: Attachment E-1 2.b. – How can a Copermittee establish a monitoring station if the MS4 is underground and not accessible in the cell requiring a station? (City of Chula Vista)

Response: As stated in the Tentative Order, the Copermittees shall locate dry weather analytical monitoring stations within its jurisdiction "...either at major outlets or other outfall points (or any other point of access such as manholes)…"

Errata Sheet for Response to Comments Document for Order No. 2001-01 (San Diego Municipal Storm Water Permit)

Additional Comments and Responses:

Section: Multiple **Subsection:** Multiple

Comment: The new requirements imposed by the Tentative Order may have a greater incremental impact on the County than on some other Copermittees because it would apply for the first time to rural parts of the County that were explicitly excluded from Order 90-42, which applied only to those parts of the unincorporated area of San Diego County that were within the Urban Limit Line. Much of the unincorporated area in San Diego County is undeveloped, rural, or agricultural in character. Subsurface storm sewers exist only in a handful of developed areas, and most stormwater is conveyed in natural stream-beds. This early imposition of requirement is ill-advised, because it will divert limited County resources from urban areas and urban programs during a difficult transition period. Because this early imposition of requirements is also obviously not based on federal law and regulations, it is a state mandate for which state funding must be provided.

Order 90-42 did not define "Urban Limit Line." Two plausible definitions exist. One approach would be to include within this line the Current Urbanized Development Area (CUDA) and Future Urbanized Development Area (FUDA) as defined in the County General Plan. A second approach would be to apply the U.S. Bureau of the Census "Urbanized Area" line for the San Diego metropolitan area. The Census definition reaches the "urban fringe" as shown by census tract data. The FUDA definition reaches rural areas identified for future development that may not yet be densely settled on a census tract basis. The Census approach is used for some purposes in U.S. EPA's Storm Water Phase II Final Rule (64 Federal Register 68721 et seq, December 8, 1999).

These circumstances raise two legal issues: (1) whether, under U.S. EPA's Phase II stormwater regulations the SDRWQCB can bring rural parts of the County under an NPDES municipal stormwater permit; and (2) if so, when the requirements of this expanded NPDES permit can be made applicable to rural parts of the County. Under these Phase II stormwater regulations, the RWQCB can bring a rural part of the County under a municipal stormwater permit if the MS4 in that rural area is physically connected to an MS4 that is already regulated under an NPDES municipal stormwater permit. But, in most of the rural parts of the County MS4s do not exist. Stormwater in these areas is conveyed in natural streams that were not constructed by and are not owned, controlled or maintained by the County. These streams are waters of the state, not MS4s. The RWQCB could also bring these rural areas under an NPDES permit after determining based on designated criteria that stormwater discharges from the rural MS4 (if an MS4 exists) would cause or have the potential to cause water quality problems. The RWQCB, however, has not developed these criteria, done this study, or made this determination.

The Clean Water Act (§ 402(p)(4), states that municipal stormwater permits shall "provide for compliance as expeditiously as practicable, but in no event later than three years after the date of issuance of such permit." Similarly, EPA's Phase II regulations provide for newly regulated systems to obtain permit coverage by March 10, 2003. The Order, in contrast, requires programs to be up and running in all parts of the County in 180 days. Requiring compliance with this permit that soon in all parts of the County is not "practicable," and therefore is illegal.

Therefore, as a matter of law any requirements imposed on the County by a revised Order, to the extent they apply outside the "urbanized area" of San Diego as defined in U.S. EPA regulations, are based exclusively on state law. Those requirements would therefore be state mandates, for which state funding must be provided.

If the Order is not substantially amended for all Copermittees, a separate Order with substantially different terms should be issued to the County. The Clean Water Act and U.S. EPA implementing regulations recognize that urban and rural stormwater problems are different. Most of the unincorporated area of the County is rural, and most of that area is not presently subject to Order 90-42.

These facts place the County in the position of legitimately asking for terms, compliance schedules, and/or exclusions from the Order that the SDRWQCB may be reluctant to extend to other copermittees. The County continues to believe the best cure for weak local stormwater programs is regional cooperation, assistance, and leadership, not an overly prescriptive Order. The County is ready to do what is needed to help other Copermittees improve their stormwater programs, provided the Order is amended to delete requirements the RWQCB cannot legally impose, to provide sufficient flexibility to Copermittees, and to provide sufficient time for compliance. If the Order is not amended in this way, the County demands that it be issued a separate permit, that takes proper account of expanded scope of this Order, and of the rural nature of most of the unincorporated portion of the County. (County of San Diego (1), County of San Diego (2), County of San Diego (3))

Response: A municipality's responsibility for discharges of storm water and urban runoff in its MS4 must be coextensive with the municipality's jurisdiction to regulate such discharges. Discharges of storm water that are not within a municipality's jurisdiction or that are not tributary to a municipality's MS4 may be subject to other water quality control requirements, but may not impose upon the municipality any regulatory obligation under these requirements. However, the commentor is incorrect to assert that a municipality should not be responsible under the requirements for discharges to natural drainages that are used as part of the municipality's MS4, regardless of the "ownership" of such a natural drainage or stream. The determination of whether or not a particular natural drainage or urban stream channel is or is not part of the municipality's MS4 depends on the particular circumstances of the channel and the municipality's urban runoff management practices. If municipalities rely on natural drainage channels or urban streams to collect and convey urban runoff and storm water to or from an MS4,

they should be recognized as components of the municipality's MS4; the municipality would be required to reduce pollutant discharges therein to the maximum extent practicable. Application of requirements for discharges of storm water in MS4s to natural drainages and urban streams does not "transform" such drainages and streams to MS4s; however, it does reflect the fact that the Regional Board recognizes the water quality consequences of municipalities' reliance on such drainages and streams for the management of storm water and urban runoff, and the environmental impact upon such drainages and streams as a consequence of the increased flows therein associated with urban development and land use under the planning and regulatory authority of municipalities.

The Tentative Order does not implement Phase II Federal NPDES regulations. Tentative Order 2001-01 implements the 1990 Federal Phase I NPDES regulations. In the Preamble to the 1990 Federal Rule, the USEPA notes:

"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 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."

The Jurisdictional Urban Runoff Management Program (JUMRP) Document, to be submitted by the County of San Diego as a Copermittee under Tentative Order 2001-01, does not have to include requirements that would implement Phase II NPDES regulations in unincorporated rural areas. Rather, the Tentative Order seeks to recognize and require extension of the JURMP to those specific parts of the unincorporated County of San Diego that are now or will plausibly be urbanized during the term of the Tentative Order. Significant growth is occurring in the previously rural northern, eastern and southern parts of the County that will result in significant urban runoff discharges to inland rivers, streams, and municipal drinking water supply reservoirs. For example, as published in the San Diego Union Tribune November 24, 2000, SANDAG projects the population of Alpine will grow from 15,368 to 30,273 by 2020. This is six times the size of the City of Del Mar. By 2020, the populations of Ramona and Valley Center are expected to grow to 60,000 and 45,853, respectively. By 2020, under the current San Diego County General Plan, approximately 850,000 people will live in the unincorporated parts of the county. A significant percentage of that growth can reasonably be predicted to occur during the term of the Tentative Order and the even greater percentage of future growth will be effected by how the County of San Diego implements the Tentative Order. The requirements of the Tentative Order 2001-01 Jurisdictional Urban Runoff Management Program, appropriately and legally applied to existing and planned new development, will ameliorate the impacts of urban runoff discharges in presently rural areas. This is not an unfunded mandate intended to be indiscriminately applied by the County throughout the urban and rural county at enormous cost in advance of the Phase II NPDES federal regulations. The Tentative Order implements Phase I NPDES regulations, but is consistent with the Phase II NPDES regulations. As described above,

the County is responsible for implementing Tentative Order 2001-01 with respect to discharges to and from demonstrable MS4 systems operated in the unincorporated county. The County of San Diego is correctly and necessarily identified in Tentative Order 2001-01 as a Copermittee.

Section: F.3 **Subsection:** F.3.a.5.c

Comment: F.3.a.(5)(c) [Maintenance of Municipal Separate Storm Sewer System] (Municipal) The definition of accumulated waste includes sediment. The definition of accumulated waste should not include sediment. It is no value to remove all sediment from roadway culverts as they are a small part of a natural drainage system. In fact, roadway culverts that convey stormwater in a natural watercourse under a road or highway should be exempt. This would also apply to streams. (County of San Diego)

Response: Section F.3.a.5.c does not require the removal of all accumulated waste in all instances. Therefore it does not require removal of all sediment. However, sediment is a frequent cause of receiving water impairment within the region. Therefore, in cases where large deposits of sediment exist which were generated by man-made activities, this accumulated sediment should be removed. Since roadway culverts are part of the Copermittees' MS4s, accumulated waste should be removed from them in a similar manner as from rest of the Copermittees' MS4s.

Section: F.3 **Subsection:** F.3.a.5.c.ii

Comment: "F.3.a.(5)(c)(ii) Additional cleaning as necessary between October 1 and April 30 of each year;" - "as necessary" is ambiguous. Does this mean we would be required to inspect the entire MS4 in the off-season to determine whether additional cleaning is necessary? (County of San Diego)

Response: The term "as necessary" is included in section F.3.a.5.c.ii to provide the Copermittees discretion and flexibility in determining when additional cleaning should be conducted.

Section: F.3 **Subsection:** F.3.a.5.c.iv

Comment: F.3.a.(5)(c)(iv) Proper disposal of waste removed pursuant to applicable laws. This section inappropriately places additional liability on Copermittees for violations of existing laws. These "second tier" violations could carry significantly more severe penalties than do the original laws they duplicate. The County recommends deletion of this section. If the RWQCB staff wish to remind Copermitees of the need to

comply with waste disposal laws, they should do so in the Technical Report. (County of San Diego)

Response: Language in the Tentative Order regarding proper disposal of waste is included in order to ensure that the waste is not discharged in a manner which will result in the waste re-entering an MS4 or receiving water. Therefore, requirements for proper disposal of waste are applicable to the Tentative Order and will remain in the Tentative Order.

Section: F.3 **Subsection:** F.3.a.8

Comment: F.3.a.(8) Enforcement of Municipal Areas and Activities - What is the meaning of this section? Is it the RWQCB's intention that Copermittees would take enforcement actions against their own employees? The section is ambiguous, and is not supported by the findings, by existing evidence, nor by law. (County of San Diego)

Response: Section F.3.a.8 requires municipalities to enforce their storm water ordinances for all municipal areas and activities. This can apply to municipal areas which are open to the public, such as parks and streets. Enforcement in these areas may be necessary due to their heavy use. In addition, municipalities should ensure their employees comply with storm water ordinances. If their employees are not complying with the ordinances, some form of enforcement may be necessary, such as warnings, reprimands, etc.

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