



California Regional Water Quality Control Board

Los Angeles Region

(50 Years Serving Coastal Los Angeles and Ventura Counties)

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Gray Davis
Governor

March 2, 2001

Harry W. Stone
Director of Public Works
County of Los Angeles, Department of Public Works
900 South Fremont Avenue, P.O. Box 1460
Alhambra, CA 91802-1460

REVIEW OF THE REPORT OF WASTE DISCHARGE FOR THE REISSUANCE OF THE MUNICIPAL STORM WATER PERMIT FOR LOS ANGELES COUNTY AND CITIES IN LOS ANGELES COUNTY.

Dear Mr. Stone:

Thank you for submitting, on January 31, 2001, the Report of Waste Discharge (ROWD) for reissuance of the Los Angeles County Municipal Storm Water Permit (Los Angeles County MS4 permit), and a sample MS4 permit. The County of Los Angeles and Cities (except the City of Long Beach) are covered under Board Order No. 96-054, which expires on July 30, 2001.

Federal regulations at 40 CFR 122.21(d) require that the ROWD be submitted at least 180 days prior to the MS4 permit expiration date and that the permitting authority respond as to its completeness. The US Environmental Protection Agency (USEPA), in addition, has issued guidelines for review and consideration of MS4 permit reapplications. (61 Fed Reg. 41697).

The purpose of our review and comment is to: (i) identify possible gaps in the application, (ii) suggest potential areas for improvement in program implementation and the Storm Water Quality Management Plan (SQMP), (iii) recommend a direction in monitoring to emphasize identification and control of pollutant sources and eliminate the causes of receiving water impairment, (iv) invite input on objective measures of successful program implementation (i.e. performance standards), and (v) highlight subject areas for further discussion during permit reissuance. Our comments are also intended to communicate Board staff strategy to update the Los Angeles County MS4 permit in accordance with current laws and policies and provide Permittees the opportunity to provide any additional information that will assist Board staff in permit development. During permit development, we intend to look at the sample MS4 permit submitted by Permittees for useful content, but it will not form the basis for developing permit requirements.

So far as the ROWD and accompanying Storm Water Quality Management Plan (SQMP) did not include better and improved Best Management Practices (BMPs) for the next permit term, as required under USEPA's Interim Permitting Policy (61 Fed. Reg. 43761), the application is incomplete. Permittees did not demonstrate that they evaluated the monitoring results and model program implementation experience from the current permit term and utilized them to propose enhancements to the SQMP for the next permit term. As a result, we identified several apparent deficiencies in this initial review. Our review of your reapplication evaluated the following areas of the Los Angeles County MS4 program for consistency with federal and state storm water regulations: (i) Illicit Connection and Illicit Discharge Elimination, (ii) Industrial

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Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

Commercial Inspection, (iii) Development Planning, (iv) Development Construction, Public Agency Activities, (v) Public Information/ Education, and (vi) Monitoring. Our comments are in the attachment (and, for your convenience, summarized in a table).

Please note that this review does not in any way restrict our privilege to bring up for discussion additional subject matters during the permit reissuance process, that have not been commented upon herein. We intend to conduct a series of work-group meetings to receive input over the coming months, with Permittee representatives and interested persons, to assist us in developing permit requirements.

While our comments, which accompany this letter, pertain to the ROWD for Los Angeles County and incorporated cities for the MS4 permit reissuance, the comments may also be deemed applicable to common elements in the separate ROWD and sample permit submitted concurrently by you and the City of Santa Clarita for the Santa Clara Watershed.

If you have any questions, please do not hesitate to contact me at (213) 576-6510 or Dr. Xavier Swamikannu at (213) 576-6654.

Sincerely,

ORIGINAL SIGNED BY

Dennis A. Dickerson
Executive Officer

Enclosure

cc: Jorge Leon, Office of Chief Council, State Water Resources Control Board
John Youngerman, Storm Water Section, State Water Resources Control Board
Eugene Bromley, CWA Standards and Permits Office, USEPA Region IX
Laura Gentile, CWA Compliance Office, USEPA Region IX
Mustafa Ariki, Watershed Management Division, County of Los Angeles Department of
Public Works
Permittees – See attached Distribution List

California Environmental Protection Agency

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SUMMARY OF COMMENTS

MUNICIPAL STORM WATER AND URBAN RUNOFF DISCHARGES WITHIN LOS ANGELES COUNTY, AND THE CITIES OF LOS ANGELES COUNTY [EXCLUDING THE CITY OF LONG BEACH]

Program	Key Enhancements Proposed for Renewed Permit
Public Information and Participation	<ol style="list-style-type: none"> 1. Targeted Outreach: Implement targeted programs that draw on results of the integrated monitoring program 2. Site Visit Program: <ul style="list-style-type: none"> - Upgrade commercial/industrial educational site visits to inspections - Revise outreach component to continue business sponsorships 3. Performance: Provide performance standards for each Permittee
IC/ID Elimination	<ol style="list-style-type: none"> 1. Surveying the storm drain: <ul style="list-style-type: none"> - Prioritize, and add a performance measure - Clarify responsibilities among the County and municipalities 2. Non-storm water discharges exempt from prohibition: <ul style="list-style-type: none"> - For proposed new categories, provide a supporting rationale and an analysis of water quality impacts - For conditioned exemptions, clarify conditions (and obtain Executive Officer approval) 3. Training: Expedite
Public Agency Activities	<ol style="list-style-type: none"> 1. Public Construction Projects <ul style="list-style-type: none"> - Require public construction projects 1 acre or more to implement construction and post-construction storm water controls 2. Pesticide Application <ul style="list-style-type: none"> - Provide a standardized protocol for the routine and non-routine application - Prohibit application during rain events forecasted to be greater than 0.25 inches 3. Phase 1 Facilities <ul style="list-style-type: none"> - Demonstrate that such facilities apply the stricter compliance based on technology or water quality for Phase 1 facilities 4. Performance <ul style="list-style-type: none"> - Include appropriate performance standard to measure successful implementation
Industrial and Commercial Inspections	<ol style="list-style-type: none"> 1. Develop a stand-alone program component (business educational should remain under PIPP) 2. Include Phase I (including sites with NOIs under State Permit), vehicle repair shops, vehicle body shops, vehicle parts and accessories, gasoline stations, restaurants 3. Emphasize issues specific to the watershed and receiving waters impairments by targeting known or potential sources or sectors (as a way to prioritize the schedule) 4. Continue critical sources identification process to bring new categories of facilities, if identified, in to the system and address them through a prioritization process or as designated by WMC

	<ol style="list-style-type: none">5. Specify a clear frequency and schedule for the inspections6. Standardize the database for scheduling and tracking of activities performed, including constant updates of facilities list, inspections, follow-up inspections and enforcement activities7. Coordinate with RB activities8. Incorporate suggestions made in the <i>CSWMP Report of Effectiveness</i>9. Specify clearly defined measurable goals/performance standards, by identifying a baseline, a defined target and milestones to be achieved during the 5-year life of the permit10. Include enforcement criteria for sites under the State General Construction Permit: Permittees must first enforce and complete followup inspections under their legal authority; then escalate to Regional Board for additional enforcement (except in situations when RB or USEPA involvement is solicited)11. Tiered training timetables: expedite to six months for cities less than 1 million population, one year for cities with population over 1 million
Development Planning	<ol style="list-style-type: none">1. Complete revisions to CEQA guidelines to mitigate storm water runoff from new developments and redevelopment.2. Complete revisions to General Plans to include storm water and watershed considerations.3. Implement a program to make available to developers development planning information such as guidelines on siting and design of BMPs etc.4. Specify peak discharge rate criteria to control post-development peak discharge rates.5. Add performance standards.
Development Construction	<ol style="list-style-type: none">1. Accelerate local enforcement2. Add performance standards
Monitoring	<ol style="list-style-type: none">1. Trash Monitoring: Implement a baseline trash-monitoring program for watersheds not presently listed for impairment from trash.2. Critical Source Characterization: Implement a program to characterize critical sources that contribute a CWA 303(d) listed pollutant in watersheds3. Treatment Control BMP Effectiveness: Develop program to evaluate the effectiveness of structural and treatment control BMPs at critical sources and as watershed improvement projects.

REPORT OF WASTE DISCHARGE

MUNICIPAL STORM WATER AND URBAN RUNOFF DISCHARGES WITHIN LOS ANGELES COUNTY, AND THE CITIES OF LOS ANGELES COUNTY [EXCLUDING THE CITY OF LONG BEACH]

REVIEW AND COMMENT

I. Program for Public Information and Participation

Background

An informed and knowledgeable community is crucial to the success of a storm water quality management program. Changing public patterns of behavior that contribute to storm water pollution through education is a significant challenge. In addition, communities can play an important role in successful implementation of the storm water program when given the opportunity to participate.

The objective of a Public Information and Participation Program (PIPP) is to: (i) increase awareness among the public to build broad support for the program; (ii) increase compliance as the public become aware of the personal responsibilities expected of them for program success; and (iii) reinforce successful public education and participation strategies.

The objective of the storm water PIPP may be achieved by: (i) distributing brochures or fact sheets for general public and specific audiences such as business and industry; (ii) propagating alternative information sources through websites, public fairs, bus-stop posters, refrigerator magnets, bumper stickers, and placemats; (iii) stocking a library of educational materials for community and school groups; (iv) promoting volunteer citizen educators to educate the public and schools; (v) implementing a program for K-12 school-age children; (vi) stenciling storm drains with appropriate messages; (vii) installing a storm water hotline for information and citizen reporting; (viii) providing economic incentives to citizens and businesses; (ix) conducting public meetings/ citizen panels to receive input and disseminate information; (x) supporting volunteer water quality monitoring groups; (xi) supporting community clean-ups; (xii) supporting citizen watch groups; (xiii) encouraging vicinity adoption programs to keep areas free of storm water pollutants; (xiv) and establishing measurable goals to evaluate successful program implementation.

Permittees propose to continue the following PIPP components,

- Advertising - traditional and non-traditional
- Media Relations
- Corporate Partnerships
- Special Events

- Business Outreach
- School Education K-12
- 1-888-CLEAN-LA hotline and website
- Project Pollution Prevention identifying signature
- Research to target audiences and allocate budget resources accordingly.
- Coordination with other pollution prevention programs such as solid wastes recycling and used oil recycling.

Deficiencies

The PIPP implemented by Permittees under the current permit term was well formulated and objectively implemented. However, the PIPP program for the next permit term appears deficient as indicated below:

- **Targeted Outreach:** PIPP program for the next permit term is not upgraded to implement targeted public education programs that draw on the results of the integrated monitoring program.
- **Site Visit Program:** The commercial/ industrial educational site visits program is not upgraded to an inspection and enforcement program [see comment under IV. Program for Industrial/Commercial Inspection], and the education/ participation component of the program separated.
- **Performance:** A performance standard for each Permittee, in addition to a countywide performance standard, has not been provided.

Possible Advancements

- **Targeted Outreach:** Use the results from the completed 5-year PIPP and monitoring program in the current permit term to identify target audiences for special outreach (such as zinc, copper, and TSS generating facilities in the Ballona Creek watershed). Materials and information specific to known problem areas should be developed to target specific audiences. The results of research conducted during the current permit term should be used to augment the PIPP through the next permit term.
- **Business education/ participation:** Revise the business/ industrial outreach component to continue business sponsorships, providing easy-to-understand brochures, consulting assistance [e.g. City of Los Angeles Environmental Affairs HTM program] etc.
- **Cost-sharing:** The County of Los Angeles should retain its existing PIPP partnerships and continue to forge new ones. The budget for the program the last five years was approximately U.S. \$5.2 million. The County indicates that an estimated 3 - 5 times that amount may be needed to support an adequate PIPP, partially due to the increase in advertising costs. The proposed PIPP budget for the new permit term is \$7.5 million. Permittee contributions on pro-rate basis may be considered to fill the funding gap.

II. Program to Eliminate Illicit Connections and Illicit Discharges (IC/ID)

Background

During dry weather, much of the discharge to storm drain systems consists of wastes and wastewaters from non-storm water sources. A significant amount of such discharges may be from illicit discharges or connections, or both. Illicit discharges may occur either through direct connections (deliberate or mistaken piping) or indirect connections (infiltration, spills, washdowns, or dumping). The objective of the Permittees' proposed IC/ID program should be to detect illicit connections and illicit discharges (including unpermitted non-storm water discharges) to the storm drain system, and to promptly eliminate such discharges and connections.

The IC/ID elimination program objective may be achieved by: (i) mapping locations of outfalls of the MS4 and the names and locations of all waters of the U.S. that receive discharges from the outfalls; (ii) adopting a storm water/ urban runoff ordinance to prohibit unauthorized non-storm water discharges into the MS4, and implementing appropriate enforcement procedures and actions; (iii) implementing a program to detect and eliminate non-storm water discharges to the MS4, including illegal dumping; (iv) educating public employees, businesses, and the general public about the dangers associated with illegal discharges and improper disposal; (v) establishing a public reporting hotline or other mechanism to report illicit discharges and illegal dumping; and (v) establishing measurable goals to evaluate successful program implementation.

In the ROWD, the Permittees propose to continue implementation of IC/ID program elements, listed below, at a level of effort similar to that undertaken for the previous five years:

- Illicit Discharge Elimination
- Illicit Connection Elimination
- Public Reporting of Illicit Discharges, including Hazardous Substances

Deficiencies

The proposed IC/ID program does not specify important performance standards to detect and eliminate illicit connections and discharges. For example:

- **Progress in surveying the storm drain system:** Under the IC/ID program in existing permit, Permittees have been screening the storm drain system for illicit connections and discharge during regularly scheduled maintenance activity. But the proposed program does not discuss how much of the storm drain system has been surveyed to date, what methods have been used, and how much remains to be surveyed. Performance standards are needed measure progress on this program element.

- **Responsibility for surveys:** It is not clear who has lead responsibility in various segments of the County's and municipalities' storm drain system. Additional information is needed to clarify responsibilities.
- **Non-storm water discharge exemptions:** The Los Angeles County MS4 permit allows several categories of exemptions to the general prohibition on un-permitted non-storm water discharges. The Permittees have proposed adding several new exemption categories; e.g. unspecified discharges from emergency floor drains, and blood and human tissue from accident sites. However, no rationale and analyses of possible impacts to water quality are submitted to justify the addition of new categories to the prohibition exemption. In addition, several of the exemptions in the existing permit are subject to conditions; these conditions need to be clarified, and are subject to approval by the Regional Board Executive Officer.
- **Training:** Permittees propose to train employees in targeted positions to identify and report illicit discharges one year from the permit adoption date (page 28 of the ROWD, Part 4, E.2). However, because Permittees were required to possess training materials by March 1997, and the IC/ID model program was to be implemented no later than July 1999, the one-year time period appears unwarranted. All that may be required is refresher training. Pending clarification from the Permittees, Board staff intend to propose that the refresher training be conducted no later than 90 days from permit adoption date.

Possible Advancements

- **Overview of IC/ID problems:** Based on Annual Reports and the ROWD, it is not clear what types of discharges have been most problematic, and what type of response and/or corrective action has been required. It would be helpful for Permittees to provide additional information. This will facilitate the Regional Board and Permittees' efforts to enhance the IC/ID program, by focusing our efforts in the most problematic areas.
- **Public reporting (including hazardous materials):** Permittees may enhance the Public Reporting component of the program, including Hazardous Wastes Reporting, by posting records of illicit discharges and connections (i.e. those not subject to criminal investigation) on Permittee's websites.
- **GIS database:** The County of Los Angeles and several cities already have storm drain data mapped on a Geographic Information System. Consider digitizing the information for the entire MS4 permitted area and consolidation to one comprehensive GIS database.

III. Program for Public Agency Activities

Background

Municipal operations can be a potential source of pollutants to the MS4. These include pollutants: (i) that collect on streets, parking lots, open spaces, storage and vehicle maintenance areas, park and recreation lands, and (ii) that are generated from land development practices, flood management practices, storm sewer maintenance, pesticide application, and facilities maintenance.

The objective of a program for public agency activities is to ensure that public agencies: (i) minimize storm water pollution impacts from public agency activities; and (ii) hold their level of performance to an equivalent or better standard than private business/ industry.

Permittees propose to continue their implementation under the current permit term in the following subject areas:

- Sewage Systems Operations
- Public Construction Activities Management
- Vehicle Maintenance/Material Storage Facilities Management
- Landscape and Recreational Facilities Management
- Storm Drain Operation and Management
- Streets and Roads Maintenance
- Parking Facilities Management
- Public Industrial Activities (optional)
- Emergency Procedures

Deficiencies

The program proposed does not contain the following components:

- **Public construction projects:** Does not require public construction projects to implement construction and post-construction storm water controls similar to that required of private construction projects, including numerical mitigation criteria for post-construction BMPs.
- **Pesticide application:** Does not provide a standardized protocol for the routine and non-routine application of pesticides, herbicides (including preemergents), and fertilizers, and a prohibition on application during rain events (e.g. within one day of rain event forecasted to be greater than 0.25 inches except for application of preemergent herbicides; and after rain event where water is leaching or running or when water is running off-site).
- **Phase 1 facilities:** Does not demonstrate that it applies the stricter compliance standard based on technology or water quality criteria for Phase 1 facilities. Eliminate the current provision that allows publicly owned Phase 1 facilities to be covered under the MS4 permit. This provision has largely been unused during the current permit term and may cause some confusion because of the different compliance standard than for other MS4 programs.

- **Performance:** An appropriate performance standard to measure successful implementation is not included.

Possible Advancements

- **Trash collection:** Collect trash and debris from open channels twice a year (Aug-Oct; March-May) before and after the storm season, and create a voluntary program for collection of trash in natural stream channels.
- **Priority catch-basin threshold:** Permittees may lower the priority catch-basin classification threshold to be 25 percent full from 40 percent full for clean out. Permittees may submit mapping (preferably as a GIS layer) of all catch basins in a municipality and identify which are city-owned/ county-owned, and which are priority for frequent cleaning.
- **Priority Projects below 1 acre:** For construction projects between 5,000 square feet and less than 1 acre, Permittees may develop a checklist to identify projects that will need to implement construction and post-construction BMP controls.
- **Contractor Self-Inspections:** Permittees may require that contractors perform self-inspections before and after every rainfall event with 0.25 inch or more predicted or actual precipitation.

IV. Program for Industrial/ Commercial Inspection

Background

The purpose of the industrial/ commercial inspection program is to conduct site visits to priority businesses (Phase 1, automotive service, gas stations, restaurants) and to evaluate on-site business practices to ensure compliance with local storm water regulations. Inspections of industrial/ commercial facilities and enforcement of storm water requirements are crucial to the success of the program and maintaining support among the public.

The objective of the industrial/ commercial program can be achieved by: (i) establishing a single electronic database of all facilities to be inspected and a schedule for inspection; (ii) distributing to industry and business owners specific brochures on appropriate BMPs to minimize storm water pollution; (iii) conducting site visits to evaluate compliance with local storm water ordinances; (iv) implementing appropriate enforcement procedures and actions; and (v) establishing measurable goals to evaluate successful program implementation.

Permittees propose to continue implementation of the following components of the program for industrial/ commercial business inspection:

- Conduct educational site visits and distribute brochures

- Maintain a database on industrial/ commercial facilities visited

Deficiencies

The ROWD does not include:

- **Inspection Program:** The industrial/ commercial educational site visit program should be upgraded to an inspection and enforcement program, since Permittees have had five years to gain experience. The U.S. EPA requires this change [see letter from Alexis Strauss, Director, Water Division, USEPA, Region IX to Dennis A. Dickerson, Regional Board Executive Officer, dated December 19, 2000, which is attached and was also distributed at the January 2001 EAC Meeting].
- **Performance:** An appropriate performance standard to measure successful implementation.

Possible Advancements

- **Tracking database:** Consider using the educational site-visits database to create a tracking database for the inspection and enforcement program. The database should be streamlined and a single standard format used for ease of updating and coordination. Consider a web-based database. See suggestions for modifying and augmenting the database that are contained in the CSWMP Report of Effectiveness [July 31, 2000].
- **Inspection program:** Submit an industrial/ commercial facilities inspection and enforcement program for consideration. Key components may include: (i) a proposed schedule of inspections with frequencies; (ii) a proposed performance standard to evaluate successful implementation; (iii) inspection schedule tie-in with the critical sources findings, characteristics of the watershed, and known impacts on the receiving waters; and (iv) specifics on the use of a comprehensive database for tracking and appropriate modifications and augmentations.

V. Program for Development Planning

Background

Post-construction mitigation of storm water runoff in areas undergoing new-development or redevelopment is necessary because storm water from these areas significantly affects receiving water bodies. Studies indicate that prior planning and design for the minimization of pollutants in post-construction storm water is the most cost-effective approach to storm water quality management.

The objective of a program for new development planning is to ensure that new developments and redevelopment are designed to minimize or prevent adverse impacts on water quality from storm water discharges. Municipalities are required to develop, implement, and enforce the

program to comply with storm water regulations. Federal regulations do not limit the categories of development that may be subject to storm water mitigation requirements nor does it limit them to the nature of the approval action as defined under the California Environmental Quality Act (CEQA) or the National Environmental Protection Act (NEPA) [i.e. discretionary or ministerial].

The development planning program objective may be achieved by, (i) requiring the implementation of combinations of structural BMPs, treatment control BMPs, and source control BMPs, (ii) adopting an ordinance requiring the implementation of post-construction BMPs, (iii) providing a mechanism to ensure long-term maintenance and operation of treatment control and structural BMPs; (iv) revising General Plans and CEQA procedures to ensure that developments mitigate post-construction storm water runoff; and (iv) establishing measurable goals to evaluate successful program implementation.

Permittees have proposed to continue the following components,

- SUSMP requirements for development categories authorized by the State Water Resources Control Board Order No. 2000-11 and projects in environmentally sensitive areas;
- checklist to identify non-SUSMP projects that may require post-construction BMP controls and an urban storm water mitigation plan; and
- developer and contractor information program.

Deficiencies

The program is deficient because the SQMP does not:

- **CEQA Guideline Revisions:** Require completion of CEQA guidelines and checklist revision, if not already done so, for consideration and mitigation of the potential water quality impacts of new development and redevelopment no later than the date of permit adoption. This revision should have been done under the current permit term.
- **General Plans:** Require completion of revision to General Plans, if they have not already been done, to include watershed and storm water management considerations no later than date of permit adoption. This revision should have been done under the current permit term.
- **Developer Information:** The SQMP does not contain a program for Permittee to provide or make available to developers Development Planning Information that includes: (i) guidelines on BMP selection; (ii) guidelines on the siting and design of BMPs; (iii) Standard Urban Storm Water Mitigation Plans (SUSMPs); and (iv) guidance on post-construction storm water mitigation for non-SUSMP categories, no later than 90 days from the date of permit adoption.
- **Peak storm water discharge rate criteria:** Permittees need to establish numerical criteria to control post-development peak storm water runoff discharge rates to not exceed pre-development peak discharge rates where the discharge will result in potential downstream

erosion and/or impair protect stream habitat. Permittees should work with the County of Ventura to develop criteria.

- **Performance:** An appropriate performance standard to measure successful implementation is not included

Possible Advancements

- Possible categories to add to the SUSMP: Extend SUSMP standards and post-construction storm water mitigation to ministerial (non-discretionary) projects. Also extend SUSMP standards to: (i) locations within or directly adjacent to or discharging directly to an environmentally sensitive areas; and (ii) heavy industrial development on one acre or more.
- Commercial/Industrial category: Lower the threshold for application of SUSMP requirements for commercial and industrial developments from 100,000 square feet to 1 acres, beginning March 8, 2003, to be consistent with USEPA Phase II regulations for small construction projects [See USEPA Fact Sheets – Small Construction; Construction Site Runoff; Post-Construction Runoff, which are attached]
- Retail gasoline outlets: Make the numerical BMP design criteria applicable to proposed medium and high-output retail gasoline outlet developments.
- Non-SUSMP listed projects: Use project characteristics and a checklist to identify additional development types for post-construction storm water runoff. The characteristics may include (i) vehicle or equipment fueling areas; (ii) vehicle or equipment maintenance areas; (iii) outdoor storage or handling of hazardous materials or waste; (iv) commercial or industrial waste handling or storage; (v) hillside location; (vi) outdoor manufacturing work areas; (vii) exposed animal confinement areas; and (viii) any other pollutant generating areas with the potential to be exposed to storm water runoff.
- Mitigation funding: Propose a funding mechanism for regional or watershed-based BMP solutions such as a storm water mitigation fund or “bank”. Developers who obtain waivers from the numerical BMP design standards will in part fund the mitigation bank.

VII. Program for Development Construction

Background

Polluted storm water from construction sites often flow to MS4s and are discharged to receiving water bodies. Sediment is usually the main pollutant of concern although other pollutants that are generated from poor on site waste management practices can be a problem. These pollutants can impact natural waters by destroying habitats and causing siltation.

The objective of a program for development construction is to ensure that construction projects are (i) managed to minimize the potential for soil erosion and sediment transport, and (ii) to reduce pollutants generated during construction and post-construction.

The objective of the program may be achieved by, (i) adopting an ordinance requiring the implementation of proper erosion and sediment controls, and controls for other wastes; (ii) implementing procedures for site plan review of construction plans that consider potential for water quality impacts; (iii) implementing procedures for construction site inspection and enforcement of control measures; (iv) utilizing sanctions and penalties to ensure compliance; (v) establishing procedures for the receipt and consideration of information and non-compliance reports submitted by the public; (vi) identifying appropriate BMPs for implementation on construction sites; (vii) establishing measurable goals to evaluate successful program implementation.

Permittees propose to continue the following Development Construction program components:

- local storm water pollution prevention plans for projects less than five acres
- minimum control measures at all construction sites
- State storm water pollution prevention plan and notice of intent filing for construction projects five or more acres
- Brochures and information material for developers, construction affiliates, and the public
- Employee training

Deficiencies

The program is deficient because it does not include:

- **SWPPP Enforcement:** Permittees need to enforce SWPPP requirements at all sites under their municipal and MS4 permit authority, including sites under the State General Construction Activity Storm Water Permit, independent of the Regional Board's inspection program.
- **Performance:** An appropriate performance standard to measure successful implementation.

Possible Advancements

- **Training:** Tier employee training schedules to allow a completion time of six months for cities with a population less than 1 million and one year for cities with a population of 1 million or more.
- **Regulation of Additional Construction Sites:** Lower the threshold for storm water pollution prevention plans from 5 acres to "1 acre or more," to be consistent with USEPA Phase II regulations. [See USEPA Phase II Small Construction Projects Fact Sheet]. Also consider requiring such plans for high-risk projects that are within or discharging directly to or directly adjacent to an environmental sensitive area, are located in a hillside area; and/or are less than an acre – but need to be regulated as deemed necessary by priority criteria to be proposed by Permittees.

- Tracking database: Develop a construction inspection and enforcement tracking system, similar to the one for the industrial program. A standardized database may be created to identify projects subject to the construction program requirements and inspection and enforcement fields attached. The database will also enable measuring the performance and progress.
- Program detail: Provide detail on compliance inspection, follow-up procedures, fate of self-inspection forms, use of building code violation forms for storm water violations, and guidelines on sanctions.
- Preference: Emphasize the use of erosion control BMPs first and only then sediment control BMPs. Guidance materials about BMPs that may be considered for implementation should be made readily available through diverse media such as websites and public counters.

VIII. Program for Storm Water Monitoring in Los Angeles County

Background

Permittees implemented a successful comprehensive monitoring and assessment program during the current permit at two watersheds to better understand receiving water impacts. In addition they measured mass emissions at four rivers, conducted land-use pollutant load studies, and evaluated a couple of critical sources.

The objective of a monitoring program for Los Angeles County is to: (i) identify sources of storm water pollutants; (ii) assess impacts of storm water discharges on receiving waters; (iii) measure pollutant loads to waters of the U.S. and establish long-term trends; and (iv) evaluate the effectiveness of BMPs.

The objective of the storm water program may be achieved by: (i) monitoring critical sources and priority land-uses; (ii) profiling storm water discharge plumes and evaluating the causes of toxicity; (iii) conducting bioassessments of resident flora and fauna to assess the health of the ecosystem; (iv) measuring mass-emissions of pollutants to the coastline at river and stream mouths; and (v) evaluating the effectiveness of structural and treatment control BMPs.

Permittees propose to implement a monitoring program for Los Angeles County that includes:

- Landuse monitoring for selected pollutant parameters
- Mass emission monitoring at Ballona Creek, Malibu Creek, Los Angeles River, Dominguez Channel and San Gabriel River for selected parameters
- Plume profile, bioassessment, sediment fate and transport, and storm water toxicity at San Pedro Bay and Santa Monica Bay
- Wet and dry weather flow toxicity in the Los Angeles River, Coyote Creek, and Dominguez Channel
- Impact of aerial deposition on inland watersheds

- Co-participation with the Southern California Coastal Water Research Project pathogen modeling study; and with the Coastal Commission and the U.S. Army Corp to manage contaminated sediments

Deficiencies

The proposed monitoring program is deficient as follows:

- **Trash monitoring:** Does not implement a baseline trash-monitoring program for watersheds not presently listed for impairment from trash.
- **Treatment Control BMP Effectiveness:** Does not evaluate the effectiveness of structural and treatment control BMPs at critical sources and as watershed improvement projects.

Possible Advancements

- **Source Identification Strategy:** Submit strategies for source identification and reduction of zinc and copper in the Ballona Creek watershed and nutrients in the Malibu watershed, and for pollutants scheduled in respective watersheds within the next 5 years for Total Maximum Daily Load (TMDL) development.
- **New Development Controls:** Conduct a study to measure the effectiveness of new development and redevelopment standards in improving the quality of storm water discharges.
- **Coordination:** Coordinate the monitoring program with the California Department of Transportation (Caltrans), the Santa Monica Bay Restoration Program, and the Southern California Coastal Water Research Project (SCCWRP) Regional Monitoring Program.

IX. Miscellaneous

Small Municipality Temporary Delay: Municipalities with a population of less than 100,000 (1990 census), who availed themselves of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 temporary delay provisions for publicly operated Phase 1 industrial facilities and construction projects, will be required to obtain coverage for storm water discharges no later than March 10, 2003.

Administrative Review Procedure: The Administrative Review procedure followed in the current permit term is likely to be revised significantly, with 'Notice of Intent to Meet and Confer' and other administrative review provisions eliminated. The USEPA has commented that MS4 permits should not include such administrative steps that restrain the ability of the permitting authority to enforce the federal Clean Water Act.

WMAFs: The requirement to develop detailed Watershed Management Area Plans (WMAFs) is likely to be eliminated, because WMAFs submitted with the ROWD did not demonstrate that municipalities intend to tailor implementation to accommodate watershed characteristics. Permittees are invited to submit a separate list of watershed specific programs that are different than the countywide baseline for consideration [or reference the WMAP page]. Such sub-programs may de-emphasize some countywide program components, strengthen others, or offer a wholly new augmentation.

TMDL Provisions: The tentative permit is likely to include provisions that will require Permittees to: (i) modify the SQMP within 180 days of approval of a TMDL, pursuant to the procedures established under state and federal law and regulations, and (ii) implement a program to achieve pollutant load reductions as specified in the TMDL.