

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
ORDER R4-2010-0108
NPDES PERMIT NO. CAS004002
WASTE DISCHARGE REQUIREMENTS
FOR
STORM WATER (WET WEATHER) AND NON-STORM WATER (DRY WEATHER)
DISCHARGES FROM
THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS WITHIN THE VENTURA
COUNTY WATERSHED PROTECTION DISTRICT, COUNTY OF VENTURA AND
THE INCORPORATED CITIES THEREIN.

July 8, 2010



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FINDINGS

The California Regional Water Quality Control Board, Los Angeles Region (hereinafter called Regional Water Board), finds that:

A. Permit Parties and History

1. Ventura County Watershed Protection District (Principal Permittee and Co-permittee), County of Ventura, cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura (Ventura), Santa Paula, Simi Valley and Thousand Oaks (hereinafter referred to separately as Permittees) have joined together to form the Ventura Countywide Storm Water Quality Management Program to discharge wastes. The Permittees discharge or contribute to discharges of storm water and non-storm water from municipal separate storm sewer systems (MS4s), also called storm drain systems, into the Watershed Management Areas of Ventura River, Santa Clara River, Calleguas Creek, Malibu Creek and Miscellaneous Ventura Coastal all within Ventura County and Los Angeles County (see Attachment "A").
2. Prior to the issuance of this permit, storm water discharges from the Ventura County MS4 were covered under the countywide waste discharge requirements contained in Order No. 09-0057, adopted by the Regional Water Board on May 7, 2009, which replaced Order No. 00-108, adopted by the Regional Water Board on July 27, 2000, which replaced Order No. 94-082, adopted by the Regional Water Board on August 22, 1994. Order No. 09-0057 also served as a National Pollutant Discharge Elimination System (NPDES) permit for the discharge of municipal storm water.
3. On June 8, 2009, the Building Industry Legal Defense Foundation, Construction Industry Coalition on Water Quality, and the Building Industry Association of Southern California, Inc. (collectively, "BIA") submitted a petition to the State Water Resources Control Board (State Water Board) challenging Order No. 09-0057. On

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March 10, 2010, the State Water Board requested that the Regional Water Board agree to a voluntary remand of Order No. 09-0057 in order to address perceived procedural issues in connection with adoption of Order No. 09-0057. The State Water Board also requested that BIA agree to place its petition in abeyance. On March 11, 2010, the Regional Water Board agreed to a voluntary remand, and stated its intention to hold a hearing to reconsider the permit in July 2010. Since BIA did not agree to place its petition in abeyance, BIA's petition was thereafter dismissed by operation of law. On May 5, 2010, the Regional Water Board notified the Permittees, the parties and other interested persons of its intent to reconsider Order No. 09-0057 and has provided them with an opportunity to submit written comments on provisions of the permit that were not previously subject to notice and comment.

4. The Ventura County Board of Supervisors approved the concept of a countywide NPDES permit program and the use of the Flood Management District (presently the Watershed Protection District) benefit assessment authority to finance it on April 14, 1992. On June 30, 1992, the Ventura County Board of Supervisors adopted a benefit assessment levy for storm water and flood management in the unincorporated areas of Ventura County and the cities within the County, to be used in part to finance the implementation of a countywide NPDES municipal storm water permit program. The Ventura County MS4 Permittees have entered into an agreement with the Watershed Protection District to finance the activities related to the Ventura County MS4 Permit for shared and district wide expenses. The Permittees are also given the option to use the Benefit Assessment Program to finance their respective activities related to reducing the discharge of storm water pollutants under the MS4 Permit.
5. The Regional Water Board may require a separate NPDES permit for any entity that discharges storm water into the watersheds of Ventura County. Such an entity can be any State or Federal facility, special district or other public or private party.

B. Nature of Discharge

1. Storm water discharges consist of surface water runoff generated from various land uses in all the hydrologic drainage basins, which discharge into Waters of the State. The quality of these discharges varies and is affected by geology, land use, season, hydrology, and sequence and duration of hydrologic events. Based on the Ventura Countywide Storm Water Monitoring Program's Water Quality Monitoring Reports which were required under Order No. 00-108, the dry weather and wet weather Pollutants of Concern (POC) in urban stormwater include chloride, fecal indicator bacteria, conventional pollutants, metals, nitrogen, organic compounds, and pesticides. The POC are identified in Attachment "B" of this Order. Many of the POC listed are causing impairments identified on the federal Clean Water Act (CWA) § 303(d) list of impaired waterbodies.

The State Water Board submits a report (a list of water quality limited segments (§ 303[d] list)) on the State's water quality to the U.S. EPA pursuant to § 305(b) of the

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1972 CWA, and Title 40, CFR 130.7, every 2 years. The Report provides water quality information to the general public and serves as the basis for the U.S. EPA's National Water Quality Inventory Report to Congress. Section 303(d) requires that all waters that are not attaining standards after the implementation of those controls required by 1977, shall be included on the list. Title 40 CFR 130.7(b)(3) defines "water quality standard applicable to such waters" as "those water quality standards established under § 303 of the Clean Water Act, including numeric criteria, narrative criteria, waterbody uses, and antidegradation requirements."

2. Common pollutants in urban storm water and their respective sources include, but are not limited to: bacteria from illegal discharges, illicit connections and animal waste; Polycyclic Aromatic Hydrocarbons (PAHs) from the products of internal combustion engine operation and parking lot sealants; nitrogen compounds from fertilizer application; pesticides from pest mitigating applications and from plant mitigating applications; bis (2-ethylhexyl) phthalate from the break down of plastic products; mercury from atmospheric fallout and improper disposal of mercury switches; lead from fuels, paints and automotive parts; copper from brake pad wear and roofing materials; zinc from tire wear and galvanized sheeting and fencing; sediment from land disturbance and erosion; trash; and dioxins as products of combustion.
3. In general, the pollutants that are found in municipal storm water runoff can harm human health and aquatic ecosystems. In addition, the high volumes and high velocities of storm water discharged from MS4s into receiving waters can adversely impact aquatic ecosystems and stream habitat and cause stream bank erosion and physical modifications; these changes are collectively termed hydromodification. Hydromodification and discharges of runoff and stormwater from urbanized areas remain a leading cause of impairment of surface waters in California and nationwide (U.S. EPA 2009).
4. Ammonia as Nitrogen, and Nitrate plus Nitrite as Nitrogen are biostimulatory substances that can cause or contribute to eutrophic effects such as low dissolved oxygen and algae growth impairing aquatic and wildlife habitats as well as recreational uses. At elevated concentrations, ammonia is highly toxic to fish and other aquatic life.
5. Elevated bacterial indicator densities impair the water contact recreation (REC-1) beneficial use at beaches, creeks, lakes, estuaries, lagoons, and marinas. Swimming in waters with elevated bacterial indicator densities has been associated with adverse health effects. Specifically, local and national epidemiological studies indicate that there is a causal relationship between adverse health effects and recreational water quality, as measured by bacterial indicator densities (Pruss, 1998, Review of epidemiological studies on health effects from exposure to recreational waters, International Journal of Epidemiology; Haile et al., 1996, An epidemiological study of possible adverse health effects of swimming in Santa Monica Bay, Santa Monica Bay Restoration Project; and Haile et al., 1999, The health effects of swimming in

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ocean water contaminated by storm drain runoff, Epidemiology). Sources of elevated bacteria to marine and fresh waters may also include illegal discharges from improperly maintained standard septic systems, on-site wastewater treatment systems (OWTS) and illicit discharges from private drains.

6. Pesticides are substances used to prevent, destroy, repel or mitigate pests such as insects, weeds, and microorganisms. Their effects can be direct (e.g. fish die from exposure to a pesticide entering waterways, or birds do not reproduce after ingesting contaminated fish), or indirect (a hawk becomes sick from eating a mouse dying from pesticide poisoning). Pesticide categories include: Organochlorine, Organophosphorus, Organophosphate, and Pyrethroid.
7. Polychlorinated Biphenyls (PCBs) are a subset of the synthetic organic chemicals known as chlorinated hydrocarbons. Concern over PCBs' toxicity, persistence (chemical stability) in the environment and bioconcentration in aquatic organisms has led to prohibitions on PCBs.
8. Rising groundwater and swimming pool water have been found to be sources of pollutants such as salts (chloride). Salts increase the salinity of otherwise freshwater systems and disrupt physiological processes. The Regional Water Board has waterbodies listed on the CWA § 303(d) list for impairment due to salts and has adopted Basin Plan amendments to include Total Maximum Daily Loads (TMDLs) for salts. This Order includes provisions to control the discharges from these activities in order to directly or indirectly reduce or eliminate the discharge of salts to fresh water systems where salts may impair water quality and beneficial uses.
9. Trash and debris are pervasive pollutants which accumulate in streams, rivers, bays, and the ocean throughout Southern California. They pose a serious threat to our oceans and coasts, navigation, biological resources, recreation, human health and safety, aesthetics, and economies.
10. Municipal storm water (wet weather) and non-storm water (dry weather) discharges may contain pollutants that cause or threaten to cause an exceedance of the water quality standards, as outlined in the Los Angeles Region's Basin Plan. Wet weather and dry weather discharges from the MS4 are subject to conditions and requirements established in the Basin Plan for point source discharges. Discharges from the MS4 may not cause or contribute to exceedances of water quality standards.
11. Biological communities act to integrate the effects of water quality conditions in a stream by responding with changes in their population abundances and species composition over time. These populations are sensitive to multiple aspects of water and habitat quality, and provide expressions of ecological health easier to understand than the results of chemical and toxicity tests. Biological assessments and criteria address the cumulative impacts of all stressors, especially habitat degradation, and chemical contamination, which result in a loss of biological diversity. Biological

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information can help provide an ecologically based assessment of the status of a waterbody. Bioassessment is a cost-effective tool and protocol for assessing the biological and physical habitat conditions of streams and rivers for evaluation of the overall health of a watershed. The Principal Permittee consents to participate in the Southern California Storm Water Monitoring Coalition (SMC) Southern California Regional Bioassessment Monitoring Program.

12. Studies indicate that facilities with paved surfaces subject to frequent motor vehicular traffic (such as: strip malls, parking lots, commercial business parks, and fast food restaurants), or facilities that perform vehicle repair, maintenance, or fueling (automotive service facilities) are potential sources of POC in storm water (*California Stormwater Quality Association, Stormwater Best Management Practice Handbook, Municipal, January 2003*).
13. Retail Gasoline Outlets (RGOs) are points of convergence for vehicular traffic and are similar to parking lots and urban roads. Studies indicate that storm water discharges from RGOs have high concentrations of hydrocarbons and heavy metals (*California Stormwater Quality Association, Stormwater Best Management Practice Handbook, Municipal, January 2003*).
14. The industries and businesses listed in this Order that are to be inspected by Permittees have the potential to discharge contaminated storm water into the MS4. This storm water is an environmental threat because it can adversely impact public health and safety, and the quality of receiving waters. For example, pretreatment program compliance inspections and audits performed in the Los Angeles and Ventura Counties indicate that automotive service and food service facilities sometimes discharge polluted storm water to the MS4s. The POC in such wash waters include oil and grease, toxic chemicals, and food waste. Spills from clogged sanitary sewer lines have a high likelihood to reach the receiving waters via MS4s. Overall, the most common POC identified in storm water discharge to the MS4s are: (i) heavy metals, (ii) oil and grease/ PAHs, (iii) sediments, (iv) oxygen demanding substances, (v) litter/ trash/ debris, (vi) nutrients, (vii) other toxic materials, such as pesticides. Municipal storm water monitoring data and industrial storm water monitoring data indicate that industrial and commercial sites continue to contribute significant quantities of pollutants in storm water runoff.
15. Development and urbanization increase pollutant loads, volume, and discharge velocity. First, natural vegetated pervious ground cover is converted to impervious surfaces (paved) such as highways, streets, rooftops and parking lots. While natural vegetated soil can both absorb rainwater and remove pollutants providing an effective natural purification process, in contrast, impervious surfaces (such as pavement and concrete) can neither absorb water nor remove pollutants, and thus the natural purification characteristics are lost. Second, urban development creates new pollution sources as the increased density of human population brings proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage waste,

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pesticides, household hazardous wastes, pet wastes, trash, and other anthropogenic pollutants. Development and urbanization especially threaten environmentally sensitive areas. Such areas have a much lower capacity to withstand pollutant shocks than might be acceptable in the general circumstance. In essence, development that is ordinarily insignificant in its impact on the environment may become significant in a particularly sensitive environment. These environmentally sensitive areas (ESAs) designated by the State in the Ventura County watershed are defined in Part 6 (Definitions).

16. The increased volume, increased velocity, and discharge duration of storm water runoff from developed areas has the potential to accelerate downstream erosion and impair stream habitat in natural drainages. Studies have demonstrated a direct relationship between the degree of imperviousness of an area and waterbody degradation (*Impacts of Impervious Cover on Aquatic Systems, Center for Watershed Protection, March 2003; Management Strategies for Urban Stream Rehabilitation, Booth, D. et al., February 2003*). Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as 3-10 percent conversion from natural to impervious surfaces in a subwatershed. Recent studies conducted in California indicate that intermittent and ephemeral streams are even more susceptible to the effects of hydromodification than streams from other regions of the U.S. with stream degradation being recognized when the associated catchment's impervious cover is as little as 3-5% (*Managing Runoff to Protect Natural Streams: The Latest Development on Investigation and Management of Hydromodification in California, Stein, E. and Zaleski, S., December 2005; Effect of Increase in Peak Flows and Imperviousness on the Morphology of Southern California Streams, Coleman, D., April 2005*). The percentage of impervious cover is one indicator and predictor of potential water quality degradation expected from new development.
17. The Order requires projects where it has been demonstrated to be technically infeasible to achieve less than 30% Effective Impervious Area, to mitigate off-site 1.5 times the volume that would normally be required to be retained on site. The increase in off-site mitigation is warranted because it has been concluded that, at impervious land cover over 30%, impacts on streams and wetlands become more severe, and degradation is almost unavoidable without special measures (Prince George's County, MD 1999; BASMAA 1999; Center for Watershed Protection 2003). The off-site mitigation volume requirement may be met through retention and/or biofiltration.
18. Low Impact Development (LID) is an effective approach to minimizing the adverse effects of urbanization and development on waterbodies and their beneficial uses that has been endorsed by California and other states. The California Ocean Protection Council (OPC), in a resolution adopted on May 15, 2008, found that LID is a practicable and superior approach that new and redevelopment projects can implement to minimize and mitigate increases in runoff and runoff pollutants and the resulting impacts on downstream uses, coastal resources and communities. In its

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Strategic Plan Update 2008-2012, the State Water Board reiterated sustainability as a key principle, stating its commitment to “enhancing and encouraging sustainability within the administration of Water Board programs and activities by promoting water management strategies such as low impact development...” (SWRCB 2008).

19. LID is a comprehensive source control strategy first pioneered by Prince George’s County, Maryland in 1997 to help address the growing economic and environmental limitations of conventional stormwater management practices. As LID was developed by a local government, it is sensitive to addressing local government’s unique environmental and regulatory needs in the most economical manner possible by reducing costs associated with stormwater infrastructure design, construction, maintenance and enforcement. LID also provides for local government’s need for economic vitality through reasonable and continued growth and redevelopment. LID allows for greater development potential with less environmental impacts through the use of smarter designs and advanced technologies to achieve a better balance between conservation, growth, ecosystem protection and public health / quality of life. (Low Impact Development: Smart Technology For Clean Water Definitions, Issues, Roadblocks, and Next Steps, Coffman, Larry)
20. The implementation of LID techniques across the United States and Canada has demonstrated that the proper implementation of LID techniques results in more benefits than single purpose stormwater and flood control infrastructure, including increased water quality protection, enhanced property values, improved aquatic and terrestrial habitat, aesthetic amenities, and improved quality of life (Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices, USEPA Doc No. EPA 841-F-07-006, December 2007). Further, properly implemented LID techniques can help mimic the pre-project runoff volume and time of concentration, thus minimizing the adverse effects of hydromodification on stream habitat and biological condition (A Review of Low Impact Development Policies: Removing Institutional Barriers to Adoption, Low Impact Development Center and State of California, State Water Resources Control Board, December 2007). The requirements of this Order facilitate the implementation of LID strategies to protect water quality, reduce runoff volume, and to garner additional benefits.
21. The implementation of LID techniques have been associated with the following environmental benefits: improved air quality due to the increased use of trees and vegetation, reduced urban temperatures due to the shade offered by increased vegetation and the reduction of heat absorbing materials (concrete, etc.), the moderation of climate change due to reduced urban temperatures, increased energy efficiency due to lower ambient temperatures when LID practices are implemented on and around buildings, and aesthetic benefits due to the increased use of trees and vegetation (U.S. EPA Technical Guidance on Implementing the Storm Water Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act).

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22. Furthermore, the implementation of LID not only benefits water quality, but also enhances water supply. LID is consistent with and supports the Governor's 20 x 2020 Water Conservation Plan (February 2010); the State Board's 2008-2012 Strategic Plan Update (i.e. to promote sustainable local water supplies); the State Board's Recycled Water Policy (Resolution No. 2009-0011) objective to increase [beneficial] use of stormwater; requirements of the Water Conservation in Landscaping Act of 2006 (AB 1881, Laird), which requires cities and counties to adopt landscape water conservation ordinances by January 1, 2010; and the Department of Water Resources' Water Efficient Landscape Ordinance (Cal. Code Regs. §492.15).
23. This Order requires specified New Development and Redevelopment projects to control pollutants, pollutant loads, and runoff volume emanating from impervious surfaces by specifying a 5% Effective Impervious Area (EIA) site limitation and a fixed runoff volume to be retained on site. There is a growing acceptance by stormwater professionals and local governments to integrate LID strategies that limit impervious area, and associated onsite retention criteria, into stormwater management programs and MS4 permits. For example, West Virginia's Small MS4 Permit # WV0116025, requires the on-site retention of the volume of runoff produced from the first inch of a 24-hour storm; the U.S. EPA's Technical Guidance on Implementing the Storm Water Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act, requires the on-site retention of the volume of runoff produced from the 95th percentile storm event where technically feasible; the City of Philadelphia requires the onsite retention of the volume of runoff produced from the first inch of a 24-hour storm; and the City of Portland, Oregon requires the onsite infiltration of the runoff volume from a 10-year, 24-hour design storm.
24. Based on a study conducted by Horner (2007) in Ventura County, it was found that a 5% EIA threshold can be met in typical developments. This result was reached assuming the use of native soils typical to Ventura County; soil enhancements can further increase onsite infiltration potential. Using six different development types, the Horner study tested the feasibility of draining all but 3% of impervious area to pervious land on the sites. Five of the six sites had adequate or greater capacity to infiltrate the full annual runoff volume from the "Not-Connected Impervious Area" (NCIA) and pervious areas where EIA is limited to 3% of the total site area. By showing that it is possible to retain all runoff from pervious areas where EIA is limited to 3% of the total site area under typical site conditions (i.e. native soils) and a wide range of development types, the study results provide support for the feasibility of the 5% EIA threshold.
25. Horner (2007) also found that developments implementing low impact strategies can achieve significant reductions in pollutant loading and runoff volume as well as greatly enhanced recharge rates compared to both developments with no BMPs and developments with traditional treatment BMPs.

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26. In some circumstances, however, site conditions and the type of development can limit the feasibility of retaining, infiltrating, and reusing stormwater at sites due to a variety of site specific conditions. Factors that affect the feasibility of a fixed volume capture standard include, but are not limited to: successive storms, soil infiltration capacity, subsurface pollution, and infill in urban core centers (e.g. R. Horner, *Investigation of the Feasibility and Benefits of Low-Impact Site Design Practices ("LID") for Ventura County* (February 2007); E. Strecker, A. Poresky, D. Christsen, *Memorandum: Rainwater Harvesting and Reuse Scenarios and Cost Consideration* (April, 2009)).
27. A major concern expressed by commenters is the 30% EIA limitation may not allow some projects to be built. Part of the rationale supporting the feasibility of on site retention in Order 09-0057 was derived from the Richard Horner (2007) study. The Horner study purports to demonstrate that stormwater infiltration is feasible throughout Ventura County and is the key study for an upper-bound EIA requirement. Horner's approach to demonstrate feasibility is to estimate stormwater runoff volume and compare it to infiltration capacity. While the Horner report has value at a general level and complements findings of other studies in Southern California and elsewhere. Staff has the following concerns with the Horner study conclusions with regard to the universal feasibility of achieving less than 30% EIA:
- The Horner analysis is based on engineered infiltration basins rather than undisturbed pervious cover.
 - The Horner analysis cites the UCSB infiltration studies which are based on a relatively high permeability soils. However, the EIR cited in the study by Horner shows a significant quantity percentage of the Ventura County soils are described as sandy loamy and are classified as "low permeability and slow draining.
 - The Horner analysis normalizes runoff rates and infiltration capacity to an annual basis which may not address the critical conditions appropriate for the seasonal precipitation patterns in Ventura County.
 - Horner states the study was limited in scope such that its universal applicability throughout Ventura County is not well supported.

Staff recognizes the significance of the 30% EIA threshold but cannot justify a strict cap.

28. In a letter dated April 10, 2009, the Ventura County Permittees, NRDC and Heal the Bay presented an agreement to the Regional Water Board proposing new development/redevelopment criteria, including on-site retention requirements, a 5% EIA limitation, infeasibility criteria, a 30% EIA cap, and off-site mitigation provisions; the elimination of Municipal Action Levels (MALs) and weekly, year-round beach water quality monitoring at 10 sites. The letter was signed by representatives of the parties, including NRDC, Heal the Bay, Ventura, Oxnard, Simi Valley, and the County of Ventura. At the Regional Board hearing on May 7, 2009,

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the Ventura County Permittees, NRDC, and Heal the Bay reiterated their support for the agreement set forth in their joint April 10, 2009 comment letter and advocated that the agreement be incorporated into the permit in its entirety.

29. Specific LID strategies include bioretention and rainwater harvesting for reuse. Bioretention is a method of treating stormwater by pooling water on the surface and allowing filtering and settling of suspended solids and sediment at the mulch layer, prior to entering the plant/soil/microbe complex media for infiltration and pollutant removal. Rain Gardens / bioretention techniques are used to accomplish water quality improvement and water quantity reduction. Prince George's County, Maryland, and Alexandria, Virginia have used this BMP since 1992 with success in many urban and suburban settings. Rain Gardens can be integrated into a site with a high degree of flexibility and can balance nicely with other structural management systems, including porous asphalt parking lots, infiltration trenches, as well as non-structural stormwater BMPs. The Rain Garden vegetation serves to filter (water quality) and transpire (water quantity) runoff, and the root systems can enhance infiltration. The plants take up pollutants; the soil medium filters out pollutants and allows storage and infiltration of stormwater runoff; and the infiltration bed provides additional volume control ("Rain Gardens", River-Friendly Landscaping Coalition, Sacramento, CA). Properly designed bioretention techniques mimic natural forest ecosystems through species diversity, density and distribution of vegetation, and the use of native species, resulting in a system that is resistant to insects, disease, pollution, and climatic stresses (Draft - Pennsylvania Stormwater Management Manual).

As an alternative to redirection of stormwater to functional landscape, rain gutter flows can be directed into rain barrels or cisterns for later use in irrigating lawns and gardens. Disconnections of rain gutters can effectively be implemented on existing properties with little change to present site designs. The benefits of urban area rainwater harvesting can be huge, providing supplemental water for many local uses. Such as irrigating a vegetable garden and surrounding landscape, which also leaves more treated water in the municipal water supply to help cities through times of drought or other shortages. A number of cities in the Los Angeles Region, including Los Angeles, Long Beach and Santa Monica, have implemented successful rainwater harvesting incentive programs.

30. Traditional approaches to stormwater management involve conveying runoff off-site to receiving waters, to a combined sewer system, or to a regional facility that treats runoff from multiple sites. These designs typically include hard infrastructure, such as curbs, gutters, and piping. LID-based designs, in contrast, are designed to use natural drainage features or engineered swales and vegetated contours for runoff conveyance and treatment. In terms of costs, LID techniques like conservation design can reduce the amount of materials needed for paving roads and driveways and for installing curbs and gutters. Conservation designs can be used to reduce the total amount of impervious surface, which results in reduced road and driveway lengths and reduced costs. Other LID techniques, such as grassed swales, can be used to infiltrate roadway

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runoff and eliminate or reduce the need for curbs and gutters, thereby reducing infrastructure costs. Also, by infiltrating or evaporating runoff, LID techniques can reduce the size and cost of flood-control structures (Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices, U.S. EPA).

The U.S. EPA looked at 17 case studies throughout the country to determine if LID strategies were a cost effective alternative to conventional storm water control measures. They found that the use of LID practices can be both fiscally and environmentally beneficial to communities. They found total capital cost savings ranging from 15% to 80% when LID strategies were used compared with traditional stormwater control measures, with only a few cases noted where LID projects resulted in higher costs than traditional storm water controls. In the majority of the cases, costs for projects implementing LID strategies were found to be less due to reduced costs for site grading and preparation, stormwater infrastructure, site paving, and landscaping (Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices, U.S. EPA).

31. The use of LID strategies also has the potential to create larger economic benefits, including but not limited to, reduced need for flood control, which could save up to \$400 million; increased property values, which could amount to up to \$5 billion; and creation of additional groundwater supplies worth up to \$7.2 billion (Deviny et al. 2004; MacMullan, E., Assessing Low Impact Developments Using a Benefit-Cost Approach, 2nd National Low Impact Development Conference, March 12-14, 2007).
32. The Regional Water Board adopted a Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands (Order No. R4-2005-0080) on November 3, 2005. The objective of the program is to monitor runoff from irrigated agriculture facilities in the coastal watersheds of Ventura and Los Angeles Counties. The Basin Plan, which designates beneficial uses and establishes water quality objectives for the Region, recognizes that agricultural activities can generate pollutants such as sediment, pesticides, and nutrients that upon discharge to receiving water can degrade water quality and impair beneficial uses. A category identified by the Conditional Waiver as a source of pollutants is nursery operations. This Order includes requirements for the municipal operator to confirm that nursery operators implement pollutant reduction and control measures with the objective of reducing pollutants in storm water runoff discharges.
33. Research conducted on the contribution of aerial deposition of trace heavy metals in Los Angeles County watersheds indicates that dry indirect deposition may account for a significant load of pollutants into surface waters. Similar patterns of aerial deposition likely occur in Ventura County. Of the atmospherically deposited pollutants on the watersheds, ten to twenty percent may account for the total load for copper, zinc, nickel, lead, and chromium to the waterbodies. Land reservoirs and sequestration may account for the remaining eighty to ninety percent of the atmospherically deposited pollutants on the watersheds. Emissions of semi-volatile

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organics such as polycyclic aromatic hydrocarbons (PAHs) and pesticides and their subsequent deposition may contribute to the contamination of receiving waters but appear to be less significant. The remaining percentage is stored in land reservoirs and eventually shows up in receiving waters.

C. Permit Background

1. The essential components of the Storm Water Management Program, as required by the Code of Federal Regulations (CFR) [40 CFR 122.26(d)] are:
 - (a) Adequate Legal Authority.
 - (b) Fiscal Resources.
 - (c) Storm Water Quality Management Program (SMP)
 - (1) Public Information and Participation Program
 - (2) Industrial/ Commercial Facilities Program
 - (3) Planning and Land Development Program
 - (4) Development Construction Program
 - (5) Public Agency Activities Program
 - (6) Illicit Connection and Illicit Discharges Elimination Program
 - (d) Reporting Program (Monitoring Report and Program Report)
2. The Ventura County SMP, dated November 2001 (revision 2) identifies seven program areas, which are listed below and were previously approved under Board Order No. 00-108. For purposes of consistency, they are titled as follows:
 - (a) Ventura County SMP.
 - (1) Program Management
 - (2) Programs for Residents
 - (3) Programs for Industrial/ Commercial Businesses
 - (4) Programs for Planning and Land Development
 - (5) Programs for Construction Sites
 - (6) Programs for Public Agency Activities
 - (7) Programs for Illicit Connections/ Illegal Discharges
 - (b) For purposes of region-wide consistency, the program titles are revised and consolidated into the six areas listed in the preceding C.1(c). All Permittee storm water documents submitted to the Regional Water Board are to follow the organization enumerated in C.1(c).
3. The Permittees filed a Report of Waste Discharge (ROWD), dated January 26, 2005. The Permittees applied for renewal of their waste discharge requirements for a 5-year period, which serves as an NPDES permit to discharge wastes to surface waters.
4. The Regional Water Board reviewed the ROWD and determined it to be partially complete under the reapplication policy for MS4s issued by the United States Environmental Protection Agency (U.S. EPA) (61 Fed. Reg. 41697). The Regional Water Board has prepared this Order so that implementation of provisions contained

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in this Order by Permittees will meet the requirements of the federal NPDES regulations at 40 CFR 122.26.

5. The Permittees ROWD contained a proposed Storm Water Management Program and a Monitoring Program to be considered by the Regional Water Board for incorporation into an MS4 NPDES Permit as permit conditions and to demonstrate compliance with federal law.
6. To-date, the monitoring program has consisted of mass emission, receiving water (tributaries), and land-use monitoring stations, toxicity testing, special studies for bioassessment of the Ventura River and hydrology, identification of ESAs, implementation of the Storm Water Quality Urban Impact Mitigation Plan (SQUIMP), and has provided support for volunteer monitoring programs. This Order requires a monitoring program consisting of mass emission, toxicity, TMDL storm water (wet weather) MS4 water quality-based effluent limits, TMDL non-storm water (dry weather) MS4 water quality-based effluent limits, Pyrethroid assessment study, continuation of the hydromodification study, low impact development study, and participation in the Southern California Regional Bioassessment Program and Southern California Bight Project (SCBP).
7. The Principal Permittee is a member of the Southern California Coastal Water Research Project (SCCWRP) Commission. The Principal Permittee also participates in the Regional Monitoring Programs and research partnerships, such as the Southern California Storm Water Monitoring Coalition (SMC) and the Bioassessment Working Group.

D. Permit Coverage

1. The area covered by this Order includes all areas within Ventura County boundaries and all areas within each co-permittee's boundaries (see Figure 1) that drain into the MS4.
2. The Permittees covered under this Order were designated on a system-wide basis under Phase I of the CWA § 402(p)(3)(B)(i). The action of covering all Ventura County municipalities under a single MS4 permit on a system-wide basis was consistent with the provisions of 40 CFR 122.26(a)(3)(iv), which states that one permit application may be submitted for all or a portion of all municipal separate storm sewers within adjacent or interconnected large or medium municipal separate storm sewer systems; and the Regional Water Board may issue one system-wide permit covering all, or a portion of all municipal separate storm sewers in adjacent or interconnected large or medium municipal separate storm sewer systems.
3. Federal, State, Regional, or local entities within the Permittees' boundaries or in jurisdictions outside the Ventura County Watershed Protection District, and not currently named in this Order, may operate storm drain facilities and/ or discharge

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storm water to storm drains and receiving waters covered by this Order. The Permittees may lack legal jurisdiction over these entities under State and Federal constitutions. The Regional Water Board will coordinate with these entities to implement programs that are consistent with the requirements of this Order. The Regional Water Board may consider such facilities for coverage under its NPDES permitting scheme pursuant to USEPA Phase II storm water regulations. Permittees have expressed their intention to work cooperatively to control the contribution of pollutants from one portion of the MS4 to another portion of the system. Permittees shall make good faith efforts to control the contribution of pollutants to the MS4 from non-permittee dischargers such as Caltrans, the U.S. Department of Defense, and other state and federal facilities.

4. TMDLs are numerical calculations of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point sources (Waste Load Allocation (WLA)) and non-point sources (Load Allocation (LA)). Discharges from the MS4s are considered point source discharges, because the MS4 is a point source.
5. This Order incorporates applicable WLAs that have been adopted by the Regional Water Board and have been approved by the Office of Administrative Law and the U.S. EPA. The TMDL WLAs in the Order are expressed as water quality-based effluent limits in a manner consistent with the assumptions and requirements of the TMDL from which they are derived.
6. The CWA and the California Water Code contain specific provisions on how wastewater discharges from point sources are to be permitted. Stormwater discharges (both dry weather and wet weather) are considered point source discharges.
7. Permittees should work cooperatively to control the contribution of pollutants from one portion of the MS4 to another portion of the system through inter-agency agreements or other formal arrangements.

E. Federal, State and Regional Regulations

1. The Water Quality Act of 1987 added §.402(p) to the CWA (33U.S.C. § 1251-1387). This section requires the U.S. EPA to establish regulations setting forth NPDES requirements for storm water discharges in 2 phases.
 - (a) U.S. EPA Phase I storm water regulations were directed at MS4s serving a population of 100,000 or more, including interconnected systems and storm water discharges associated with industrial activities, including construction activities. The Phase 1 Final Rule was published on November 16, 1990 (55 Fed. Reg. 47990).
 - (b) U.S. EPA Phase II storm water regulations are directed at storm water discharges not covered in Phase I, including small MS4s (population of less than 100,000),

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small construction projects (less than 5 acres), municipal facilities with delayed coverage under the Intermodal Surface Transportation Efficiency Act of 1991, and other discharges for which the U.S. EPA Administrator or the State determines that the storm water discharge contributes to a violation of a water quality standard, or is a significant contributor of pollutants to waters of the U.S. The Phase II Final Rule was published on December 8, 1999 (64 Fed. Reg. 68722).

2. The U.S. EPA published an Interpretative Policy Memorandum on Reapplication Requirements for MS4 permits on August 9, 1996 (61 Fed. Reg. 41697). This policy requires that MS4 reapplication for reissuance for a subsequent five-year permit term contain certain basic information and information for proposed changes and improvements to the storm water management program and monitoring program.
3. The U.S. EPA has entered into a Memorandum of Agreement (MOA) with the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service for enhancing coordination regarding the protection of endangered and threatened species under section 7 of the Endangered Species Act, and the CWA's water quality standards and NPDES programs. Among other actions, the MOA establishes a framework for coordination of actions by the U.S. EPA, the Services, and CWA delegated States on CWA permit issuance under § 402 of the CWA [66 Fed. Reg. 11202-11217].
4. The CWA allows the U.S. EPA to authorize states with an approved environmental regulatory program to administer the NPDES program in lieu of the U.S. EPA. The State of California is a delegated State. The Porter-Cologne Water Quality Control Act (California Water Code) authorizes the State Water Resources Control Board (State Water Board), through the Regional Water Boards, to regulate and control the discharge of wastes that could affect the quality of waters of the State, including waters of the United States, and tributaries thereto.
5. Under CWA § 303(d) of the CWA, States are required to identify a list of impaired water-bodies and develop and implement TMDLs for these waterbodies (33 USC § 1313 (d)(1)). The most recent 303(d) list's U.S. EPA approval date was June 28, 2007. The U.S. EPA entered into a consent decree with the Natural Resources Defense Council (NRDC), Heal the Bay, and the Santa Monica Baykeeper on March 22, 1999, under which all TMDLs for the Los Angeles Region must be adopted within 13 years from that date. This Order incorporates provisions incorporating approved WLAs for municipal storm water discharges and requires amending the SMP after subsequent pollutant loads have been allocated and approved.
6. Collectively, the restrictions contained in the TMDL Provisions for Storm Water (Wet Weather) Discharges and Non-Storm Water (Dry Weather) Discharges of this Order on individual pollutants are no more stringent than required to implement the provisions of the TMDL, which have been adopted and approved in a manner that is consistent with the CWA. Where a TMDL has been approved, NPDES permits must

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contain effluent limits and conditions consistent with the assumptions and requirements of the available WLAs in TMDLs (40 CFR 122.44(d)(1)(vii)(B)).

7. This Order does not constitute an unfunded local government mandate subject to subvention under Article XIII B, Section (6) of the California Constitution for several reasons, including, but not limited to, the following. This Order implements federally mandated requirements under CWA § 402, subdivision (p)(3)(B) (33 U.S.C. § 1342(p)(3)(B)). This includes federal requirements to effectively prohibit non-storm water discharges, to reduce the discharge of pollutants to the maximum extent practicable, and to include such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. Federal cases have held these provisions require the development of permits and permit provisions on a case-by-case basis to satisfy federal requirements. (Natural Resources Defense Council, Inc. v. U.S. E.P.A. (9th Cir. 1992) 966 F.2d 1292, 1308, fn. 17.) The authority exercised under this Order is not reserved state authority under the Clean Water Act's savings clause (cf. Burbank v. State Water Resources Control Bd. (2005) 35 Cal.4th 613, 627-628 [relying on 33 U.S.C. § 1370, which allows a state to develop requirements which are not "less stringent" than federal requirements]), but instead, is part of a federal mandate to develop pollutant reduction requirements for municipal separate storm sewer systems. To this extent, it is entirely federal authority that forms the legal basis to establish the permit provisions. (See, City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region (2006) 135 Cal.App.4th 1377, 1389; Building Industry Ass'n of San Diego County v. State Water Resources Control Bd. (2004) 124 Cal.App.4th 866, 882-883.)

Likewise, the provisions of this Order to implement TMDLs are federal mandates. The CWA requires TMDLs to be developed for waterbodies that do not meet federal water quality standards (33 U.S.C. § 1313(d)). Once the U.S. EPA or a state develops a TMDL, federal law requires that permits must contain effluent limitations consistent with the assumptions of any applicable wasteload allocation. (40 CFR 122.44(d)(1)(vii)(B)).

Second, the local agency Permittees' obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental dischargers who are issued NPDES permits for storm water discharges. With a few inapplicable exceptions, the Clean Water Act regulates the discharge of pollutants from point sources (33 U.S.C. § 1342) and the Porter-Cologne regulates the discharge of waste (Wat. Code, § 13263), both without regard to the source of the pollutant or waste. As a result, the "costs incurred by local agencies" to protect water quality reflect an overarching regulatory scheme that places similar requirements on governmental and nongovernmental dischargers. (See *County of Los Angeles v. State of California* (1987) 43 Cal.3d 46, 57-58 [finding comprehensive workers compensation scheme did not create a cost for local agencies that was subject to state subvention].)

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The Clean Water Act and the Porter-Cologne Water Quality Control Act largely regulate storm water with an even hand, but to the extent there is any relaxation of this even-handed regulation, it is in favor of the local agencies. Generally, the Clean Water Act requires point source dischargers, including discharges of storm water associated with industrial or construction activity, to comply strictly with water quality standards. (33 U.S.C. § 1311(b)(1)(C), *Defenders of Wildlife v. Browner* (1999) 191 F.3d 1159, 1164-1165 [noting that industrial storm water discharges must strictly comply with water quality standards].) As discussed in prior State Water Resources Control Board decisions, certain provisions of this Order do not require strict compliance with water quality standards. (SWRCB Order No. WQ 2001-15, p. 7.) Therefore, certain provisions of this Order regulate the discharge of waste in municipal storm water more leniently than the discharge of waste from non-governmental sources.

Third, the local agency Permittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order subject to certain voting requirements contained in the California Constitution. (See California Constitution XIII D, section 6, subdivision (c); see also *Howard Jarvis Taxpayers Association v. City of Salinas* (2002) 98 Cal. App. 4th 1351, 1358-1359.) The fact sheet demonstrates that numerous activities contribute to the pollutant loading in the municipal separate storm sewer system. Local agencies can levy service charges, fees, or assessments on these activities, independent of real property ownership. (See, e.g., *Apartment Ass'n of Los Angeles County, Inc. v. City of Los Angeles* (2001) 24 Cal.4th 830, 842 [upholding inspection fees associated with renting property].) The ability of a local agency to defray the cost of a program without raising taxes indicates that a program does not entail a cost subject to subvention. (*County of Fresno v. State of California* (1991) 53 Cal.3d 482, 487-488.)

Fourth, the Permittees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in federal Clean Water Act section 301, subdivision (a) (33 U.S.C. § 1311(a)) and in lieu of numeric restrictions on their discharges. (See finding C.5., supra.) To the extent that the local agencies have voluntarily availed themselves of the permit, the program is not a state mandate. (Accord *County of San Diego v. State of California* (1997) 15 Cal.4th 68, 107-108.) Likewise, where MS4 Permittees are regulated under a Best Management Practices (BMP) based storm water management program rather than end-of-pipe numeric limits, there exists no compulsion of a specific regulatory scheme that would violate the 10th Amendment to the United States Constitution. (See *City of Abilene v. U.S. E.P.A.* (5th Cir. 2003) 325 F.3d 657, 662-663 [noting that municipalities can choose between a management permit or a permit with numeric limits].) The local agencies' voluntary decision to file a report of waste discharge proposing a program-based permit is a voluntary decision not subject to subvention. (See *Environmental Defense Center v. USEPA* (9th Cir. 2003) 344 F.3d 832, 845-848.)

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Fifth, the local agencies' responsibility for preventing discharges of waste that can create conditions of pollution or nuisance from conveyances that are within their ownership or control under state law predates the enactment of Article XIII B, Section (6) of the California Constitution.

8. Under § 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA), Coastal States with approved coastal zone management programs are required to address non-point pollution impacting or threatening coastal water quality. CZARA addresses five sources of non-point pollution: 1) agriculture; 2) silviculture; 3) urban; 4) marinas; and 5) hydromodification. This Waste Discharge Requirement addresses the management measures required for the urban category and the hydromodification category, with the exception of septic systems.
9. The Regional Water Board addresses septic systems through the administration of non-Chapter 15 regulatory programs and the implementation of Regional Water Board Order No. R4-2004-0146. Septic systems are also addressed under State Assembly Bill (AB) 885 (2000). The Regional Water Board will implement and enforce regulations issued by the State Board pursuant to AB 885. Taken together, these State and Local agency requirements when imposed on septic system operators are expected to reduce the bacterial contamination of storm water from improperly maintained septic systems.
10. The State Water Board has issued waste discharge requirements for discharges from utility vaults (CAG990002). The Regional Water Board has issued waste discharge requirements for discharges from well heads and hydrostatic pipe testing (CAG674001). These discharges to the MS4 shall be conducted under coverage of a separate NPDES permit specific to that activity.
11. On May 18, 2000, the U.S. EPA established numeric criteria for priority toxic pollutants for the State of California (California Toxics Rule (CTR) 65 Fed. Reg. 31682 (40 CFR 131.38)) for the protection of human health and aquatic life. These apply as ambient water quality criteria for inland surface waters, enclosed bays and estuaries.
12. The State Water Board adopted a revised Water Quality Control Plan for Ocean Waters of California (Ocean Plan) in 2005. The California Ocean Plan establishes water quality objectives for California's ocean waters and provides the basis for regulation of wastes discharged into the State's coastal waters. It applies to point and nonpoint source discharges. The Ocean Plan identifies the applicable beneficial uses of marine waters that include preservation and enhancement of designated Areas of Special Biological Significance (ASBS) (now called "State Water Quality Protection Areas") and establishes a set of narrative and numerical water quality objectives designed to protect beneficial uses. The SWRCB adopted the California Ocean Plan, and both the SWRCB and the six coastal Regional Water Quality Control Boards (RWQCBs) implement and interpret the California Ocean Plan.

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13. This Regional Water Board adopted a revised Water Quality Control Plan (Basin Plan) for the Los Angeles Region on June 13, 1994. The Basin Plan specifies the beneficial uses of Ventura County waterbodies and their tributary streams, and contains both narrative and numerical water quality objectives for these receiving waters. The following beneficial uses identified in the Basin Plan apply to all or portions of each watershed covered by this Order:
- (a) Municipal and domestic supply
 - (b) Agricultural supply
 - (c) Industrial service supply
 - (d) Industrial process supply
 - (e) Ground water recharge
 - (f) Freshwater replenishment
 - (g) Navigation
 - (h) Hydropower generation
 - (i) Water contact recreation
 - (j) Non-contact water recreation
 - (k) Ocean commercial and sport fishing
 - (l) Warm freshwater habitat
 - (m) Cold freshwater habitat
 - (n) Preservation of Areas of Special Biological Significance
 - (o) Saline water habitat
 - (p) Wildlife habitat
 - (q) Preservation of rare and endangered species
 - (r) Marine habitat
 - (s) Fish migration
 - (t) Fish spawning
 - (u) Shellfish harvesting
14. On March 22, 1999 the Consent Decree in Heal the Bay, Inc.; Santa Monica Baykeeper, Inc. v. Browner, Case No. 98-4825 SBA was approved. Under Establishment of TMDLs- The parties understand that California has the initial opportunity pursuant to § 303(d) of the CWA to adopt and submit to U.S. EPA for approval TMDLs to be established under this Consent Decree. TMDLs developed by Regional Water Boards are generally adopted through Basin Plan amendments. Basin plan amendments adopted by the State Board pursuant to Water Code section 13246, and the regulatory portions must be approved by the Office of Administrative Law pursuant to Government Code section 11353(b). TMDLs established pursuant to CWA section 303(d)(1) must be submitted to U.S. EPA for approval pursuant to section 303(d)(2), and incorporated into the state's water quality management plan.
15. The Regional Water Board has adopted amendments to the Basin Plan, to incorporate TMDLs for the following:
- (a) The following TMDLs have been or will be incorporated into the Basin Plan within the term of the Order.

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- (1) Santa Clara River - Nitrogen Compounds
 - (A) Regional Water Board Resolution No. 2003-011
 - (B) State Water Board Resolution No. 2003-0073
 - (C) OAL file No. 04-0123-35
 - (D) U.S. EPA approval date March 18, 2004
 - (E) Final fee exemption date March 23, 2004 (effective date).
 - (F) Compliance is 1 year after effective date (March 23, 2005)

- (2) Malibu Creek and Lagoon - Bacteria.
 - (A) Regional Water Board Resolution No. 2004-019
 - (B) State Water Board Resolution No. 2005-0072
 - (C) OAL file No. 05-1018-03 S
 - (D) U.S. EPA approval date January 10, 2006
 - (E) Final fee exemption date January 24, 2006 (effective date)
 - (F) Compliance for Summer Dry is 3 years after effective date (January 24, 2009)
 - (G) Compliance for Winter Dry is 6 years after effective date (January 24, 2012).
 - (H) Compliance for Wet Weather is 10 years after effective date (January 24, 2016), which is beyond the term of this Order

- (3) Toxicity, Chlorpyrifos and Diazinon in the Calleguas Creek, Its Tributaries and Mugu Lagoon.
 - (A) Regional Water Board Resolution No. 2005-009
 - (B) State Water Board Resolution No. 2005-0067
 - (C) OAL file No. 05-1110-02 S
 - (D) U.S. EPA approval date March 14, 2006
 - (E) Final fee exemption date March 24, 2006 (effective date)
 - (F) Compliance for Toxicity and Interim WLA is effective date (March 24, 2006)
 - (G) Compliance for Final WLA is 2 years after effective date (March 24, 2008)

- (4) Organochlorine (OC) Pesticides, Polychlorinated Biphenyls (PCBs), and Siltation in Calleguas Creek, Its Tributaries and Mugu Lagoon.
 - (A) Regional Water Board Resolution No. 2005-010
 - (B) State Water Board Resolution No. 2005-0068
 - (C) OAL file No. 05-1206-03 S
 - (D) U.S. EPA approval date March 14, 2006
 - (E) Final fee exemption date March 24, 2006 (effective date)
 - (F) Compliance for Interim WLA is effective date (March 24, 2006)
 - (G) Compliance for Final WLA is 20 years after effective date (March 24, 2026), which is beyond the term of this Order

- (5) Calleguas Creek Watershed Metals

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- (A) Regional Water Board Resolution No. 2006-012
 - (B) State Water Board Resolution No. 2006-0078
 - (C) OAL file No. 06-1222-015 S
 - (D) U.S. EPA approval date March 26, 2007.
 - (E) Final fee exemption date March 27, 2007 (effective date)
 - (F) Compliance for Interim WLA is effective date (March 27, 2007)
 - (G) Compliance for Final WLA is Within 15 years after the effective date (March 27, 2022), which is beyond the term of this Order
- (6) Revolon Slough & Beardsley Wash Trash TMDL
- (A) Regional Water Board Resolution No. 2007-007
 - (B) State Water Board Resolution No 2007-0076
 - (C) OAL file No 2007-1227-05 S
 - (D) U.S. EPA approval date February 27, 2008
 - (E) Final fee exemption date March 6, 2008 (effective date)
 - (F) Compliance for Trash Monitoring & Reporting Plan Submittal is 6 months from effective date (September 6, 2008)
 - (G) Compliance for Final WLA is 8 years from effective date (March 6, 2016)
- (7) Ventura River Estuary Trash TMDL
- (A) Regional Water Board Resolution No. 2007-008
 - (B) State Water Board Resolution No 2007-0072
 - (C) OAL file No 2007-1227-01 S
 - (D) U.S. EPA approval date February 27, 2008
 - (E) Final fee exemption date March 6, 2008 (effective date)
 - (F) Compliance for Trash Monitoring & Reporting Plan Submittal is 6 months from effective date (September 6, 2008)
 - (G) Compliance for Final WLA is 8 years from effective date (March 6, 2016)
- (8) Harbor Beaches of Ventura County Bacteria TMDL
- (A) Regional Water Board Resolution No. 2007-017
 - (B) State Water Board Resolution No 2008-0072
 - (C) OAL file No 2007-1023-01 S
 - (D) U.S. EPA approval date December 18, 2008
 - (E) Final fee exemption date January 17, 2009 (effective date)
16. The Regional Water Board adopted and approved requirements for new development and significant redevelopment projects in Ventura County to control the discharge of storm water pollutants in post-construction storm water, on January 26, 2000, in Board Resolution No. R-00-02. The Regional Water Board Executive Officer issued the approved Standard Urban Storm Water Mitigation Plans (SUSMPs) on March 8, 2000 for Los Angeles County and the Cities in Los Angeles County. Since 2000, new development and redevelopment water quality criteria have been implemented by the Permittees to be consistent with SUSMP. The State Board affirmed the Regional

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Water Board action and SUSMPs in State Board Order No. WQ 2000-11, issued on October 5, 2000.

- (a) A statewide policy memorandum (dated December 26, 2000), which interprets the Order to provide broad discretion to Regional Water Boards and identifies potential future areas for inclusion in SUSMPs and the types of evidence and findings necessary. Such areas include ministerial projects, projects in environmentally sensitive areas, and water quality design criteria for Retail Gasoline Outlets (RGOs, see Part 6 for definition). The Regional Water Board properly justified the extensions of SUSMPs and water quality criteria to ministerial projects, projects in environmentally sensitive areas, and RGOs, during the adoption of Regional Water Board Order 01-182. The Regional Water Board's action was upheld by the County of Los Angeles Superior Court (*In Re: County of Los Angeles v. State Water Resources Control Board* (2006) 143 Cal.App.4th 985).
 - (b) The State Water Board's Chief Counsel interpreted the Order to encourage regional solutions and endorsed a mitigation fund or "bank" as alternatives for new development and significant redevelopment. The Regional Water Board has included provisions for regional solutions and the establishment of a mitigation bank in this Order.
17. The Regional Water Board supports Watershed Management planning to address water quality protection in the region. The objective of the Watershed Management planning is to provide a comprehensive and integrated strategy towards water resource protection, enhancement, and restoration while balancing economic and environmental impacts within a hydrologically defined drainage basin or watershed. It emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with available resources.
 18. To facilitate compliance with federal regulations, the State Water Board has issued the following 4 Statewide General NPDES Permits associated with storm water:
 - (a) Industrial General Permit (IASGP- Industrial Activities Storm Water General Permit), NPDES No. CAS000001, issued on November 19, 1991, reissued on September 17, 1992 and April 17, 1997, currently under review for reissuance.
 - (b) Construction General Permit (CASGP- Construction Activities Storm Water General Permit), NPDES No. CAS000002, issued on August 20, 1992, reissued August 19, 1999, and September 2, 2009.
 - (c) Small Linear Underground/ Overhead Construction Projects General Permit (small LUPs), NPDES No. CAS000005, issued on June 18, 2003.
 - (d) Small MS4 Permit WQ Order No. 2003-0005-DWQ, NPDES No. CAS000004, adopted on April 30, 2003.
 19. Facilities discharging storm water associated with industrial activities, construction projects that disturb one or more acres of soil, or construction projects that disturb less than one acre but are part of a larger common plan of development or sale that in

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total disturbs 1 or more acres, and construction activities associated with small linear underground/ overhead projects that result in land disturbances greater than one acre, but less than five acres (small LUPs), are all required to obtain individual NPDES permits for storm water discharges, or be covered by the statewide General Permits by completing and filing a Notice of Intent (NOI) with the State Board. The U.S. EPA guidance anticipates coordination of the state-administered programs for industrial and construction activities with the local agency program to reduce pollutants in storm water discharges to the MS4.

20. State Water Board Resolution No. 68-16 contains the state Antidegradation Policy, titled "Statement of Policy with Respect to Maintaining High Quality Waters in California" (Resolution 68-16), which applies to all waters of the state, including ground waters of the state, whose quality meets or exceeds (is better than) water quality objectives. Resolution No. 68-16 is considered to incorporate the federal Antidegradation Policy (40 CFR 131.12) where the federal policy applies, (State Water Board Order WQO 86-17). Administrative policies that implement both, federal and state antidegradation policies acknowledge that an activity that results in a minor water quality lowering, even if incrementally small, can result in violation of Antidegradation Policies through cumulative effects, for example, when the waste is a cumulative, persistent, or bioaccumulative pollutant.
 - (a) Federal Antidegradation Policy (40 CFR 131.12) states that the State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:
 - (1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
 - (2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.
 - (3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.

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- (4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Act.
- (b) State Water Board Resolution No. 68-16 establishes essentially a 2-step process for compliance with the policy.
- (1) Step 1- if a discharge will degrade high quality water, the discharge may be allowed if any change in water quality:
- (A) Will be consistent with maximum benefit to the people of the State.
- (B) Will not unreasonably affect present and anticipated beneficial use of such water.
- (C) Will not result in water quality less than that prescribed in state policies (e.g., water quality objectives in Water Quality Control Plans).
- (2) Step 2- any activities that result in discharges to high quality waters are required to:
- (A) Meet waste discharge requirements that will result in the best practicable treatment or control of the discharge necessary to avoid a pollution or nuisance.
- (B) Maintain the highest water quality consistent with the maximum benefit to the people of the State.
21. The State Water Board on June 17, 1999, adopted Order No. WQ 99-05, which specifies standard receiving water limitation language to be included in all municipal storm water permits issued by the State and Regional Water Boards.
22. Cal. Water Code § 13263(a) requires that waste discharge requirements issued by Water Boards shall implement any relevant water quality control plans that have been adopted; shall take into consideration the beneficial uses to be protected and the water quality objectives reasonably required for that purpose; other waste discharges; and the need to prevent nuisance.
23. Clean Water Act section 402(p)(3)(B)(iii) requires municipal separate storm sewer system (MS4) operators to reduce the discharge of pollutants to the "maximum extent practicable" (MEP). The MEP requirement is analogous to a technology-based requirement in that it focuses upon the feasibility of pollutant reduction measures rather than achievement of water quality standards in the receiving waters to achieve improvements in the quality of the storm water that is discharged. Compliance with the MEP requirement can range from implementation of structural and nonstructural best management practices to installation of end-of-pipe treatment systems. MEP generally provides the MS4 operators the flexibility to determine what controls should be implemented through the development of a storm water management plan, subject to the Regional Water Board's approval. Nevertheless, MEP does not define the limits of pollution control measures that may be required of MS4 operators, and the requirement to implement controls that reduce pollutants to the MEP is not limited by the goal of attaining water quality standards. In some circumstances, compliance with MEP may result in controls more stringent than applicable WQS.

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and in others, less stringent. The Regional Water Board may use its discretion to impose other provisions beyond MEP, as it determines appropriate for the control of pollutants, including ensuring strict compliance with water quality standards. (Defenders of Wildlife v. Browner (1999) 191 F.3d 1159, 1168.)

24. The California Supreme Court has ruled that although Water Code section 13263 requires the Water Boards to consider the factors set forth in Water Code section 13241 when issuing an NPDES permit, the Water Boards may not consider the factors to justify imposing pollutant restrictions that are less stringent than the applicable federal regulations require (City of Burbank v. State Water Resources Control Bd. (2005) 35 Cal.4th 613). However, when the pollutant restrictions in an NPDES are more stringent than federal law requires, Water Code section 13263 requires that the Water Boards consider the factors described in section 13241 as they apply to those specific restrictions.
25. The City of Burbank case related to NPDES permits for publicly owned treatment works, not permits for municipal separate storm sewer systems (MS4s). Among other requirements, federal law requires MS4 permits to include requirements to effectively prohibit non-storm water discharges into the storm sewers, in addition to requiring controls to reduce the discharge of pollutants to the maximum extent practicable. Therefore, a 13241 analysis is not required for permit requirements that implement the effective prohibition on the discharge of non-storm water into the MS4, or for practicable controls to reduce the discharge of pollutants to the maximum extent, as those requirements are mandated by federal law.
26. The requirements in this Order may be more specific or detailed than those enumerated in federal regulations under 40 CFR 122.26 or in U.S. EPA guidance. However, the requirements have been designed to be consistent with and within the federal statutory mandates described in CWA § 402(p)(3)(B)(ii) and (iii) and the related federal regulations. Consistent with federal law, all of the conditions in this permit could have been included in a permit adopted by U.S. EPA in the absence of the in lieu authority of California to issue NPDES permits.
27. The Board finds that all requirements in this order are practicable. Moreover, while commenters have alleged that the permit requirements are "beyond MEP," no commenter has presented evidence that demonstrates that any particular permit requirement is not actually practicable.
28. Notwithstanding findings 23 through 27, the Regional Water Board has developed an economic analysis of the permit's requirements, consistent with Water Code section 13241. That analysis is contained in the "Economic Considerations of the Proposed Storm Water (Wet Weather) and Non-Storm Water (Dry Weather) Discharges from the Municipal Separate Storm Sewer Systems within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein, June 2, 2008, which is contained in the administrative record for this Order. The Regional

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Water Board has considered all of the evidence that has been presented regarding the 13241 factors in adopting this permit, both as contained in the economic analysis and as reflected in the fact sheet and comments (and responses thereto) submitted to the many drafts of this permit. The Regional Water Board finds that the requirements in this Order are reasonably necessary to protect beneficial uses identified in the Basin Plan, and the economic information related to costs of compliance and other 13241 factors are not sufficient to justify failing to protect those beneficial uses. Where appropriate, additional time to implement certain measures and achieve water quality objectives can be provided through the iterative storm water management plan process.

F. Implementation

1. The California Environmental Quality Act (CEQA) (Cal. Pub. Resources Code § 2100 et seq.) requires that public agencies consider the environmental impacts of the projects they approve for development. CEQA applies to projects that are considered discretionary (a governmental agency can use its judgment in deciding whether and how to carry out or approve a project, § 15357) and does not apply to ministerial projects (the law requires a governmental agency to act on a project in a set way without allowing the agency to use its own judgment, § 15369). A ministerial project may be made discretionary by adopting local ordinance provisions or imposing conditions to create decision-making discretion in approving the project. In the alternative, Permittees may establish standards and objective criteria administratively for storm water mitigation for ministerial projects. For water quality purposes regardless of whether a project is discretionary or ministerial, the Regional Water Board considers that all new development and significant redevelopment activity in specified categories, that receive approval or permits from a municipality, are subject to storm water mitigation requirements in a manner that is consistent with and complies with the provisions of CEQA.
2. The objective of this Order is to ensure that discharges from the MS4 in Ventura County comply with water quality standards, including protecting the beneficial uses of receiving waters. To meet this objective, the Order requires that Best Management Practices (BMPs) will be implemented to reduce the discharge of pollutants in storm water to the maximum extent practicable (MEP), and achieve water quality objectives and standards. The U.S. EPA envisioned that municipal storm water programs would be implemented in an iterative manner and improved with each iteration by using information and experience gained during the previous permit term (*Interpretative Policy Memorandum on Reapplication Requirements for MS4 permits* - 61 Fed. Reg. 41697). Municipalities are required to evaluate what is effective and make improvements in order to protect beneficial uses of receiving waters. This Order requires implementation of an effective combination of pollution control and pollution prevention measures, education, public outreach, planning, and implementation of source control BMPs and Structural and Treatment Control BMPs.

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The better-tailored BMPs combined with the performance objectives outlined in this Order have the purpose of attaining water quality objectives and standards (*Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits*- 61 Fed. Reg. 43761). Where WLAs have been adopted for storm water (wet weather) and non-storm water (dry weather) discharges from MS4s, this Order requires Permittees to implement controls to achieve the WLAs within the compliance schedule provided in the TMDLs.

3. The implementation of measures set forth in this Order are reasonably expected to reduce the discharge of pollutants conveyed in storm water discharges into receiving waters, and to meet the TMDL WLAs for discharges from MS4s that have been adopted by the Regional Water Board.
4. The U.S. EPA has recommended that all future TMDLs and TMDL amendments be expressed as daily increments consistent with a federal court ruling (*Friends of the Earth, Inc. v. EPA, et al.* No. 05-5015 (D.C. Cir. 2006)). However, this interpretation does not affect the discretionary authority of the Regional Water Board to express NPDES permit limits and conditions in non daily terms because there is no express or implied statutory limitation (CWA §502(11)) (*Establishing TMDL "Daily Loads" in Light of the Decision by the U.S. Court of Appeals for the D.C. Circuit in Friends of the Earth, Inc. v. EPA, et al. (April 2006) and Implications for NPDES Permits*, U.S. EPA Office of Water, memorandum, Nov 15, 2006). This Order translates MS4 TMDL WLAs adopted by the Regional Water Board into forms "consistent with the assumptions and requirements of the TMDL".
5. During the term of the Order, the Permittees shall implement all necessary control measures to reduce pollutant(s) which cause or continue to cause or contribute to water quality impairments, but for which TMDLs have not yet been developed or approved, to eliminate the water quality impairment(s). Successful efforts to reverse the wet weather impairments during the permit term for such pollutants, may avoid the need for a WLA for wet weather or the need to develop a TMDL in the future.
6. This Order promotes land development and redevelopment strategies that consider water quality and water management benefits associated with smart growth techniques. Such measures may include hydromodification mitigation requirements, minimization of effective impervious area, integrated water resources planning, and low impact development guidelines. (Reference: *Protecting Water Resources with Smart Growth*, EPA 231-R- 04-002, U.S. EPA 2004; *Using Smart Growth Techniques as Storm Water Best Management Practices*, EPA 231-B-05-002, U.S. EPA 2005; *Parking Spaces/Community Places: Finding the Balance through Smart Growth Solutions*, EPA 231-K-06-001, U.S. EPA 2006; *Protecting Water Resources with Higher-Density Development*, EPA 231-R-06-001, U.S. EPA 2006.)
7. The implementation of an effective Public Information and Participation Program is a critical component of a storm water management program. While commercial and

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industrial facilities are traditionally subject to multiple environmental regulations and receive environmental protection guidance from multiple sources, the general public, in comparison, receives significantly less education in environmental protection. An effective Public Information and Participation Program is required because:

- (a) Activities conducted by the public such as vehicle maintenance, improper household waste materials disposal, improper pet waste disposal and the improper application of fertilizers and pesticides have the potential to generate a significant amount of pollutants that could be discharged in storm water.
 - (b) An increase in public knowledge of storm water regulations, proper storage and disposal of household wastes, proper disposal of pet wastes and appropriate home vehicle maintenance practices can lead to a significant reduction of pollutants discharged in storm water.
8. This Order also provides flexibility for Permittees to seek authorization from the Regional Water Board Executive Officer to substitute a BMP under this Order with an alternative BMP, if they can provide information and documentation on the effectiveness of the alternative, equal to or greater than the prescribed BMP in meeting the objectives of this Order.
 9. This Order contemplates that the Permittees are responsible for considering potential storm water impacts when making planning decisions in order to fulfill the Permittees' CWA requirement to reduce the discharge of pollutants in municipal storm water to the MEP and attain water quality objectives from new development and redevelopment activities. However, the Permittees retain authority to make the final land-use decisions and retain full statutory authority for deciding what land uses are appropriate at specific locations within each Permittee's jurisdiction. This Order and its requirements are not intended to restrict or control local land use decision-making authority.
 10. The State Water Board amended the Policy for the Implementation of Toxics Standards In Inland Surface Waters, Enclosed Bays and Estuaries of California (State Implementation Policy – SIP) on February 24, 2005. The SIP does not apply directly to the stormwater discharges. However, this Order includes a Monitoring Program that incorporates Minimum Levels (MLs) established under the State Implementation Policy. The MLs represent the lowest quantifiable concentration for priority toxic pollutants that is measurable with the use of proper method-based analytical procedures and factoring out matrix interference. The SIP's MLs therefore represent the best available science for determining MLs and are appropriate for a storm water monitoring program. The use of MLs allows the detection of toxic priority pollutants at concentrations of concern using recent advances in chemical analytical methods.
 11. The International Storm Water Best Management Practices (BMP) Database was established in 1996 as a cooperative initiative between the U.S. EPA and the American Society of Civil Engineers (ASCE) to provide scientifically sound information to improve the design, selection and performance of storm water BMPs.

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The BMP database includes standardized BMP monitoring and reporting protocols, a storm water BMP database, BMP performance evaluation protocols, and BMP monitoring guidance. The storm water BMP database is updated approximately semi-annually to add new BMP studies and performance data. The International Storm Water Database is now maintained by the Water Environment Research Foundation (WERF).

12. This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with CA Health and Safety Code, § 116110 et seq. Certain Treatment Control BMPs if not properly designed, operated or maintained may create habitats for vectors (e.g. mosquitoes and rodents). This Order contemplates that the Permittees will closely cooperate and collaborate with local vector control agencies and the State Department of Public Health for the implementation, operation, and maintenance of Treatment Control BMPs in order to minimize the risk to public health from vector borne diseases.
13. This Order contemplates that Permittees will ensure that implemented Treatment Control BMPs will not pose a safety or health hazard to the public. This Order contemplates that Permittees will ensure that the maintenance of implemented Treatment Control BMPs will comply with all applicable health and safety regulations, such as, but not limited to requirements for worker entry into confined spaces under OSHA Safety and Training education, § 1926.21(b)(6)(i).
14. This Order incorporates presumptive BMPs to reduce pollutants in storm water discharges from construction sites to the MEP. The BMPs are identified in Table 6 (BMPs at Construction sites less than 1 acre), Table 7 (BMPs at Construction Sites 1 acre or greater but less than 5 acres), and Table 8 (BMPs at Construction sites 5 acres or greater). These BMPs include erosion control, sediment control, and construction site waste management practices. The BMPs listed in part 4.F of the Order were selected based on the Water Boards' experience of regulating such sites since 1992, and are referenced in the *California Stormwater Quality Association (CASQA) Storm Water Best Management Practice Handbook Construction (January 2003)* and from the *Stormwater Quality Handbooks, Project Planning and Design Guide, Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Plan (WPCP) Preparation Manual, Construction Site Best Management Practices (BMPs) Reference Manual, March 2007* (Caltrans Document Number CTSW-RT-06-171.11-1) which serve as an industry standard for California. The BMPs identified in the Tables are technically feasible, practicable, and cost-effective. Where an identified BMP may be impracticable on a particular site, this Order includes a provision to select and implement an alternative BMP, through the BMP substitution provisions in subpart 4.A.2.
15. This Order incorporates presumptive BMPs to reduce pollutants in storm water discharges from commercial and industrial sites to the MEP. The BMPs are

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identified in Table 2 (BMPs at Restaurants), Table 3 (BMPs at Automotive Service Facilities), Table 4 (BMPs at Retail Gasoline Outlets), and Table 5 (BMPs at Nurseries). These BMPs include the implementation of good housekeeping practices designed to control pollutants at the source, promote the use of proper waste management practices, and implement control practices to keep pollutants away from any entrance to the storm drainage system. The BMPs listed in part 4.D of the Order were selected based on the Water Boards' experience of regulating such sites since 1992 and referenced in the California Stormwater Quality Association (CASQA) Storm Water Best Management Practice Handbook Commercial/Industrial Activity (January 2003) and from the Caltrans Storm Water Quality Handbook Maintenance Staff Guide May 2003 (Caltrans Document Number CTSW-RT-02-057), which serve as an industry standard for California. The BMPs identified in the Tables are technically feasible, practicable, and cost-effective. Where an identified BMP may be impracticable, this Order includes a provision to select and implement an alternative BMP, through the BMP substitution provisions in subpart 4.A.2.

16. This Order incorporates presumptive BMPs to reduce pollutants in storm water discharges from Public Agency Activities to the MEP. The BMPs are identified in Table 10 (BMPs at Vehicle Maintenance/ Material Storage Facilities/ Corporation Yards). These BMPs include the implementation of good housekeeping practices designed to control pollutants at the source, promote the use of proper waste management practices, implement control practices to keep pollutants away from any entrance to the storm drainage system and from being deposited or discharged directly into waters of the U.S. The BMPs listed in part 4.G of the Order were selected based on the Water Boards' experience of regulating such sites since 1990, and are referenced in the Caltrans Storm Water Quality Handbook Maintenance Staff Guide May 2003 (Caltrans Document Number CTSW-RT-02-057), which serves as a statewide standard for the California Department of Transportation (Caltrans). The BMPs identified in the Table are technically feasible, practicable, and cost-effective, and are the standard of practice for Caltrans sites statewide. Where an identified BMP may be impracticable, this Order includes a provision to select and implement an alternative BMP, through the BMP substitution provisions in subpart 4.A.2.
17. This Order incorporates BMPs to ensure that authorized Non-Storm Water Discharges are not a source of pollutants to the MS4, Table 1 (Required Conditions for Non-Storm Water Discharges). The BMPs included are for the purpose of dechlorination and/or for prevention of erosion and sediment loss, or to reduce other harmful pollutants during the discharge of authorized non-storm water discharges to the MS4. The BMPs listed in part 1.A of the Order were selected from the *American Water Works Association AWWA Guidelines For The Development Of Your Best Management Practices (BMP) Manual For Drinking Water System Releases Developed by the CA-NV AWWA Environmental Compliance Committee (2005)* which serves as an industry standard for California, from the results of studies directed by the Los Angeles Water Board, - *Evaluation of Non-Storm Water Discharges to California Storm Drains and Potential Policies for Effective*

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Prohibition Methods, Final Report, University of California, Los Angeles, Contract No. 5-104-140-0 (1997), and *Water Quality Concerns and Regulatory Controls for Non Storm Water Discharges to Storm Drains*, Duke L.D. and M. Kihara, Journal of the American Water Resources Association, Vol. 34: 661-676, (1998), and from the Water Boards' experience of controlling authorized non-storm discharges to the MS4 since 1990. The BMPs identified in the Table are technically feasible, practicable, and cost-effective. Where an identified BMP may be impracticable, this Order includes a provision to select and implement an alternative BMP, through the BMP substitution provisions in subpart 4.A.2.

18. In accordance with Federal regulations at 40 CFR 124.8, a Fact Sheet has been prepared to explain the principal facts and the significant factual, legal, methodological, policy, and economic matters considered in preparing the Order. This Fact Sheet has been made a part of the Administrative Record.
19. The State Water Board adopted statewide General Waste Discharge Requirements for Sanitary Sewer Systems, (WQ Order No. 2006-0003) on May 2, 2006, to provide a consistent, statewide regulatory framework to address sanitary sewer overflows ("SSO Orders"). The SSO Order establishes requirements for public agencies that own or operate sanitary sewer systems to develop and implement sewer system management plans and to report SSOs. SSOs that enter MS4s have the potential to impair the recreational use of receiving waters, and to harm public health. This Order establishes coordination, response, and notification requirements for MS4 Permittees when SSOs result in a discharge to the MS4 system.
20. This Order takes into consideration the housing needs in the area under the Permittees' jurisdiction by balancing the implementation of Smart Growth and Low Impact Development techniques with the protection of the water resources of the region. Although not required, the Regional Water Board considered the need for housing and the appropriate techniques to allow for reasonable development while protecting the receiving waters from degradation.
21. This Order may have an effect on costs required for compliance with the provisions contained herein. Although not required, the Regional Water Board has considered costs in preparing this Order. Though also not required, the Regional Water Board has also considered the factors set forth in Water Code section 13241.

G. Public Notification

1. The issuance of waste discharge requirements pursuant to California Water Code section 13370 et seq. is exempt from the California Environmental Quality Act in accordance with California Water Code section 13389. *County of Los Angeles et al., v. California Water Boards et al.*, (2006), 143 Cal.App.4th 985.

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2. The Regional Water Board has notified the Permittees, and interested agencies and persons of its intent to reconsider Order No. 09-0057 and issue waste discharge requirements for this discharge, and has provided them with an opportunity to make statements and submit their comments.
3. The Regional Water Board staff has conducted more than 35 meetings from February 9, 2007 through December 19, 2008, with Permittees, their representatives (Larry Walker Associates, and Somach, Simmons & Dunn), and various stakeholders (Building Industry Association of Southern California/Greater Los Angeles Ventura Chapter (BIA/LAV), California State Dept. of Public Health, Calleguas Municipal Water District, California Stormwater Quality Association (CASQA), City of Downey, City of Los Angeles-EMD, Coalition for Practical Regulation (CPR), Construction Industry Coalition on Water Quality (CICWQ), County of Orange, Geosyntec Consultants, Golden State, Heal the Bay; Local Government Commission, Los Angeles City; Los Angeles County Department of Public Works, Los Angeles County-SD, Los Angeles Department of Water and Power, Metropolitan Water District, Natural Resources Defense Council (NRDC), Richard Watson and Associates, San Bernardino Flood Control District, Santa Monica Bay Restoration Commission, Southern California Coastal Water Research Project, University of California Sea Grant, Ventura CoastKeeper). On April 5, 2007 and September 20, 2007, the Regional Water Board conducted workshops to discuss drafts of the NPDES Order and received input from the Permittees and the public regarding proposed changes.
4. This Order shall serve as a NPDES permit, pursuant to CWA § 402, and shall take effect on (Order adoption date) provided the Regional Administrator of the U.S. EPA has no objections.
5. Pursuant to Cal. Water Code § 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board within 30 days of the date of adoption of the Order by the Regional Water Board. A petition must be sent to:

State Water Resources Control Board
Office of the Chief Counsel
P.O. Box 100
Sacramento, CA 95812-0100

6. This Order may be modified or alternatively revoked or reissued prior to its expiration date or any administrative extension thereto, in accordance with 40 CFR 122.41(f) and 122.62.

IT IS HEREBY ORDERED that the Permittees, in order to meet the provisions contained in Division 7 of the Cal. Water Code and regulations adopted thereunder, and the provisions of the CWA and regulations adopted thereunder, shall comply with the following:

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PART 1 - DISCHARGE PROHIBITIONS**A. Prohibitions - Non-Storm Water Discharges**

1. The Permittees shall, within their respective jurisdictions, effectively prohibit non-storm discharges into the MS4 and receiving waters, except where such discharges:
 - (a) Originate from a State, Federal, or other source for which they are pre-empted from regulating by State or Federal law; or
 - (b) Are covered by a separate individual or general NPDES permit, or conditional waiver for irrigated lands; or
 - (c) Flows from fire fighting activities.
 - (d) Fall within one of the categories below, are not a source of pollutants that exceed water quality standards, and meet all conditions where specified by the Regional Water Board Executive Officer:
 - (1) Category A – Natural flows
 - (A) Stream diversions authorized by the State Water Board
 - (B) Natural springs and rising ground water
 - (C) Uncontaminated ground water infiltration [as defined by 40 CFR 35.2005(20)]¹
 - (D) Flows from riparian habitats or wetlands
 - (2) Category B – Flows incidental to urban activities, providing conditions listed in table below:
 - (A) Discharges from potable water sources²
 - (B) Gravity flow from foundation, footing and crawl space drains.
 - (C) Air conditioning condensate
 - (D) Reclaimed and potable landscape irrigation runoff
 - (E) Dechlorinated/ debrominated swimming pool discharges [see def. part 6]
 - (F) Non-commercial car washing by residents or non-profit organizations
 - (G) Sidewalk rinsing
 - (H) Pooled non-storm water from treatment BMPs³

¹ NPDES permit for ground water dewatering is required within the Los Angeles Region including Ventura County.

² The term applies to low volume, incidental and infrequent releases that are innocuous from a water quality perspective. Those releases for dewatering or hydro-testing or flushing of water supply and distribution mains and incidental and infrequent releases from well heads shall be allowed with the implementation of appropriate BMPs until such time as a new General Permit is adopted that addresses those types of releases. Discharges from hydrostatic pipe testing shall be subject to separate NPDES general permit coverage (CAG674001) and discharges from utility vaults shall be conducted under coverage of a separate NPDES permit specific to that activity.

³ All storm water BMPs shall at a minimum be maintained at a frequency as specified by the manufacturer, and designed to drain within 72 hours of the end of a rain. Storm water treatment BMPs may be drained to the MS4 under this Order if the discharge is not a source of pollutants. Sediments shall be disposed of properly, in compliance with all applicable local, state, and federal policies, acts, laws, regulations, ordinances, and statutes.

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Table 1 – Required Conditions for Non-Storm Water Discharges

Type of Discharges:	Conditions under which allowed:	Required conditions for discharge to occur:
Stream diversions permitted by the State Board	Authorization by the State Water Board	Permittees shall comply with all conditions in the authorization.
Natural springs and rising ground water	1. Ground water dewatering requires a separate NPDES permit. 2. Segregate flow to prevent introduction of pollutants.	Permittees shall comply with all conditions in the authorization.
Uncontaminated ground water infiltration [as defined by 40 CFR 35.2005(20)] (Utility vault dewatering requires a separate NPDES permit.)	NPDES permit for ground water dewatering is required within the Los Angeles Region including Ventura County	Permittees shall comply with all conditions in the authorization.
Flows from riparian habitats or wetlands	Provided that all necessary permits or authorizations are received prior to diverting the stream flow.	Permittees shall comply with all conditions in the authorization.
Discharges from potable water sources	See Footnote #2. Provided discharges from water lines and potable water sources shall be dechlorinated, pH adjusted if necessary, reoxygenated, and volumetrically and velocity controlled to prevent resuspension of sediments.	See Footnote #2. To be discharged, this type of water shall be dechlorinated using aeration and/ or sodium thiosulfate and/ or other appropriate means and/ or be allowed to infiltrate to the ground. BMPs such as sand bags or gravel bags, or other appropriate means shall be utilized to prevent sediment transport. All sediments shall be collected and disposed of in a legal and appropriate manner.
Drains for foundation, footing and crawl drains	Dewatering requires a separate NPDES permit.	Permittees shall comply with all conditions in the authorization.
Air conditioning condensate	Segregation of flow to prevent introduction of pollutants. Percolation whenever possible.	Permittees shall comply with all conditions in the authorization.
Water from crawl space pumps	Dewatering requires a separate NPDES permit within the Los Angeles Region including Ventura County	Permittees shall comply with all conditions in the authorization.
Reclaimed and potable landscape irrigation runoff	Segregation of flow to prevent introduction of pollutants.	Implement conservation programs to minimize this type of discharge by using less water.
Dechlorinated/ debrominated	Where the discharge is not exempted by the sanitary sewer operator. Swimming pool	Pool water may be dechlorinated using time,

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Type of Discharges:	Conditions under which allowed:	Required conditions for discharge to occur:
swimming pool discharges [see definition Part 6]	<p>discharges are to be dechlorinated, pH adjusted if necessary, aerated to remove chlorine if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments.</p> <p>Cleaning waste water and filter back wash shall not be discharged to municipal separate storm sewers.</p> <p>No discharges are allowed containing salts in excess of Water Quality Standards.</p> <p>Chlorine residual in discharge shall not exceed 0.1mg/L.</p>	aeration, and/ or sodium thiosulfate.
Non-commercial car washing by residents or non-profit organizations	Preferably at a commercial carwash or designated area where wash water can percolate. Pumps or vacuums may be used to direct water to pervious areas.	Permittees shall comply with all conditions in the authorization.
Sidewalk rinsing	This may be undertaken only if high pressure low volume is used as described in the glossary under "Sidewalk Rinsing".	
Pooled storm water from treatment BMPs	All storm water BMPs shall at a minimum be maintained at a frequency as specified by the manufacturer. All storm water BMPs shall be designed to drain within 72 hours of the end of the rain event to avoid the breeding of vectors. Storm water treatment BMPs may be drained to the MS4 under this Order if the discharge is not a source of pollutants. The discharge shall cease before the discharge has become a source of a pollutant(s), (bottom sediment included). Sediments shall be disposed of properly, in compliance with all applicable local, state, and federal policies, acts, laws, regulations, ordinances, and statutes.	

2. If the Regional Water Board Executive Officer determines that any of the preceding categories of non-storm water discharges are a source of pollutants that exceed water quality standards, the Permittee(s) shall either:
 - (a) Prohibit the discharge from entering the MS4; or
 - (b) Authorize the discharge category and require implementation of appropriate or additional BMPs to ensure that the discharge will not be a source of pollutants; or
 - (c) Require or obtain coverage under a separate RWQCB or SWRCB permit for discharge into the MS4.

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PART 2 – RECEIVING WATER LIMITATIONS

1. Discharges from the MS4 that cause or contribute to a violation of water quality standards are prohibited.
2. Discharges from the MS4 of storm water, or non-storm water, for which a Permittee is responsible, shall not cause or contribute to a condition of nuisance.
3. The Permittee shall comply with Receiving Water Limitations 1 and 2 through timely implementation of control measures and other actions to reduce pollutants in the storm water discharges in accordance with the requirements of this Order including any modifications. The Permittees' Program shall be designed to achieve compliance with Receiving Water Limitations 1 and 2. If exceedance(s) of water quality objectives or water quality standards (collectively WQS) persist, notwithstanding implementation of this permit, the Permittees shall ensure compliance with Receiving Water Limitations 1 and 2 by complying with the following procedure:
 - (a) Upon determination by either the Permittees or the Regional Water Board that discharges are causing or contributing to an exceedance of an applicable WQS, the Permittee(s) upstream of the point of discharge shall promptly notify and thereafter submit a report to the Regional Water Board Executive Officer 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 WQSs. The report may be included with the Annual Report, unless the Regional Water Board Executive Officer directs an earlier submittal. The Regional Water Board Executive Officer may require modifications to the report.
 - (b) Submit any modifications to the report required by the Regional Water Board Executive Officer within 30 days of notification.
 - (c) Within 30 days following approval of the Report described above by the Regional Water Board Executive Officer, the Permittees shall revise their Program 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 Program and monitoring program according to the approved schedule.
4. Permittees shall annually report the effectiveness of BMPs in reducing exceedances of receiving water limitations. The Regional Water Board Executive Officer may direct implementation of additional BMPs if there are continuing or recurring exceedances of the same receiving water limitation.

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PART 3 - STORM WATER QUALITY MANAGEMENT PROGRAM
IMPLEMENTATION

A. General Requirements

1. Each Permittee shall, at a minimum, adopt and implement applicable terms of this Order within its jurisdictional boundary. The Principal Permittee shall be responsible for program coordination as described in this Order as well as compliance with applicable portions of the permit within its jurisdiction. This Order shall be implemented no later than July 8, 2010, unless a later date has been specified for a particular provision in this Order and provided the Regional Administrator of the U.S. EPA has no objections.
2. Each Permittee shall comply with the requirements of 40 CFR 122.26(d)(2) and implement programs and control measures so as to reduce the discharges of pollutants in storm water to the MEP and achieve water quality standards.
3. Each Permittee shall require that treatment control BMPs being implemented under the provisions of this Order shall be designed, at a minimum, to achieve the BMP performance criteria for storm water pollutants likely to be discharged as identified in Attachment "C", for an 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area using a 48 to 72-hour draw down time, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998). Expected BMP pollutant removal performance for effluent quality was developed from the WERF-ASCE/ U.S. EPA International BMP Database. Permittees shall select Treatment BMPs based on the primary class of pollutants likely to be discharged from the site/facility (e.g. metals from an auto repair shop). Permittees may develop guidance for appropriate Treatment BMPs for project type based on Attachment "C". For the treatment of pollutants causing impairments within the drainage of the impaired waterbody, permittees shall select BMPs from the top three performing BMP categories or alternative BMPs that are designed to meet or exceed the performance of the highest performing BMP for the pollutant causing impairment.
4. Each Permittee shall implement programs and measures to comply with the TMDLs' WLAs for the MS4 as specified in Part 5.
5. If TMDL requirements, including Implementation Plans and Reports, address substantially similar requirements as the MS4 permit, the Executive Officer may approve the applicable reports, plans, data or submittals under the applicable TMDL as fulfilling requirements under the MS4.

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B. Legal Authority

1. Permittees shall possess the necessary legal authority to prohibit, including, but not limited to:
 - (a) Illicit connections and illicit discharges, and to remove illicit connections.
 - (b) The discharge of non-storm water to the MS4 from:
 - (1) Washing or cleaning of gas stations, auto repair garages, or other types of automotive service facilities
 - (2) Mobile auto washing, carpet cleaning, steam cleaning, sandblasting and other such mobile commercial and industrial operations
 - (3) Areas where repair of machinery and equipment which are visibly leaking oil, fluid or antifreeze, is undertaken
 - (4) Storage areas for materials containing grease, oil, or other hazardous substances, and uncovered receptacles containing hazardous materials
 - (5) Swimming pools¹ that have a concentration greater than:
 - (A) Chlorine/ bromine- 0.1mg/L
 - (B) Chloride- 250mg/L
 - (6) Swimming pool filter backwash
 - (7) Decorative fountains and ponds
 - (8) Industrial/ Commercial areas, including restaurant mats
 - (9) Concrete truck cement, pumps, tools, and equipment washout
 - (10) Spills, dumping, or disposal of materials other, such as:
 - (A) Litter, landscape and construction debris, garbage, food, animal waste, fuel or chemical wastes, batteries, and any other materials which have the potential to adversely impact water quality; and
 - (B) Any pesticide, fungicide or herbicide
 - (11) Stationary and mobile pet grooming facilities
 - (12) Trash container leachate
2. The Permittees shall possess adequate legal authority to:
 - (a) Control through interagency agreement, the contribution of pollutants from one portion of the MS4 to another portion of the MS4.
 - (b) Require persons within their jurisdiction to comply with conditions in the Permittees' ordinances, permits, contracts, model programs, or orders (i.e. hold dischargers to its MS4 accountable for their contributions of pollutants and flows).
 - (c) Utilize enforcement measures (e.g., stop work orders, notice of violations, fines, referral to City, County, and/ or District Attorneys, referral to strikeforces, etc.) by ordinances, permits, contracts, orders, administrative authority, and civil and criminal prosecution.²

¹ MS4s discharging directly to the ocean are not subject to this prohibition.

²In the case of private responsible parties such as, HOAs, the Permittee must retain enforcement authority.

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- (d) Control pollutants, including potential contribution¹ in discharges of storm water runoff associated with industrial activities, including construction activities to its MS4, and control the quality of storm water runoff from industrial sites, including construction sites.
 - (e) Carry out all inspections, surveillance and monitoring procedures necessary to determine compliance and non-compliance with permit conditions including the prohibition on illicit discharges to the MS4.
 - (f) Require the use of control measures to prevent or reduce the discharge of pollutants to achieve water quality objectives.
 - (g) Require that Treatment Control BMPs be properly operated and maintained.
3. Each Permittee has adopted a Storm Water Quality Ordinance based upon a countywide model. Each Permittee shall ensure, no later than [two years after Order adoption date], that its Storm Water Quality Ordinance authorizes the Permittee to enforce all requirements of this Order.
 4. Each Permittee shall submit no later than (two years after Order adoption date), a statement by its legal counsel that the Permittee has obtained and possesses all necessary legal authority to comply with this Order through adoption of ordinances and/ or municipal code modifications.

C. Fiscal Resources

1. The Permittees shall implement the activities required to comply with the provisions of this Order.² Each Permittee shall:
 - (a) Submit an Annual Budget Summary that shall include:
 - (1) Budgets for the upcoming report year (estimated expenditure) for the following specific categories (estimated percentages and written explanations where necessary):
 - (A) Program Management Activities.
 - (i) Overall Administrative costs
 - (B) Program Implementation Activities (permit related activities only).
Provide figures breakdown of expenditures for the categories below:
 - (i) Illicit connection/ illicit discharge program.
 - (ii) Development planning and approval
 - (iii) Construction program including inspection activities
 - (iv) Industrial/ Commercial program including inspection activities
 - (v) Public Agency Activities
 - (I) Maintenance and inspection of Treatment Control BMPs
 - (II) Municipal Street Sweeping

¹ "Potential contributions" and "potential to discharge," means adequate legal authority to prevent an actual discharge of pollutants to the municipal separate storm sewer system.

² The sources of funding may be the general funds, and/or Benefit Assessment, plan review fees, permit fees, industrial/ commercial user fee, revenue bonds, grants or other similar funding mechanism.

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(III) Municipal Drainage Maintenance including catch basin clean-outs

(IV) Other costs associated with storm water management (describe)

(vi) Public Information and Participation.

(vii) Monitoring Program

(viii) Miscellaneous Expenditures (describe)

D: Modifications/ Revisions

1. No later than (two years after the Order adoption date), each Permittee shall modify its storm water management programs, protocols, practices, and municipal codes to make them consistent with the requirements herein.

E. Designation and Responsibilities of the Principal Permittee

1. The Ventura County Watershed Protection District is hereby designated as the Principal Permittee. The Principal Permittee shall:
 - (a) Participate in the County Environmental Crimes Task Force
 - (b) Coordinate and facilitate activities necessary to comply with the requirements of this Order, but the Principal Permittee is not responsible for ensuring compliance of any other individual Permittee
 - (c) Coordinate permit activities among Permittees and act as liaison between the Permittees and the Regional Water Board on permitting issues
 - (d) Provide technical and administrative support for committees that will be organized to implement this Order and its requirements
 - (e) Evaluate, assess, and synthesize the results of the monitoring program and the effectiveness of the implementation of BMPs
 - (f) Convene the Committee Meetings constituted pursuant to subpart 4.F.1., below, upon designation of representatives
 - (g) Implement the Countywide Monitoring Program required under the Order and evaluate, assess and synthesize the results of the monitoring program
 - (h) Provide personnel and fiscal resources for the collection, processing and submittal to the Regional Water Board of monitoring and annual reports, and summaries of other reports required under this Order

F. Responsibilities of the Permittees

1. Each Permittee is required to comply with the requirements of this Order applicable to discharges within its boundaries (see Findings- Permit Coverage D.1 and D.2). Permittees are not responsible for the implementation of the provisions applicable to the Principal Permittee or other Permittees. Each Permittee shall:
 - (a) Comply with the requirements of this Order and any modifications thereto

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- (b) Coordinate among its internal departments and agencies, as necessary, to facilitate the implementation of the requirements of this Order applicable to such Permittees in an efficient and cost-effective manner
- (c) Participate in intra-agency coordination (e.g., Planning Department, Fire Department, Building and Safety, Code Enforcement, Public Health, Parks and Recreation, and others) necessary to successfully implement the provisions of this Order
- (d) Report, in addition to the Budget Summary, any supplemental dedicated budgets for the same categories
- (e) Participate in Committee Meetings, as necessary

PART 4 - SPECIAL PROVISIONS (BASELINE)

A. General Requirements

1. This Order and the provisions herein are intended to develop, achieve, and implement a timely, comprehensive, cost-effective storm water pollution control program to reduce the discharge of pollutants in storm water to the MEP and not cause or contribute to exceedances of water quality standards for the permitted areas in the County of Ventura.
2. Best Management Practice Substitution
 - (a) The Regional Water Board Executive Officer may approve any site-specific BMP substitution upon written request by a Permittee(s) and after public notice, if the Permittee can document that:
 - (1) The proposed alternative BMP or program will meet or exceed the objective of the original BMP or program in the reduction of storm water pollutants.
 - (2) The fiscal burden of the original BMP or program is greater than the proposed alternative and does not achieve a greater improvement in storm water quality.
 - (3) The proposed alternative BMP or program will be implemented within a similar period of time.
 - (4) BMP substitution will be in accordance with the public review provisions of the Order (Part 7.C.1 and Part 7.C.2).

B. Watershed Initiative Participation

1. The Principal Permittee shall participate in water quality meetings for watershed management and planning, including but not limited to the following:
 - (a) Southern California Stormwater Monitoring Coalition (SMC)
 - (b) Other Watershed planning groups as appropriate
2. The Principal Permittee shall participate in the following regional water quality programs, and projects for watershed management and planning:

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- (a) SMC Regional Monitoring Programs
 - (1) Southern California Regional Bioassessment
 - (A) Level of effort per watershed
 - (i) Probabilistic sites per watershed
 - (I) Ventura River - Six
 - (II) Santa Clara River - Three
 - (III) Calleguas Creek - Six
 - (ii) Integrator sites per watershed
 - (I) Ventura River - One
 - (II) Santa Clara River - One
 - (III) Calleguas Creek - One
 - (iii) Fixed bioassessment sites
 - (I) The Permittees shall perform bioassessment at one fixed urban site in each major watershed. Site selection shall be determined by the results of the first year SMC results, as approved by the Executive Officer.
- (b) Southern California Bight Projects
 - (1) Regional Monitoring Survey - 2008, and successive years.

C. Public Information and Participation Program (PIPP)

1. The Principal Permittee shall implement a Public Information and Participation Program (PIPP) that includes, but is not limited to, the requirements listed in this part. The Principal Permittee shall coordinate with Permittees to implement specific PIPP requirements. The objectives of the PIPP are as follows:
 - (a) To increase the knowledge of the target audience about the MS4, the adverse impacts of storm water pollution on receiving waters and potential solutions to mitigate the impacts
 - (b) To change the waste disposal and storm water pollution generation behavior of target audiences by encouraging implementation of appropriate solutions
 - (c) To involve and engage communities in Ventura County to participate in mitigating the impacts of storm water pollution
2. Residential Program
 - (a) "No Dumping" Message

Each Permittee shall label all storm drain inlets that they own with a legible "no dumping" message. In addition, signs with prohibitive language discouraging illegal dumping shall be posted at designated public access points to creeks, other relevant waterbodies, and channels. Signage and storm drain messages shall be legible and maintained.
 - (b) Public Reporting

Each Permittee shall identify staff who will serve as the contact person(s) for reporting clogged catch basin inlets and illicit discharges/dumping, faded or missing catch basin labels, and general storm water management information.

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Permittees shall include this information, updated by July 1 of each year, in public information media such as the government pages of the telephone book, and internet web sites. The Principal Permittee shall compile a list of the general public reporting contacts submitted by all Permittees and make this information available on the web site (<http://www.vcstormwater.org/contact.htm>) and upon request. Each Permittee is responsible for providing current, updated information to the Principal Permittee.

(c) Outreach and Education

- (1) Collaboratively, the Permittees shall implement the following activities:
 - (A) Conduct a Storm Water pollution prevention advertising campaign.
 - (B) Conduct Storm Water pollution prevention public service announcements.
 - (C) Distribute storm water pollution prevention public education materials no later than (365 days after Order adoption date) to:
 - (i) Automotive parts stores
 - (ii) Home improvement centers/ lumber yards/ hardware stores
 - (iii) Pet shops/ feed stores
 - (D) Public education materials shall include, but are not limited to information on the proper disposal, storage, and use of:
 - (i) Vehicle waste fluids
 - (ii) Household waste materials
 - (iii) Construction waste materials
 - (iv) Pesticides and fertilizers (including integrated pest management practices-IPM)
 - (v) Green waste (including lawn clippings and leaves)
 - (vi) Animal wastes
 - (E) Work with existing local watershed groups or organize watershed Citizen Advisory Groups/ Committees to develop effective methods to educate the public about storm water pollution no later than (365 days after Order adoption date).
 - (F) Organize events targeted to residents and population subgroups; and
 - (G) Maintain the Countywide storm water website (www.vcstormwater.org), which shall include educational material listed in the preceding subpart C.2(c)(1)(D).
- (2) The Principal Permittee shall develop a strategy to educate ethnic communities through culturally effective methods. Details of this strategy should be incorporated into the PIPP, and implemented, no later than (365 days after Order adoption date).
- (3) Each Permittee shall continue the existing outreach program to residents on the proper disposal of litter, green waste, pet waste, proper vehicle maintenance, lawn care and water conservation practices.
- (4) Each Permittee shall conduct educational activities within its jurisdiction and participate in countywide events.
- (5) The Permittees shall make a minimum of 5 million impressions per year to the general public related to storm water quality, with a minimum of 2.5

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million impressions via newspaper, local TV access, local radio and/ or internet access.

- (6) The Principal Permittee, in cooperation with the Permittees, shall provide schools within each School District in the County with materials, including, but not limited to, videos, live presentations, and other information necessary to educate a minimum of 50 percent of all school children (K-12) every 2 years on storm water pollution. Alternatively, a Permittee may submit a plan to the Regional Water Board Executive Officer for consideration no later than (90 days after Order adoption date), to provide outreach in lieu of the school curriculum. Pursuant to Water Code section 13383.6, the Permittees, in lieu of providing educational materials/ funding to School Districts in the County, may opt to provide an equivalent amount of funds or fraction thereof to the Environmental Education Account established within the State Treasury.
- (7) Each Permittee shall provide the contact information for their appropriate staff responsible for storm water public education activities to the Principal Permittee and contact information changes no later than 30 days after a change occurs.
- (8) The Permittees shall develop and implement a behavioral change assessment strategy no later than (365 days after Order adoption date) in order to determine whether the PIPP is demonstrably effective in changing the behavior of the public. The strategy shall be developed based on current sociological data and studies.

(d) Pollutant-Specific Outreach

The Principal Permittee, in cooperation with the Permittees, shall coordinate to develop outreach programs that focus on metals, urban pesticides, bacteria and nutrients as the pollutants of concern no later than (365 days after Order adoption date). Metals may be appropriately addressed through the Industrial/ Commercial Facilities Program (e.g. the distribution of educational materials on appropriate BMPs for metal fabrication and recycling facilities that have been identified as a potential source). Region-wide pollutants may be included in the Principal Permittee's mass media outreach program.

3. Businesses Program

(a) Corporate Outreach

- (1) The Permittees shall work with other regional or statewide agencies and, associations such as the California Storm Water Quality Association (CASQA), to develop and implement a Corporate Outreach program to educate and inform corporate franchise operators and/or local facility managers about storm water regulations and BMPs. Once developed, the program shall target a minimum of four Retail Gasoline Outlets (RGO) franchisers and cover a minimum of 80% of RGO franchisees in the county, four retail automotive parts franchisers, two home improvement center franchisers and six restaurant franchisers. Corporate outreach for all target facilities shall be conducted not less than twice during the term of this

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Order, with the first outreach contact to begin no later than two years after Order adoption date. At a minimum, this program shall include:

- (A) Confer with franchise operators and/or local facility managers to explain storm water regulations.
- (B) Distribution and discussion of educational material regarding storm water pollution and BMPs, and provide managers with recommendations to facilitate employee and facility compliance with storm water regulations.

(b) Business Assistance Program

- (1) The Permittees shall implement a Business Assistance Program to provide technical information to small businesses to facilitate their efforts to reduce the discharge of pollutants in storm water. The Program shall include:
 - (A) On-site, telephone or e-mail consultation regarding the responsibilities of businesses to reduce the discharge of pollutants, procedural requirements, and available guidance documents.
 - (B) Distribution of storm water pollution prevention education materials to operators of auto repair shops, car wash facilities (including mobile car detailing), mobile carpet cleaning services, commercial pesticide applicator services and restaurants.

D. Industrial/ Commercial Facilities Program

I. Each Permittee shall require implementation of pollutant reduction and control measures, unless precluded by local ordinances, at industrial and commercial facilities, with the objective of reducing pollutants in storm water. Except where specified otherwise in this Order, pollutant reduction and control measures may be used alone or in combination, and may include Treatment Control, Source Control BMPs, and operation and maintenance procedures, which may be applied before, during, and/ or after pollutant generating activities. At a minimum, the Industrial/ Commercial Facilities Control Program shall include requirements to:

- (a) Track
- (b) Inspect
- (c) Ensure compliance with municipal ordinances at industrial and commercial facilities that are critical sources of pollutants in storm water

1. Inventory of Critical Sources

- (a) Each Permittee shall maintain a watershed-based inventory or database of all facilities within its jurisdiction that are critical sources of storm water pollution. Critical Sources to be tracked are summarized below, and specified in Attachment "D":
 - (1) Commercial Facilities
 - (A) Restaurants
 - (B) Automotive service facilities
 - (C) RGOs and automotive dealerships

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- (D) Nurseries and nursery centers
 - (2) U.S. EPA Phase I, II Facilities
 - (3) Other Federally-mandated Facilities [as specified in 40 CFR 122.26(d)(2)(iv)(C)]
 - (A) Municipal landfills
 - (B) Hazardous waste treatment, disposal, and recovery facilities
 - (C) Facilities subject to SARA Title III (also known as the Emergency Planning and Community Right-to-Know Act (EPCRA))
 - (b) Each Permittee shall include the following minimum fields of information for each critical source industrial and commercial facility
 - (1) Name of facility and name of owner/ operator.
 - (2) Address of facility
 - (3) Coverage under the IASGP or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Board pertaining to runoff discharges.
 - (4) A narrative description including Standard Industrial Classification (SIC) System/ North American Industry Classification System (NAICS) codes that best describe the industrial activities performed and principal products used at each facility and status of exposure to storm water.
 - (c) The Regional Water Board recommends that Permittees include additional fields of information, such as material usage and/ or industrial output, and discrepancies between SIC System/ NAICS Code designations (as reported by facility operators) and identify the actual type of industrial activity that has the potential to pollute storm water. In addition, the Regional Water Board recommends the use of an automated database system, such as a Geographical Information System (GIS) or Internet-based system.
 - (d) Each Permittee shall update its inventory of critical sources at least annually. The update may be accomplished through collection of new information obtained through field activities or through other readily available inter and intra-agency informational databases (e.g. business licenses, pretreatment permits, sanitary sewer hook-up permits, and similar information).
2. Inspect Critical Sources
- (a) Commercial Facilities

Permittee shall inspect all facilities identified in subpart 4.D.1. twice during the 5-year term of the Order, provided that the first inspection occurs no later than (2 years after Order adoption date). A minimum interval of 6 months between the first and the second mandatory compliance inspection is required. In addition, each Permittee shall implement the activities outlined in the following subparts. At each facility, inspectors shall verify that the operator is implementing the source control BMPs. The Permittees may require implementation of additional BMPs where storm water flows from the MS4 discharge to an environmentally sensitive area (ESA, see Part 6 for definition) or a CWA § 303(d) listed waterbody (see subpart 3(b) below).

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- (1) Restaurants-
 Level of inspections: Each Permittee shall inspect all restaurants within its jurisdiction to confirm that storm water BMPs are being effectively implemented in compliance with State law, County and municipal ordinances. BMPs in Table 2 (BMPs at Restaurants) shall be implemented, unless the pollutant generating activity does not occur.

Table 2 - BMPs at Restaurants

Pollutant-Generating Activity	BMP Narrative Description	2003 California Stormwater BMP Handbook Industrial and Commercial BMP Identification #
Waste/ Hazardous Materials Storage, Handling and Disposal	Implementation of effective storage, handling and disposal procedures for hazardous materials.	By Municipality
Unauthorized Non-Storm Water Discharges	Effective elimination of non-storm water discharges.	SC-10
Accidental Spills/ Leaks	Implementation of effective spills/ leaks prevention and response procedures.	SC-11
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices.	SC-33
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/ handling practices and appropriate control measures	SC-34
Parking/ Storage Area Maintenance	Implementation of effective parking/ storage area designs and housekeeping/ maintenance practices	SC-43
Storm Water Conveyance System Maintenance	Implementation of proper conveyance system operation and maintenance protocols.	SC-44

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(2) Automotive Service Facilities-

Level of Inspection: Each Permittee shall confirm that BMPs are being effectively implemented at each facility within its jurisdiction, in compliance with County and municipal ordinances. The inspections shall verify that BMPs in Table 3 (BMPs at Automotive Service Facilities) are being implemented, unless the pollutant generating activity does not occur.

Table 3 - BMPs at Automotive Service Facilities

Pollutant-Generating Activity	BMP Narrative Description	2003 California Stormwater BMP Handbook Industrial and Commercial BMP Identification #
Unauthorized Non-Storm Water Discharges	Effective elimination of non-storm water discharges.	SC-10
Accidental Spills/ Leaks	Implementation of effective spills/ leaks prevention and response procedures.	SC-11
Vehicle/ Equipment Fueling	Implementation of effective fueling source control devices and practices.	SC-20
Vehicle/ Equipment Cleaning	Implementation of effective equipment/ vehicle cleaning practices and appropriate wash water management practices	SC-21
Vehicle/ Equipment Repair	Implementation of effective vehicle/ equipment repair practices and source control devices.	SC-22
Outdoor Liquid Storage	Implementation of effective outdoor liquid storage source controls and practices.	SC-31
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices.	SC-33
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/ handling practices and appropriate control measures	SC-34
Parking/ Storage Area Maintenance	Implementation of effective parking/ storage area designs and housekeeping/ maintenance practices	SC-43
Storm Water Conveyance System Maintenance Practices	Implementation of proper conveyance system operation and maintenance protocols.	SC-44

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- (3) Retail Gasoline Outlets and Automotive Dealerships-
 Level of Inspections: Each Permittee shall confirm that BMPs are being effectively implemented at each facility within its jurisdiction, in compliance with County and municipal ordinances. The inspections shall verify that BMPs in Table 4 (BMPs at Retail Gasoline Outlets) are being implemented, unless the pollutant generating activity does not occur.

Table 4 - BMPs at Retail Gasoline Outlets

Pollutant-Generating Activity	BMP Narrative Description	2003 California Stormwater BMP Handbook Industrial and Commercial BMP Identification #
Unauthorized Non-Storm Water Discharges	Effective elimination of non-storm water discharges.	SC-10
Accidental Spills/ Leaks	Implementation of effective spills/ leaks prevention and response procedures.	SC-11
Vehicle/ Equipment Fueling	Implementation of effective fueling source control devices and practices.	SC-20
Vehicle/ Equipment Cleaning	Implementation of effective wash water control devices.	SC-21
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices.	SC-33
Storage and Handling of Solid Waste	Implementation of effective solid waste storage/ handling practices and appropriate control measures	SC-34
Building and Grounds Maintenance	Implementation of effective facility maintenance practices.	SC-41
Parking/ Storage Area Maintenance	Implementation of effective parking/ storage area designs and housekeeping/ maintenance practices	SC-43

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- (4) Commercial Nurseries and Nursery Centers (Merchant Wholesalers, Nondurable Goods, and Retail Trade)-

Level of Inspection: Each Permittee shall confirm that BMPs are being effectively implemented at each facility within its jurisdiction, in compliance with County and municipal ordinances. The inspections shall verify that BMPs in Table 5 (BMPs at Nurseries) are being implemented, unless the pollutant generating activity does not occur.

Table 5 - BMPs at Nurseries

Pollutant-Generating Activity	BMP Narrative Description	2003 California Stormwater BMP Handbook Industrial and Commercial BMP Identification #
Unauthorized Non-Storm Water Discharges	Effective elimination of non-storm water discharges.	SC-10
Outdoor Loading/ Unloading	Implementation of effective outdoor loading/ unloading practices.	SC-30
Outdoor Liquid Storage	Implementation of effective outdoor liquid storage source controls and practices.	SC-31
Outdoor Equipment Operations	Implementation of effective outdoor equipment source control devices and practices.	SC-32
Outdoor Storage of Raw Materials	Implementation of effective source control practices and structural devices.	SC-33
Building and Grounds Maintenance	Implementation of effective facility maintenance practices.	SC-41

(b) Industrial Facilities

Each Permittee shall conduct compliance inspections as specified below.

(1) **Frequency of Inspection**

- (A) Each Permittee shall perform an initial inspection at all industrial facilities identified by the U.S. EPA in 40 CFR 122.26(c) no later than (2 years after Order adoption date). After the initial inspection, all facilities determined as having exposure of industrial activities to storm water are subject to a second mandatory compliance inspection. A minimum interval of 6 months between the first and the second compliance inspection is required.
- (B) Following the first mandatory compliance inspection, a Permittee shall perform a second mandatory compliance inspection yearly at a minimum of 20% of the facilities determined not to have exposure of industrial activities to storm water. The purpose of this inspection is to verify the continuity of the no exposure status. Facilities determined

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as having exposure will be notified that they must obtain coverage under the IASGP. A facility need not be inspected more than twice during the term of the Order unless subject to an enforcement action. A minimum interval of 6 months in between the first and the second compliance inspection is required.

- (C) Applicable to all facilities: A Permittee need not inspect facilities that have been inspected by the Regional Water Board within the previous 24 month interval. However, if the Regional Water Board performed only one inspection, the Permittee shall conduct the second required mandatory compliance inspection.
 - (2) **Level of Inspection:** Each Permittee shall confirm that each operator:
 - (A) Has a current Waste Discharge Identification (WDID) number for facilities discharging storm water associated with industrial activity, and that a Storm Water Pollution Prevention Plan (SWPPP) is available on-site.
 - (B) Is effectively implementing BMPs in compliance with County and municipal ordinances. Facilities must implement the source control BMPs identified in subpart 4.D.2. and Appendix D, *California Stormwater Industrial and Commercial BMP Handbook (2003)*; or
 - (C) Has applied and has a current No Exposure Certification (and WDID number) for facilities subject to this requirement.
3. Ensure Compliance of Critical Sources
- (a) **BMP Implementation:** Facilities must implement the source control BMPs identified in Part 4.D.2. and, as applicable, Appendix D, *California Stormwater Industrial and Commercial BMP Handbook (2003)*. In the event that a Permittee determines that a BMP is infeasible at any site, the Permittee shall require implementation of similar BMPs that will achieve the equivalent reduction of pollutants in the storm water discharges. Likewise, for those BMPs that are not protective of water quality standards, Permittees may require additional site-specific controls.
 - (b) **Environmentally Sensitive Areas (ESAs) and Impaired Waters:** For critical sources that discharge to MS4s that directly discharge to ESAs or to CWA § 303(d) listed impaired waterbodies, the Permittees shall require operators to implement additional pollutant specific controls to reduce pollutants in storm water runoff that are causing or contributing to exceedances of water quality objectives. A Regional Water Board approved TMDL Implementation Plan for the receiving water will substitute for this requirement.
 - (c) **Progressive Enforcement:** Each Permittee shall implement a progressive enforcement policy to ensure that facilities are brought into compliance with all storm water requirements within a reasonable time period as specified below.
 - (1) In the event that a Permittee determines, based on an inspection conducted, that an operator has failed to adequately implement all necessary BMPs, that Permittee shall take progressive enforcement actions which, at a minimum,

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shall include a follow-up inspection within 4 weeks from the date of the initial inspection.

- (2) In the event that a Permittee determines that an operator has failed to adequately implement BMPs after a follow-up inspection, that Permittee shall take enforcement action as established through authority in its municipal code and ordinances or through the judicial system.
- (3) Each Permittee shall maintain records and make them available on request to the Regional Water Board, including inspection reports, warning letters, notices of violations, and other enforcement records, demonstrating a good faith effort to bring facilities into compliance.

4. Interagency Coordination

(a) **Referral of Violations of the Municipal Storm Water Ordinances and California Water Code § 13260:** A Permittee may refer a violation(s) of § 13260 by Industrial and Commercial facilities to the Regional Water Board provided that under its municipal storm water ordinance the Permittee has made a good faith effort of progressive enforcement. At a minimum, a Permittee's good faith effort must be documented with:

- (1) Two follow-up inspections
- (2) Two warning letters or notices of violation

(b) **Referral of Violations of the Industrial Activities Storm Water General Permit (IASGP), including Requirements to File a Notice of Intent or No Exposure Certification:** For those facilities in violation of the municipal storm water ordinance and subject to the IASGP, Permittees may escalate referral of such violations to the Regional Water Board (electronically on a quarterly basis to the Regional Water Board's Storm Water Site at MS4stormwaterb4@waterboards.ca.gov) after one inspection and one written notice (copied to the Regional Water Board) to the operator regarding the violation. In making such referrals, Permittees shall include, at a minimum, the following documentation:

- (1) Name of the facility
- (2) Operator of the facility
- (3) Owner of the facility
- (4) WDID Number (if applicable)
- (5) Industrial activity being conducted at the facility that is subject to the IASGP
- (6) Records of communication with the facility operator regarding the violation, which shall include at least an inspection report
- (7) The written notice of the violation copied to the Regional Water Board

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- (c) **Investigation of Complaints Regarding Facilities – Transmitted by the Regional Water Board Staff:** Each Permittee shall initiate, within one business day,¹ investigation of complaints (other than non-storm water discharges) to the MS4 from facilities within its jurisdiction. The initial investigation shall include, at a minimum, a limited inspection of the facility to confirm the complaint to determine if the facility is effectively complying with the municipal storm water urban runoff ordinances and, if necessary, to oversee corrective action.
- (d) **Assistance of Regional Water Board Enforcement Actions:** As directed by the Regional Water Board Executive Officer, Permittees shall assist Regional Water Board enforcement actions by: helping in identification of current owners, operators, and lessees of facilities; providing staff, when available, for joint inspections with Regional Water Board inspectors; appearing as witnesses in Regional Water Board enforcement hearings; and providing copies of inspection reports and other progressive enforcement documentation.
- (e) **Participation in a Task Force:** The Permittees shall participate with the Regional Water Board, and other public agencies on an enforcement task force such as the Storm Water Task Force, to communicate concerns regarding special cases of storm water violations by industrial and commercial facilities and to develop a coordinated approach to enforcement action.

E. Planning and Land Development Program

I. Purpose

1. The Permittees shall implement a Planning and Land Development Program pursuant to part 4.E. for all New Development and Redevelopment projects subject to this Order to:
 - (a) Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development towards existing communities via infill or redevelopment, safeguarding of environmentally sensitive areas, mixing of land uses (e.g., homes, offices, and shops), transit accessibility, and better pedestrian and bicycle amenities.
 - (b) Minimize the adverse impacts from storm water runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of waterbodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21100).
 - (c) Minimize the percentage of effective impervious surfaces on land developments to mimic predevelopment water balance through infiltration, evapotranspiration and reuse.

¹ Permittees may comply with the Permit by taking initial steps (such as logging, prioritizing, and tasking) to “initiate” the investigation within that one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, to occur within four business days.

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- (d) Minimize pollutant loadings from impervious surfaces such as roof-tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including Source Control BMPs such as good housekeeping practices), Low Impact Development Strategies, and Treatment Control BMPs.
- (e) Properly select, design and maintain Treatment Control BMPs and Hydromodification Control BMPs to address pollutants that are likely to be generated, assure long-term function, and to avoid the breeding of vectors.¹
- (f) Prioritize the selection of BMPs suites to remove storm water pollutants, reduce storm water runoff volume, and beneficially reuse storm water to support an integrated approach to protecting water quality and managing water resources in the following order of preference:
 - (1) Infiltration BMPs
 - (2) BMPs that store and reuse storm water runoff.
 - (3) BMPs that incorporate vegetation to promote pollutant removal and runoff volume reduction and integrate multiple uses
 - (4) BMPs which percolate runoff through engineered soil and allow it to discharge downstream slowly
 - (5) Approved modular/ proprietary treatment control BMPs that are based on LID concepts and that meet pollution removal goals

II. Applicability

1. New Development Projects.

- (a) Development projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:
 - (1) All development projects equal to 1 acre or greater of disturbed area and adding more than 10,000 square feet of impervious surface area
 - (2) Industrial park 10,000 square feet or more of surface area
 - (3) Commercial strip mall 10,000 square feet or more of impervious surface area
 - (4) Retail gasoline outlet 5,000 square feet or more of surface area
 - (5) Restaurant (SIC 5812) 5,000 square feet or more of surface area
 - (6) Parking lot 5,000 square feet or more of impervious surface area, or with 25 or more parking spaces
 - (7) Streets, roads, highways, and freeway construction of 10,000 square feet or more of impervious surface area shall incorporate USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets to the maximum extent practicable.
 - (8) Automotive service facilities (SIC 5013, 5014, 5511, 5541, 7532-7534 and 7536-7539) [5,000 square feet or more of surface area]

¹ Treatment BMPs when designed to drain within 72 hours of the end of rainfall minimize the potential for the breeding of vectors.

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- (9) Redevelopment projects in subject categories that meet Redevelopment thresholds (identified in subpart E.II.2 below)
- (10) Projects located in or directly adjacent to, or discharging directly to an Environmentally Sensitive Area (ESA), where the development will:
 - (A) Discharge storm water runoff that is likely to impact a sensitive biological species or habitat; and
 - (B) Create 2,500 square feet or more of impervious surface area
- (11) Single-family hillside homes. To the extent that a Permittee may lawfully impose conditions, mitigation measures or other requirements on the development or construction of a single-family home in a hillside area as defined in the applicable Permittee's Code and Ordinances, each Permittee shall require that during the construction of a single-family hillside home, the following measures to be implemented:
 - (A) Conserve natural areas
 - (B) Protect slopes and channels
 - (C) Provide storm drain system stenciling and signage
 - (D) Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability
 - (E) Direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability

2. Redevelopment Projects

- (a) Redevelopment projects subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, prior to completion of the project(s), are:
 - (1) Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site on development categories identified in subpart 4.E.III.1.
 - (2) Where Redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post development storm water quality control requirements, the entire project must be mitigated.
 - (3) Where Redevelopment results in an alteration to less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post development storm water quality control requirements, only the alteration must be mitigated, and not the entire development.
- (b) Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of facility or emergency redevelopment activity required to protect public health and safety. Impervious surface replacement, such as the reconstruction of parking lots and roadways which does not disturb additional area and maintains the original grade and alignment, is considered a routine maintenance activity. Redevelopment does not include the repaving of existing roads to maintain original line and grade.

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- (c) Existing single-family dwelling and accessory structures are exempt from the Redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.
3. Effective Date –The New Development and Redevelopment requirements contained in Section E of the Order shall begin (90 calendar days) after Regional Water Board Executive Officer approval of the changes to the Technical Guidance Manual needed to comply with this permit. After that date all discretionary permit projects or project phases that have not been deemed complete for processing, or discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals must comply with the requirements in Section E. Projects that have been deemed complete prior to the update of the technical design manual are not subject to this section. For Permittee's projects the effective date shall be the date the governing body or their designee approves initiation of the project design.

III. New Development/ Redevelopment Performance Criteria

1. Integrated Water Quality/ Flow Reduction/Resources Management Criteria
- (a) Except as provided in subpart 4.E.III.1.(c) below, Permittees shall require all New Development and Redevelopment projects identified in subpart 4.E.II to control pollutants, pollutant loads, and runoff volume emanating from impervious surfaces through infiltration, storage for reuse, evapotranspiration, or bioretention/ biofiltration by reducing the percentage of Effective Impervious Area (EIA) to 5 percent or less of the total project area.
 - (b) Impervious surfaces may be rendered "ineffective", and thus not count toward the 5 percent EIA limitation, if the stormwater runoff from those surfaces is fully retained on-site for the design storm event specified in provision (c), below. To satisfy the EIA limitation and low-impact development requirements, the permittees must require stormwater runoff to be infiltrated, reused, or evapotranspired on-site through a stormwater management technique allowed under the terms of this permit and implementing documents. If on-site retention is determined to be technically infeasible pursuant to 4.E.III.2(b), an on-site biofiltration system that achieves equivalent stormwater volume and pollutant load reduction as would have been achieved by on-site retention shall satisfy the EIA limitation. An on-site biofiltration system that releases above the design volume shall achieve 1.5 times the amount of stormwater volume and pollutant load reduction as would have been achieved by on-site retention and, thereby, shall satisfy the EIA limitation.
 - (c) The permittees shall require all features constructed or otherwise utilized to render impervious surfaces "ineffective", as described in provision (b), above, to be properly sized to infiltrate, store for reuse, or evapotranspire, without any runoff at least the volume of water, or in the case of biofiltration with release above the design volume, 1.5 times the volume of water, that results from:

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- (1) The 85th percentile 24-hour runoff event determined as the maximized capture stormwater volume for the area using a 48 to 72-hour draw down time, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998);
 - (2) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in the Ventura County Technical Guidance Manual for Storm Water Quality Control Measures (July 2002 and its revisions); or
 - (3) The volume of runoff produced from a 0.75 inch storm event.
- (d) To address any impervious surfaces that may not be rendered "ineffective", surface discharge of stormwater runoff if any, that results from New Development and Redevelopment projects identified in subpart 4.E.II which have complied with subparts 4.E.III.1.(a)-(c), above, shall be mitigated in accordance with subpart 4.E.III.4.

2. Alternative Compliance for Technical Infeasibility

- (a) To encourage smart growth and infill development of existing urban centers where on-site compliance with post-construction requirements may be technically infeasible, the permittees may allow projects that are unable to meet the Integrated Water Quality/Flow Reduction/Resources Management Criteria in subpart 4.E.III.1, above, to comply with this permit through the alternative compliance measures described in subpart 4.E.III.2.(c), below.
- (b) To utilize alternative compliance measures, the project applicant must demonstrate that compliance with the applicable post-construction requirements would be technically infeasible by submitting a site-specific hydrologic and/or design analysis conducted and endorsed by a registered professional engineer, geologist, architect, and/or landscape architect. Technical infeasibility may result from conditions including the following:
 - (1) Locations where seasonal high groundwater is within 5 feet of the surface
 - (2) Locations within 100 feet of a groundwater well used for drinking water
 - (3) Brownfield development sites or other locations where pollutant mobilization is a documented concern
 - (4) Locations with potential geotechnical hazards
 - (5) Smart growth and infill or redevelopment locations where the density and/or nature of the project would create significant difficulty for compliance with the on-site volume retention requirement
 - (6) Other site or implementation constraints identified in the LID Technical Guidance document required by subpart 4.E.IV.4.
- (c) Alternative Compliance Measures. When a permittee finds that a project applicant has demonstrated technical infeasibility, the permittee shall identify alternative compliance measures that the project will need to comply with as a substitute for the otherwise applicable post-construction requirements listed in subparts 4.E.III.1.(a)-(c) of this permit. The Ventura County Technical Guidance Manual shall be revised to identify the alternative compliance measures and shall include the following requirement:

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- (1) Minimum on-site requirement. The project must take all feasible measures to reduce the percentage of Effective Impervious Area to no more than 30 percent of the total project area and treat all remaining runoff pursuant to the design and sizing requirements of subparts 4.E.III.1.(b)-(d).
- (2) Offsite mitigation volume. The difference in volume between the amount of stormwater infiltrated, reused, and/ or evapotranspired and/or biofiltered by the project on-site and the otherwise applicable requirements of subparts 4.E.III.1.(a)-(c) (the "offsite mitigation volume"), above, must be mitigated by the project applicant either by performing offsite mitigation that is approved by the permittee or by providing sufficient funding for public or private offsite mitigation to achieve equivalent stormwater volume and pollutant load reduction through infiltration, reuse, evapotranspiration and/ or biofiltration.
 - For projects with demonstrable technical infeasibility that cannot reduce the Effective Impervious Area to 5% or less of the total project, but are able to reduce the Effective Impervious Area to no more than 30 percent of the total project, mitigation or payment in lieu must be equivalent to the amount of stormwater not managed on site.
 - For projects with demonstrable technical infeasibility that cannot reduce the Effective Impervious Area to 30% of the total project or less, mitigation or payment in lieu must be for 1.5 times the amount of stormwater not managed on site
- (3) Location of off site mitigation. Offsite mitigation projects must be located in the same sub-watershed (defined as draining to the same hydrologic area in the Basin Plan) as the new development or redevelopment project. A list of eligible public and private offsite mitigation projects available for funding shall be identified by the Permittees and provided to the project applicant. Off site mitigation projects include green streets projects, parking lot retrofits, other site specific LID BMPs, and regional BMPs. Project applicants seeking to utilize these alternative compliance provisions may propose other offsite mitigation projects, which the Permittees may approve if they meet the requirements of this subpart.
- (4) Timing and Reporting Requirements for Offsite Mitigation Projects. The Permittee(s) shall develop a schedule for the completion of offsite mitigation projects, including milestone dates to identify fund, design, and construct the projects. Offsite mitigation projects shall be completed as soon as possible, and at the latest, within 4 years of the certificate of occupancy for the first project that contributed funds toward the construction of the offsite mitigation project, unless a longer period is otherwise authorized by the Executive Officer. For public offsite mitigation projects, the permittees must provide in their annual reports a summary of total offsite mitigation funds raised to date and a description (including location, general design concept, volume of water expected to be retained, and total estimated budget) of all pending public offsite mitigation projects. Funding sufficient to address the offsite mitigation volume must be

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transferred to the permittee (for public offsite mitigation projects) or to an escrow account (for private offsite mitigation projects) within one year of the initiation of construction.

- (5) The project applicant must demonstrate that the EIA achieved on-site is as close to 5 percent EIA as technically feasible, given the site's constraints.
- (d) Watershed equivalence. Regardless of the methods through which permittees allow project applicants to implement alternative compliance measures, the sub-watershed-wide (defined as draining to the same hydrologic area in the Basin Plan) result of all development must be at least the same level of water quality protection as would have been achieved if all projects utilizing these alternative compliance provisions had complied with subparts 4.E.III.1.(a)-(d) of the permit. The permittees shall provide in their annual report to the Regional Board a list of mitigation project descriptions and pollutant and flow reduction analyses (compiled from design specifications submitted by project applicants and approved by the permittee(s)) comparing the expected aggregate results of alternative compliance projects to the results that would otherwise have been achieved by meeting the 5 percent EIA requirement on-site.
3. Hydromodification (Flow/ Volume/ Duration) Control Criteria
- (a) Each Permittee shall require all New Development and Redevelopment projects identified in subpart 4.E.II to implement hydrologic control measures, to prevent accelerated downstream erosion and to protect stream habitat in natural drainage systems. The purpose of the hydrologic controls is to minimize changes in post-development hydrologic storm water runoff discharge rates, velocities, and duration. This shall be achieved by maintaining the project's pre-project storm water runoff flow rates and durations.
- (1) Description
- (A) Hydromodification control in natural drainage systems shall be achieved by maintaining the Erosion Potential (E_p) in streams at a value of 1, unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and damage stream habitat (see Attachment "E" - Determination of Erosion Potential)
- (B) Hydromodification control may include one, or a combination of on-site, regional subregional hydromodification control BMPs, LID strategies, or stream restoration measures, with preference given to LID strategies and hydromodification control BMPs. Any in-stream restoration measure shall not adversely affect the beneficial uses of the natural drainage systems
- (C) Natural drainage systems, which include unlined or unimproved (not engineered) creeks, streams, rivers and their tributaries, are located in the following watersheds:
- (i) Ventura River
- (ii) Santa Clara River

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- (iii) Calleguas Creek
- (iv) Malibu Creek
- (v) Miscellaneous Ventura Coastal
- (D) The Southern California Storm Water Monitoring Coalition (SMC) is developing a regional methodology to eliminate or mitigate the adverse impacts of hydromodification as a result of urbanization, including hydromodification assessment and management tools.
 - (i) The SMC has identified the following objectives for the Hydromodification Control Study (HCS):
 - (I) Establishment of a stream classification for Southern California streams
 - (II) Development of a deterministic or predictive relationship between changes in watershed impervious cover and stream-bed/ stream bank enlargement
 - (III) Development of a numeric model to predict stream-bed/ stream bank enlargement and evaluate the effectiveness of mitigation strategies
- (E) The Permittees shall participate in the SMC HCS to develop:
 - (i) A regional stream classification system
 - (ii) A numerical model to predict the hydrological changes resulting from new development
 - (iii) A numerical model to identify effective mitigation strategies
- (F) Until the completion of the SMC HCS, Permittees shall implement the Interim Hydromodification Control Criteria, described in subpart 4.E.III.3(a)(3)(A) below, to control the potential adverse impacts of changes in hydrology that may result from new development and redevelopment projects identified in subpart 4.E.II
- (G) Existing single-family structures are exempt from the Hydromodification control requirements unless such projects disturb one acre or more of land or create, add, or replace 10,000 square feet or more of impervious surface area
- (2) Exemptions to Hydromodification Controls. Permittees may exempt the following New Development and Redevelopment projects from implementation of Hydromodification controls where assessments of downstream channel conditions and proposed discharge hydrology indicate that adverse Hydromodification effects to present and future beneficial uses of Natural Drainage Systems are unlikely:
 - (A) All projects that disturb less than one acre.
 - (B) Projects that are replacement, maintenance or repair of a Permittee's existing flood control facility, storm drain, or transportation network.
 - (C) Redevelopment Projects in the Urban Core that do not increase the effective impervious area or decrease the infiltration capacity of pervious areas compared to the pre-project conditions.

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- (D) Projects that have any increased discharge go directly or via a storm drain to a sump, lake, area under tidal influence, into a waterway that has a 100-year peak flow (Q100) of 25,000 cfs or more, or other receiving water that is not susceptible to Hydromodification impacts;
 - (E) Projects that discharge directly or via a storm drain into concrete or improved (not natural) channels (e.g., rip rap, sackcrete, etc.), which, in turn, discharge into receiving water that is not susceptible to Hydromodification impacts (as in D above).
- (3) Interim Hydromodification Control Criteria
- (A) The Interim Hydromodification Control Criteria to protect natural drainage systems until Permittees complete Hydromodification Control Plans (HCPs), described in subpart 4.E.III.3(a)(4) below, are as follows:
 - (i) **Projects disturbing land area of less than fifty acres**
will be subject to LID and/or source or treatment BMPs as addressed in this permit. The combined effects of LID and the treatment BMPs are considered adequate for Hydromodification control for projects that disturb less than 50 acres.
 - (ii) **Projects disturbing land areas of fifty acres or greater**
Projects in this category shall develop and implement a Hydromodification Analysis Study (HAS) that demonstrates that post development conditions are expected to approximate the pre-project erosive effect of sediment transporting flows in receiving waters. The HAS must lead to the incorporation into the project design features intended to approximate, to the extent feasible, an Erosion Potential value of 1 or any alternative value that can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and damage stream habitat in natural drainage systems, or
 - (I) Alternatively, project proponents in this category may elect to develop, in partnership with Permittees, an equivalent implementation method based on flow duration control in the form of nomographs relating planned impervious area and local soil type (infiltration rates) to determine hydromodification control BMP volume and land area requirements for the proposed project. The nomographs shall be derived from continuous simulation modeling using Ventura County specific rain gauge records and soil types, and calibrated using data from a local undeveloped watershed with similar conditions; or
 - (II) Alternatively, the Co-Permittees may revise the Ventura County Technical Guidance Manual for Stormwater

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Quality Control Measures to address projects that disturb more than 50 acres.

(4) Final Criteria

(A) The Permittees shall develop and implement watershed specific HCPs no later than (180 days) after the completion of the SMC HCS.

(i) The HCP shall identify:

(I) Stream classifications

(II) Flow rate and duration control methods

(III) Sub-watershed mitigation strategies

(IV) Stream restoration measures, which will maintain the stream and tributary Erosion Potential at 1 unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces and damage stream habitat in natural drainage system tributaries

(B) The HCP shall contain the following elements:

(i) Hydromodification Management Standards

(ii) Natural Drainage Areas and Hydromodification Management Control Areas

(iii) New Development and Redevelopment Projects subject to the HCP

(iv) Description of authorized Hydromodification Management Control BMPs

(v) Hydromodification Management Control BMP Design Criteria.

(vi) For flow duration control methods, the range of flows to control for, and goodness of fit criteria

(vii) Allowable low critical flow, Q_c , which initiates sediment transport

(viii) Description of the approved Hydromodification Model.

(ix) Any alternate Hydromodification Management Model and Design

(x) Stream Restoration Measures Design Criteria

(xi) Monitoring and Effectiveness Assessment

(xii) Record Keeping

(C) The HCP shall be deemed in effect upon Executive Officer approval.

4. Water Quality Mitigation Criteria

(a) Each Permittee shall require all New Development and Redevelopment projects identified in subpart 4.E.II to implement post-construction storm water treatment BMPs and control measures to mitigate storm water pollution as follows:

(1) Projects disturbing land areas less than 50 acres

(A) Volumetric Treatment Control BMP

(i) The 85th percentile 24-hour runoff event determined as the maximized capture storm water volume for the area using a 48 to

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- 72-hour draw down time, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998)*; or
- (ii) The volume of annual runoff based on unit basin storage water quality volume, to achieve 80 percent or more volume treatment by the method recommended in the Ventura County Technical Guidance Manual for Storm Water Quality Control Measures (July 2002 and its revisions); or
 - (iii) The volume of runoff produced from a 0.75 inch storm event, prior to its discharge to a storm water conveyance system;¹
and/ or
- (B) Flow Based Treatment Control BMP
- (i) The flow of runoff produced from a rain event equal to at least 0.2 inches per hour intensity; or
 - (ii) The flow of runoff produced from a rain event equal to at least 2 times the 85th percentile hourly rainfall intensity as determined from local rainfall records; or
 - (iii) Eight percent of the 50-year storm design flow rate as determined from the method recommended in the Ventura County Technical Guidance Manual for Storm Water Quality Control Measures (July 2002 and its revisions)
- (2) Projects disturbing land area of 50 acres or greater
- (A) Eighty percent of the average runoff volume using an appropriate public domain continuous flow model (such as Storm Water Management Model (SWMM) or Hydrologic Engineering Center – Hydrologic Simulation Program – Fortran (HEC-HSPF), using the local rainfall record and relevant BMP Performance data.

IV. Implementation

1. Maintenance Agreement and Transfer
 - (a) Prior to issuing approval for final occupancy each Permittee shall require that all new development and redevelopment projects subject to post-construction BMP requirements provide an operation and maintenance plan and verification of ongoing maintenance provisions for LID practices, Treatment Control BMPs, and Hydromodification Control BMPs including but not limited to: final map conditions, legal agreements, covenants, conditions or restrictions, CEQA mitigation requirements, conditional use permits, and/ or other legally binding maintenance agreements.
 - (1) Verification at a minimum shall include the developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either

¹ This option is available only for construction projects that disturb land area less than 5 acres.

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- (A) A signed statement from the public entity assuming responsibility for BMP maintenance; or
 - (B) Written conditions in the sales or lease agreement, which require the property owner or tenant to assume responsibility for BMP maintenance and conduct a maintenance inspection at least once a year; or
 - (C) Written text in project covenants, conditions, and restrictions (CCRs) for residential properties assigning BMP maintenance responsibilities to the Home Owners Association (HOA); or
 - (D) Any other legally enforceable agreement or mechanism that assigns responsibility for the maintenance of BMPs.
- (b) Each Permittee shall require all development projects subject to post-construction BMP requirements to provide a plan for the operation and maintenance of all structural and treatment controls. The Operation and Maintenance plan shall follow the Technical Guidance Manual Appendix D "Maintenance Plan Guidance" (or subsequent guidance manual) for each BMP component. The plan shall be submitted for examination of relevance to keeping the BMPs in proper working order. Where BMPs are transferred to Permittee for ownership and maintenance, the plan shall also include all relevant costs for upkeep of BMPs in the transfer. Operation and Maintenance plans for private BMPs shall be kept on-site for periodic review by Permittee inspectors.

2. Tracking, Inspection, and Enforcement of Post-Construction BMPs

- (a) Each Permittee shall implement a tracking system and an inspection and enforcement program for new development and redevelopment post-construction storm water BMPs as set forth in part 4.E. no later than (one year after Order adoption date).
 - (1) Implement a GIS or other electronic system for tracking projects that have been conditioned for post-construction BMPs. The electronic system, at a minimum, should contain the following information:
 - (A) Municipal Project ID
 - (B) State WDID No
 - (C) Project Acreage
 - (D) BMP Type and Description
 - (E) BMP Location (coordinates)
 - (F) Date of Acceptance
 - (G) Date of Maintenance Agreement
 - (H) Maintenance Records
 - (I) Inspection Date and Summary
 - (J) Corrective Action
 - (K) Date Certificate of Occupancy Issued
 - (L) Replacement or Repair Date
- (b) Inspect all development sites upon completion of construction and prior to the issuance of occupancy certificates to ensure proper installation of LID measures,

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structural BMPs, treatment control BMPs and Hydromodification control BMPs. The inspection may be combined with other inspections provided it is conducted by trained personnel.

- (c) Verify proper maintenance and operation of post-construction BMPs previously approved for new development and redevelopment and operated by the Permittees. The post construction BMP maintenance inspection program shall incorporate the following elements:
 - (1) Post-construction BMP Maintenance Inspection checklist.
 - (2) Inspection at least once every 2 years, beginning (Order adoption date), of post-construction BMPs to assess operation conditions with particular attention to:
 - (3) Criteria and procedures for post construction Treatment Control and Hydromodification Control BMP repair, replacement, or re-vegetation.
- (d) For post construction BMPs operated and maintained by parties other than the Permittees, the Permittees shall require annual reports by the other parties demonstrating proper maintenance and operations.
- (e) Undertake enforcement as appropriate based on the results of the inspection.

3. Alternative Post Construction Storm Water Mitigation Programs

- (a) A Permittee or a coalition of Permittees may apply to the Regional Water Board for approval of a Redevelopment Project Area Master Plan (RPAMP) for redevelopment projects within the Redevelopment Project Areas, in consideration of exceptional site constraints that inhibit site-by-site or project-by-project implementation of post-construction requirements.
- (b) Upon review and a determination by the Regional Water Board Executive Officer that the proposal is technically valid and appropriate, the Regional Water Board may consider for approval such a program if its implementation will:
 - (1) Result in equivalent or superior reduction of storm water pollutant loads in comparison to individual projects regulated by this permit.
 - (2) Satisfy, on a Redevelopment Project Area-wide basis, the hydromodification criteria of this section.
 - (3) Reduce the percentage of Effective Impervious Area (EIA) to a target of 5 percent or less of the Redevelopment Project Area, using properly sized storm water treatment/ collection features, as described in this Section.
 - (4) Be fiscally sustainable and have secure funding; and
 - (5) Be completed in four years of the adoption date of this permit.
- (c) The RPAMP should prioritize the implementation of LID storm water mitigation measures, as described in this section.
- (d) A Permittee or a coalition of Permittees may apply to the Regional Water Board for approval of a Redevelopment Project Area Master Plan (RPAMP) that takes into consideration the balancing of water quality protection with the needs for adequate housing, population growth, public transportation and management, land recycling, and urban revitalization.
- (e) For the RPAMP to be considered, a technical panel of the Local Government Commission or an equivalent state or regional planning agency must have

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reviewed and approved the proposed RPAMP, prior to its submittal to the Regional Water Board. The Regional Water Board Executive Officer may then consider the RPAMP for approval, or elect to submit it to the Regional Water Board for consideration.

- (f) The RPAMP, on approval, may substitute in part or wholly for post-construction requirements.
 - (g) Redevelopment Project Areas include the following:
 - (1) City Center areas
 - (2) Historic District areas
 - (3) Brownfield areas
 - (4) Infill Development areas
 - (5) Urban Transit Villages
 - (6) Any other redevelopment area so designated by the Regional Water Board
 - (h) Nothing in these provisions shall be construed as to delay the implementation of post-construction control requirements, as approved in this Order.
4. Developer Technical Guidance and Information
- (a) The Permittees shall update the Ventura County Technical Guidance Manual for Storm Water Quality Control Measures to include, at a minimum, the following:
 - (1) Hydromodification Control criteria described in this Order, including numerical criteria.
 - (2) Expected BMP pollutant removal performance including effluent quality (ASCE/ U.S. EPA International BMP Database, CASQA New Development BMP Handbook, technical reports, local data on BMP performance, and the scientific literature appropriate for southern California geography and climate).
 - (3) Selection of appropriate BMPs for storm water pollutants of concern.
 - (4) Data on Observed Local Effectiveness and performance of implemented BMPs.
 - (5) BMP Maintenance and Cost Considerations.
 - (6) Guiding principles to facilitate integrated water resources planning and management in the selection of BMPs, including water conservation, groundwater recharge, public recreation, multipurpose parks, open space preservation, and redevelopment retrofits.
 - (7) LID principles and specifications, including the objectives and specifications for integration of LID strategies in the areas of:
 - (A) Site Assessment.
 - (B) Site Planning and Layout.
 - (C) Vegetative Protection, Revegetation, and Maintenance.
 - (D) Techniques to Minimize Land Disturbance.
 - (E) Techniques to Implement LID Measures at Various Scales
 - (F) Integrated Water Resources Management Practices.
 - (G) LID Design and Flow Modeling Guidance.
 - (H) Hydrologic Analysis.
 - (I) LID Credits.

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- (b) Permittees shall update the Technical Guidance Manual within (120 days after Order adoption date).
 - (c) The Permittees shall facilitate implementation of LID by providing key industry, regulatory, and other stakeholders with information regarding LID objectives and specifications contained in the LID Technical Guidance Section through a training program. The LID training program will include the following:
 - (1) LID targeted sessions and materials for builders, design professionals, regulators, resource agencies, and stakeholders
 - (2) A combination of awareness on national efforts and local experience gained through LID pilot projects and demonstration projects
 - (3) Materials and data from LID pilot projects and demonstration projects including case studies
 - (4) Guidance on how to integrate LID requirements into the local regulatory program(s) and requirements
 - (5) Availability of the LID Technical Guidance regarding integration of LID measures at various project scales
 - (6) Guidance on the relationship among LID strategies, Source Control BMPs, Treatment Control BMPs, and Hydromodification Control requirements
 - (d) The Permittees shall submit revisions to the Ventura County Technical Guidance Manual to the Regional Water Board for Executive Officer approval.
5. Project Coordination
- (a) Each Permittee shall facilitate a process for effective approval of post-construction storm water control measures. The process shall include:
 - (1) Detailed BMP review including BMP sizing calculations, BMP pollutant removal performance, and municipal approval; and
 - (2) An established structure for communication and delineated authority between and among municipal departments that have jurisdiction over project review, plan approval, and project construction through memoranda of understanding (MOU) or an equivalent agreement.

V. State Statute Conformity

- 1. California Environmental Quality Act (CEQA) Document Update
 - (a) Each Permittee shall incorporate into its CEQA process no later than (365 days after Order adoption date) those additional procedures necessary for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents.
 - (1) The procedures shall require consideration of the following:
 - (A) Potential impact of project construction on storm water runoff.
 - (B) Potential impact of project post-construction activity on storm water runoff.
 - (C) Potential for discharge of storm water from areas from material storage, vehicle or equipment fueling, vehicle or equipment

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maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas.

- (D) Potential for discharge of storm water to impair the beneficial uses of the receiving waters.
- (E) Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and waterbodies.
- (F) Potential for significant changes in the flow velocity or volume of storm water runoff to cause harm to or impair the beneficial uses of natural drainage systems.
- (G) Potential for significant increases in erosion at the project site or surrounding areas.

2. General Plan Update

- (a) Each Permittee shall amend, revise or update its General Plan to include watershed and storm water quality and quantity management considerations and policies when any of the following General Plan elements are updated or amended:
 - (1) Land Use
 - (2) Housing
 - (3) Conservation
 - (4) Open Space
- (b) Each Permittee shall provide the Regional Water Board with the draft amendment or revision when a listed General Plan element or General Plan is noticed for comment in accordance with Cal. Govt. Code § 65350 *et seq.*

F. Development Construction Program

- (I) Each Permittee shall implement a construction program that prevents illicit construction-related discharges of pollutants into the MS4, implements and maintains structural and non-structural BMPs to reduce pollutants in stormwater runoff from construction sites, reduces construction site discharges of pollutants from the MS4 to the MEP, and prevents construction site discharges from the MS4 from causing or contributing to a violation of water quality standards.

1. BMP Implementation - Construction Sites Less Than One Acre

- (a) Each Permittee shall require the implementation of an effective combination of erosion and sediment control BMPs from Table 6 to prevent erosion and sediment loss, and the discharge of construction wastes.¹

¹ The BMPs are taken from the *California BMP Handbook, Construction, January 2003* and the *Caltrans Stormwater Quality Handbooks, Construction Site Best Management Practices (BMPs) Manual, March 2003*, and addenda.

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Table 6 - BMPs at Construction sites less than 1 acre

Minimum Set of BMPs for All Construction Sites	CASQA Handbook	Caltrans Handbook
For Erosion Control		
Scheduling	EC-1	SS-1
Preservation of Existing Vegetation	EC-2	SS-2
Sediment Controls		
Silt Fence	SE-1	SC-1
Sand Bag Barrier	SE-8	SC-8
Stabilized Construction Site Entrance/Exit	TC-1	TC-1
Non-Storm Water Management		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations (Groundwater dewatering only under NPDES Permit No. CAG994004). ¹	NS-2	NS-2
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Stockpile Management	WM-3	WM-2
Spill Prevention and Control	WM-4	WM-4
Solid Waste Management	WM-5	WM-5
Concrete Waste Management	WM-8	WM-8
Sanitary/ Septic Waste Management	WM-9	WM-9

2. BMP Implementation - Construction Sites One Acre but Less than 5 acres.
 - (a) Each Permittee shall require the implementation of an effective combination of appropriate erosion and sediment control BMPs from Table 7 in addition to the ones identified in Table 6 to prevent erosion and sediment loss, and the discharge of construction wastes:

Table 7 - BMPs at Construction sites 1 acre or greater but less than 5 acres

BMPs	CASQA Handbook	Caltrans Handbook
For Erosion Control		
Hydraulic Mulch	EC-3	SS-3
Hydroseeding	EC-4	SS-4
Soil Binders	EC-5	SS-5
Straw Mulch	EC-6	SS-6
Geotextiles and Mats	EC-7	SS-7
Wood Mulching	EC-8	SS-8
Sediment Controls		
Fiber Rolls	SE-5	SC-5
Gravel Bag Berm	SE-6	SC-6
Street Sweeping and/ or Vacuum	SE-7	SC-7
Storm Drain Inlet Protection	SE-10	SC-10
Additional Controls		
Wind Erosion Controls	WE-1	WE-1

¹ Ponded storm water may be discharged at a concentration of Total Suspended Solids (TSS) of 100mg/L or less.

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BMPs	CASQA Handbook	Caltrans Handbook
Stabilized Construction Entrance/ Exit	TC-1	TC-1
Stabilized Construction Roadway	TC-2	TC-2
Entrance/ Exit Tire Wash	TC-3	TC-3
Non-Storm Water Management		
Vehicle and Equipment Washing	NS-8	NS-8
Vehicle and Equipment Fueling	NS-9	NS-9

3. BMP Implementation - Construction Sites 5 acres and Greater

- (a) Each Permittee shall require the implementation of an effective combination of the following BMPs in Table 8 (BMPs at Construction sites 5 acres or greater) in addition to the ones identified in Table 6 (BMPs at Construction sites less than 1 acre) and Table 7 (BMPs at Construction sites 1 acre or greater but less than 5 acres) at all construction sites 5 acres and greater to prevent erosion and sediment loss, and the discharge of construction wastes. Erosion control BMPs shall be preferred to sediment control BMPs.

Table 8 - BMPs at Construction sites 5 acres or greater

BMPs	CASQA Handbook	Caltrans Handbook
Sediment Controls		
Sediment Basin	SE-2	SC-2
Check Dam	SE-4	SC-4
Tracking Control BMPs		
Stabilized Construction Entrance/ Exit	TR-1	TC-1
Non-Storm Water Management		
Vehicle and Equipment Maintenance	NS-10	NS-10
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Spill Prevention and Control	WM-4	WM-4
Concrete Waste Management	WM-8	WM-8
Sanitary/ Septic Waste Management	WM-9	WM-9

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4. Enhanced Construction BMP Implementation.
- (a) Each Permittee shall implement, or require implementation of, enhanced practices that preclude impacts to water quality posed by all construction sites on hillsides as defined in this Order and construction sites that directly discharge to a waterbody listed on the CWA § 303 (d) list for siltation or sediment, or that occur within or directly adjacent to an Environmentally Sensitive Area (ESAs). Construction sites located on hillsides, adjacent to CWA 303(d) listed waters for siltation or sediment, and directly adjacent to ESAs are termed "High risk sites."
 - (b) Each Permittee shall require implementation of enhanced practices for high risk sites which shall include increased BMP inspection and maintenance requirements.
 - (1) Each Permittee shall require that high risk sites shall be inspected by the project proponent's Qualified SWPPP Developer or Qualified SWPPP Practitioner or personnel or consultants who are Certified Professionals in Erosion and Sediment Control (CPESC) at the time of BMP installation, at least weekly during the wet season, and at least once each 24 hour period during a storm event that generates runoff from the site, to identify BMPs that need maintenance to operate effectively, that have failed or could fail to operate as intended.
 - (2) During the wet season, the area of disturbance shall be limited to the area that can be controlled with an effective combination of erosion and sediment control BMPs. Enhanced sediment controls should be used in combination with erosion controls and should target portions of the site that cannot be effectively controlled by standard erosion controls described above. Effective sediment and erosion control BMPs proposed by the proponent shall include the BMPs listed in Table 9 below. The project proponents are responsible to implement the BMPs below unless shown unnecessary. The Permittee shall require that the project proponent retain records of the inspection and a determination and rationale of the BMPs selected to control runoff.

Table 9 - Enhanced Construction BMP Implementation.

CONSTRUCTION SITE BMPs	CASQA Handbook	Caltrans Handbook
Erosion Controls		
Scheduling	EC-1	SS-1
Preservation of Existing Vegetation	EC-2	SS-2
Hydraulic Mulch	EC-3	SS-3
Hydroseeding	EC-4	SS-4
Soil Binders	EC-5	SS-5
Straw Mulch	EC-6	SS-6
Geotextiles and Mats	EC-7	SS-7
Wood Mulching	EC-8	SS-8
Slope Drains	EC-11	SS-11
Sediment Controls		

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CONSTRUCTION SITE BMPs	CASQA Handbook	Caltrans Handbook
Silt Fence	SE-1	SC-1
Fiber Rolls	SE-5	SC-5
Sediment Basin	SE-2	SC-2
Check Dam	SE-4	SC-4
Gravel Bag Berm	SE-6	SC-6
Street Sweeping and/or Vacuum	SE-7	SC-7
Sand Bag Barrier	SE-8	SC-8
Storm Drain Inlet Protection	SE-10	SC-10
Additional Controls		
Wind Erosion Controls	WE-1	WE-1
Stabilized Construction Entrance/Exit	TC-1	TC-1
Stabilized Construction Roadway	TC-2	TC-2
Entrance/Exit Tire Wash	TC-3	TC-3
Advanced Treatment Systems ¹		
Non-Storm Water Management		
Water Conservation Practices	NS-1	NS-1
Dewatering Operations (Groundwater dewatering only under NPDES Permit No. CAG994004). ¹⁹	NS-2	NS-2
Vehicle and Equipment Washing	NS-8	NS-8
Vehicle and Equipment Fueling	NS-9	NS-9
Vehicle and Equipment Maintenance	NS-10	NS-10
Waste Management		
Material Delivery and Storage	WM-1	WM-1
Stockpile Management	WM-3	WM-2
Spill Prevention and Control	WM-4	WM-4
Solid Waste Management	WM-5	WM-5
Concrete Waste Management	WM-8	WM-8
Sanitary/Septic Waste Management	WM-9	WM-9

5. Local Agency Requirements

(a) Each Permittee shall require for all construction sites 1 acre or greater, compliance with all conditions identified in the preceding subparts F.1 - F.4, and the following requirements:

(1) Local Storm Water Pollution Prevention Plan (Local SWPPP),

(A) Each Permittee shall require the preparation and submittal of a Local SWPPP, for the Permittee's review and written approval prior to issuance of a grading or construction permit for construction or demolition projects. The Permittees' approval signature shall be contained within the first pages of the Local SWPPP

¹ If appropriate given natural background stormwater runoff and receiving water quality conditions.

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- (i) The Permittee shall not approve any Local SWPPP unless it contains appropriate site-specific construction site BMPs, specific locations, and maintenance schedules.
 - (ii) The Local SWPPP must include the rationale used for selecting or rejecting BMPs for various construction phases and weather conditions. The project architect, or engineer of record, or authorized qualified designee, must sign a statement on the Local SWPPP to the effect:
 - (I) *“As the architect/ engineer of record, I have selected appropriate BMPs to effectively minimize the negative impacts of this project’s construction activities on storm water quality. The project owner and contractor are aware that the selected BMPs must be installed, monitored, and maintained to ensure their effectiveness. The BMPs not selected for implementation are redundant or deemed not applicable to the proposed construction activity.”*
- (2) Certification Statement
- (A) Each Permittee shall require that each landowner or the landowner’s agent sign a statement on the Local SWPPP to the effect:
 - (i) *“I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure 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, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that submitting false and/ or inaccurate information, failing to update the Local SWPPP to reflect current conditions, or failing to properly and/ or adequately implement the Local SWPPP may result in revocation of grading and/ or other permits or other sanctions provided by law.”*
 - (ii) The Local SWPPP certification shall be signed by the property owner or owner’s representative/designee. If the Local SWPPP or SWPPP is being prepared by the local agency then the appropriate authority of the local agency shall sign the document.
6. Roadway Paving or Repaving Operations (For Private or Public Projects)
- (a) Each Permittee shall require that for any project that includes roadbed or street paving, repaving, patching, digouts, or resurfacing roadbed surfaces, that the following BMPs be implemented for each project:
 - (1) Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall unless required by emergency conditions
 - (2) Install sand bags or gravel bags and filter fabric at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat

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- (3) Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or receiving waters.
- (4) Minimize non storm water runoff from water use for the roller and for evaporative cooling of the asphalt
- (5) Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly
- (6) Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly
- (7) Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly
- (8) Cover the "cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm
- (9) Cover loads with tarp before haul-off to a storage site, and do not overload trucks
- (10) Minimize airborne dust by using water spray during grinding
- (11) Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or receiving waters
- (12) Protect stockpiles with a cover or sediment barriers during a rain

7. Electronic Site Tracking System

- (a) Each Permittee shall use an electronic system to track grading permits, encroachment permits, demolition permits, building permits, or construction permits (and any other municipal authorization to move soil and/ or construct or destruct that involves land disturbance) issued by each Permittee. To satisfy this requirement, the use of a database or GIS system is encouraged, but not required.

8. Inspections

- (a) Each Permittee shall inspect all construction sites for the implementation of storm water quality controls a minimum of once during the wet season. Concurrently, each Permittee shall ensure that:
 - (1) The Local SWPPP is reviewed for compliance with local codes, ordinances, and permits.
 - (2) A follow-up inspection takes place within two weeks for inspected sites that have not adequately implemented their Local SWPPP.
- (b) Each Permittee shall take additional enforcement actions to achieve compliance as specified in municipal codes, if compliance with municipal codes, ordinances, or permits has not been attained.
- (c) Each Permittee can refer sites to the Regional Water Board for joint enforcement actions for violation of municipal storm water ordinances and the Construction Activities Storm Water General Permit (CASGP), or Small Linear Underground/ Overhead Construction Projects General Permit (small LUPs), after conducting a minimum of 2 site inspections and issuing a minimum of 2 written notices to the operator regarding the violation (copied to the Regional Water Board). In making

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such referrals, Permittees shall include, at a minimum, the following documentation:

- (1) Name of the site
 - (2) WDID number
 - (3) Site developer
 - (4) Site owner
 - (5) Records of communication with the site operator regarding the violation(s), which shall include at least an inspection report
 - (6) Written notice of the violation copied to the Regional Water
- (d) Prior to approving and/ or signing off for occupancy and issuing the Certificate of Occupancy for all construction projects subject to post-construction controls, each Permittee shall inspect the constructed site design, source control and treatment control BMPs to verify that they have been constructed in compliance with all specifications, plans, permits, ordinances, and this Order. The initial/ acceptance BMP verification inspection does not constitute a maintenance and operation inspection, as required in the preceding subpart E.IV.2(c).

9. State Conformity Requirements

- (a) Each Permittee shall ensure that no grading permit, encroachment permit, demolition permit, building permit, electrical permit, or construction permit (or any other municipal authorization to move soil and/ or construct or destruct that involves land disturbance) is issued for any project requiring coverage under the CASGP or Small LUP General Permit¹ unless:
- (1) Proof of filing a Notice of Intent for coverage under a State NPDES permit is demonstrated).
 - (2) Demonstration or Certification that a SWPPP has been prepared by the project developer.
 - (3) Proof of Change of Information form (COI) and a copy of the modified SWPPP(s) at any time a transfer of ownership takes place for the entire development or portions of the common plan of development where construction activities are still on-going.

10. Interagency Coordination

(a) **Referral of Violations:**

A Permittee may refer a violator of the municipal storm water ordinance and CWC § 13260 to the Regional Water Board provided that the Permittee has made a good faith effort at progressive enforcement consistent with the preceding subpart F.8(c). At a minimum, the Permittee's good faith effort shall be documented with:

¹ NPDES Permit No. CAS000005, Waste Discharge Requirements For Discharges of Storm Water Runoff Associated with Small Linear Underground/ Overhead Construction Projects (Small LUP General Permit) for any linear land disturbing activity or activities (cumulatively) that will cause one acre or more of land disturbance but not more than 5 acres.

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- (1) A minimum of 2 follow-up inspection reports (inspections completed within 3 months).
- (2) A minimum of two warning letters or NOVs.
- (b) **Referral of Non-filers under the CASGP or the Small LUP General Permit:**
Each Permittee shall refer non-filers (i.e., those projects which cannot demonstrate that they have a WDID number) under the CASGP or Small LUP General Permit, to the Regional Water Board, no later than 15 days after making a determination of failure to file. In making such referrals, Permittees shall include, at a minimum, the following documentation:
 - (1) Project location address
 - (2) Project description
 - (3) Developer or owners name with complete mailing address
 - (4) Project size
 - (5) Records of communication with the developer or owner regarding filing requirements
- (c) **Investigation of Complaints Regarding Facilities – Transmitted by the Regional Water Board Staff:**
 - (1) Each Permittee shall initiate, within one business day,¹ an initial investigation of complaint(s) (other than non-storm water discharges) on the construction site(s) within its jurisdiction.
 - (A) The initial investigation shall include, at a minimum, an inspection on the facility and its perimeter to confirm the complaint and to determine if the site operator is effectively complying with the municipal storm water/ urban runoff ordinances, and to oversee corrective action.
- (d) **Support of Regional Water Board Enforcement Actions – As directed by the Regional Water Board Executive Officer:**
 - (1) Each Permittee shall support Regional Water Board enforcement actions by:
 - (A) Assisting in identification of current owners, operators, and lessees of properties and sites.
 - (B) Providing staff, when available, for joint inspections with Regional Water Board inspectors.
 - (C) Appearing to testify as witnesses in Regional Water Board enforcement hearings.
 - (D) Providing copies of inspection reports and other progressive enforcement documentation.

¹ Permittees may comply with the Permit by taking initial steps (such as logging, prioritizing, and tasking) to “initiate” the investigation within that one business day. However, the Regional Water Board would expect that the initial investigation, including a site visit, to occur within four business days.

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G. Public Agency Activities Program

- I. Each Permittee shall implement a Public Agency Activities Program to minimize storm water pollution impacts from public agency activities. Public Agency requirements consist of:
 - i. Public Construction Activities Management.
 - ii. Vehicle Maintenance/ Material Storage Facilities/ Corporation Yards Management/ Municipal Operations.
 - iii. Vehicle and Equipment Wash Areas
 - iv. Landscape and Recreational Facilities Management
 - v. Storm Drain Operation and Management
 - vi. Streets and Roads Maintenance
 - vii. Public Industrial Activities Management
 - viii. Emergency Procedures
 - ix. Employee Training
 - x. Infrastructure Maintenance

1. Public Construction Activities Management
 - (a) Each Permittee shall implement and comply with the Planning and Land Development Program requirements in part 4.E. of this Order at Permittee owned or operated public construction projects for project types identified in part 4.E of this Order.
 - (b) Each Permittee shall implement and comply with the appropriate Development Construction Program requirements in part 4.F. of this Order at Permittee owned or operated construction projects as applicable.
 - (c) For public projects including those under a Capital Improvement Project Plan that disturb less than one acre of soil the Permittees shall require the development and implementation of a Storm Water Pollution Control Plan. The SWPCP shall include BMPs as identified in Table 6.

2. Vehicle Maintenance/ Material Storage Facilities/ Corporation Yards Management/ Long Term Maintenance Programs
 - (a) Each Permittee shall implement the activity specific BMPs¹ listed in Table 10 when such activities occur at Permittee owned/leased facilities and job sites including but not limited to vehicle/ equipment maintenance facilities, material storage facilities, and corporation yards, and at any area that includes the activities as described in the following Tables. Additionally, for any activity or area described in the footnote below,² each Permittee shall also implement the BMPs in the Caltrans Storm Water Quality Handbook Maintenance Staff Guide

¹ These BMPs are identified in Appendix B of the *Caltrans Storm Water Quality Handbook Maintenance Staff Guide, May 2003*, and its addenda. Other BMPs may be substituted upon approval by the Executive Officer.

² Scheduling and Planning; Spill Prevention and Control; Sanitary/ Septic Waste Management; Material Use; Safer Alternative Products; Vehicle/ Equipment Cleaning, Fueling, and Maintenance; Illicit Connections Detection, Reporting and Removal; Illegal Spill / Discharge Control and Maintenance Facility Housekeeping Practices.

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described as B-4 in Table 10 (BMPs at Vehicle Maintenance/ Material Storage Facilities/ Corporation Yards).

Table 10 - BMPs at Vehicle Maintenance/ Material Storage Facilities/ Corporation Yards
From the Caltrans Storm Water Quality Handbook Maintenance Staff Guide Appendix B

Activity Specific BMPs	Page
General BMPs	B-4
Flexible Pavement	B-9
Asphalt Cement Crack and Joint Grinding/ Sealing	B-9
Asphalt Paving	B-10
Structural Pavement Failure (Digouts) Pavement Grinding and Paving	B-11
Emergency Pothole Repairs	B-13
Sealing Operations	B-14
Rigid Pavement	B-15
Portland Cement Crack and Joint Sealing	B-15
Mudjacking and Drilling	B-16
Concrete Slab and Spall Repair	B-17
Slope/ Drains/ Vegetation	B-19
Shoulder Grading	B-19
Nonlandscaped Chemical Vegetation Control	B-21
Nonlandscaped Mechanical Vegetation Control/ Mowing	B-23
Nonlandscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal	B-24
Fence Repair	B-25
Drainage Ditch and Channel Maintenance	B-26
Drain and Culvert Maintenance	B-28
Curb and Sidewalk Repair	B-30
Litter/ Debris/ Graffiti	B-32
Sweeping Operations	B-32
Litter and Debris Removal	B-33
Emergency Response and Cleanup Practices	B-34
Graffiti Removal	B-36
Landscaping	B-37
Chemical Vegetation Control	B-37
Manual Vegetation Control	B-39
Landscaped Mechanical Vegetation Control/ Mowing	B-40
Landscaped Tree and Shrub Pruning, Brush Chipping, Tree and Shrub Removal	B-41
Irrigation Line Repairs	B-42
Irrigation (Watering), Potable and Nonpotable	B-43
Environmental	B-44
Storm Drain Stenciling	B-44
Roadside Slope Inspection	B-45
Roadside Stabilization	B-46
Storm Water Treatment Devices	B-48
Traction Sand Trap Devices	B-49
Public Facilities	B-50
Public Facilities	B-50
Bridges	B-52
Welding and Grinding	B-52
Sandblasting, Wet Blast with Sand Injection and Hydroblasting	B-54
Painting	B-56
Bridge Repairs	B-57

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Activity Specific BMPs	Page
Other Structures	B-59
Pump Station Cleaning	B-59
Tube and Tunnel Maintenance and Repair	B-61
Tow Truck Operations	B-63
Toll Booth Lane Scrubbing Operations	B-64
Electrical	B-65
Sawcutting for Loop Installation	B-65
Traffic Guidance	B-67
Thermoplastic Striping and Marking	B-67
Paint Striping and Marking	B-68
Raised/ Recessed Pavement Marker Application and Removal	B-70
Sign Repair and Maintenance	B-71
Median Barrier and Guard Rail Repair	B-73
Emergency Vehicle Energy Attenuation Repair	B-75
Snow and Ice Control	B-76
Snow Removal	B-76
Ice Control	B-77
Storm Maintenance	B-78
Minor Slides and Slipouts Cleanup/ Repair	B-78
Management and Support	B-80
Building and Grounds Maintenance	B-80
Storage of Hazardous Materials (Working Stock)	B-82
Material Storage Control (Hazardous Waste)	B-84
Outdoor Storage of Raw Materials	B-85
Vehicle and Equipment Fueling	B-86
Vehicle and Equipment Cleaning	B-87
Vehicle and Equipment Maintenance and Repair	B-88
Aboveground and Underground Tank Leak and Spill Control	B-90

3. Vehicle and Equipment Wash Areas
 - (a) Each Permittee shall eliminate discharges of wash waters from vehicle and equipment washing no later than (365 days after Order adoption date) by implementing any of the following measures at existing facilities with vehicle or equipment wash areas:
 - (1) Self-contain, and haul off for disposal
 - (2) Equip with a clarifier
 - (3) Equip with an alternative pre-treatment device; or
 - (4) Plumb to the sanitary sewer
 - (b) Each Permittee shall ensure that any municipal facilities constructed, redeveloped, or replaced has all vehicle and equipment wash areas plumbed to the sanitary sewer or be self contained and all wastewater/ washwater hauled for legal disposal.

4. Landscape, Park, and Recreational Facilities Management
 - (a) Integrated Pest Management (IPM)

IPM is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control,

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habitat manipulation, modification of cultural practices, and use of resistant varieties. Each Permittee shall implement an IPM program within (365 days after Order adoption date) that includes the following:

- (1) Pesticides are used only if monitoring indicates they are needed according to established guidelines.
 - (2) Treatments are made with the goal of removing only the target organism.
 - (3) Pest controls are selected and applied in a manner that minimizes risks to human health, beneficial, non-target organisms, and the environment.
 - (4) Its use of pesticides, including Organophosphates and Pyrethroids do not threaten water quality.
 - (5) Partner with other agencies and organizations to encourage the use of IPM.
 - (6) Adopt and verifiably implement policies, procedures, and/ or ordinances requiring the minimization of pesticide use and encouraging the use of IPM techniques (including beneficial insects) in the Permittees' overall operations and on municipal property.
 - (7) Policies, procedures, and ordinances shall include commitments and timelines to reduce the use of pesticides that cause impairment of surface waters by implementing the following procedures:
 - (A) Quantify pesticide use by its staff and hired contractors.
 - (B) Prepare and annually update an inventory of pesticides used by all internal departments, divisions, and other operational units.
 - (C) Demonstrate reductions in pesticide use.
- (b) Each Permittee shall implement the following requirements no later than (180 days after Order adoption date):
- (1) Use a standardized protocol for the routine and non-routine application of pesticides (including pre-emergents), and fertilizers.
 - (2) Ensure no application of pesticides or fertilizers are applied to an area immediately prior to, during, or immediately after a rain event, or when water is flowing off the area.
 - (3) Ensure that no banned or unregistered pesticides are stored or applied.
 - (4) Ensure that all staff applying pesticides are certified in the appropriate category by the California Department of Pesticide Regulation, or are under the direct supervision of a pesticide applicator certified in the appropriate category.
 - (5) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs; and
 - (6) Store pesticides and fertilizers indoors or under cover on paved surfaces or use secondary containment.
 - (A) Reduce the use, storage, and handling of hazardous materials to reduce the potential for spills.
 - (B) Regularly inspect storage areas.
 - (7) Comply with the provisions and the monitoring requirements for application of aquatic pesticides to surface waters (WQ Order No. 2004-0008-DWQ) (Vector Control) and Order No. 2004-0009-DWQ (Weed Control).

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5. Storm Drain Operation and Management

(a) Catch Basin Cleaning

- (1) Each Permittee shall designate catch basin inlets within its jurisdiction as one of the following:

Priority A: Catch basins that are designated as consistently generating the highest volumes of trash.

Priority B: Catch basins that are designated as consistently generating moderate volumes of trash.

Priority C: Catch basins that are designated as generating low volumes of trash.

Within one year of Order adoption (July 8, 2011), Permittees shall submit a map or list of Catch Basins with their GPS coordinates and their designations. The map or list shall contain the rationale or data to support designations.

- (2) Each Permittee shall inspect catch basins according to the following schedule:

Priority A: A minimum of 3 times during the wet season and once during the dry season every year.

Priority B: A minimum of once during the wet season and once during the dry season every year.

Priority C: A minimum of once per year.

Catch basins shall be cleaned as necessary on the basis of inspections. Permittees shall maintain inspection records for Regional Water Board review.

- (3) In addition to the preceding schedule, Permittees shall ensure that any catch basin that is determined to be at least 25% full of trash shall be cleaned out.

(b) Trash Management at Public Events

- (1) Each Permittee shall require for any event in the public right of way or wherever it is foreseeable that substantial quantities of trash and litter may be generated, the following measures:

(A) Proper management of trash and litter generated; and

(B) Arrangement for temporary screens to be placed on catch basins; or

(C) Provide clean out of catch basins, trash receptacles, and grounds in the event area within 24 hours subsequent to the event.

(c) Trash Receptacles

- (1) Each Permittee shall install trash receptacles, or equivalent trash capturing devices in areas subject to high trash generation within its jurisdiction no later than one year after Order adoption date (July 8, 2011).

- (2) Each Permittee shall ensure that all trash receptacles are cleaned out and maintained as necessary to prevent trash overflow.

(d) Catch Basin Labels

- (1) Each Permittee shall inspect the legibility of the catch basin stencil or label nearest each catch basin and inlet before the wet season begins.

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- (2) Each Permittee shall record and re-stencil or re-label within 15 days of inspection, catch basins with illegible stencils.
- (e) Additional Trash Management Practices
- (1) Each Permittee shall install trash excluders, or equivalent devices on or in catch basins or outfalls to prevent the discharge of trash to the storm drain system or receiving water no later than two years after Order adoption date in areas defined as Priority A (subpart 5.(a)(1)) except in sites where the application of such BMP(s) alone will cause flooding. Lack of maintenance that causes flooding is not an acceptable exception to the requirement to install BMPs. Alternatively the Permittee may implement alternative or enhanced BMPs beyond the provisions of this permit (such as but not limited to increased street sweeping, adding trash cans near trash generation sites, prompt enforcement of trash accumulation, increased trash collection on public property, increased litter prevention messages or trash nets within the MS4) that provide substantially equivalent removal of trash. Permittees shall demonstrate that BMPs, which substituted for trash excluders provide equivalent trash removal performance as excluders. When outfall trash capture is provided, revision of the schedule for inspection and cleanout of catch basins in task 5.(a)(2) may be proposed by the Permittee for approval by the Executive Officer.
- (f) Storm Drain Maintenance
- (1) Each Permittee shall implement a program for Storm Drain Maintenance no later than 90 days after Order adoption (October 6, 2010) that includes the following:
 - (A) Visual monitoring of Permittee-owned open channels and other drainage structures for debris at least annually.
 - (B) Remove trash and debris from open channel storm drains a minimum of once per year before the wet season.
 - (C) Eliminate the discharge of contaminants during MS4 maintenance and clean outs.
 - (D) Quantify the amount of materials removed using techniques appropriate for quantifying solid waste and ensure the materials are properly disposed of.
- (g) Spill Response Plan
- (1) Each Permittee shall implement a response plan for spills to the MS4 within their respective jurisdiction. The response Plan shall clearly identify agencies responsible and telephone numbers and e-mail address for contact and shall contain at a minimum the following:
 - (A) Investigation of all complaints received within 24 hours of the incident report.
 - (B) Response within 2 hours to spills for containment upon notification, except where such overflows occur on private property, in which case the response should be within 2 hours of gaining legal access to the property.

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- (C) Notification to appropriate public health agencies and the Office of Emergency Services (OES).
- (h) Permittee Owned Treatment Control BMPs
 - (1) Each Permittee shall implement an inspection and maintenance program for all Permittee owned treatment control BMPs, including post-construction treatment control BMPs.
 - (2) Each Permittee shall ensure proper operation of all treatment control BMPs and maintain them as necessary for proper operation, including all post-construction treatment control BMPs.
 - (3) Any residual water produced by a treatment control BMP and not being internal to the BMP performance when being maintained shall be:
 - (A) Hauled away and legally disposed of; or
 - (B) Applied to the land without runoff; or
 - (C) Discharged to the sanitary sewer system (with permits or authorization); or
 - (D) Treated or filtered to remove bacteria, sediments, nutrients, and meet the limitations set in Table 11 (Discharge Limitations for Dewatering Treatment BMPs) prior to discharge to the MS4.

Table 11 - Discharge Limitations for Dewatering Treatment BMPs¹

Parameter	Units	Limitation
Total Suspended Solids	mg/L	100
Turbidity	NTU	50
Oil and Grease	mg/L	10

6. Streets and Roads Maintenance

(a) Maintenance

- (1) Each Permittee shall perform street sweeping of curbed streets in commercial areas and areas subject to high-trash generation to control trash and debris at least two times per month.

(b) Road Reconstruction

- (1) Each Permittee shall require that for any project that includes roadbed or street paving, repaving, patching, digouts, or resurfacing roadbed surfaces, that the following BMPs be implemented for each project.
 - (A) Restrict paving and repaving activity to exclude periods of rainfall or predicted rainfall² unless required by emergency conditions.
 - (B) Install sand bags or gravel bags and filter fabric at all susceptible storm drain inlets and at manholes to prevent spills of paving products and tack coat;
 - (C) Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or receiving waters.

¹ Technology based effluent limits.

² A probability of precipitation (POP) of 50% is required.

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- (D) Minimize non storm water runoff from water use for the roller and for evaporative cooling of the asphalt.
- (E) Clean equipment over absorbent pads, drip pans, plastic sheeting or other material to capture all spillage and dispose of properly.
- (F) Collect liquid waste in a container, with a secure lid, for transport to a maintenance facility to be reused, recycled or disposed of properly.
- (G) Collect solid waste by vacuuming or sweeping and securing in an appropriate container for transport to a maintenance facility to be reused, recycled or disposed of properly.
- (H) Cover the "cold-mix" asphalt (i.e., pre-mixed aggregate and asphalt binder) with protective sheeting during a rainstorm.
- (I) Cover loads with tarp before haul-off to a storage site, and do not overload trucks.
- (J) Minimize airborne dust by using water spray during grinding.
- (K) Avoid stockpiling soil, sand, sediment, asphalt material and asphalt grindings materials or rubble in or near storm water drainage system or receiving waters.
- (L) Protect stockpiles with a cover or sediment barriers during a rain.

7. Emergency Procedures

- (a) Each Permittee may conduct repairs of essential public service systems and infrastructure in emergency situations with a self-waiver of the provisions of this Order.
 - (1) Where the self-waiver has been invoked, the Permittee shall submit to the Regional Water Board Executive Officer a statement of the occurrence of the emergency, an explanation of the circumstances, and the measures that were implemented to reduce the threat to water quality, no later than 30 business days after the situation of emergency has passed.
 - (2) Minor repairs of essential public service systems and infrastructure in emergency situations (can be completed in less than one day) are not subject to the notification provisions. Appropriate BMPs to reduce the threat to water quality shall be implemented.

8. Municipal Employee and Municipal Contractor Training

- (a) Each Permittee shall, no later than one year after Order adoption (July 8, 2011) and annually thereafter before June 30, train all of their employees and contractors in targeted positions (whose interactions, jobs, and activities affect storm water quality) on the requirements of the overall storm water management program to:
 - (1) Promote a clear understanding of the potential for activities to pollute storm water.
 - (2) Identify opportunities to require, implement, and maintain appropriate BMPs in their line of work.
- (b) Each Permittee shall, no later than one year after Order adoption (July 8, 2011) and annually thereafter before June 30, train all of their employees and

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contractors who use or have the potential to use pesticides or fertilizers (whether or not they normally apply these as part of their work). Training programs shall address:

- (1) The potential for pesticide-related surface water toxicity.
 - (2) Proper use, handling, and disposal of pesticides.
 - (3) Least toxic methods of pest prevention and control, including IPM.
 - (4) Reduction of pesticide use.
- (c) Each Permittee shall, no later than one year after Order adoption (July 8, 2011) and annually thereafter before June 30, train all of their employees and contractors who are responsible for illicit connections and illicit/ illegal discharges. Training programs shall address:
- (1) Identification
 - (2) Investigation
 - (3) Termination
 - (4) Cleanup
 - (5) Reporting of Incidents
 - (6) Documentation of Incidents

H. Illicit Connections and Illicit Discharges Elimination Program

- I. Each Permittee shall implement an Illicit Connections and Illicit Discharges (IC/ IDs) program to eliminate IC/IDs to the storm drain system, and shall document, track, and report all such cases in accordance with the elements and performance measures specified in the following subsections.
 1. General
 - (a) Implementation - Each Permittee shall implement an IC/ ID Program. The IC/ ID procedures shall be documented and made available for public review.
 - (b) Tracking - All Permittees shall, no later than May 7, 2012, map at a scale and in a format specified by the Principal Permittee all known connections to their storm drain system. All Permittees shall map at a scale and in a format specified by the Principal Permittee incidents of illicit connections and discharges since January 2009 on their baseline maps, and shall transmit this information to the Principal Permittee no later than May 7, 2012. Permittees shall use this information to identify priority areas for further investigation and elimination of IC/ ID.
 2. Public Reporting
 - (a) Permittees shall establish and maintain a phone hotline and internet site to receive all reports of IC/ ID complaints.
 - (b) Permittees shall document the location of the reported IC/ ID and the actions undertaken in response to all IC/ ID complaints.
 3. Illicit Connections
 - (a) Screening for Illicit Connections
 - (1) Each Permittee shall submit to the Principal Permittee:

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- (A) A map at a scale and in a format specified by the Principal Permittee showing the location and length of underground pipes 18 inches and greater in diameter, and channels within their permitted area and operated by the Permittee in accordance with the following schedule:
 - (i) All channeled portions of the storm drain system no later than 90 days after Order adoption date (October 6, 2010).
 - (ii) All portions of the storm drain system consisting of storm drain pipes 36 inches in diameter or greater, no later than May 7, 2012.
 - (iii) All portions of the storm drain system consisting of storm drain pipes 18 inches in diameter or greater, no later than May 7, 2014.
- (B) The status of suspected, confirmed, and terminated illicit connections.
- (2) Permittees shall conduct field screening of their storm drain systems in accordance with screening procedures described in the *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments (2004)*¹ or other equally effective alternative methods not listed in the manual. Permittees shall conduct field screening of their storm drain system that has not been previously screened and reported to the Regional Water Board, for illicit connections in accordance with the following schedule:
 - (A) All portions of the storm drain system consisting of storm drain pipes 36 inches in diameter or greater, no later than May 7, 2012.
 - (B) High priority areas identified during the mapping of illicit connections and discharges, no later than May 7, 2012.
 - (C) All portions of storm drain systems 50 years or older in age, no later than May 7, 2012.
- (3) Each Permittee shall maintain a list containing all connections under investigation for possible illicit connection and their status.
- (b) Response to Illicit Connections
 - (1) Investigation -
Each Permittee, upon discovery or upon receiving a report of a suspected illicit connection, shall complete an investigation within 21 days, to determine the following:
 - (A) Source of the connection.
 - (B) Nature and volume of discharge through the connection.
 - (C) Responsible party for the connection.
 - (2) Termination -
Each Permittee, upon confirmation of an illicit storm drain connection, shall ensure the following:
 - (A) Termination of the connection within 180 days of completion of the investigation, using formal enforcement authority to eliminate the illicit connection.
 - (3) Documentation -

¹ *Illicit Discharge Detection and Elimination, A Guidance Manual for Program Development and Technical Assessments*. The Center for Watershed Protection, Pitt R., October 2004. Chapter 13, 13.1, 13.2, 13.3, 13.4

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Each Permittee shall keep records of all illicit connection investigations and the formal enforcement taken to eliminate all illicit connections.

4. **Illicit Discharges**
 - (a) Investigation -
Each Permittee shall investigate an illicit/ illegal discharge during or immediately following containment and cleanup activities, and shall take appropriate enforcement action to eliminate the illegal discharge.
 - (b) Abatement and Cleanup -
Each Permittee shall respond, within 1 business day of discovery or a report of a suspected illicit/ illegal discharge, with actions to abate, contain, and/or clean up all illegal discharges, including hazardous waste.
 - (c) Documentation -
Each Permittee shall maintain records of all illicit/ illegal discharge discoveries, reports of suspected illicit/ illegal discharges, their response to the illicit/ illegal discharges and suspected illicit/ illegal discharges, and the formal enforcement taken to eliminate all illicit/ illegal discharges.

I. REPORTING PROGRAM

1. The Principal Permittee in consultation with the Permittees and Regional Water Board staff shall convene an adhoc working group to develop an Electronic Reporting Program, the basis of which shall be the requirements in this Order. The Committee shall no later than one year after Order adoption date (July 8, 2011) submit the electronic reporting form in each subsequent year.
2. Each Permittee shall submit information required in the Reporting Program in a method as appropriate to the format approved by the Regional Water Board Executive Officer.
3. The Principal Permittee shall submit by December 15th of each year, an Annual Report to the Regional Water Board Executive Officer in the form one hard copy and three compact disk (CD) copies (or an electronic equivalent).
4. The Annual Report shall document the status of the Municipal Storm Water Program, an integrated summary of the results of analyses from:
 - (a) The monitoring program described under Part 1- Monitoring Report.
 - (b) The requirements described under Part 2- Program Report.
5. Plans shall be submitted to the Regional Water Board Executive Officer in the form of one hard copy and three compact disk (CD) copies (or an electronic equivalent).

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6. Study Reports shall be submitted to the Regional Water Board Executive Officer in the form of one hard copy and three compact disk (CD) copies (or an electronic equivalent).
7. Progress Reports shall be submitted to the Regional Water Board Executive Officer in the form of one hard copy and three compact disk (CD) copies (or an electronic equivalent).

PART 5 - TOTAL MAXIMUM DAILY LOAD PROVISIONS

- I. Part 5 of this Order incorporates provisions to assure that Ventura County MS4 Permittees comply with WLAs and other requirements of TMDLs covering impaired waters impacted by the Permittees' discharges.
- II. Each Permittee shall attain the storm water WLAs incorporated into this Order by implementing BMPs in accordance with the TMDL Technical Reports, Implementation Plans, or as identified as a result of TMDL special studies specified in the Basin Plan Amendment.
- III. The Permittees shall comply with the following Wasteload Allocations, consistent with the assumptions and requirements of the Wasteload Allocations documented in the Implementation Plans, including compliance schedules, associated with the State adoption and approval of the TMDL at compliance monitoring points established in each TMDL (40 CFR 122.44(d)(1)(vii)(B)).
- IV. TMDLs in effect and covered in this Order are the following:
 1. TMDL for Nutrients for Malibu Creek Watershed (Effective date: March 21, 2003)
 2. TMDL for Nitrogen Compounds and Related Effects in Calleguas Creek (Effective date: July 16, 2003)
 3. TMDL for Nitrogen Compounds for the Santa Clara River (Effective date: March 23, 2004).
 4. TMDL for Chloride in Santa Clara River, Reach 3 (Effective date: June 18, 2003)
 5. TMDL for Chloride in Upper Santa Clara River (Effective date: May 4, 2005)
 6. TMDL for Toxicity, Chlorpyrifos and Diazinon in the Calleguas Creek, its Tributaries and Mugu Lagoon - (Effective date: March 24, 2006).
 7. TMDL for Organochlorine Pesticides, Polychlorinated Biphenyls, and Siltation in Calleguas Creek, its Tributaries and Mugu Lagoon (Effective date: March 24, 2006).
 8. TMDL for Bacteria in Malibu Creek and Lagoon (Effective date: January 24, 2006).
 9. TMDL for Metals and Selenium in the Calleguas Creek, its Tributaries and Mugu Lagoon (Effective date: March 26, 2007)
 10. TMDL for Trash in Revolon Slough and Beardsley Wash (Effective date: March 6, 2008).
 11. TMDL for Boron, Chloride, Sulfate, and TDS in Calleguas Creek Watershed (Effective date: December 2, 2008)

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12. TMDL for Trash in the Ventura River Estuary (Effective date: March 6, 2008).
13. TMDL for Bacteria in Harbor Beaches of Ventura County (Effective date: September 23, 2008).

V. TMDL Interim WLAs incorporated into this Order due to compliance dates which exceed the term of this Order are the following:

1. Final Wet Weather Bacteria WLAs for Malibu Creek and Lagoon – (Compliance date: January 24, 2016).
2. Final Chloride WLAs for Upper Santa Clara River – (Compliance date: May 4, 2016)
3. Final Organochlorine Pesticides, Polychlorinated Biphenyls, and Siltation WLAs for Calleguas Creek, its Tributaries and Mugu Lagoon – (Compliance date: March 24, 2026).
4. Final Metals and Selenium WLAs for Calleguas Creek, its Tributaries and Mugu Lagoon (Compliance date: March 26, 2022)
5. Final Boron, Chloride, Sulfate, and TDS WLAs for Calleguas Creek watershed (Compliance date: December 2, 2023)

VI. TMDL WLAs and Other TMDL Provisions Incorporated into this Order are as follows:

1. TMDL for Nutrients for Malibu Creek Watershed

(a) Summer Load Allocations

	Nitrogen (lbs/day)	Phosphorus (lbs/day)
- Runoff from developed areas	26	2.6
- Golf Course Fertilization	37	6.6
- Dry Weather Urban Runoff	52	4.6
- Other	56	4.1

(b) Winter concentration-based Load Allocations

	Nitrogen (Nitrate-N + Nitrite-N) (mg/L)
- Runoff from Developed Areas	8
- Golf Course Fertilization	8
- Dry Weather Urban Runoff	8
- Other	8

(c) Compliance Monitoring:

This TMDL was established and approved by U.S. EPA and did not include an implementation plan.

(d) Actions and Special Studies required for Malibu Creek MS4 permittees

(1) Extent of algal impairment. EPA recommends studies to investigate the current extent of impairment due to excessive algal growth in the creek by

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surveying algal biomass and species composition at multiple sites within the creek.

(2) Limiting factor analysis. EPA recommends further study to assess whether total nitrogen or total phosphorus or other parameters such as flow and light limit algal growth in the Malibu Creek watershed.

(3) Fate of nutrients in Malibu Lagoon. EPA recommends this special study to determine if the expected upstream reductions in nutrient loadings would result in desired improvements in water quality in the lagoon.

2. TMDL for Nitrogen Compounds and Related Effects in Calleguas Creek Watershed

The stormwater permitted discharges were considered minor sources of nitrogen to the Calleguas Creek. Therefore, WLAs are not assigned to storm water permitted discharges. The monitoring program of this TMDL includes data collection to quantify loadings and associated WLAs from these sources.

3. TMDL for Nitrogen Compounds in the Santa Clara River

(a) Waste Load Allocations:

(1) The Ventura County MS4 permittees discharging to the Santa Clara River (the cities of Fillmore and Santa Paula) ("Santa Clara MS4 permittees") shall implement BMPs to achieve the following MS4 wasteload allocations applicable to River Reach 3:

Ammonia nitrogen 30-day average	2.0 mg/L
Ammonia nitrogen 1-hour average	4.2 mg/L
Nitrate + Nitrite nitrogen 30-day average	8.1 mg/L

(b) Compliance Monitoring:

- (1) Compliance with the WLAs is to be determined through receiving water monitoring conducted in accordance with the Santa Clara River Nitrogen TMDL Monitoring Program approved by the Executive Officer.
- (2) If any WLA is exceeded at a compliance monitoring site, permittees shall implement BMPs in accordance with the TMDL Technical Reports, Implementation Plans or as identified as a result of TMDL special studies identified in the Basin Plan Amendment. Following these actions, Regional Water Board staff will evaluate the need for enforcement action.

(c) Actions and Special Studies required of Santa Clara MS4 permittees:

- (1) Annual Progress Reports. Santa Clara River MS4 permittees, either independently or in conjunction with other stakeholders, shall submit an annual progress report with respect to achievement of the WLAs.

4. TMDL for Chloride in Santa Clara River, Reach 3

(a) Waste Load Allocation:

MS4 permittees discharging to Santa Clara River, Reach 3 shall implement BMPs to achieve the following MS4 WLAs:

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Chloride (mg/L) 80

- (b) Compliance Monitoring: This TMDL was established and approved by U.S. EPA and did not include an implementation plan.
- (c) Actions and Special Studies required of Santa Clara MS4 permittees:
- (1) Annual Progress Reports. Santa Clara River MS4 permittees, either independently or in conjunction with other stakeholders, shall submit an annual progress report with respect to achievement of the WLAs.

5. TMDL for Chloride in Upper Santa Clara River

(a) Waste Load Allocation:

MS4 permittees discharging to Upper Santa Clara River shall implement BMPs to achieve the following WLAs

Chloride (mg/L) 100

(b) Compliance monitoring:

- (1) Compliance with the WLAs is to be determined through receiving water monitoring conducted in accordance with the Santa Clara River Chloride TMDL Monitoring Program approved by the Executive Officer.
- (2) If any WLA is exceeded at a compliance monitoring site, permittees shall implement BMPs in accordance with the TMDL Technical Reports and Implementation Plans. Following these actions, Regional Water Board staff will evaluate the need for enforcement action.

(c) Actions and Special Studies required of Santa Clara MS4 permittees:

- (1) Annual Progress Reports. Santa Clara River MS4 permittees, either independently or in conjunction with other stakeholders, shall submit an annual progress report with respect to achievement of the WLAs.

6. TMDL for Toxicity, Chlorpyrifos, and Diazinon in the Calleguas Creek, its Tributaries and Mugu Lagoon.

(a) Waste Load Allocations:

- (1) MS4 permittees discharging to Calleguas Creek, its tributaries and Mugu Lagoon (Ventura County Watershed Protection District, County of Ventura and the cities of Camarillo, Moorpark, Oxnard, Simi Valley and Thousand Oaks) ("Calleguas MS4 permittees") shall implement BMPs to achieve the following MS4 WLAs:

Toxicity WLA	1.0 TUc
Chlorpyrifos WLA	0.014 ug/L
Diazinon WLA	0.10 ug/L

- (2) Pursuant to the TMDL, the final storm water WLAs for Toxicity, Chlorpyrifos and Diazinon, listed above, are receiving water concentrations measured in-stream at the base of each subwatershed within the Calleguas Creek watershed.

(b) Compliance Monitoring:

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- (1) Compliance with the WLAs is to be determined through the measurement of in-stream water quality at the base of each of the Calleguas Creek subwatersheds, in accordance with the Calleguas Creek Watershed TMDL Monitoring Program approved by the Executive Officer.
 - (2) If any WLA is exceeded at a compliance monitoring site, permittees shall implement BMPs in accordance with the TMDL Technical Reports, Implementation Plans or as identified as a result of TMDL special studies identified in the Basin Plan Amendment. Following these actions, Regional Water Board staff will evaluate the need for enforcement action.
 - (3) If as a result of compliance monitoring and subsequent investigations it is determined that a Calleguas MS4 permittee is responsible for exceedance of the in-stream Toxicity WLA, that permittee shall initiate the TRE/TIE process as outlined in U.S. EPA's "Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program" (2000) or the approved Toxicity TMDL monitoring plan, and take appropriate action to eliminate the identified source of the toxicity.
- (c) Actions and Special Studies required of Calleguas MS4 permittees:
- (1) Special Study #1. Together with Calleguas POTW permittees, investigate the pesticides that will replace diazinon and chlorpyrifos in the urban environment, their potential impact on receiving waters and potential control measures. Special Study #1 was completed by March 24, 2008.
 - (2) Special Study #2. Together with Calleguas Agricultural Dischargers, consider results of monitoring of sediment concentrations by source/land use type through the special study required in the Calleguas OC Pesticide, PCB and Siltation TMDL Implementation Plan. Complete within 6 months of completion of the OCs TMDL special study #1.
 - (3) Pesticide Collection Program. Together with Calleguas POTW permittees, develop and implement a collection program for diazinon and chlorpyrifos and an educational program. Collection and education could occur through existing programs such as household hazardous waste collection events. The Pesticide Collection Program is to be implemented by March 24, 2009.
 - (4) Special Study #3. Together with Calleguas Agricultural Dischargers, consider the findings of transport rates developed through the OC Pesticide, PCB and Siltation TMDL Implementation Plan. Complete within 6 months of completion of the OCs TMDL special study #1.
- 7: TMDL for Organochlorine (OC) Pesticides, Polychlorinated Biphenyls (PCBs) and Siltation in the Calleguas Creek, its Tributaries and Mugu Lagoon.
- (a) Waste Load Allocations:
- (1) MS4 permittees discharging to Calleguas Creek, its tributaries or Mugu Lagoon (Ventura County Watershed Protection District, County of Ventura and the cities of Camarillo, Moorpark, and Simi Valley) ("Calleguas MS4 permittees") shall implement BMPs to achieve the interim WLAs listed in Table 12.

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Table 12 - Interim Sediment Concentration WLAs (ng/g)

Constituent	Subwatershed					
	Mugu Lagoon	Calleguas Creek	Revolon Slough	Arroyo Las Posas	Arroyo Simi	Conejo Creek
Chlordane	25	17	48	3.3	3.3	3.4
4,4-DDD	69	66	400	290	14.0	5.3
4,4-DDE	300	470	1600	950	170	20
4,4-DDT	39	110	690	670	25	2
Dieldrin	19	3	5.7	1.1	1.1	3
PCBs	180	3800	7600	25700	25700	3800
Toxaphene	22900	260	790	230	230	260

- (2) Pursuant to the TMDL, the interim storm water WLAs for OC Pesticides, PCBs and Siltation, listed above, are annual average, sediment-based concentrations measured in surface waters at the base of each subwatershed within the Calleguas Creek watershed.
- (b) Compliance Monitoring:
- (1) Compliance with the WLAs is to be determined through the measurement of in-stream water quality at the base of each of the Calleguas Creek subwatersheds, in accordance with the Calleguas Creek Watershed TMDL Monitoring Program approved by the Executive Officer.
 - (2) If any WLA is exceeded at a compliance monitoring site, permittees shall implement BMPs in accordance with the TMDL Technical Reports, Implementation Plans or as identified as a result of TMDL special studies identified in the Basin Plan Amendment. Following these actions, Regional Water Board staff will evaluate the need for enforcement action.
- (c) Actions and Special Studies required of Calleguas MS4 permittees:
- (1) Pesticide Collection Program. Together with Calleguas POTW permittees, implement a collection program and source control measures pursuant to a work plan approved by the Executive Officer. The Pesticide Collection Program is to be implemented by March 24, 2011.
 - (2) Special Study #1. Together with Calleguas POTW permittees, Calleguas Agricultural Dischargers, and the Point Mugu Naval Base, submit a work plan to quantify sedimentation in the Calleguas Creek Watershed, evaluate management methods to control siltation and contaminated sediment transport to Calleguas Creek, identify appropriate BMPs to reduce sediment loadings and evaluate the effect of sediment on habitat preservation in Mugu Lagoon for approval by the Executive Officer. This special study is also to evaluate the concentration of OC pesticides and PCBs in sediments from various sources/land use types. Special Study #1 is to be completed by March 24, 2014.
 - (3) Special Study #2. Together with Calleguas Agricultural Dischargers, identify areas of high OC concentrations and evaluate the effects of watershed protection and land use practices on water quality. Such practices

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include but are not limited to management of sediment reduction practices and structures, streambank stabilization, and other projects related to stormwater conveyance and flood control improvements in the Calleguas Creek watershed. Special Study #2 is to be completed based on the schedule provided in the workplan, submitted in March, 2007

- (4) Special Study #3 – Together with Calleguas POTW permittees, Calleguas Agricultural Dischargers, and the Point Mugu Naval Base, evaluate natural attenuation rates and evaluate methods to accelerate organochlorine pesticide and polychlorinated biphenyl attenuation and examine the attainability of wasteload and load allocations in the Calleguas Creek Watershed. Special Study #3 is to be completed by March 24, 2016.

8. TMDL for Metals and Selenium in the Calleguas Creek, its Tributaries and Mugu Lagoon.

(a) Waste Load Allocations:

- (1) MS4 permittees discharging to Calleguas Creek, its tributaries or Mugu Lagoon (Ventura County Watershed Protection District, County of Ventura and the cities of Camarillo, Moorpark, Oxnard, Simi Valley and Thousand Oaks) (“Calleguas MS4 permittees”) shall implement BMPs to achieve the interim WLAs listed in Table 13 and Table 14.

Table 13 - Interim WLAs for Copper, Nickel and Selenium (ug/L)

Constituent	Calleguas and Conejo Creek (a)			Revolon Slough		
	Dry Daily Maximum (ug/L)	Dry Monthly Average (ug/L)	Daily Maximum (ug/L)	Dry Daily Maximum (ug/L)	Dry Monthly Average (ug/L)	Daily Maximum (ug/L)
Copper	23	19	204	23	19	204
Nickel	15	13	(a)	15	13	(a)
Selenium	(b)	(b)	(b)	14(c)	13(c)	(a)

- (A) The current loads do not exceed the TMDL under wet conditions, interim limits are not required
- (B) Selenium allocations have not been developed for this reach as it is not on the 303(d) list
- (C) Attainment of interim limits will be evaluated in consideration of background loading data, if available
- (2) Pursuant to the TMDL, the interim storm water WLAs for copper, nickel, and selenium are receiving water concentrations measured in-stream at the base of Calleguas Creek and Revolon Slough and in Mugu Lagoon.

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Table 14 – Interim Mass-based WLAs for mercury

Annual Cumulative Flow (million gallons per year)	Calleguas Creek (lbs/yr)	Revolon Slough (lbs/yr)
0-15,000	3.3	1.7
15,000-25,000	10.5	4
Above 25,000	64.6	10.2

- (3) Pursuant to the TMDL, the interim storm water WLAs for mercury are suspended sediment loads measured in-stream at the base of Calleguas Creek and Revolon Slough and in Mugu Lagoon.
- (4) Determination of the applicable interim WLA will be determined by calculating the total annual flow (October 1-September 30) in the Calleguas Creek watershed as measured by the flow gage at CSUCI.
- (b) Compliance Monitoring:
- (1) Compliance with the WLAs is to be determined through the measurement of in-stream water quality and total suspended solids (TSS) at the base of Calleguas Creek, Revolon Slough and in Mugu Lagoon, in accordance with the Calleguas Creek Watershed TMDL Monitoring Program approved by the Executive Officer.
- (2) If any WLA is exceeded at a compliance monitoring site, permittees shall implement BMPs in accordance with the TMDL Technical Reports, Implementation Plans or as identified as a result of TMDL special studies identified in the Basin Plan Amendment. Following these actions, Regional Water Board staff will evaluate the need for enforcement action.
- (c) Actions and Special Studies required of Calleguas MS4 permittees:
- (1) Conduct a source control study, develop and submit an Urban Water Quality Management Program (UWQMP) for copper, mercury, nickel, and selenium. Complete by March 26, 2009.
- (2) Implement the UWQMP within one year of approval by Executive Officer.
- (3) In cooperation with agricultural dischargers, evaluate the results of the OCs TMDL special study on sediment transport rates for applicability to the metals and selenium TMDL. Complete within 6 months of completion of the OCs TMDL special study #1.
- (4) In cooperation with agricultural dischargers, include monitoring for copper, mercury, nickel and selenium in the OC pesticides TMDL special study – Monitoring of Sediment by Source and Land Use Type. The special study is to be completed by March 26, 2014.
- (5) Evaluate the results of the OC Pesticides TMDL Special Study – Effects of BMPs on Sediment and Siltation, to determine the impacts on metals and selenium. Complete within 6 months of completion of the OC Pesticides special study #1.

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- (6) Evaluate the effectiveness of BMPs implemented under the UWQMP in controlling metals and selenium discharges. This is to be completed by March 26, 2013.
- (7) Re-evaluate agricultural and urban waste load allocations for copper, mercury, nickel and selenium based on the evaluation of BMP effectiveness. By March 26, 2012, urban dischargers will have a required 25% reduction in the difference between the loadings at the time of the TMDL preparation and the final WLAs effective in 2022.
- (8) In cooperation with POTW permittees and agricultural dischargers, conduct a study to identify selenium contaminated groundwater sources. Special Study is to be completed within one year of the approval of the workplan.
- (9) In cooperation with agricultural dischargers, conduct a study to investigate metals "hot spots" and natural soils concentrations. This special study is to be completed within 2 years of the approval of the workplan.

9. TMDL for Bacteria in Malibu Creek and Lagoon

(a) Waste Load Allocations:

- (1) MS4 permittees discharging to Malibu Creek or its tributaries (Ventura County Watershed Protection District, County of Ventura and the cities of Thousand Oaks and Simi Valley) ("Malibu MS4 permittees") shall achieve the WLAs identified in Resolution 2004-19. These WLAs are expressed as the number of daily or weekly sample days that may exceed the single sample limits or 30-day geometric mean bacteria targets in Resolution 2004-19.

Table 15 - Bacteria Targets

Parameters	Unit	Fresh Water Targets	
		Geometric Mean	Single Sample
E. coli	mg	126/ 100	235/ 100
Fecal coliform	mg	200/ 100	400/ 100

- (2) The summer dry weather wasteload allocations are to be achieved no later than January 24, 2009. The winter dry weather wasteload allocations are to be achieved no later than January 24, 2012.

(b) Compliance Monitoring:

- (1) Achievement of the WLAs is to be determined through receiving water monitoring conducted in accordance with the Malibu Creek and Lagoon Bacteria TMDL Compliance Monitoring Program approved by the Executive Officer.
- (2) If any WLA is exceeded at a compliance monitoring site, permittees shall implement BMPs in accordance with the TMDL Technical Reports, Implementation Plans or as identified as a result of TMDL special studies identified in the Basin Plan Amendment. Following these actions, Regional Water Board staff will evaluate the need for enforcement action.

(c) Actions and Special Studies required of Malibu MS4 permittees:

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- (1) If TMDL compliance monitoring indicates that the Malibu MS4 permittees are causing or contributing to an exceedance of the WLAs in the receiving waters, the permittees shall conduct a source identification study and implement additional controls sufficient to achieve the WLAs in the receiving waters.
10. TMDL for Trash in Revolon Slough and Beardsley Wash
 - (a) Wasteload Allocations
 - (1) MS4 permittees discharging to Revolon Slough and Beardsley Wash (Ventura County Watershed Protection District, County of Ventura and the cities of Camarillo and Oxnard) shall implement BMPs to achieve the WLAs of zero trash.
 - (b) Compliance Monitoring
 - (1) Responsible jurisdictions will develop a TMRP for Executive Officer approval that describes the methodologies that will be used to assess and monitor trash in Revolon Slough and Beardsley Wash and/or within responsible jurisdiction land areas. The TMRP shall include a plan to establish the trash Baseline WLAs.
 - (2) If any WLA is exceeded at a compliance monitoring site, permittees shall implement BMPs in accordance with the TMDL Technical Reports, Implementation Plans or as identified as a result of TMDL special studies identified in the Basin Plan Amendment. Following these actions, Regional Water Board staff will evaluate the need for enforcement action.
 - (c) Actions and Special Studies required of Revolon Slough and Beardsley Wash MS4 permittees
 - (1) Per the adopted Basin Plan Amendment, compliance with the TMDL may be either through a progressive implementation schedule of full capture devices or implementation of other measures to attain the required trash reduction.
 11. TMDL for Trash in the Ventura River Estuary
 - (a) Wasteload Allocations
 - (1) MS4 permittees discharging to the Ventura River Estuary (Ventura County Watershed Protection District, County of Ventura and the City of Ventura) shall implement BMPs to achieve the WLAs of zero trash.
 - (b) Compliance Monitoring
 - (1) Responsible jurisdictions will develop a TMRP for Executive Officer approval that describes the methodologies that will be used to assess and monitor trash in the Ventura River Estuary and/or within responsible jurisdiction land areas. The TMRP shall include a plan to establish the trash Baseline WLAs.
 - (2) If any WLA is exceeded at a compliance monitoring site, permittees shall implement BMPs in accordance with the TMDL Technical Reports, Implementation Plans or as identified as a result of TMDL special studies

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identified in the Basin Plan Amendment. Following these actions, Regional Water Board staff will evaluate the need for enforcement action.

(c) Actions and Special Studies required of Revolon Slough and Beardsley Wash MS4 permittees

(1) Per the adopted Basin Plan Amendment, compliance with the TMDL may be either through a progressive implementation schedule of full capture devices or implementation of other measures to attain the required trash reduction.

12. TMDL for Boron, Chloride, Sulfate and TDS in Calleguas Creek Watershed

(a) Waste Load Allocation

Table 16 - Interim Dry Weather WLAs for Permitted Stormwater Dischargers

Constituent	Interim Limit 30-day average (mg/L)
Boron Total	1.3
Chloride Total	230
Sulfate Total	1289
TDS Total	1720

Table 17 - Final Dry Weather WLAs for Permitted Stormwater Dischargers

Subwatershed	Critical Condition Flow Rate (mgd)	Chloride Allocation (lb/day)	TDS Allocation (lb/day)	Sulfate Allocation (lb/day)	Boron Allocation (lb/day)
Simi	1.39	1,738	9,849	2,897	12
Las Posas	0.13	157	887	261	N/A
Conejo	1.26	1,576	8,931	2,627	N/A
Camarillo	0.06	72	406	119	N/A
Pleasant Valley (Calleguas)	0.12	150	850	250	N/A
Pleasant Valley (Revolon)	0.25	314	1,778	523	2

(b) Compliance Monitoring

- (1) A monitoring plan will be submitted to the RWQCB for Executive Officer approval on June 2, 2009. Monitoring will begin one year after Executive Officer approval of the monitoring plan to allow time for the installation of automated monitoring equipment.
- (2) Compliance with the WLAs is to be determined through the measurement of in-stream water quality at the base of each of the Calleguas Creek

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subwatersheds, in accordance with the Calleguas Creek Watershed TMDL Monitoring Program approved by the Executive Officer.

- (3) If any WLA is exceeded at a compliance monitoring site, permittees shall implement BMPs in accordance with the TMDL Technical Reports, Implementation Plans or as identified as a result of TMDL special studies identified in the Basin Plan Amendment. Following these actions, Regional Water Board staff will evaluate the need for enforcement action.
- (c) Actions and Special Studies required of Calleguas Creek Watershed MS4 permittees

Responsible jurisdictions including MS4 permittees shall submit compliance monitoring plan to the Los Angeles Regional Water Board for Executive Officer approval on June 2, 2009. Monitoring shall begin as outlined in the approved monitoring plan one year after approval of the work plan.

Responsible jurisdictions including MS4 permittees shall demonstrate that implementation actions have reduced the boron, sulfate, TDS, and chloride imbalance by 20%, 40%, 70% by December 2 of 2011, 2015, and 2018 respectively. Stormwater dischargers shall achieve WLAs, which shall be expressed as NPDES mass-based limits specified in accordance with federal regulations and state policy on water quality control by December 2, 2023.

13. TMDL for Bacteria in Harbor Beaches of Ventura County

(a) Waste Load Allocations

- (1) MS4 permittees discharging to the Channel Islands Harbor Beaches (the County of Ventura, the Ventura County Watershed Protection District (VCWPD) and associated Municipal Separate Storm Sewer System (MS4) permittees in the Channel Islands Harbor subwatershed, and the City of Oxnard shall implement BMPs to achieve the interim WLAs listed in Table 18. All WLAs for summer dry-weather single sample bacteria densities at the Harbor Beaches of Ventura County are zero (0) days of allowable exceedances; winter dry weather and wet weather final WLAs are listed in Table 19 below.

The Basin Plan objectives that serve as the numeric targets for this TMDL are (single sample limits):

- a. Total coliform density shall not exceed 10,000/100 ml.
- b. Fecal coliform density shall not exceed 400/100 ml.
- c. Enterococcus density shall not exceed 104/100 ml.
- d. Total coliform density shall not exceed 1,000/100ml, if the ratio of fecal-to-total coliform exceeds 0.1.

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Table 18 - Interim WLAs for Single Sample Exceedance Days

Location	Summer Dry Weather		Winter Dry Weather		Wet Weather	
	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
Kiddie Beach	54	8	23	4	32	5
Hobie Beach	40	6	25	4	38	6

Table 19 - Final Allowable Exceedance Days by Location

Location	Summer Dry-weather		Winter Dry-weather		Wet-weather	
	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling	Daily Sampling	Weekly Sampling
Hobie Beach	0	0	3	1	17	3
Kiddie Beach	0	0	3	1	17	3

- (2) Pursuant to the TMDL, the interim storm water WLAs for bacteria are from samples taken at existing monitoring sites in ankle to knee- high depths.
- (b) Compliance Monitoring
 - (1) Compliance and monitoring for Harbor Beaches of Ventura County is based on existing monitoring protocols and locations. Monitoring shall continue at sampling locations (VCEHD 36000 and VCEHD37000) and at the current weekly monitoring frequency, consistent with AB411 compliance monitoring. Monitoring shall be conducted on a year-round basis at the current monitoring locations including the summer months (i.e., April to October) and winter months (i.e., November to March). Bacteria sampling shall be conducted in ankle- to knee-high water, consistent with AB411. However, if additional monitoring stations are added or if changes are made to the sampling frequencies or existing monitoring locations, then submittal of a monitoring plan is required for Executive Officer approval.
 - (2) If any WLA is exceeded at a compliance monitoring site, permittees shall implement BMPs in accordance with the TMDL Technical Reports, Implementation Plans or as identified as a result of TMDL special studies identified in the Basin Plan Amendment. Following these actions, Regional Water Board staff will evaluate the need for enforcement action.
- (c) Actions and Special Studies required of Harbor Beaches of Ventura County MS4 permittees
 - (1) Per the adopted Basin Plan Amendment, compliance with the TMDL may be either through structural and non-structural BMPs or implementation of other measures to attain the required source control.
 - (2) Special studies are not required for implementation of the TMDL though conducting special studies is within the discretion of the responsible parties.

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PART 6 - DEFINITIONS

The following are definitions for terms in this Order:

Adverse Impact - means a detrimental effect upon water quality or beneficial uses caused by a discharge or loading of a pollutant or pollutants.

Agriculture - means the science, art, and business of cultivating the soil, producing crops, and raising livestock.

Antidegradation Policies - means policies which protect surface and ground waters from degradation, and federal policies, which protect high quality surface waters. In particular, this policy protects waterbodies where existing quality is higher than that necessary for the protection of beneficial uses including the protection of fish and wildlife propagation and recreation on and in the water. (*Statement of Policy with Respect to Maintaining High Quality Water in California*, State Board Resolution No. 68-16; 40 CRF 131.12).

Applicable Standards and Limitations - means all State, interstate, and Federal standards and limitations to which a "discharge" or a related activity is subject under the CWA, including effluent limitations, water quality standards, standards of performance, toxic effluent standards or prohibitions, best management practices, and pretreatment standards under § 301, § 302, § 303, § 304, § 306, § 307, § 308, § 403, and § 404 of CWA.

Areas of Special Biological Significance (ASBS) - means all those areas of this state listed as ASBS, listed specifically within the California Ocean Plan or so designated by the State Board which, among other areas, includes the area from Mugu Lagoon to Latigo Point: Ocean water within a line originating from Laguna Point at 34° 5' 40" north, 119° 6'30" west, thence southeasterly following the mean high tideline to a point at Latigo Point defined by the intersection of the mean high tide line and a line extending due south of Benchmark 24; thence due south to a distance of 1000 feet offshore or to the 100 foot isobath, whichever distance is greater; thence northwesterly following the 100 foot isobath or maintaining a 1,000-foot distance from shore, whichever maintains the greater distance from shore, to a point lying due south of Laguna Point, thence due north to Laguna Point.

Authorized Discharge - means any discharge that is authorized pursuant to an NPDES permit, waste discharge requirement, conditional waiver from waste discharge requirements, or meets the conditions set forth in this Order.

Automotive Repair Shop - means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.

Automotive Service Facilities - means a facility that is categorized in any one of the following Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes. For inspection purposes, Permittees need not inspect facilities with SIC codes

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5013, 5014, 5541, 5511, provided that these facilities have no outside activities or materials that may be exposed to storm water.

SIC Code	Corresponding NAICS Code
5013	425120, 441310, 425110, & 423120
5014	425120, 425110, 423130, & 441320
5511	441110
5541	447110, & 447190
7532	811121
7533	811112
7534	326212, & 811198
7536	811122
7537	811113
7538	811111
7539	811198, & 811118

Bacteria Total Maximum Daily Load (TMDL) Dry Weather - defined in the Bacteria TMDLs as those days with less than 0.1 inch of rainfall and those days occurring more than 3 days after a rain.

Bacteria Total Maximum Daily Load (TMDL) Wet Weather - defined in the Bacteria TMDLs as a day with 0.1 inch or more of rain and 3 days following the rain event.

Basin Plan - means the Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, adopted by the Regional Water Board on June 13, 1994 and subsequent amendments.

Beneficial Uses - means the existing or potential uses of receiving waters in the permit area as designated by the Regional Water Board in the Basin Plan.

Best Management Practices (BMPs) - means methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and nonpoint source discharges including storm water. BMPs include structural and nonstructural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

California Environmental Quality Act (CEQA) - means a California statute that requires state and local agencies to identify significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible (Reference: California Public Resources Code § 21000 et seq.)

Channel - means an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two waterbodies.

Chronic Toxicity - means a measurement of a sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or ambient waters compared to that of the control organisms.

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Commercial Area(s) - means any geographic area of the Permittees' jurisdiction that is not heavy industrial or residential. A commercial area includes, but is not limited to areas surrounding: commercial activity, hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities, mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

Commercial Development - means any development on private land that is not heavy industrial or residential. The category includes, but is not limited to: hospitals, laboratories and other medical facilities, educational institutions, recreational facilities, plant nurseries, car wash facilities; mini-malls and other business complexes, shopping malls, hotels, office buildings, public warehouses and other light industrial complexes.

Construction - Construction activity includes any construction or demolition activity, clearing, grading, grubbing, or excavation or any other activity that results in a land disturbance. Construction does not include emergency construction activities required to immediately protect public health and safety or routine maintenance activities required to maintain the integrity of structures by performing minor repair and restoration work, maintain original line and grade, hydraulic capacity, or original purpose of the facility. See "Routine Maintenance" definition for further explanation. Where clearing, grading or excavating of underlying soil takes place during a repaving operation, State General Construction Permit coverage is required if more than one acre is disturbed or the activities are part of a larger plan.

Construction Activities Storm Water General Permit (CASGP) - means the general NPDES permit adopted by the State Board, which authorizes the discharge of storm water from construction activities under certain conditions.

Control - means to minimize, reduce, eliminate, or prohibit by technological, legal, contractual or other means, the discharge of pollutants from an activity or activities.

Critical Sources - means commercial facilities and businesses that have a potential to contribute pollutants to stormwater runoff if effective BMPs are not implemented. Attachment "D" specifies the commercial facilities and businesses that have been identified as Critical Sources.

Dechlorinated/ Debrominated Swimming Pool Discharge - means any swimming pool discharge with a residual chlorine or bromine level of 0.1mg/L or less; and does not contain any detergents, wastes, algaecides, or cyanuric acid in excess of 50 ppm, or any other chemicals including salts from pools commonly referred to as "salt water pools". The term does not include swimming pool filter backwash or swimming pool water containing bacteria.

Development - means any construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single-family, multi-unit or planned unit development); industrial, commercial, retail and any other non-residential projects, including public agency projects; or mass grading for future construction.

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Directly Adjacent - means situated within 200 feet of the contiguous zone required for the continued maintenance, function, and structural stability of the environmentally sensitive area.

Directly Discharging - means outflow from a drainage conveyance system that is composed entirely or predominately of flows from the subject, property, development, subdivision, or industrial facility and not commingled with the flows from adjacent lands.

Discharge - means when used without qualification the "discharge of a pollutant."

Discharging Directly - means outflow from a drainage conveyance system that is composed entirely or predominantly of flows from the subject, property, development, subdivision, or industrial facility, and not commingled with the flows from adjacent lands.

Discharge of a Pollutant - means any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source" or, any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft, which is being used as a means of transportation. The term discharge includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Disturbed Area - means any area that is altered as a result of land disturbance. Examples include but are not limited to: clearing, grading, grubbing, stockpiling and/ or excavation, etc...

Dry Day - means a non-wet day for Malibu Creek and Lagoon Bacteria TMDL WLA. A wet day is defined as a day with a 0.1 inch or more of rain and 3 days following the rain event.

Effect Concentration (EC) - means a point estimate of the toxicant concentration that would cause an observable adverse effect (e.g., death, immobilization, or serious incapacitation) in a given percent of the test organisms, calculated from a continuous model (e.g., Probit Model). EC₂₅ is a point estimate of the toxicant concentration that would cause an observable adverse effect in 25 percent of the test organisms.

Effective Impervious Surface - means that portion of the surface area that is hydrologically connected via sheet flow over a hardened conveyance or impervious surface without any intervening medium to mitigate flow volume.

Effluent limitation - means any restriction imposed by the Permitting Authority (PA) on quantities, discharge rates, concentrations, and/ or mass loadings of "pollutants" which are "discharged" from "point sources" into "waters of the United States," the waters of the "contiguous zone," or the ocean.

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Emergency - means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. "Emergency" includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident, or sabotage. (Reference: California Public Resources Code § 21060.3. Emergency).

End-of-Pipe - means the end of the major outfall as defined in 40 CFR 122.26 (b)(5) and 40 CFR 122.26 (b)(6).

Endpoint - means a biological measurement used to quantify the results obtained from analytical methods such as whole effluent toxicity testing [e.g., lethal concentration (LC₅₀); inhibition concentration (IC₂₅); and no observed effect concentration (NOEC)]. Such endpoints are quantitative measurements of the responses of test organisms (e.g., survival, growth, mobility, reproduction, and weight gain or loss) in response to exposure to a serial dilution of effluent.

Environment - means the physical conditions, which exist within the area and which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved shall be the area in which significant effects would occur either directly or indirectly as a result of the project. The "environment" includes both natural and man-made conditions.

Environmentally Sensitive Area (ESA) - means an area "in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human activities and developments" (Reference: California Public Resources Code § 30107.5). ESAs will include Clean Water Act 303d Listed Water Bodies in all reaches that are unimproved, all California Coastal Commission's Environmentally Sensitive Habitat Areas as delineated on maps in Local Coastal Plans and Regional Water Quality Control Board's Basin Plan Rare, Threatened or Endangered Species (RARE) and Preservation of Biological Habitats (BIOL) designated waterbodies. The California Department of Fish and Game's Significant Natural Areas map will be considered for inclusion as the department field verifies the designated locations. Watershed restoration projects will be considered for inclusion as the department field verifies the designated locations.

Erosivity Factor - The Erosivity Factor is a criterion that to assess the risk of erosion on disturbed land. It is described in "Predicting soil erosion by water: A guide to conservation planning with the Revised Universal Soil Loss Equation (RUSLE), Agricultural Handbook 703, USDA-ARS, U.S. Government Printing Office, Washington, D.C., 1997 by Renard, K.C., G.R. Foster, G.A. Weesies, D.K. McCool, and D.C. Yoder.

Federal Clean Water Act (CWA) - means (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92—500, as amended by Public Law 95—217, Public Law 95—576, Public Law 96—483 and Public Law 77—117, codified at 33 U.S.C. 1251 et seq.

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First Storm Event - means the first storm event of the wet season that produces at least 0.25 inches of rain.

Forest Land - means land at least 10 percent stocked with live trees, or land that had this minimum tree stocking in the past and is not currently developed for nonforest use. The minimum area recognized is 1 acre.

Groundwater Dewatering - means the active practice of removing standing water from soil excavations using a pump(s) or other means.

Hillside - means property located in an area with known erosive soil conditions, where the development will result in grading on any slope that is 20% or greater or an area designated by the Municipality under a General Plan or ordinance as a "hillside area".

Horse Stables - means a property where at least one horse is stabled at least part of the year.

Hydromodification - means the alteration away from a natural state of stream flows or the beds or banks of rivers, streams, or creeks, including ephemeral washes, which results in hydrogeomorphic changes.

Illegal Discharge - means any discharge to the municipal separate storm sewer (storm drain system) that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term illegal discharge includes all non-storm water discharges not composed entirely of storm water except discharges pursuant to an NPDES permit, discharges that are identified in part 1, "Discharge Prohibitions" of this order, or discharges authorized by the Regional Water Board Executive Officer.

Illicit Connection - means any engineered conveyance that is connected to the storm drain system without a permit or municipal authorization. It also means any engineered conveyance through which discharges of pollutants to the separate storm drainage systems, which are not composed entirely of storm water or are not authorized by an NPDES permit, may occur.

Illicit Discharge - means any discharge to a municipal separate storm sewer (storm drain system) that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term illicit discharge includes all non-storm water discharges 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 that are identified in part 1, "Discharge Prohibitions" of this order, or authorized by the Regional Water Board Executive Officer.

Illicit Disposal - means any disposal, either intentionally or unintentionally, of material(s) or waste(s) that can pollute storm water.

Industrial/ Commercial Facility - means any facility involved and/ or used in the production, manufacture, storage, transportation, distribution, exchange or sale of goods and/ or

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commodities, and any facility involved and/ or used in providing professional and non-professional services. This category of facilities includes, but is not limited to, any facility defined by either the Standard Industrial Classifications (SIC) or the North American Industry Classification System (NAICS). Facility ownership (federal, state, municipal, private) and profit motive of the facility are not factors in this definition.

Industrial Activities Storm Water General Permit (IASGP) - means the general NPDES permit adopted by the State Board, which authorizes the discharge of storm water from certain industrial activities under certain conditions.

Industrial Park - means a land development that is set aside for industrial development. Industrial parks are usually located close to transport facilities, especially where more than one transport modalities coincide: highways, railroads, airports, and navigable rivers. It includes office parks, which have offices and light industry.

Inhibition Concentration (IC) - means a point estimate of the toxicant concentration that would cause a given percent reduction in a non-lethal biological measurement (e.g., reproduction or growth), calculated from a continuous model (i.e., Interpolation Method). IC25 is a point estimate of the toxic concentration that would cause a 25-percent reduction in a non-lethal biological measurement.

Inspection - means entry and the conduct of an on-site review of a facility and its operations, at reasonable times, to determine compliance with specific municipal or other legal requirements. The steps involved in performing an inspection, include, but are not limited to:

1. Pre-inspection documentation research
2. Request for entry
3. Interview of facility personnel
4. Facility walk-through
5. Visual observation of the condition of facility premises
6. Examination and copying of records as required
7. Sample collection (if necessary or required)
8. Exit conference (to discuss preliminary evaluation)
9. Report preparation, and if appropriate, recommendations for coming into compliance

Integrated Pest Management (IPM) - means a sustainable approach to managing pests by combining biological, cultural, physical and chemical tools in a way that minimizes economic, health, and environmental risks.

Large Municipal Separate Storm Sewer System (MS4) - means all MS4s that serve a population greater than 250,000 (1990 Census) as defined in 40 CFR 122.26 (b)(4). The Regional Water Board designated Ventura County as a large MS4 in 1990, based on: (i) the U.S. Census Bureau 1990 population count of 669,016 thousand, and (ii) the interconnectivity of the MS4s in the incorporated and unincorporated areas within the County.

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Local SWPPP - means the Local Storm Water Pollution Prevention Plan (LSWPPP) required by the local agency for a project that disturbs one or more acres of land. Shall mean a plan identifying potential pollutant sources from a construction site and describing proposed design, placement and implementation of BMPs, to effectively prevent non-storm water discharges and reduce pollutants in storm water discharges to the storm drain system, during construction activities. Also referred as a Storm Water Pollution Control Plan (SWPCP).

Low Impact Development (LID) – means a design strategy with the goal of maintaining or replicating the pre-development hydrologic regime through the use of design techniques to create a functionally equivalent hydrologic site design. Hydrologic functions of storage, infiltration and ground water recharge, as well as the volume and frequency of discharges are maintained through the use of integrated and distributed micro-scale storm water retention and detention areas, reduction of impervious surfaces, and the lengthening of runoff flow paths and flow time. Other strategies include the preservation/protection of environmentally sensitive site features such as riparian buffers, wetlands, steep slopes, valuable (mature) trees, flood plains, woodlands, and highly permeable soils.

Major Municipal Separate Storm Sewer Outfall (“or major outfall”) - means a major municipal separate storm sewer outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (discharge from a single conveyance other than circular pipe which is associated with a drainage area of more than 50 acres); or for municipal separate storm sewers that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or the equivalent), an outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (discharge from other than a circular pipe associated with a drainage area of 2 acres or more), as defined in 40 CFR 122.26 (b)(5).

Major Outfall - means a major municipal separate storm sewer outfall, as defined in 40 CFR 122.26 (b)(6).

Maximum Extent Practicable (MEP) – The technology-based permit requirement established by Congress in CWA section 402(p)(3)(B)(iii) that municipal dischargers of storm water must meet. Technology-based requirements, including MEP, establish a level of pollutant control that is derived from available technology or other controls. MEP requires municipal dischargers to perform at maximum level that is practicable. Compliance with MEP may be achieved by emphasizing pollution prevention and source control BMPs in combination with structural and treatment methods where appropriate. The MEP approach is an ever evolving and advancing concept, which considers technical and economic feasibility.

Method Detection Limit (MDL) - means the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in 40 CFR 136, Appendix "G" of this Order.

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Minimum Level (ML) - means the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed. The ML value represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interferences. Assuming that all method-specific analytical steps are followed, the ML value will also represent, after the appropriate application of method-specific factors, the lowest standard in the calibration curve for that specific analytical technique.

Minimum Significant Difference (MSD) - means a measure of test sensitivity that establishes the minimum difference required between a control and a test treatment in order for that difference to be considered statistically significant.

Municipal Separate Storm Sewer System (MS4) - means a conveyance or system of conveyances (including roads w/ drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains), as defined in 40 CFR 122.26(b)(8):

1. Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under § 208 of the Federal Clean Water Act (CWA) that discharges into waters of the United States
2. Designed or used for collecting or conveying storm water
3. Which is not a combined sewer
4. Which is not part of a Publicly Owned Treatment Works (POTW), as defined in 40 CFR 122.2

NAICS - means North American Industry Classification System.

National Pollutant Discharge Elimination System (NPDES) - means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under CWA § 307, 402, 318, and 405.

Natural Drainage Systems - means unlined or unimproved (not engineered) creeks, streams, rivers or similar waterways.

New Development - means land disturbing activities; structural development, including construction or installation of a building or structure, creation and replacement of impervious surfaces; and land subdivision.

Non-Storm Water Discharge - means any discharge to a storm drain that is not composed entirely of storm water.

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No Observed Effect Concentration (NOEC) - means the highest tested concentration of an effluent or toxicant that causes no observable adverse effect on the test organisms (i.e., the highest concentration of toxicant at which the values for the observed responses are not statistically different from the controls).

Nuisance - means anything that meets all of the following requirements: (1) is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property; (2) affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal; (3) occurs during, or as a result of, the treatment or disposal of wastes.

Nursery - means nursery operations that are generally classified under 4 broad NAICS classification sectors: (a) 111xxx - Crop Production – Agriculture; (b) 424xxx - Merchant Wholesalers, Nondurable Goods; (c) 44xxxx - Retail Trade; and (d) 454xxx - Non-store retailers. Retail nursery operations shall be covered by this Order. This Order does not cover wholesale nursery stock operations or agricultural nursery operations, unless such operations are not covered by another Regional Water Board Order.

- (1) **Retail Nursery Operations** - means Nursery, Garden Center, and Farm Supply Stores typically classified under NAICS Code 444220 and non-store retailers typically classified under NAICS Code 454xxx. Retail nursery operations are primarily engaged in retailing nursery and garden products, such as trees, shrubs, plants, seeds, bulbs, floriculture products and sod, which are predominantly grown elsewhere. These establishments may sell a limited amount of a product they grow themselves.

Open Channel - means a storm drainage channel that is not a natural water course.

Parking Lot - means land area or facility for the parking or storage of motor vehicles used for businesses, commerce, industry, or personal use.

Percent Minimum Significant Difference (PMSD) - means the minimum significant difference divided by the control mean, expressed as a percent (see minimum significant difference).

Permit - means an authorization, license, or equivalent control document issued by U.S. EPA or an "approved State" to implement the requirements of 40 CFR Parts 122, 123, and 124. "Permit" includes an NPDES "general permit" (§ 122.28). Permit does not include any permit, which has not yet been the subject of final agency action, such as a "draft permit" or a "proposed permit."

Permittee(s) - means co-permittee(s) and any agency named in this Order as being responsible for permit conditions within its jurisdiction, as defined by Federal Regulation. Permittees to this Order include the Ventura Water Protection District, Ventura County, and the

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cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura, Santa Paula, Simi Valley and Thousand Oaks.

Point Source - means 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, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural storm water discharges and return flows from irrigated agriculture.

Point Zero - means in the context of the TMDLs, the point at which water from the storm drain or creek initially mixes with water.

Pollutants - means those "pollutants" defined in CWA § 502(6) (33.U.S.C. § 1362(6)), and incorporated by reference into California Water Code § 13373.

Pollutants of Concern - means constituents that have exceeded Basin Plan Objectives, and CTR- Chronic or Acute Objectives during monitoring at Mass Emission, Receiving Water, and Land Use stations.

Potable Water Sources - means the potable water system for the treatment, distribution, and provision of water for residential, commercial, industrial, or institutional use that meets all California safe drinking water regulatory standards for human consumption.

Pre-Developed Condition - means native vegetation and soils that existed at a site prior to first development. The pre-developed condition may be assumed to be an area with the typical vegetation, soil, and storm water runoff characteristics of open space areas in coastal Southern California unless reasonable historic information is provided that the area was atypical.

Priority Pollutants - means those constituents referred to in 40 CFR 401.15 and listed in the U.S. EPA NPDES Application Form 2C, pp. V-3 through V-9.

Project - means all development, redevelopment, and land disturbing activities. The term is not limited to "Project" as defined under CEQA (Reference: California Public Resources Code § 21065).

Qualified SWPPP Developer or Qualified SWPPP Practitioner – refer to State of California General Construction Stormwater Permit for definition.

Rare, Threatened, or Endangered Species (RARE) - means a beneficial use for waterbodies in the Los Angeles Region, as designated in the Basin Plan (Tables 2-1, 2-3, and 2-4), that supports habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

Redevelopment - means land-disturbing activity that results in the creation, addition, or replacement of 5,000 square feet or more of impervious surface area on an already developed

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site. Redevelopment includes, but is not limited to: the expansion of a building footprint; addition or replacement of a structure; replacement of impervious surface area that is not part of a routine maintenance activity; and land disturbing activities related to structural or impervious surfaces. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety.

Regional Administrator - means the Regional Administrator of the Regional Office of the U.S. EPA or the authorized representative of the Regional Administrator.

Report of Waste Discharge (ROWD) - means an application for renewal of the NPDES Permit for Waste Discharge Requirements for Municipal Separate Storm Sewer Discharges Within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein.

Restaurant - means 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).

Restoration - means the reestablishment of predisturbance aquatic functions and related physical, chemical and biological characteristics (Reference: National Research Council. 1992. Restoration of Aquatic Ecosystems: Science, Technology and Public Policy. National Academy Press, Washington, D.C.).

Retail Gasoline Outlet (RGO) - means any facility engaged in selling gasoline and lubricating oils- SIC 5541 and NAICS 447110 & 447190.

1. RGOs: 447190 Other Gasoline Stations:

This industry comprises establishments known as gasoline stations (except those with convenience stores) primarily engaged in one of the following: (1) retailing automotive fuels (e.g., diesel fuel, gasohol, gasoline) or (2) retailing these fuels in combination with activities, such as providing repair services; selling automotive oils, replacement parts, and accessories; and/ or providing food services.

2. RGOs: 447110 Gasoline Stations with Convenience Stores:

Retailing automotive fuels in combination with a convenience store or food mart.

Routine Maintenance – Routine maintenance projects include, but are not limited to projects conducted to:

1. Maintain the original line and grade, hydraulic capacity, or original purpose of the facility.
2. Perform as needed restoration work to preserve the original design grade, integrity and hydraulic capacity of flood control facilities.
3. Includes road shoulder work, regrading dirt or gravel roadways and shoulders and performing ditch cleanouts.
4. Update existing lines* and facilities to comply with applicable codes, standards, and regulations regardless if such projects result in increased capacity.
5. Repair leaks

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Routine maintenance does not include construction of new** lines or facilities resulting from compliance with applicable codes, standards and regulations.

* Update existing lines includes replacing existing lines with new materials or pipes.

** New lines are those that are not associated with existing facilities and are not part of a project to update or replace existing lines.

Screening - means using proactive methods to identify illicit connections through a continuously narrowing process. The methods may include: performing baseline monitoring of open channels, conducting special investigations using a prioritization approach, analyzing maintenance records for catch basin and storm drain cleaning and operation, and verifying all permitted connections into the storm drains. Special investigation techniques may include: dye testing, visual inspection, smoke testing, flow monitoring, infrared, aerial and thermal photography, and remote control camera operation.

Sidewalk Rinsing - means only sidewalk rinsing using high pressure and low volume of water with no additives and at an average usage of 0.006 gallons per square foot of surface area to be rinsed. Any waste generated from the activity must be collected and properly and legally disposed of. It does not mean hosing of any sidewalk or street with a garden hose with a pressure nozzle.

Site - means the land or water area where any "facility or activity" is physically located or conducted, including adjacent land used in connection with the facility or activity.

Small Construction - means any soil disturbing activities less than 5 acres.

Smart Growth - development in or near cities intended to lessen or reverse suburban sprawl, decrease the use of automobiles, and shorten daily travel. It uses compact building design to cluster together residential, shopping, and work areas and encourages walking and public transportation. Smart Growth is considered a stormwater BMP in the 2005 publication *Using Smart Growth Techniques as Stormwater Best Management Practices*, EPA 231-B-05-002.

Source Control BMP - means any schedules of activities, prohibitions of practices, maintenance procedures, managerial practices or operational practices that aim to prevent storm water pollution by reducing the potential for contamination at the source of pollution.

Southern California Stormwater Monitoring Coalition (SMC) - means the Stormwater Monitoring Coalition, which is a collaborative research/ monitoring partnership of the Southern California Water Boards, Municipal Storm Water Agencies, and municipalities to develop the methodologies and assessment tools to more effectively understand urban storm water and non-storm water (anthropogenic) impacts to receiving waters and to conduct research/ monitoring through Subsequent Research Implementation Agreements. The first original cooperative agreement was entered into on February 8, 2001.

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Stream - means a body of flowing water; natural water course containing water at least part of the year. In hydrology, it is generally applied to the water flowing in a natural channel as distinct from a canal (Reference: US Geological Survey).

Strip Mall - means a commercial development that is a shopping center where the stores are arranged in a row, with a sidewalk in front. Strip malls are typically developed as a unit and have large parking lots in front. They face major traffic arterials and tend to be self-contained with few pedestrian connections to surrounding neighborhoods. It is also called a plaza.

Storm Event Monitoring - means a rainfall event that produces more than 0.25 inch of precipitation and is separated from the previous storm event by at least 1 week of dry weather, for the purpose of monitoring.

Storm Water - means storm water runoff, snow melt runoff, and surface runoff and drainage, as defined in 40 CFR 122.26(b)(13).

Storm Water Discharge Associated with Industrial Activity - means industrial discharge, as defined in 40 CFR 122.26(b)(14).

Storm Water Quality Management Program - means the Ventura Countywide Storm Water Quality Management Plan, which includes descriptions of programs, collectively developed by the Permittees in accordance with provisions of the NPDES Permit, to comply with applicable federal and state law, as the same is amended from time to time.

Structural BMP - means any structural facility designed and constructed to mitigate the adverse impacts of storm water runoff pollution (e.g. canopy, structural enclosure). The category may include both Treatment Control BMPs and Source Control BMPs.

Summer Dry Weather - means dry weather days occurring from April 1 through October 31 of each year.

t-Test (formally Student's t-test) - means a statistical analysis comparing two sets of replicate observations, in the case of WET, only two test concentrations (e.g., a control and 100% effluent). The purpose of this test is to determine if the means of the two sets of observations are different [e.g., if the 100% effluent concentration differs from the control (i.e., the test pass or fails)].

Targeted Employees - means management and staff who perform or direct activities that directly or indirectly have an effect of storm water quality. The employees generally are employed in the following areas: department of public works, engineering, sanitation, storm water maintenance, drainage and flood control, transportation, streets and roads, parks and recreation, public landscaping and corporation yards, planning or community development, code enforcement, building and safety, harbor or port departments, airports, or general services and fleet services.

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Total Maximum Daily Load (TMDL) - means the sum of the individual waste load allocations for point sources and load allocations for nonpoint sources and natural background.

Toxicity Identification Evaluation (TIE) - means a set of procedures to identify the specific chemical(s) responsible for toxicity through a process of chemical/ physical manipulations of samples followed by toxicity tests. These procedures are performed in 3 phases (Phase I- Toxicity Characterization Procedure, Phase II- Toxicity Identification Procedure, and Phase III- Toxicity Confirmation Procedure) using aquatic organism toxicity tests.

Toxicity Reduction Evaluation (TRE) - means a study conducted in a step-wise process to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity.

Toxicity Test - means a procedure using living organisms to determine whether a chemical or an effluent is toxic. A toxicity test measures the degree of the effect of a specific chemical or effluent on exposed test organisms.

Toxic Unit (TU) - means a measure of toxicity in an effluent as determined by the acute toxicity units (TUa) or chronic toxicity units (TUc) measured. The larger the TU, the greater the toxicity.

Toxic Unit - Chronic (TUc) - means 100 times the reciprocal of the effluent concentration that causes no observable effect on the test organisms in a chronic toxicity test ($TUc = 100/NOEC$ or $100/EC25$) (see NOEC).

Treatment - means the application of engineered systems that use physical, chemical, or biological processes to remove pollutants. Such processes include, but are not limited to, filtration, gravity settling, media absorption, biodegradation, biological uptake, chemical oxidation and UV radiation.

Treatment Control BMP - means any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

Urbanization - means the process of changing of land use and land patterns from rural characteristics to urban (city-like) characteristics. These changes include (i) the replacement of pervious surfaces with impervious surfaces such as rooftops and buildings, and impervious materials such as asphalt and concrete; and (ii) the conversion of rural land to house new residents, support new businesses, and facilitate vehicular traffic flow.

U.S. EPA Phase I Facilities - means facilities in specified industrial categories that are required to obtain an NPDES permit for storm water discharges, as required by 40 CFR 122.26(c).

These categories include:

1. Facilities subject to storm water effluent limitation guidelines, new source performance standards, or toxic pollutant effluent standards (40 CFR N)
2. Manufacturing facilities

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3. Oil and gas/ mining facilities
4. Hazardous waste treatment, storage, or disposal facilities
5. Landfills, land application sites, and open dumps
6. Recycling facilities
7. Steam electric power generating facilities
8. Transportation facilities
9. Sewage of wastewater treatment works
10. Light manufacturing facilities

Vehicle Maintenance/ Material Storage Facilities/ Corporation Yards - means any Permittee owned or operated facility or portion thereof that:

1. Conducts industrial activity, operates or stores equipment or materials, and provides services similar to Federal Phase I facilities;
2. Performs fleet vehicle service/ maintenance including repair, maintenance, washing, or fueling;
3. Performs maintenance and/ or repair of machinery/ equipment; or
4. Stores chemicals, raw materials, or waste materials.

Waste Load Allocations (WLAs) - means a portion of a receiving water's Total Maximum Daily Pollutant Load (TMDL) that is allocated to one of its existing or future point sources of pollution (Reference: 40 CFR 130.2(h)).

Water Quality Objectives - means water quality criteria contained in the Basin Plan, the California Ocean Plan, the National Toxics Rule, the California Toxics Rule, and other state or federally approved surface water quality plans. Such plans are used by the Regional Water Board to regulate all discharges, including storm water discharges.

Water Quality Standards - means the State Water Quality Standards, which are comprised of beneficial uses, water quality objectives and the State's Antidegradation Policy.

Waters of the State - means any surface water or groundwater, including saline waters, within boundaries of the state (Reference: California Water Code § 13050).

Waters of the United States or Waters of the US - means:

1. All waters that 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;
2. All interstate waters, including interstate "wetlands";
3. 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 where the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
 - a. Which are or could be used by interstate or foreign travelers for recreational or other purposes
 - b. From which fish or shellfish are or could be taken and sold in interstate or

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- foreign commerce; or
- c. Which are used or could be used for industrial purposes by industries in interstate commerce
 - 4. All impoundments of waters otherwise defined as waters of the United States under this definition;
 - 5. Tributaries of waters identified in the preceding paragraph (1) through (4) of this definition;
 - 6. The territorial sea; and
 - 7. "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in the preceding paragraph (1) through (6) of this definition.
(Reference: 33 CFR 328)

Watercourse - means any natural or artificial channel for passage of water, including the VCFCD jurisdictional channels included in the List of Channels within the Comprehensive Plan of the VCFCD, as approved by the Board of Supervisors of the VCFCD on October 4, 1993, and any amendments thereto.

Watershed Management - means approach for water resources protection. It is a strategy for integrating and managing resources, both human and fiscal that focuses on regulation of point sources, to a more regional approach that acknowledges environmental impacts from other activities.

Watershed Management Areas (WMA) - means the geographically-defined watershed areas where the Regional Water Board will implement the watershed approach. These generally involve a single large watershed within which exists smaller subwatersheds but in some cases may be an area that does not meet the strict hydrologic definition of a watershed e.g., several small Ventura coastal waterbodies in the region are grouped together into one WMA.

Wet Season - means the calendar period beginning October 1 through April 15.

Winter Dry Weather - means dry weather days occurring from November 1 - March 31 of each year.

Whole Effluent Toxicity - means the aggregate toxic effect of an effluent measured directly by a toxicity test.

PART 7 - STANDARD PROVISIONS

A. General Requirements

- 1. The Permittee shall comply with all provisions and requirements of this Order.
- 2. Should the Permittee discover that it failed to submit any relevant facts or that it submitted incorrect information in a report it shall promptly submit the missing or correct information.

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3. The Permittee shall report all instances of non-compliance not otherwise reported at the time monitoring reports are submitted.
4. This Order includes Attachment "I", the Reporting Program, which is a part of this Order and must be complied with.

B. Regional Water Board Review

1. The Regional Water Board may review any formal determination or approval made by the Regional Water Board Executive Officer pursuant to the provisions of this Order.
 - (a) Permittee(s) or a member of the public may request such review upon petition within 30 day of the effective date of the notification of such decision to the Permittee(s) and interested parties on file at the Regional Water Board.

C. Public Review

1. All documents submitted to the Regional Water Board in compliance with the terms and conditions of this Order shall be made available to members of the public pursuant to the Freedom of Information Act (5 U.S.C. § 552), as amended, and the Public Records Act (California Government Code § 6250 et seq.).
2. All documents submitted to the Regional Water Board Executive Officer for approval shall be made available to the public for a 30-day period to allow for public comment.

D. Duty to Comply [40 CFR 122.41(a)]

1. Each Permittee must comply with all of the terms, requirements, and conditions of this Order. Any violation of this order constitutes a violation of the Clean Water Act, its regulations and the California Water Code, and is grounds for enforcement action, Order termination, Order revocation and reissuance, denial of an application for reissuance, or a combination thereof [40 CFR 122.41(a), Cal. Wat. Code § 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350].
2. A copy of these waste discharge specifications shall be maintained by each Permittee so as to be available during normal business hours to Permittee employees and members of the public.
3. Any discharge of wastes at any point(s) other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

E. Duty to Mitigate [40 CFR 122.41 (d)]

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1. Each Permittee shall take all reasonable steps to minimize or prevent any discharge that has a reasonable likelihood of adversely affecting human health or the environment.

F. Inspection and Entry; Investigations; Responsibilities [40 CFR 122.41(i), Cal. Water Code § 13225 and § 13267]

1. The Regional Water Board, U.S. EPA, and other authorized representatives shall be allowed:
 - (a) Entry upon premises where a regulated facility is located or conducted, or where records are kept under conditions of this Order;
 - (b) Access to copy any records, at reasonable times that are kept under the conditions of this Order;
 - (c) To inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order;
 - (d) To photograph, sample, and monitor at reasonable times for the purpose of assuring compliance with this Order, or as otherwise authorized by the CWA and the CAL. WATER CODE;
 - (e) To review any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement to investigate the quality of any waters of the state within its region; and,
 - (f) To require as necessary any state or local agency to investigate and report on any technical factors involved in water quality control or to obtain and submit analyses of water.

G. Proper Operation and Maintenance [40 CFR 122.41 (e), Cal. Water Code § 13263(f)]

1. The Permittees shall at all times properly operate and maintain all facilities and systems of treatment (and related appurtenances) that are installed or used by the Permittees to achieve compliance with this Order. Proper operation and maintenance includes:
 - (a) Adequate laboratory controls; and
 - (b) Appropriate quality assurance procedures.
2. This provision requires the operation of backup or auxiliary facilities or similar system that are installed by a Permittee only when necessary to achieve compliance with the conditions of this Order.

H. Signatory Requirements [40 CFR 122.41(k) & 122.22]

1. Except as otherwise provided in this Order, all applications, reports, or information submitted to the Regional Water Board shall be signed by the City Manager or Mayor, or authorized designee and certified as set forth in 40 CFR 122.22.

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I. Reopener and Modification [40 CFR 122.41(f) & 122.62]

1. This Order may only be modified, revoked, or reissued, prior to the expiration date, by the Regional Water Board, in accordance with the procedural requirements of the Cal. Water Code and CCR Title 23 for the issuance of waste discharge requirements, 40 CFR 122.62, and upon prior notice and hearing, to:
 - (a) Address changed conditions identified in the required reports or other sources deemed significant by the Regional Water Board;
 - (b) Incorporate applicable requirements or statewide water quality control plans adopted by the State Board or amendments to the Basin Plan, including TMDLs;
 - (c) Comply with any applicable requirements, guidelines, and/ or regulations issued or approved pursuant to CWA § 402(p); and/ or,
 - (d) Consider any other federal, or state laws or regulations that became effective after adoption of this Order.

2. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
 - (a) Violation of any term or condition contained in this Order;
 - (b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;
or,
 - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

3. The filing of a request by the Principal Permittee or Permittees for a modification, revocation and re-issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

4. This Order may be modified to make corrections or allowances for changes in the permitted activity listed in this section, following the procedures at 40 CFR 122.63, if processed as a minor modification. Minor modifications may only:
 - (a) Correct typographical errors; or
 - (b) Require more frequent monitoring or reporting by the Permittee.

J. Severability

1. 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 circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected.

K. Duty to Provide Information [40 CFR 122.41(h)]

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1. The Permittees shall furnish, within a reasonable time, any information the Regional Water Board or U.S. EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order.
2. The Permittees shall also furnish to the Regional Water Board, upon request, copies of records required to be kept by this Order.

L. Twenty-Four Hour Reporting [40 CFR 122.41(l)(6)]¹

1. The Permittees shall report to the Regional Water Board any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time any 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 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 reoccurrence of the noncompliance.
2. The Regional Water Board may waive the required written report on a case-by-case basis.

M. Bypass [40 CFR 122.41(m)]²

1. Bypass (the intentional diversion of waste streams from any portion of a treatment facility) is prohibited. The Regional Water Board may take enforcement action against Permittees for bypass unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury or severe property damage. (Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that 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) There were no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. 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 that could occur during normal periods of equipment downtime or preventive maintenance;

¹ This provision applies to incidents where effluent limitations (numerical or narrative) as provided in this Order or in the Ventura County SMP are exceeded, and which endanger public health or the environment.

² This provision applies to the operation and maintenance of storm water controls and BMPs as provided in this Order or in the Ventura County SMP.

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- (c) The Permittee submitted a notice at least ten days in advance of the need for a bypass to the Regional Water Board; or,
- (d) Permittees may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such a case, the above bypass conditions are not applicable. The Permittee shall submit notice of an unanticipated bypass as required.

N. Upset [40 CFR 122.41(n)]¹

1. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Permittee. 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.
2. A Permittee that wishes to establish the affirmative defense of an upset in an action brought for non compliance shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (a) An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - (b) The permitted facility was being properly operated by the time of the upset;
 - (c) The Permittee submitted notice of the upset as required; and,
 - (d) The Permittee complied with any remedial measures required.
3. No determination made before an action for noncompliance, such as during administrative review of claims that non-compliance was caused by an upset, is final administrative action subject to judicial review.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an upset has the burden of proof.

O. Property Rights [40 CFR 122.41(g)]

1. This Order does not convey any property rights of any sort, or any exclusive privilege.

P. Enforcement

1. Violation of any of the provisions of the NPDES permit or any of the provisions of this Order may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalties may be applied for each kind of violation. The CWA provides the following:
 - (a) Criminal Penalties for:

¹ This provision applies to incidents where effluent limitations (numerical or narrative) as provided in this Order or in the Ventura County SMP are exceeded, and which endanger public health or the environment.

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(1) Negligent Violations [CWA § 309 (c)(1)(B)]:

The CWA provides that any person who negligently violates permit conditions implementing CWA § 301, 302, 306, 307, 308, 318, or 405 is subject to a fine of not less than \$2,500 nor more than \$25,000 per day for each violation, or by imprisonment for not more than 1 year, or both.

(2) Knowing Violations [CWA § 309 (c)(2)(B)]:

The CWA provides that any person who knowingly violates permit conditions implementing CWA § 301, 302, 306, 307, 308, 318, or 405 is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or by imprisonment for not more than 3 years, or both.

(3) Knowing Endangerment [CWA § 309 (c)(3)(A)]:

The CWA provides that any person who knowingly violates permit conditions implementing CWA § 301, 302, 307, 308, 318, or 405 and who knows at that time that he is placing another person in imminent danger of death or serious bodily injury is subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both.

(4) False Statement [CWA § 309 (c)(4)]:

The CWA provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the Act or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the Act, shall upon conviction, be punished by a fine of not more than \$10,000 or by imprisonment for not more than two years, or by both. If a conviction is for a violation committed after a first conviction of such person under this paragraph, punishment shall be by a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or by both.

(b) Civil Penalties [[CWA § 309 (d)]

The CWA provides that any person who violates a permit condition implementing CWA § 301, 302, 306, 307, 308, 318, or 405 is subject to a civil penalty not to exceed \$27,500 per day for each violation.

2. Violation of any of the provisions of the NPDES permit or any of the provisions of this Order may subject the violator to any of the penalties described herein, or any combination thereof, at the discretion of the prosecuting authority; except that only one kind of penalties may be applied for each kind of violation. The Cal. Water Code §13885 provides the following:

(a) Any person who violates any of the following shall be liable civilly in accordance with this section:

- (1) Section 13375 or 13376.
- (2) Any waste discharge requirements or dredged or fill material permit issued pursuant to this chapter or any water quality certification issued pursuant to, Section 13160.
- (3) Any requirements established pursuant to Section 13383.

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- (4) Any order or prohibition issued pursuant to Section 13243 or Article 1 (commencing with Section 13300) of Chapter 5, if the activity subject to the order or prohibition is subject to regulation under this chapter.
- (5) Any requirements of Section 301, 302, 306, 307, 308, 318, 401, or 405 of the Clean Water Act, as amended.
- (6) Any requirement imposed in a pretreatment program approved pursuant to waste discharge requirements issued under Section 13377 or approved pursuant to a permit issued by the administrator.

Q. Need to Halt or Reduce Activity not a Defense [40 CFR 122.41(c)]

1. It shall not be a defense for a Permittee 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.

R. Termination of Board Order

1. Except for enforcement purposes, Regional Water Board Order No. 09-0057 is hereby terminated.

S. Board Order Expiration Date

1. This Order expires on July 8, 2015. The Permittees must submit a Report of Waste Discharge (ROWD) and a proposed Storm Water Quality Management Program in accordance with CCR Title 23 as application for reissuance of waste discharge requirements no later than 180 days in advance of such date.

T. MS4 Annual Reporting Program [40 CFR 122.42(c)]

1. The Annual Program Reporting shall include the following information:
 - (a) *Municipal separate storm sewer systems.*
The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the Director under 40 CFR 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 programs that are established as permit condition. Such proposed changes shall be consistent with 40 CFR 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 40 CFR 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;

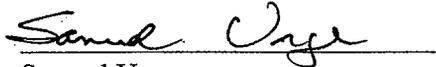
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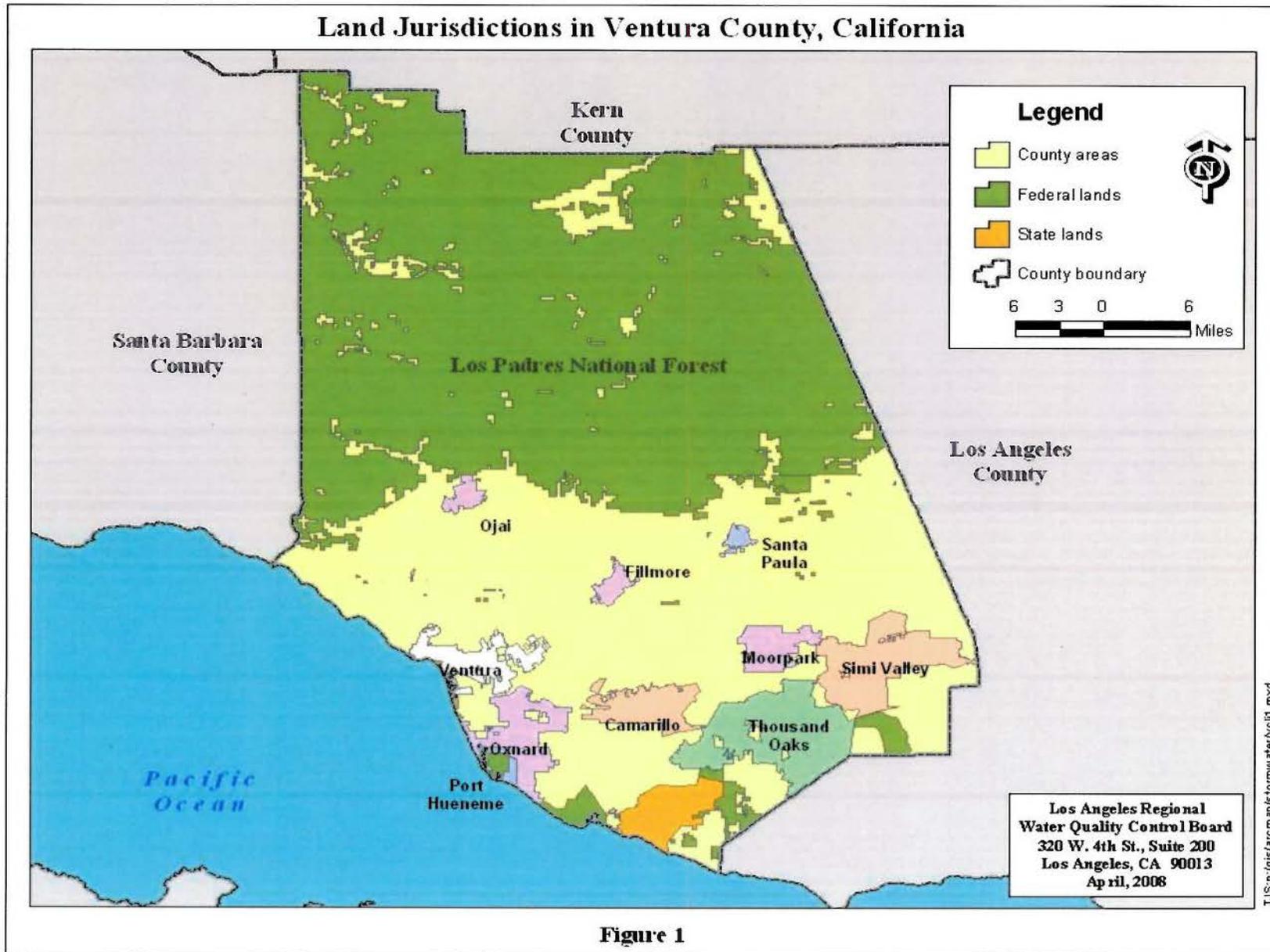
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- (5) Annual expenditures and budget for year following each annual report;
- (6) A summary describing the number and nature of enforcement actions, inspections, and public education programs; and
- (7) Identification of water quality improvements or degradation.

I, Samuel Unger, Interim Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on July 8, 2010.



Samuel Unger
Interim Executive Officer



July 8, 2010