

California Regional Water Quality Control Board
North Coast Region

Order No. R1-2008-0106
NPDES No. CA0025054
WDID No. 1B96074SSON

Waste Discharge Requirements

For

The City of Santa Rosa, the County of Sonoma, and
the Sonoma County Water Agency

Storm Water (Wet Weather) and Non-Storm Water (Dry Weather) Discharges from
Municipal Separate Storm Sewer Systems

Sonoma County

FINDINGS

The California Regional Water Quality Control Board, North Coast Region, (Regional Water Board) finds that:

1. The City of Santa Rosa, the County of Sonoma, and the Sonoma County Water Agency (hereinafter Permittees) jointly submitted a Report of Waste Discharge dated December 21, 2007. The report was submitted to request renewal of Waste Discharge Requirements under the National Pollutant Discharge Elimination System (NPDES). 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, to the Russian River and its tributaries, the Sonoma County coastline, and other waters.
2. Section 402(p) of the federal Clean Water Act (CWA), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges from MS4s, storm water discharges associated with industrial activity (including construction activities), and designated storm water discharges which are considered significant contributors of pollutants to waters of the United States. On November 16, 1990, the United States Environmental Protection Agency (hereinafter U.S. EPA) published regulations (40 CFR Part 122) which prescribe permit application requirements for municipal separate storm drain systems pursuant to section 402(p) of the CWA. On May 17, 1996, U.S. EPA published an Interpretive Policy Memorandum on Reapplication Requirements for MS4s, which provided guidance on permit application requirements for regulated MS4s.

3. On September 9, 1997, the Permittees entered into a cooperative agreement to share costs and other resources for implementing NPDES storm water program activities. 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 the City of Santa Rosa, Sonoma County, and the Sonoma County Water Agency 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.
4. The Regional Water Board may require a separate NPDES permit for any entity that discharges storm water into the watersheds included in this Order. Such an entity can be any State or Federal facility, special district or other public or private party.
5. Section 402(p) of the CWA (33 U.S.C. section 1342(p)) provides that MS4 permits must “require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including management practices, control techniques and systems, design engineering methods and such other provisions as the [U.S. EPA] Administrator or the state determines appropriate for the control of such pollutants.” The State Water Resources Control Board (State Water Board)’s Office of Chief Counsel (OCC) has issued a memorandum, dated February 11, 1993, interpreting the meaning of MEP to include technical feasibility, cost, and benefit derived with the burden being on the municipality to demonstrate compliance with MEP when rejecting a particular best management practice (BMP) by showing that it is not technically feasible in the locality, that its costs would exceed any benefit to be derived, or that its cost would be prohibitive. (See also *In re Petition of the Cities of Bellflower et al.* (SWRCB 2000) Order No. WQ 2000-11, p. 20.) MEP generally emphasizes pollution prevention and source control best management practices (BMPs) (as first line of defense) in combination with treatment methods as a backup (additional line of defense). Furthermore, it is recognized that the implementation of BMPs to ensure water quality protection is an iterative process. BMPs must be evaluated for success and, when necessary, additional BMPs implemented to provide required water quality protection.
6. The Permittees are currently subject to Order No. R1-2003-0062 adopted on June 26, 2003.
7. The Permittees have jurisdiction over and/or maintenance responsibility for their respective MS4s that they own and operate in Sonoma County. The MS4 discharges consist of storm water runoff generated from various land uses

discharging into Santa Rosa Creek, the Laguna de Santa Rosa (Laguna), Mark West Creek, the lower Russian River, bay and ocean waters and other surface waters. In addition, various non-storm water discharges enter the MS4 and are discharged to surface waters. The quality and quantity of these discharges varies considerably due to the effects of land use, season, geology, and the sequence and duration of hydrologic events.

8. The previous two five-year terms of the MS4 permit provided for an increasingly robust program for all mandated components. The Permittees have implemented many programs and policies intended to control the discharge of pollutants into their MS4 systems. Due to the differences in their levels of responsibility and authority, each Permittee has developed and implemented its own individual program. However, where possible, consistent strategies are implemented throughout the permit area. Examples of first-term and second-term accomplishments include: implementing a spill response and enforcement program; implementing a year-round inspection program focusing on erosion and non-storm water discharge control; conducting ongoing education and outreach activities; biological and chemical monitoring of select receiving waters; the establishment of a refined working relationship between the Permittees and the Regional Water Board with respect to reducing pollutants of concern in storm water runoff; and development and implementation of the Standard Urban Storm Water Mitigation Plan. The Permittees are committed to continue to implement an effective combination of these programs and policies and will implement additional programs as identified in this Order which will ensure that pollutant loads resulting from storm water runoff are properly controlled and managed to the MEP.
9. Permit boundary

The first term of this Order defined a permit boundary which consisted of the existing Santa Rosa city limits, areas tributary to the City, Sonoma County islands within the City limits and the City's future urban growth boundary. Many areas of the watershed were not included within the permit boundary of the first-term permit. Since these additional areas do discharge storm water runoff and do contribute, cumulatively, to the water quality impairment of downstream receiving waters, the next permit expanded the permit boundary to apply to all City and Sonoma County controlled MS4s within the Mark West Creek and Laguna de Santa Rosa watersheds as well as urban clusters outside of Healdsburg and Graton.

This Order expands the current MS4 permit boundary which previously consisted of the Laguna de Santa Rosa and Mark West Creek watersheds to include the entire area of Sonoma County that falls within the North Coast Region. The MS4 permit boundary has been expanded for the following reasons: (1) the North Coast Region has CWA section 303(d) impaired water bodies that receive storm water runoff containing constituents of concern in areas of Sonoma County outside the

Laguna de Santa Rosa and Mark West Creek watersheds, (2) total maximum daily loads (TMDLs) will be developed for these water bodies and until TMDLs are established, the impaired waters must be protected from the discharge of pollutants, (3) these additional areas of Sonoma County do discharge storm water runoff and do contribute, cumulatively, to the water quality impairment of downstream receiving waters; (4) many of these water bodies provide habitat for endangered species, (5) encouraging Permittees to provide consistent requirements and standards for development within Sonoma County is a goal of the Regional Water Board, and (6) the North Coast Region has a designated area of biological significance (ASBS) in the waters of Bodega Bay and Sonoma County has substantial coastal resources that need to be protected from new and existing sources of storm water pollution.

The permit area designated by this Order is bounded on the north by Mendocino County, on the west by the Pacific Ocean, on the south by the Marin Coastal Basin and San Pablo Basin, and on the east by Napa County and Lake County.

The MS4 permit boundary includes all or the portion within Sonoma County of these watersheds: Salmon Creek Hydrologic Area (HA), Bodega Harbor HA, Estero San Antonio HA, and the Estero Americano HA within the Bodega Hydrologic Unit (HU); Lower Russian River HA, Guerneville Hydrologic Sub Area (HSA), Austin Creek HSA, Middle Russian River HA, Laguna HA, Santa Rosa HSA, Mark West HSA, Warm Springs HSA, Geyserville HSA, and Sulphur Creek HSA within the Russian River HU; Gualala River HA, Rockpile Creek HSA, Buckeye Creek HSA, Wheatfield Fork HSA, Gualala HSA, and Russian Gulch HA within the Mendocino Coast HU.

This modification will address discharges from Permittee-owned and/or operated connected storm water infrastructure currently in place as well as future additions to the system. This modification will help provide a consistent watershed-wide effort to control all MS4 sources of pollutants to receiving waters within the watershed. In making this modification to the permitted area, the Regional Water Board recognizes that there will be different Permittee control strategies and implementation timelines needed for different land use areas. The Regional Water Board recognizes that not all permitted areas may need the same types of management practices or level of activity.

10. The area covered by this Order includes all areas within Sonoma County boundaries and all areas within the Permittees' boundaries that are within the North Coast Regional Water Board's jurisdiction. Storm water runoff and non-storm water discharges that enter the Permittees' MS4s are regulated by this Order. Provisions of this Order apply to the urbanized areas of the municipalities, areas undergoing urbanization and areas which the Regional Water Board Executive Officer determines are discharging storm water that causes or contributes to a

violation of a water quality standard or is a significant contributor of pollutants to the waters of the United States pursuant to CWA § 402(p)(2)(E).

Federal, State, Regional, or local entities within the Permittees' boundaries, and not currently named in this Order, may operate storm drain facilities and/or discharge storm water to storm drains and watercourses covered by this Order. The Permittees may lack legal jurisdiction over these entities under State and Federal constitutions. The Regional Water Board will work with these entities to ensure the implementation of programs that are consistent with the requirements of this Order.

11. This Order and its requirements are not intended to restrict or control local land use decision-making authority. 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 Permittees' jurisdiction. The Regional Water Board recognizes that the Permittees' land use authority allows urban developments that may generate pollutants and runoff that could impair receiving water quality and beneficial uses. The Permittees are therefore responsible for considering potential storm water impacts when making planning decisions in order to fulfill the CWA requirement to reduce the discharge of pollutants in municipal storm water to MEP. This responsibility requires the Permittees to exercise their legal authority to ensure that any increased pollutant loads and flows do not affect the beneficial uses of the receiving water. The Sonoma County Water Agency (Water Agency) does not have broad land use authority and can control activities only on its own property or through its flood control and stream maintenance responsibilities. Therefore, not all requirements in this Order are applicable to the Water Agency.
12. This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Health Services or local vector control agencies in accordance with California Health and Safety Code section 2270 *et seq.* and section 116110 *et seq.* Certain storm water treatment controls if not properly designed, operated or maintained may create habitats for vectors (e.g. mosquitoes and rodents). This Order expects the Permittees to closely cooperate and collaborate with local vector control agencies and the State Department of Health Services for the implementation, operation, and maintenance of storm water treatment controls in order to minimize the risk to public health from vector borne diseases.
13. This Order includes the following attachments:
 - (a) Attachment A – Beneficial uses of waters within the permit boundary.
 - (b) Attachment B – Standard Provisions of the Order.
 - (c) Attachment C – Definitions of terms in the Order.
 - (d) Attachment D – Permittees' Storm Water Management Plan summary.

Discharge Characteristics

14. Watershed development and urbanization results in increased pollutant loading, runoff volume and discharge velocity to receiving waters. In many cases naturally vegetated, pervious areas are converted to impervious surfaces such as paved highways, streets, rooftops and parking lots. In other areas, natural ground surfaces are graded or otherwise disturbed and subject to compaction, erosion, and sediment discharge. Naturally vegetated soil can both absorb rainwater and act to remove pollutants, thereby providing an effective natural purification process. Retaining natural soil also aids in sequestering carbon. The pool of organic carbon in the soil is approximately twice as large as that of the atmosphere. Soils can contain as much or more carbon than the vegetation they support. For example, 97 percent of the 335 billion tons of carbon stored in grassland ecosystems is held in the soil. Soil carbon storage can help offset release of carbon dioxide, a major greenhouse gas that contributes to global climate change. In contrast, pavement and concrete have limited ability to absorb water and remove pollutants, and thus the natural purification characteristics are lost. In addition, urban development creates new pollution sources as the increased density of human population brings proportionately higher amounts of vehicle emissions, vehicle maintenance wastes, municipal sewage waste, pesticides, household hazardous wastes, pet wastes, trash, and other anthropogenic pollutants. Storm water runoff from these developed areas can collect and mobilize these pollutants. In most cases, the runoff from these developed areas is discharged directly to streams and rivers, without treatment.

15. The quality and quantity of MS4 discharges vary considerably because of the effects of hydrology, geology, land use, season, and sequence and duration of precipitation events. Storm water runoff discharges typically contain pollutants that lower the quality of receiving waters and impact beneficial uses of receiving waters. Nationwide studies have shown exceedances of water quality standards including instances of aquatic toxicity in receiving waters as a result of storm water discharges. Specific pollutants that are contained in storm water include, but are not limited to, heavy metals from sources such as automobiles, metal pipes, etc; mercury from atmospheric fallout and improper disposal of mercury switches; lead from fuels, paints, automotive parts; copper from brake pad wear and roofing materials; zinc from tire wear and galvanized sheeting and fencing; bis (2-ethylhexyl) phthalate from the break down of plastic products; sediment from land disturbance and erosion; dioxins as products of combustion; petroleum hydrocarbons from sources such as leaking automobiles, minor spills, etc.; microbial pathogens from sewer overflows, pet waste, failing domestic wastewater systems, etc.; pesticides from over application, spills, etc.; nutrients from fertilizer application, decomposing plant material, etc.; and litter.

16. Storm water is frequently a significant source of nutrient loading to receiving waters, well above background levels. This increase in nutrient loading can impair beneficial uses in several different ways. Nutrients are a primary driving factor in excess algal growth, low dissolved oxygen, extreme diurnal pH and dissolved oxygen cycles which can contribute to shifts in composition of aquatic species that are a primary component of a beneficial use. Ammonia as Nitrogen, and Nitrate plus Nitrite Nitrogen are biostimulatory substances that can cause or contribute to eutrophic effects impairing warm freshwater and wildlife habitats. Ammonia is highly toxic to fish and other aquatic life. Excessive ammonia can cause aquatic life toxicity.
17. Elevated bacterial indicator densities impair the water contact recreation (REC-1) beneficial use at beaches, rivers, creeks, 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 recreational water quality, as measured by bacterial indicator densities and adverse health effects. Sources of elevated bacteria to marine and fresh waters may also include illegal discharges from improperly maintained onsite water treatment systems and illicit discharges from private drains.
18. Storm water can be a significant source of sediment in urban waterways through two primary mechanisms: (1) External - direct transport of large volumes of sediment from impervious urban landscape into stream channels; and (2) Internal - de-stabilization of the stream channel and stream bed from excess hydraulic energy leading to high rates of erosion within the stream channel.

Sediment impacts beneficial uses in many ways: (1) Filling in the stream channel and thus reducing the number and depth of pools and complexity of stream habitat features; (2) Creating a shallower stream environment that is more susceptible to increased temperature; (3) Increased nutrient loading, shallow pools, impaired flows all of which contribute to nuisance algal conditions; and (4) Direct effects from smothering of spawning gravels and benthic macroinvertebrate communities.

The Regional Water Board has adopted Board Resolution R1-2004-0087 which directs Regional Water Board staff to utilize existing regulatory programs to address sources of sediment within sediment impaired watersheds.

19. Storm water flows alter the natural temperature regime of receiving waters by changing the channel morphology and through direct differences in runoff temperature versus natural flows. Often direct flows are much warmer than the receiving water and can lead to temperature stress in many cold water aquatic species. The impact can also be less direct because warmer water has a lower oxygen saturation potential and therefore lower dissolved oxygen. These

temperature effects can impact the biotic community within an aquatic ecosystem. Increased runoff from impervious surfaces such as paved areas and rooftops may increase the temperature of receiving waters. Temperatures of receiving waters may also be increased by lack of vegetation and reduced ground water infiltration in summer months.

20. 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 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.
21. Polychlorinated Byphenyls (PCBs) are a subset of the synthetic organic chemicals known as chlorinated hydrocarbons. Concern over PCBs toxicity, persistence (chemical stability) in the environment, and demonstrated ability to bioconcentrate has led to prohibitions on PCBs.
22. In general, the substances 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 natural watercourses can adversely impact aquatic ecosystems and stream habitat and cause stream bank erosion and physical modifications. These changes can also result in increased flood flows impacting downstream property owners and creating an added burden to flood control agencies. These changes are collectively termed hydromodification. Municipal point source discharges from urbanized areas remain a leading cause of impairment of surface waters in California.
23. Urban development changes the quantity and flow characteristics of storm water runoff as compared to undeveloped conditions. Increases to the volume and velocity of storm water runoff due to development have the potential to greatly accelerate streambank erosion and impair stream habitat in receiving waters. Studies have demonstrated a direct correlation between the degree of imperviousness of an area and the degradation of its receiving waters.

Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as 10 percent conversion from natural to impervious surfaces. Percentage of impervious cover is a reliable indicator and predictor of potential water quality degradation expected from new development. Added flow modifications from land clearing and grading, stream alteration and runoff channelization can exacerbate impacts from impervious surfaces.

24. Water quality assessments conducted by the Regional Water Board and others have identified impairment, or threatened impairment, of beneficial uses of water bodies within the Mark West Creek watershed. The causes of impairments include pollutants of concern that are typically contained in municipal storm water discharges. Pollutants in storm water can have damaging effects on both human health and aquatic ecosystems. Pollutants of concern within the Mark West Creek and Laguna watersheds include: sediments; temperature; nutrients; mercury and pathogens. A one-time annual pollutant loading estimate was submitted in the Permittees' Part II application (1996). Annual loading estimates for Santa Rosa Creek were determined for sediments and nutrients (TSS: 21,400 tons; TDS: 9,600 tons; Phosphorus: 31 tons; Nitrate: 36 tons; TKN: 85 tons; Total Organic Nitrogen: 78 tons). This estimate was based on limited monitoring data and was not intended to quantify loadings for other runoff years. Implementation of the MS4 program since 1997 is expected to have resulted in reductions in pollutant loadings to receiving waters. This Phase I permit renewal contains additional program elements specifically intended to focus on sediment and nutrient pollutant reduction.
25. 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 Basin Plan. Wet weather and dry weather discharges are subject to the conditions and requirements established in the Basin Plan for point source discharges. The water quality standards must be complied with at all times, irrespective of the source and manner of discharge.
26. The discharge of wash waters, irrigation runoff, and other non-storm water flows as well as contaminated storm water from some categories of industries and businesses is an environmental threat that can adversely impact public health and the environment. Pollutants contained in such discharges include organic material from food waste, oil and grease, sediment, pharmaceuticals, nutrients and toxic chemicals. The Storm Water Permit requires the proper use of BMPs to reduce the water quality impact of these discharges. The Permittees are required to implement programs to eliminate or reduce the discharge of non-storm water discharges to the MS4 systems.
27. The Regional Water Board has adopted a Water Quality Control Plan for the North Coast Basin (Basin Plan). Regional Water Board staff is currently working on a Basin Plan amendment that will address low threat discharges to surface waters. The determination of which discharges should be considered to be low threat is being developed. It is anticipated, however, that small, accidental discharges of recycled water for irrigation will be included in the Basin Plan amendment. The Storm Water Permit requires the use of BMPs to minimize or eliminate the volume and frequency of low threat discharges.

28. Certain pollutants present in storm water and/or urban runoff may be derived from extraneous sources that the Permittees have no or limited jurisdiction over. Examples of such pollutants and their respective sources are: polycyclic aromatic hydrocarbons (PAHs) which are products of internal combustion engine operation, nitrates, bis (2-ethylhexyl) phthalate and mercury from atmospheric deposition, lead from fuels, copper from brake pad wear, zinc from tire wear, dioxins as products of combustion, and naturally occurring minerals from local geology. The implementation of the measures set forth in this Order is intended to reduce the entry of these pollutants into storm water and their discharge to receiving waters.
29. 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 pollutants of concern (POC) in storm water. 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.
30. 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, which 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 Sonoma County 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.
31. 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 in a particular sensitive environment become significant. These environmentally sensitive areas (ESAs) designated by the State include:
 - (a) Regional Water Board's areas listed in the Basin Plan as supporting the "Rare, Threatened, or Endangered Species (RARE)" Beneficial Use;

- (b) Designated areas of special biological significance (ASBS) in ocean waters; and
- (c) Wetlands, riparian areas, and headwaters streams that offer high habitat value and basin-wide value for pollution removal, floodwater retention, channel stability and habitat connectivity. These waters provide habitat for a high number of special-status species and because of the high percentage of historic losses of these waters in California and the vulnerability of these waters to future impacts from projected population growth and land development, these waters warrant special protection in the land development process.

Storm Water Management Plan

32. The Permittees' December 21, 2007 permit re-application package included the draft Storm Water Management Plan (hereinafter Management Plan). The intent of the Management Plan is to identify specific tasks and programs to reduce the discharge of pollutants in storm water to the MEP in a manner designed to achieve compliance with water quality standards and objectives. The Management Plan identifies measures to effectively prohibit non-storm water discharges into municipal storm drain systems and watercourses within the Permittees' jurisdictions. The Management Plan was developed in discussions between the Permittees and Regional Water Board staff. Based on these discussions, the Permittees submitted a Management Plan including their recommendations on how to achieve MEP. The Regional Water Board is requiring that the Management Plan be revised to better meet MEP in this Order. Modifications to the Management Plan could include additional measurable goals, improvements in program elements to reduce pollutant discharge to impaired waters, or modifications to implementation schedules. The Management Plan fulfills the Regional Water Board's permit application requirements subject to the condition that it will be improved and revised in accordance with the provisions of this Order. Each of the Permittees developed individual plans that were incorporated into the Management Plan. The Management Plan defines the actions and sets measurable goals that will meet the MEP standard, when revised as required by this Order. Therefore, the Management Plan is hereby incorporated into this Order and is an enforceable component of this Order. A summary of the Management Plan submitted on December 21, 2007, is included with this Order as Attachment D.
33. The Management Plan describes a framework for management of storm water discharges during the term of this Order. The Management Plan describes the program's goals, objectives and activities, and the annual reporting and program evaluation process. Measurable goals and associated implementation dates, which represent the baseline level of effort required of each of the Permittees, are contained in the Management Plan. They will serve as a reference point upon which to base overall program effectiveness evaluations. Each of the Permittees is individually responsible for implementing their own individual Management Plan

components to reduce, control and/or otherwise address sources of pollutants within their jurisdiction. These components contain individual strategies for urban runoff control, including specific measurable goals, BMPs and implementation schedules, and procedures that detail how these control measures will be achieved.

34. Joint program activities that are described in the Management Plan include:
 - (a) Program Management – This program’s goals are to: facilitate communication and coordination among the Permittees, Regional Water Board and other appropriate entities; ensure the Management Plan elements are implemented on schedule; and ensure that all requirements of the permit are met. Program management includes annual reporting and effectiveness evaluations.
 - (b) Santa Rosa Area Standard Urban Storm Water Mitigation Plan (SRA-SUSMP) – This program outlines post construction storm water control, treatment and disposal measures for new development and significant redevelopment. Program goals are to manage storm water runoff from new development and significant redevelopment for both quality and quantity, as close to the point of origin as possible, through design and engineered measures.
 - (c) Monitoring Program – This program’s chemical and biological monitoring goal is to assess receiving water quality and direct efforts towards controlling pollutants of concern.
35. Specific program activities are focused on the following elements:
 - (a) Legal Authority
 - (b) Private Construction
 - (c) Industrial and Commercial Discharge Sources
 - (d) Municipal Operations
 - (e) Public Construction Activities Management
 - (f) Landscape and Recreational Facilities Management
 - (g) Storm Drain System Operation and Management
 - (h) Street and Road Maintenance
 - (i) Parking Facilities Management
 - (j) Emergency Procedures
 - (k) Illicit Discharge Detection and Elimination
 - (l) Public Education and Outreach
 - (m) Industrial/Commercial Outreach
 - (n) School Education
 - (o) Effectiveness Evaluation
 - (p) Fiscal Analysis
36. The Management Plan contains specific measurable goals that the Permittees believe would achieve pollution reductions to the MEP. The selection of the measurable goals was made using projections of future revenues to fund the

implementation of these goals. Those revenue projections may change considerably over the permit term, especially when considering forecasts for the state budget as a whole. If the state makes budgetary changes that reduce available discretionary funding for the municipalities, certain measurable goals now required by the Management Plan may become cost prohibitive. In such budgetary conditions, it may be necessary to delay the implementation of those measurable goals. If this situation occurs, the Permittees may request a delay or modification of the measurable goals. It is expected that these requests will be included in the annual report for that year. The Permittees will have the burden to demonstrate to the Regional Water Board that a delay in measurable goals is appropriate based on a showing of the applicable budgetary constraints, prior best efforts to secure financing, and a plan to prospectively restore the prior level measurable goal implementation. The Permittees will identify the measurable goals proposed to be delayed and will discuss program priorities and funding limitations with Regional Water Board staff. Proposed modifications of the Management Plan to delay the implementation of cost prohibitive measurable goals would then be proposed for consideration by the Regional Water Board at a duly noticed public hearing.

37. Regional Water Board staff has worked with the Permittees in order to develop a Management Plan that meets the MEP criteria, would be consistent with the iterative BMP implementation process and would include measurable goals to evaluate program performance. The submitted Management Plan contains many significant improvements over the Management Plan for the previous permit term. However, Regional Water Board staff has identified several other tasks that are necessary to help improve storm water quality and meet the MEP criteria. These tasks are consistent with permit language in other MS4 permits and reflect current storm water management practices, and so are being required in the Storm Water Permit.
38. The Permittees are dedicated to a process of continuous program review and improvement, which includes seeking new opportunities to control storm water pollution and to protect beneficial uses. The Permittees are committed to working with other agencies and individuals to form mutually beneficial partnerships. The Permittees will look for opportunities to obtain grants and other funding sources to improve their storm water program. The Permittees are encouraged to conduct and document peer review of their control and evaluation programs to ensure that they are cost-effective and meet design goals. The Permittees will conduct ongoing evaluations of each relevant element of each Permittee's program and revise activities, control measures and BMPs as deemed necessary. These reviews can provide an opportunity for local staff to benefit from the experience of other storm water professionals and to explore statewide and national storm water program models that have been shown to be successful in other areas. Any

program modifications from this evaluation would be formally proposed for inclusion in the Management Plan in accordance with provisions of this Order.

39. It is the intent of Regional Water Board staff to perform, in coordination with the Permittees and interested persons, an annual performance review and evaluation of the program and its activities. The reviews are a useful means of evaluating overall Program effectiveness, implementation of measurable goals, and continuous improvement opportunities. The following areas will be evaluated:
- (a) Overall Program effectiveness;
 - (b) Adherence to measurable goal schedules;
 - (c) Permittees' coordination and implementation of watershed based management actions (e.g., flood management, new development and construction, industrial source controls, public information/participation, monitoring);
 - (d) Partnership opportunities with other local storm water programs; and
 - (e) Consistency in meeting MEP measures within the Program and with other compatible Regional, Statewide, and National municipal storm water management program elements, with respect to pollutants of concern.

**New Development Standards
(Santa Rosa Area Standard Urban Storm Water Mitigation Plan)**

40. On October 5, 2000, the State Water Board adopted Order WQ 2000-11, a precedential decision upholding the use of Standard Urban Storm Water Mitigation Plans (SUSMP) in MS4 permits for new development and significant redevelopment projects. Regional Water Board orders are required to be consistent with applicable portions of the State Water Board's precedential decisions. The program developed by the Permittees in their current permit is referred to as the Santa Rosa Area Standard Urban Storm Water Mitigation Plan (hereinafter SRA-SUSMP). The existing SRA-SUSMP requires design review and post-construction storm water treatment only for large projects (one acre or more). Consistent with the storm water program goals of requiring iterative improvements to storm water quality, this Order will require new development controls for smaller projects, based on land use categories. The SRA-SUSMP shall also be revised during this permit term to prioritize post-construction storm water treatment BMPs for their efficacy in removing pollutants of concern and minimizing hydromodification.

The permit also requires preferential consideration of Low Impact Development (LID) techniques in order to mitigate storm water quality and quantity impacts from new development. LID is a development site design strategy with a goal of maintaining or reproducing the pre-development hydrologic system through the use of design techniques to create a functionally equivalent hydrologic setting. 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 small scale storm water retention and detention areas,

reduction of impervious surfaces, and the lengthening of flow paths and runoff time. Other LID strategies include the preservation and protection of environmentally sensitive site features such as riparian buffers, wetlands, steep slopes, valuable trees, flood plains, woodlands, native vegetation and permeable soils. Other benefits from LID implementation include reducing global warming impacts from new development (preserving carbon sequestering in native soils and retaining native vegetation), increasing water supply (by encouraging ground water recharge) and reducing energy consumption.

Modifications of the SRA-SUSMP program will be necessary in the future as the Permittees improve program implementation and to help mitigate water quality impacts from new development. Specifically, the SRA-SUSMP shall be revised to incorporate additional categories of new development and to implement LID strategies.

41. Federal regulations (40 CFR 131.10(a)) prohibit states from designating waste transport or waste assimilation as a beneficial use for any water of the United States. Authorizing the construction of a storm water/urban runoff treatment facility in a water body may be considered as accepting waste assimilation as an appropriate use for that water body. Furthermore, the construction and operation of a pollution control facility in a water body can impact the physical, chemical, and biological integrity as well as the beneficial uses of the water body. Therefore, storm water treatment and/or mitigation in accordance with the SRA-SUSMP and any other requirements of this Order must occur prior to the discharge of storm water pollutants into surface waters.
42. Each Permittee is individually responsible for adopting and enforcing local SRA-SUSMP ordinances necessary to implement effective BMPs to prevent or reduce pollutants in storm water as a result of new development or redevelopment. The Permittees are also responsible for ensuring that adequate permit conditions or funding is in place to cover costs associated with construction, operation, and maintenance of storm water treatment BMPs. This requirement may be implemented by placing conditions into discretionary approvals to implement SRA-SUSMP ordinances and to provide for the long-term operation and maintenance of storm water control measures that are implemented. Projects requiring only ministerial approvals can be required to prove compliance with pre-existing criteria before development is allowed.

Statutory and Regulatory Considerations

43. The CWA authorizes the U.S. EPA to permit a state to serve as the NPDES permitting authority in lieu of the U.S. EPA. The State of California has in-lieu authority for the NPDES program. The Porter-Cologne Water Quality Control Act authorizes the State Water Board, through the Regional Water Boards, to regulate and control the discharge of pollutants into waters of the State. The State Water

Board entered into a Memorandum of Agreement with the U.S. EPA, on September 22, 1989, to administer the NPDES Program governing discharges to waters of the United States.

44. 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 (also jointly referred to as "the Services") 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].
45. The Water Quality Act of 1987 added section 402(p) to the federal CWA (33 U.S.C. section 1251-1387). Section 402(p)(3)(B) of this act requires that NPDES permits for discharges from MS4s shall require controls to reduce the discharge of pollutants to the MEP. Section 402(p) also requires the U.S. EPA to establish regulations setting forth NPDES requirements for storm water discharges in two phases:
 - (a) The 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 I Final Rule was published on November 16, 1990 (55 Federal Register 47990).
 - (b) The U.S. EPA Phase II storm water regulations are directed at storm water discharges not covered in Phase I, including small MS4s (serving a population of less than 100,000), small construction projects (one to five 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 United States. The Phase II Final Rule was published on 8 December 1999 (64 Federal Register 68722).
46. In addition to the above, MS4s that U.S. EPA or the State determines are contributing to a water quality impairment or are a significant contributor of pollutants to waters of the United States are required to obtain permit coverage. The majority of surface waters of Sonoma County within North Coast Regional Water Board jurisdiction are impaired for excess sediment and temperature, and preliminary TMDLs analyses that indicate that storm water runoff is a significant contributor of pollutants to impaired waters. In addition, development patterns in the County indicate that development pressure will continue thereby increasing

MS4 discharges in the future. The Regional Water Board finds that the Sonoma County MS4 system does contribute to water quality impairment and is a significant contributor of pollutants, particularly temperature and sediment, to waters of the United States. Therefore, the Storm Water Permit boundary is being expanded to cover all of Sonoma County within the North Coast Regional Water Board jurisdiction.

47. This permit is 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 MEP from the permitted areas in Sonoma County to surface waters subject to the Permittees' jurisdiction.
48. Section 402(p)(3)(B)(ii) of the CWA requires NPDES permits to effectively prohibit non-storm water discharges into MS4s. Corresponding regulations in the CWA (40 CFR 122.26(d)(2)(iv)(B)(1)) require control programs to prevent illicit discharges to the MS4s. Certain categories of non-storm water discharges or flows are allowed to enter the MS4s provided that the Permittees have taken steps to minimize their occurrence and to reduce the pollutant loading in such discharges.
49. The State Water Board has issued NPDES General Permits for the regulation of storm water discharges associated with industrial and construction activities. In addition, the Regional Water Board has issued General Permit Order No. 93-61 for dewatering discharges to surface waters including discharges to MS4s owned and operated by the Permittees. Under the CWA, the Permittees cannot enforce these NPDES permits. However, the Permittees, through inspections of these facilities, can implement overlapping local ordinances and permit conditions and can bring NPDES permit violations to the attention of Regional Water Board staff. This division of responsibility will help ensure that industries, businesses, and developers within the Permittees' jurisdiction are not subject to duplication of NPDES storm water regulatory activities.
50. Federal regulations (40 CFR 122.26(d)(2)(iv)(A) and 40 CFR 122.26(d)(2)(iv)(C)) require that MS4 Permittees implement a program to monitor and control pollutants in discharges to the municipal system from industrial and commercial facilities that contribute a substantial pollutant load to the MS4. The regulations require that Permittees establish priorities and procedures for inspection of industrial facilities and priority commercial establishments. This permit, consistent with U.S. EPA policy, incorporates a cooperative partnership, including the specifications of minimum expectations, between the Regional Water Board and the Permittees for the inspection of industrial facilities and priority commercial establishments to control pollutants in storm water discharges (58 Federal Register.61157).

51. The Permittees are required to enforce local storm water ordinances and permit conditions at industrial facilities and construction sites. If the Permittees become aware of industrial or construction site discharges that are in violation of statewide general NPDES permits, the Regional Water Board will rely on the Permittees to promptly report the incident to Regional Water Board staff for appropriate follow-up actions. In those areas where the local and state requirements overlap, the staffs of the respective agencies will work together to gain compliance in a streamlined manner.
52. State Mandates. 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. First, this Order implements federally mandated requirements under federal CWA section 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 CWA'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.)

Second, the 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 CWA 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.)

The CWA 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. Except for MS4s, the CWA 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* (9th Cir. 1999) 191 F.3d 1159, 1164-1165.) As discussed in prior State Water Board decisions, this Order does not require strict compliance with water quality standards. (SWRCB Order No. WQ 2001-15, p. 7.) The Order, therefore, regulates the discharge of waste in municipal storm water more leniently than the discharge of waste from non-governmental sources.

Third, the Permittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order. 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.) 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 CWA section 301, subdivision (a) (33 U.S.C. § 1311(a)) and in lieu of numeric restrictions on their discharges. To the extent 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, the Permittees have voluntarily sought a program-based municipal storm water permit in lieu of a numeric limits approach. (See *City of Abilene v. U.S. E.P.A.* (5th Cir. 2003) 325 F.3d 657, 662-663.) 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.)

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.

53. It is the Regional Water Board's intent that this Order shall ensure attainment of applicable water quality objectives and protection of beneficial uses of receiving waters. This Order therefore prohibits discharges from causing violations of water quality objectives or causing conditions to occur that create a condition of nuisance or water quality impairment in receiving waters as a result of MS4

discharge. Accordingly, these requirements shall be addressed through the effective implementation of BMPs to reduce pollutants in storm water discharges.

54. There are federal, state, regional or local entities within the Permittees' boundaries that operate storm drain facilities and/or discharge storm water to storm drains systems regulated by this Order. The Permittees may lack legal jurisdiction over these entities. Consequently, the Regional Water Board recognizes that the Permittees should not be held directly responsible for such facilities and/or discharges. Some of these entities have their own MS4-type discharges to surface waters and are required to obtain storm water permit coverage in accordance with the federal EPA Phase II storm water program. If these entities are not required to obtain permit coverage under Phase II but are found to be discharging storm water that causes or threatens to cause a violation of water quality objectives, they may be required to obtain an individual storm water discharge permit from the Regional Water Board. The California Department of Transportation (Caltrans) is a state agency that discharges storm water within the permit boundary. On July 15, 1999, the State Water Resources Control Board issued a separate NPDES storm water permit to Caltrans (NPDES No. CAS000003 - Order No. 99-06-DWQ.)
55. 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 Order addresses the management measures required for some of the categories Identified in the CZARA.
56. 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. The State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays and Estuaries of California* (SIP) - 2000, on March 2, 2000, for implementation of the CTR (State Board Resolution No. 2000-15, as amended by Board Resolution No. 2000-030). This policy requires that discharges comply with TMDL derived load allocations as soon as possible, but no later than 20 years from the effective date of the policy.
57. 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.

58. 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 (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 (Construction Activities Storm Water General Permit), NPDES No. CAS000002, issued on August 20, 1992, reissued August 19, 1999, currently under review for reissuance.
 - (c) Small Linear Underground/ Overhead Construction Projects General Permit (small LUPs), NPDES No. CAS000005, issued on June 18, 2003, currently under review for reissuance.
 - (d) Small MS4 Permit WQ Order No. 2003-0005-DWQ adopted on April 30, 2003 currently under review for reissuance.

59. 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 total disturbs one 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 Water 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.

60. 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); this policy 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 incorporates the federal Antidegradation Policy (40 CFR section 131.12) where the federal policy applies, (State Water Board Order WQO 86-17). Both, state and federal 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 CFR131.12) 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.
- (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.

61. State Water Board Resolution No. 68-16 establishes essentially a 2-step process for compliance with the policy.
- (a) Step 1- if a discharge will degrade high quality water, the discharge may be allowed if any change in water quality:
 - (1) Will be consistent with maximum benefit to the people of the State.
 - (2) Will not unreasonably affect present and anticipated beneficial use of such water.
 - (3) Will not result in water quality less than that prescribed in state policies (e.g., water quality objectives in Water Quality Control Plans).
 - (b) Step 2- any activities that result in discharges to high quality waters are required to:
 - (1) Meet waste discharge requirements that will result in the best practicable treatment or control of the discharge necessary to avoid a pollution or nuisance.
 - (2) Maintain the highest water quality consistent with the maximum benefit to the people of the State.

- (i) If such treatment or control results in a discharge that maintains the existing water quality, then a lowering of water quality would not be consistent with state Antidegradation Policy.
 - (ii) Likewise, the discharge could not be allowed under state Antidegradation Policy if:
 - (I) The discharge, even after treatment, would unreasonably affect beneficial uses; or
 - (II) The discharge, would not comply with applicable provisions of Water Quality Control Plans.
62. The Hydromodification Control and Low Impact Development (LID) provisions of this Order are intended to promote the State Water Board and Federal Antidegradation policies by preventing water quality and habitat degradation, a beneficial use identified in the Basin Plan.
63. 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.
64. California Water Code (CWC) section 13263(a) requires that waste discharge requirements issued by Regional 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.
65. CWC § 13370 et. seq. requires that waste discharge requirements issued by the Water Boards implement the provisions of the CWA (33 U.S.C. Sec. 1251 et seq.) and acts amendatory thereof or supplementary thereto, and federal regulations and guidelines issued pursuant thereto.
66. The California State Assembly passed AB 1721 (Pavley Environmental Education) on September 8, 2005, to add § 13383.6 to the CWC, relating to environmental education. On and after January 1, 2007, if a Regional Water Board or the State Board issues a municipal storm water permit pursuant to § 402(p) of the CWA (33 U.S.C. Sec. 1342(p)) that includes a requirement to provide elementary and secondary public schools with educational materials on storm water pollution, the Permittees may satisfy the requirement, upon approval by the Regional Water Board or State Board, by contributing an equivalent amount of funds to the Environmental Education Account established pursuant to subdivision (a) of § 71305 of the Public Resources Code.
67. 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 adopts the California Ocean Plan, and both the SWRCB and the six coastal Regional Water Boards implement and interpret the California Ocean Plan.

68. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve water quality objectives for all waters of the Basin. 'Water quality standards' means beneficial use designations, water quality criteria based upon those beneficial uses, an antidegradation policy, and certain policies generally affecting the application and implementation of water quality standards. (40 CFR sections 131.6(a), (c), and (d); 40 CFR section 131.13.) Water quality objective(s) means the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area. (CWC, section 13050(h).) Water quality objectives and standards generally consist of narrative or numeric water quality criteria contained in the Basin Plan, the California Ocean Plan, the National Toxics Rule, the California Toxics Rule, State Implementation Policy for the California Toxics Rule, and other state or federally approved surface water quality plans. This Order implements applicable sections of the Basin Plan.
69. Beneficial uses applicable to the receiving waters within the Storm Water Permit boundary are contained in Attachment A.
70. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.
71. It is not feasible at this time to establish numeric effluent limits for pollutants in storm water discharges from MS4s. Therefore, the effluent limitations in this Order are narrative, and include the requirement to reduce pollutants in storm water discharges to MEP. This Order requires the implementation of BMPs and measurable goals (in lieu of numeric effluent limitations) identified in the Permittees' Management Plan to control and abate the discharge of pollutants in storm water discharges. Implementation of BMPs and measurable goals in accordance with the Permittees' Management Plan and their schedules constitutes compliance with MEP requirements, and with requirements to achieve water quality objectives.

72. This Order incorporates presumptive BMPs to reduce pollutants in storm water discharges from construction sites to the MEP. The BMPs are identified in Table 7 (BMPs at Construction sites less than 1 acre), Table 8 (BMPs at Construction Sites 1 acre or greater but less than 5 acres), and Table 9 (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 8 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. Consistent with CWC 13360, 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 Special Provisions, Part 1, subsection 2.
73. This Order incorporates presumptive BMPs to reduce pollutants in storm water discharges from commercial and industrial sites to the MEP. The BMPs are identified in Table 3 (BMPs at Restaurants), Table 4 (BMPs at Automotive Service Facilities), Table 5 (BMPs at Retail Gasoline Outlets), and Table 6 (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 3 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. Consistent with CWC 13360, 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 Special Provisions, Part 1, subsection 2.
74. 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 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 9 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 serve 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. Consistent with CWC 13360, 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 Special Provisions, Part 1, subsection 2.

75. It is not feasible at this time to establish numeric effluent limits for pollutants in certain categories of non-storm water discharges from facilities owned or operated by the Permittees. Therefore, the effluent limitations in this Order are narrative, and include the requirement to reduce pollutants in non-storm water discharges through implementation of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technologies (BCT). Until such time that effluent limits are developed, implementation of both structural and non-structural BMPs constitutes compliance with the CWA section 301 for BAT/BCT effluent limitation standards.
76. This Order incorporates BMPs to ensure that authorized Non-Storm Water Discharges are not a source of pollutants to the MS4, Table 2 (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 Discharge Prohibition A.4 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 serve 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 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.

Consistent with CWC 13360, 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 Special Provisions, Part 1, subsection 2.

77. This Order recognizes that there will be an increase in discharges of storm water because of continuing development within each Permittee's jurisdiction, and it is therefore possible that future degradation of receiving water quality could occur. The continued revisions and implementation of each Permittees' Management Plan in compliance with this Order will reduce the potential for discharges from MS4s to cause the degradation of receiving water quality. In addition, other measures implemented by the Management Plan are intended to reduce the impacts of storm water runoff from areas of existing development. The Permittees shall continue too look for additional opportunities to reduce pollutants discharged from the MS4 system. This Order is therefore consistent with any applicable anti-degradation provisions of 40 CFR 131.12 and the State Water Board Resolution 68-16.
78. On May 6, 2008, the State Water Board adopted Resolution No. 2008-30 Requiring Sustainable Water Resources Management. It was resolved that the State Water Board:
 - (a) Continues to commit to sustainability as a core value for all Water Boards' activities and programs;
 - (b) Directs Water Boards' staff to require sustainable water resources management such as LID and climate change considerations, in all future policies, guidelines, and regulatory actions; and
 - (c) Directs Regional Water Boards to aggressively promote measures such as recycled water, conservation, and LID Best Management Practices where appropriate and work with Dischargers to ensure proposed compliance documents include appropriate, sustainable water management strategies.
79. On May 15, 2008, the California Ocean Protection Council (OPC) adopted the Resolution Regarding Low Impact Development. In the Resolution OPC:
 - (a) Resolves to promote the policy that new developments and redevelopments should be designed consistent with LID principles so that storm water pollution and the peaks and durations of runoff are significantly reduced and, in the case of a new development, are substantially the same as before development occurred on the site;
 - (b) Finds 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; and
 - (c) Resolves to advance LID implementation in California through NPDES Permit Requirements – When crafting storm water NPDES permit requirements, the

State Water Board and Regional Water Boards should ensure that LID designs are utilized as the primary approach to satisfying post-construction runoff control requirements and that LID designs can be utilized to control pollutants and the rate and volume of runoff.

- 80. Federal regulations (40 CFR 122.42(c)(7)) require the Permittees to submit an annual report that identifies water quality improvements or degradation.
- 81. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code, section 21000 et seq.) in accordance with section 13389 of the CWC. The renewal of this NPDES permit is also exempt from CEQA pursuant to Title 14, California Code of Regulations, section 15301, because it is for an existing facility.
- 82. This Order does not authorize any take of endangered species. To ensure that endangered species issues have been raised to responsible agencies, the Regional Water Board notified the U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration Fisheries, and the California Department of Fish and Game of Regional Water Board consideration of this Order.

Impaired Water Bodies

- 83. CWA section 303(d) and 40 CFR 130.7 require States to identify water quality-impaired water bodies and pollutants of concern and develop TMDLs. A TMDL is a quantitative assessment of the total pollutant load that can be discharged from all sources each day while still meeting water quality objectives. The Regional Water Board is currently in the process of developing TMDLs for listed water bodies within the Region. Once the Regional Water Board and U.S. EPA approve TMDLs, the Permittees' discharge of storm water into an impaired water body will be subject to load allocations and implementation plans established under the TMDLs. Certain early actions and/or assessments by the Permittees to address 303(d) listed water bodies and constituents are warranted and required by this Order. The impaired water bodies that are within the Storm Water Permit boundary are listed below in Table 1.

Table 1. Impaired Water Bodies

Hydrologic Drainage	Pollutant
Bodega HU, Bodega Harbor HA	Exotic Species
Bodega HU, Estero Americano HA, Americano Creek	Nutrients
Bodega HU, Estero Americano HA, estuary	Nutrients Sediment
Bodega HU, Estero San Antonio HA, Stemple Creek	Nutrients Sediment

Hydrologic Drainage	Pollutant
Mendocino Coast HU, Gualala River HA, Gualala River	Sediment Temperature
Russian River HU, Lower Russian River HA, Austin Creek HSA	Sediment Temperature
Russian River HU, Lower Russian River HA, Guerneville HSA	Pathogens ¹ pH ² Sediment Temperature
Russian River HU, Middle Russian River HA, Big Sulphur Creek HSA	Sediment Specific Conductivity Temperature
Russian River HU, Middle Russian River HA, Geyserville HSA	Sediment Temperature
Russian River HU, Middle Russian River HA, Laguna de Santa Rosa	Low Dissolved Oxygen Mercury Nitrogen Phosphorous Sediment Temperature
Russian River HU, Middle Russian River HA, Mark West Creek HSA	Sediment Temperature
Russian River HU, Middle Russian River HA, Santa Rosa Creek	Pathogens Sediment Temperature
Russian River HU, Middle Russian River HA, Warm Springs HSA	Sediment Temperature
Russian River HU, Middle Russian River HA, Warm Springs HSA, Lake Sonoma	Mercury

84. TMDLs are numerical calculations of the maximum amount of a pollutant that a water body 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 points (Waste Load Allocation (WLA) and non-point sources (Load Allocation (WL))). Storm water (wet weather) and non-storm water (dry weather) discharges from MS4s are considered point sources.

¹ Listing covers only the Monte Rio area of this watershed from the confluence of Dutch Bill Creek to the confluence of Fife Creek and Healdsburg Memorial Beach from the Hwy 101 crossing to the railroad crossing upstream of the Beach.

² Listing only applies to Pocket Canyon Creek, a tributary to the lower Russian River within the greater Guerneville HSA.

85. Permittees are to 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.
86. Section 301(b) and section 122.44(d) of the CWA require that permits include limitations necessary to achieve applicable water quality standards. NPDES regulations in section 122.44(d)(1)(i) mandate that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant through the TMDL process, WLAs must be translated to water quality-based effluent limitations (WQBELs).
87. Regional Water Board staff recently collaborated with the Laguna de Santa Rosa Foundation to conduct an assessment of existing water quality, hydrology, sediment transport, and ecosystem function to develop a conceptual framework for conducting the Laguna TMDL. The conceptual model analysis confirmed the impaired conditions within the Laguna relative to temperature, nutrients, sediments, and dissolved oxygen.

In addition, the preliminary loading analysis has identified urban storm water discharges during the wet season and urban non-storm water discharges in the dry season as a potentially significant source of impacts for all parameters of concern. The TMDL analyses will better define the contributions of the MS4s that discharge to the Laguna and will provide allocations to the system for each parameter and include an implementation plan with recommendations on how the allocations can be achieved.

The TMDLs will also address the role of impervious surfaces within the Laguna watershed. Impervious surfaces are linked to increased delivery of sediments, nutrients, and other oxygen consuming wastes to waterways within the Laguna. In addition, the hydrological modification that has resulted from high levels of impervious surfaces within the Laguna watershed has contributed to degraded stream channel, stream bank, and riparian conditions which are important risk co-factors for impairment related to bio-stimulatory substances. The effect of a greater area of impervious surface is two-fold: increased loading of pollutants and decreasing the assimilative capacity of stream ecosystems.

This Order requires the use of post-construction storm water treatment BMPs and requires consideration of LID techniques for new development to reduce the impact of new development in contributing to the impairment that the TMDLs will address when they are completed.

Implementation

88. CEQA (Cal. Pub. Resources Code section 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. This process would change a ministerial permit into a discretionary permit. 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.
89. The objective of this Order is to protect the beneficial uses of receiving waters in Sonoma County. To meet this objective, the Order requires that BMPs will be implemented to reduce the discharge of pollutants in storm water to MEP, and achieve water quality objectives and standards. The U.S. EPA envisioned that municipal storm water program 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. 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).
90. The implementation of measures set forth in this Order are reasonably expected to reduce the discharge of pollutants conveyed in storm water (wet weather) and non-storm water (dry weather) discharges into receiving waters.
91. 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 MS4 related impairments during the permit term for such pollutants, may avoid the need for a WLA or the need to develop a TMDL in the future.

92. This Order promotes a land development and redevelopment strategy that considers the water quality and water management benefits associated with smart growth techniques. Such measures include hydromodification mitigation requirements, minimization of impervious surfaces, 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.)
93. The implementation of an effective Public Information and Participation Program is a critical component of a storm water management program. While commercial and 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.
94. The California Supreme Court ruled that although Water Code section 13263 requires the Water Boards to consider the factors set forth in Water Code section 13241 when establishing waste discharge requirements, 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.*, 35 Cal.4d, 618 (2005)). However, when the pollutant restrictions in an NPDES are more stringent than federal law, Water Code section 13263 requires that the Water Boards consider the factors described in section 13241. The requirements in this Order may be explicit or more specific than those enumerated in federal regulations under 40 CFR122.26 or in U.S. EPA guidance. However, the requirements have been prescribed to be consistent with 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. These requirements are necessary to reduce the discharges of pollutants to the maximum extent practicable, and to attain water quality standards. Hence they are not more stringent than federal law.

95. This Order also provides flexibility for Permittees to petition the Regional Water Board Executive Officer to substitute a BMP under this Order with an alternative BMP, if they can provide information and documentation that the effectiveness of the alternative is equal to or greater than the prescribed BMP in meeting the objectives of this Order.
96. 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.
97. 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. 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.
98. This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Health Services or local vector control 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 Health Services for the implementation, operation, and maintenance of Treatment Control BMPs in order to minimize the risk to public health from vector borne diseases.

99. This Order contemplates that Permittees will ensure that implemented BMPs will not pose a safety or health hazard to the public. This Order contemplates that Permittees will ensure that the maintenance of implemented 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).
100. 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 (SSOs). The State Water Board's 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.
101. When industrial or construction site discharges occur in violation of local permits and ordinances, the Regional Water Board defers first to the municipality where the discharge occurs for appropriate actions. If the municipality has demonstrated a good faith effort to educate and enforce but remains unsuccessful, the Regional Water Board may assist the municipality and conduct a cooperative investigation and/or enforcement effort including enforcement of the applicable statewide General Permit. If the municipality has not demonstrated a good faith enforcement effort, the Regional Water Board may initiate enforcement action against both the industrial or construction discharger under the statewide General Permits, as well as against the authorizing municipal Permittee for violations of this Order. Each Permittee must also provide the first level of enforcement against illegal discharges from other land uses it has authorized, such as commercial and residential developments.

Public Process

102. The Regional Water Board has notified the Permittees and interested parties of its intent to prescribe waste discharge requirements (WDRs) for this discharge. Regional Water Board staff and Permittees' staff have worked closely together over the last year to develop the Management Plan and discuss revisions to the previous Order to achieve a well integrated set of documents that will effectively protect water quality. The hearing on the Order was properly noticed. Accordingly, the Permittees and interested parties have been given an opportunity to address the Regional Water Board at a public hearing and an opportunity to submit their written comments and recommendations to the Regional Water Board.

103. The issuance of waste discharge requirements is exempt from the California Environmental Quality Act) of the Public Resources Code in accordance with CWC section 13389. (*County of Los Angeles et al., v. California Water Boards et al.*, 35 Cal. 4th 618 (2005)). Notwithstanding, the Regional Water Board has considered the policies and requirements set forth in Chapters 1 through 2.6 of CEQA.
104. The Regional Water Board has considered the information in the attached Management Plan, which is part of this Order, in developing the Findings of this Order.
105. These findings serve as a “Draft Fact Sheet,” as required by section 124.8 of the title 40 of the Code of Federal Regulations. The above paragraphs set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the Draft Order. The findings in the Draft Order describes that the Order is for the discharge, or contribution of discharge, of storm water and non-strom water from MS4s to the Russian River and its tributaries, the Sonoma County coastline and other waters, and explain the basis for the draft Order conditions, including applicable regulatory requirements.

Section 40 CFR 124.8(b)(6) also requires that the Draft Fact Sheet describe the procedures that will be followed for reaching a decision on the Draft Order. The comment period will begin on Tuesday, September 9, 2008, and will end on October 22, 2008. Comments on the Draft Order must be sent in writing to 5550 Skylane Blvd, Ste A, Santa Rosa, CA 95403. At the end of the public comment period, the Regional Water Board staff will prepare written responses to all of the significant public comments received on the Draft Order. If no significant changes are made to the Draft Order based upon the comments received by the public, the Draft Order, with any revisions, will come before the Regional Water Board for approval on December 11, 2008. If comments are received that result in substantive changes being made to the Draft Order, the revised Draft Order may be released again for public comment, and would not come before the Regional Water Board until another 30-day comment period had expired. Mona Dougherty is the Regional Water Board staff person that should be contacted for additional information at 707-570-3761 or mdougherty@waterboards.ca.gov.

106. This Order shall serve as a NPDES permit, pursuant to CWA section 402, or amendments thereto, and shall take effect 90 days from Order adoption date provided the Regional Administrator of the U.S. EPA has no objections.
107. Pursuant to CWC section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board within 30 days 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

108. This Order may be modified or alternatively revoked or reissued prior to its expiration date, in accordance with the procedural requirements of the NPDES program 40 CFR 122.41(f) & 122.62, and the CWC § 13167.5 for the issuance of waste discharge requirements.
109. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge and this Order.

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

A. DISCHARGE PROHIBITIONS

1. Discharges into and from the MS4 in a manner causing or contributing to a condition of pollution, contamination or nuisance (as defined in CWC section 13050), in waters of the State are prohibited.
2. Discharges from the MS4, which cause or contribute to exceedances of receiving water quality objectives for surface waters are prohibited.
3. Discharges to the MS4 that are not authorized by an NPDES individual or general permit are prohibited, except as set forth below.
4. Non-Storm Water Discharges

Impacts to receiving waters from non-storm water flows may include increased pollutant loading, flow modification and related physical changes to receiving waters, and creation of a condition of nuisance. The Permittees shall effectively prohibit non-storm discharges into the MS4 and watercourses except where discharges originate from a State, federal, or other source which they are pre-empted by law from regulating. In lieu of a strict prohibition, the Permittees may submit a plan for Executive Officer authorization that includes categories of non-storm water discharges and associated BMPs to minimize or eliminate non-storm water discharges to the MS4.

- (a) The Permittees shall require that non-storm water flows infiltrate where possible and perform public outreach and education as one of the BMPs associated with each type of non-storm water discharge that they seek

authorization from the Executive Officer to allow into the MS4. The Executive Officer will consider authorizing the discharge of non-storm water flows that are listed below in Table 2 (Required or Suggested BMPs for Non-Storm Water Discharges), and are not a source of pollutants.

Table 2. Required or Suggested BMPs for Non-Storm Water Discharges

Type of Discharges:	Conditions under which allowed:	Required or suggested BMPs:
Stream diversions permitted by the State or Regional Water Board	Shall comply with all conditions in the authorization.	Erosion and sediment control
Natural springs and rising ground water	<ol style="list-style-type: none"> 1. Shall comply with all conditions in the authorization. 2. Ground water dewatering (from construction or pumped sources) may require a separate NPDES permit. 3. Segregate flow to prevent introduction of pollutants. 	No sources of ground water contamination near the extraction site.
Uncontaminated ground water infiltration [as defined by 40 CFR 35.2005(20)] ³ (Utility vault dewatering requires a separate NPDES permit)	1. Shall comply with all conditions in the authorization.	No sources of ground water contamination near the extraction site.
Natural overflows from riparian habitats or wetlands	<ol style="list-style-type: none"> 1. Shall comply with all conditions in the authorization. 2. Provided that all necessary permits or authorizations are received prior to diverting the stream flow. 	Dewatering that would impact beneficial uses of wetlands and other state waters shall be prohibited unless approved by the Regional Board.
Flows from emergency fire fighting activity	<ol style="list-style-type: none"> 1. Shall comply with all conditions in the authorization. 2. Pooled water after fire must be controlled (non-emergency repair or training flows are not allowed). 	<ol style="list-style-type: none"> 1. Utilize mats over storm drain inlets to increase the distance and settling out of pollutants before discharge to storm drain. 2. Runoff controls shall be considered for fires at industrial

³ NPDES permit for ground water dewatering is required within the North Coast Region including Sonoma County.

Type of Discharges:	Conditions under which allowed:	Required or suggested BMPs:
		or other facilities where hazardous materials may be onsite.
Fire hydrant testing	Shall comply with all conditions in the authorization.	<ol style="list-style-type: none"> 1. Must be dechlorinated using aeration and/or sodium thiosulfate and/or other appropriate means and/or be allowed to infiltrate to the ground. 2. Utilize mats over storm drain inlets to increase the distance and removal of chlorine by volatilization before discharge to storm drain.
Discharges from potable water sources. ⁴	<ol style="list-style-type: none"> 1. Shall comply with all conditions in the authorization. 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. 3. Unless the MS4 is authorized by the Regional Water Board, planned discharges require separate NPDES permit coverage. 	<ol style="list-style-type: none"> 1. Must be dechlorinated using aeration and/or sodium thiosulfate and/or other appropriate means and/or be allowed to infiltrate into the ground. 2. Sediment removal in discharge through settling or filtration. 3. Control flow rate of discharge to minimize erosion potential. 4. BMPs such as sand bags or gravel bags shall be utilized to prevent erosion and sediment transport. 5. All sediments shall be collected and disposed of in a legal and appropriate manner.
Utility vault dewatering	<ol style="list-style-type: none"> 1. Shall comply with all conditions in the authorization. 2. Coverage under Order No. 	<ol style="list-style-type: none"> 1. Segregation of flow to prevent introduction of pollutants.

⁴ The term applies to low volume, incidental and infrequent releases that are innocuous from a water quality perspective. It does not cover scheduled discharges by potable water purveyors for the (i) dewatering or hydro-testing or flushing of water supply and distribution mains, or (ii) dewatering or draining of reservoirs or water storage facilities. Releases may occur for discharges from potable water sources only with the implementation of appropriate BMPs, dechlorination prior to discharge. Discharges from utility vaults shall be conducted under coverage of a separate NPDES permit specific to that activity.

Type of Discharges:	Conditions under which allowed:	Required or suggested BMPs:
	2006-0008-DWQ or as updated may be required. 3. No reasonable potential to discharge CTR pollutants.	2. Sediment removal through settling or filtration.
Gravity flow from foundation, footing and crawl drains	1. Shall comply with all conditions in the authorization.	1. Segregation of flow to prevent introduction of pollutants. 2. Sediment removal through settling or filtration. 3. No sources of ground water contamination near the extraction site.
Air conditioning condensate	1. Shall comply with all conditions in the authorization. 2. Segregation of flow to prevent introduction of pollutants.	
Water from crawl space pumps	1. Shall comply with all conditions in the authorization.	1. Segregation of flow to prevent introduction of pollutants. 2. Sediment removal through settling or filtration. 3. No sources of ground water contamination near the extraction site.
Reclaimed and potable landscape irrigation runoff	1. Shall comply with all conditions in the authorization. 2. Reclaimed water irrigation sites must have appropriate permits from the State or Regional Water Boards.	1. Segregation of flow to prevent introduction of pollutants. 2. Implement conservation programs to minimize this type of discharge by using less water. 3. User agreements between Master Water Recycler and recycled water user requiring adherence to Title 22 standards and setbacks to waterways. Inspection, public outreach and enforcement by the Permittee. 4. Implement structural BMPs such as low flow emitters.

Type of Discharges:	Conditions under which allowed:	Required or suggested BMPs:
		5. Provide infiltration areas at the lowest elevation of large urban irrigation areas, if possible. 6. Proper maintenance of sprinkler systems. 7. Recycled water suppliers should establish irrigation schedules for urban areas to minimize runoff potential to same storm drain system. 8. Development of inspection, monitoring, complaint response, and enforcement protocols.
Dechlorinated/ debrominated swimming pool discharges [see definitions]	1. Shall comply with all conditions in the authorization. 2. Provided discharge to a sanitary sewer or land is not available. Swimming pool discharges are dechlorinated, pH adjusted if necessary, aerated to remove chlorine if necessary, and volumetrically and velocity controlled to prevent resuspension of sediments. 3. Cleaning waste water and filter back wash shall not be discharged to the MS4. Water that has been hyperchlorinated shall not be discharged to the MS4, even after de-chlorination. No discharges are allowed containing salts in excess of Water Quality Standards. 4. Chlorine residual in discharge shall not exceed 0.02mg/L.	1. Segregation of flow to prevent introduction of pollutants. 2. Sediment removal through settling or filtration.
Non-commercial car washing by residents or non-profit organizations	Shall comply with all conditions in the authorization.	1. Preferred area is at commercial carwash or in an area where wash water infiltrates. 2. Pumps or vacuums may be

Type of Discharges:	Conditions under which allowed:	Required or suggested BMPs:
		used to direct water to areas for infiltration or re-use.
Sidewalk rinsing	1. Shall comply with all conditions in the authorization. 2. 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. ⁵	1. Shall comply with all conditions in the authorization. 2. All storm water BMPs shall at a minimum be maintained at a frequency as specified by the manufacturer. 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.	

- (b) If the Regional Water Board Executive Officer determines that any of the preceding categories of non-storm water discharges are a source of pollutants, the Permittee(s) shall either:
- (1) Prohibit the discharge from entering the MS4; or
 - (2) 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
 - (3) Require or obtain coverage under a separate NPDES permit for discharge into the MS4.

⁵ 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.

B. 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 pollution or nuisance.
3. The Permittees shall comply with the Order through timely implementation of control measures and other actions to reduce pollutants in storm water discharges in accordance with this Order. This Order shall be implemented to achieve compliance with receiving water limitations. If exceedance(s) of water quality objectives or water quality standards persist, notwithstanding implementation of the Order and its components and other requirements of this Order, the Permittee shall assure compliance with discharge prohibitions and receiving water limitations by complying with the following procedure:
 - (a) Upon an exceedance(s) of water quality standards or water quality objectives, which may be inferred from the results of the receiving water monitoring program described in Monitoring and Reporting Program No.R1-2008-0106 or by other information obtained by the Permittees,, the Permittee shall notify the Regional Water Board within 30 days of any such inference of exceedance, and thereafter submit a Receiving Water Limitations (RWL) Compliance Report to the Regional Water Board Executive Officer for approval. The RWL Compliance Report shall be included with the Annual Report, unless the Regional Water Board Executive Officer directs an earlier submittal.
 - (b) The RWL Compliance Report shall describe BMPs currently being implemented and the additional BMPs that will be implemented, to prevent or reduce the discharge of any pollutants that are causing or contributing to the exceedances of water quality standards.
 - (c) The RWL Compliance Report shall include a BMP implementation schedule.
 - (d) Within 30 days following approval of the RWL Compliance Report, the approved or modified suite of BMPs, the implementation schedule, and any additional monitoring required shall be implemented.
 - (e) Modifications to the RWL Compliance Report required by the Regional Water Board shall be submitted to the Executive Officer within 30 days of notification.
 - (f) The Permittee shall implement the revised monitoring program according to the approved schedule.

4. The Permittee will have to repeat the procedure set forth above to comply with the receiving water limitations for continuing or recurring exceedances of the same water quality standard(s) unless directed otherwise by the Regional Water Board Executive Officer.

C. STORM WATER QUALITY MANAGEMENT PROGRAM IMPLEMENTATION

PART 1 – General Requirements

1. Each Permittee shall, at a minimum, adopt and implement applicable terms of this Order within its jurisdictional boundary within the North Coast Region. The Permittees shall be responsible for program coordination as described in this Order as well as compliance with applicable portions of this Order within its jurisdiction. This Order shall be implemented no later than (90 days after Order adoption date), unless a later date has been specified for a particular provision in this Order and provided 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 objectives.

PART 2 – Legal Authority

1. Permittees shall possess the necessary legal authority to prohibit, including, but not limited to, the following:
 - (a) Illicit connections and illicit discharges.
 - (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, storage areas for fertilizers and soil amendments, and uncovered receptacles containing hazardous materials;
 - (5) Swimming pools that have a concentration greater than:
 - (A) Chlorine/ bromine- 0.02mg/L
 - (B) Chloride- 250mg/L;
 - (6) Swimming pool filter backwash;
 - (7) Decorative fountains and ponds;
 - (8) Industrial and commercial areas, including areas where restaurant mats are cleaned;

- (9) Concrete truck cement, pumps, tools, and equipment washout
 - (10) Spills, dumping, or disposal of materials, such as:
 - (A) Litter, landscape and construction debris, household refuse, 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; and
 - (12) Trash container leachate.
2. The Permittees shall possess adequate legal authority to achieve water quality objectives and:
- (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, notices of violation, monetary penalties, referral to City, County, and/ or District Attorneys, referral to task forces, etc.) by ordinances, permits, contracts, orders, administrative authority, and civil and criminal prosecution⁶;
 - (d) Control pollutants, including potential contributions⁷ from discharges of storm water runoff associated with industrial activities, including construction activities to its MS4, and control the quality of storm water runoff from these 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; and
 - (g) Require that treatment control BMPs be properly operated and maintained.
3. Each Permittee has a currently adopted Storm Water Quality Ordinance that prohibits the discharge of pollutants to their MS4. Each Permittee will update its Storm Water Quality Ordinance to be able to enforce all requirements of this Order, no later than (365 days after Order adoption date).

⁶ Where the Permittee has no direct authority, the Permittee is required to enter into an agreement with the agency or department that has the enforcement authority. In the case of private responsible parties such as, home owner's associations, the Permittee must retain enforcement authority.

⁷ "Potential contributions" and "potential to discharge," means adequate legal authority to prevent an actual discharge of pollutants to the MS4.

4. Each Permittee shall submit no later than (365 days 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.

PART 3 – Fiscal Resources

1. The Permittees shall implement the activities required to comply with the provisions of this Order.⁸ Each Permittee shall:
 - (a) Submit an Annual Budget Summary that shall include:
 - (1) The storm water budget for the prior report year, using actual expenditures with written explanation where necessary for the implementation of the storm water program.
 - (2) The storm water budget for the upcoming report year, using estimated expenditures with written explanation where necessary for the implementation of the storm water program.
 - (3) The summary report shall identify for both the prior report year (actual expenditure) and the upcoming report year (estimated expenditure) the following specific categories:
 - (A) Program management activities and overall administrative costs;
 - (B) Program-required activities implementation (storm water related activities only). Provide figures describing the breakdown of expenditures for the categories below:
 - (i) Illicit connection/ illicit discharge;
 - (ii) Development planning;
 - (iii) Development construction;
 - (iv) Construction inspection activities;
 - (v) Industrial/Commercial inspection activities;
 - (vi) Public Agency Activities;
 - (I) Maintenance of Structural BMPs and Treatment Control BMPs;
 - (II) Inspection of Structural BMPs and Treatment Control BMPs;
 - (III) Municipal Street Sweeping for Commercial/ Industrial land uses only;
 - (IV) Catch basin clean-outs (include dumping fees separately);
 - (V) Storm drain clean-outs (include dumping fees separately);
 - (VI) Other costs (describe);
 - (vii) Public Information and Participation;
 - (viii) Monitoring Program; and

⁸ The sources of funding may be the general funds, and/or Benefit Assessment, plan review fees, permit fees, industrial and commercial user fees, revenue bonds, grants or other similar funding mechanisms.

(ix) Miscellaneous Expenditures (describe).

PART 4 – Modifications/ Revisions

No later than (365 days after Regional Water Board adoption of this Order) each Permittee shall modify storm water management programs, protocols, practices, and municipal codes to make them consistent with the requirements herein, unless otherwise specified in this Order.

PART 5 – Responsibilities of the Permittees

1. Each Permittee is required to comply with the requirements of this Order applicable to MS4 discharges within its boundaries. Each Permittee shall:
 - (a) Comply with the requirements of this Order and any modifications thereto;
 - (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;
 - (f) Aim to participate in the Sonoma County Environmental Crimes Task Force;
 - (g) Provide technical and administrative support for committees that will be organized to implement this Order and its requirements;
 - (h) Evaluate, assess, and synthesize the results of the monitoring program and the effectiveness of the implementation of BMPs; and
 - (i) 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.

D. SPECIAL PROVISIONS

PART 1 – 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 achieve water quality objectives for the City of Santa Rosa and County of Sonoma.

2. The Storm Water Management Plan is incorporated into this Order and is fully enforceable.
3. Best Management Practice Substitution
 - (a) The Regional Water Board Executive Officer may approve any site-specific BMP substitution upon petition 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 substantially greater than the proposed alternative and does not achieve a substantially greater improvement in storm water quality; and
 - (3) The proposed alternative BMP or program will be implemented within a similar period of time.

PART 2 – Public Information and Participation Program (PIPP)

1. The Permittees shall implement a Public Information and Participation Program (PIPP) that includes, but is not limited to, the requirements listed in this section. The Permittees shall be responsible for developing and implementing the PIPP, and shall coordinate with other entities (such as Sonoma State University and the Santa Rosa Junior College) to implement specific requirements. The objectives of the PIPP are as follows:
 - (a) To measurably 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 measurably change the waste disposal and storm water pollution generation behavior of target audiences by encouraging implementation of appropriate solutions; and
 - (c) To involve and engage communities in Sonoma 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 water bodies, and channels. Signage and storm drain messages shall be legible and maintained. The Permittees shall label 20 percent of all unlabeled storm drain inlets each year, and 100 percent shall be labeled by (end of permit term).
 - (b) Public Reporting

Each Permittee must identify staff who will serve as the contact(s) person for reporting clogged catch basin inlets and illicit discharges/ dumping, faded or missing catch basin labels, and general storm water management information. Permittees shall include this information, updated by July 1st of each year, in public information media such as the government pages of the telephone book, and internet web sites. Each Permittee is responsible for keeping current, updated information in an easily accessible page on their web sites.

(c) Outreach and Education

- (1) 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 to:
 - (i) Automotive parts stores;
 - (ii) Home improvement centers, lumber yards, hardware stores, landscape supply stores, nurseries, and stores where fertilizers and pesticides are sold; and
 - (iii) Pet shops and 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); and
 - (vi) Animal wastes.
 - (E) 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). Watershed Citizen Advisory Groups/Committees can be a subset of existing watershed groups or committees.
 - (F) Organize events targeted to residents and population subgroups.
- (2) The Permittees 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 (180 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 (25% of the permanent population within the permit area) impressions per year to the general public related to storm water quality, with a minimum of (15%) impressions via newspaper, local TV access, local radio and/or internet access.
- (6) 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. Pursuant to AB 1721 (2005), the Permittees, in lieu of providing educational materials/funding to School Districts within the permit boundary, may opt to provide an equivalent amount of funds or fraction thereof to the Environmental Education Account established within the State Treasury.⁹ This option requires the written approval of the Regional Water Board Executive Officer.
- (7) The Permittees shall develop and implement a strategy to measure the effectiveness of in-school educational programs. The protocol shall include assessment of students' knowledge of the adverse impacts of storm water pollution and solutions before and after educational programs are conducted. The strategy shall be implemented no later than (180 days after Order adoption date).
- (8) The Permittees shall develop and implement a behavioral change assessment strategy no later than (2 years after Order adoption date), in order to ensure that 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 Permittees shall coordinate to develop outreach programs that focus on watershed-specific pollutants identified in Table 1 (Impaired Water Bodies) no later than (180 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 Permittees' mass media outreach program.

3. Businesses Program
(a) Corporate Outreach

⁹ Matching funds shall be equivalent to \$10 per targeted student per year. Dollar value is to be indexed to the 2006/2007 fiscal year.

- (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 managers about storm water regulations and BMPs. The program shall target a minimum of four RGO franchisers and cover a minimum of 80% of RGO franchisees in the county, four retail automotive parts franchisers, two home improvement center franchisers, six mobile businesses (carpet cleaners, power washers, mobile car washers), and six restaurant franchisers. Corporate Outreach for all target facilities shall be conducted not less than twice during the term of this Order, with the first outreach contact to begin no later than (2 years after Order adoption date). At a minimum, this program shall include:
 - (A) Meetings with corporate management 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.
 - (2) Corporate Outreach for all RGOs, automotive parts stores, home improvement centers, mobile businesses, and restaurant chains corporations shall be conducted not less than twice during the term of this Order, with the first outreach contact to begin no later than (2 years after Order adoption date).
- (b) Business Assistance Program
- (1) The Permittees shall implement a Business Assistance Program to provide technical resource assistance to small businesses to advise them on BMPs implementation to reduce the discharge of pollutants in storm water. The Program shall include:
 - (A) On-site technical assistance or consultation via telephone or e-mail to identify and implement storm water pollution prevention methods and best management practices.
 - (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.

PART 3 – Industrial/Commercial Facilities Program

1. Each Permittee shall require implementation of pollutant reduction and control measures 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 structural treatment control, source control

BMPs, and operation and maintenance procedures, which may be applied before, during, and/or after pollution generating activities. At a minimum, the Industrial/Commercial Facilities Control Program shall include requirements to:

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

2. 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. At a minimum, the following Critical Sources to be tracked are summarized below.

- (1) Commercial Facilities
 - (A) Restaurants.
 - (B) Automotive service facilities.
 - (C) RGOs and automotive dealerships.
 - (D) Nurseries, landscape material yards and nursery centers.
- (2) 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 sources' industrial and commercial facility:

- (1) Name of facility and name of owner/operator.
- (2) Address of facility.
- (3) Coverage under the Industrial General Permit or other individual or general NPDES permits or any applicable waiver issued by the Regional or State Water 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).

3. Inspect Critical Sources

(a) Commercial Facilities

Level of inspections: Each Permittee shall inspect all facilities identified in Part 3) 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 sections. At each facility, inspectors shall verify that the operator is implementing the mandatory source control BMPs. The Permittees shall require implementation of additional treatment control BMPs where storm water flows from the MS4 discharge to an ESA or a CWA section 303(d) listed water body (see Table 1). Likewise, for those BMPs that are not adequate to achieve water quality objectives, Permittees may require additional site-specific controls, such as treatment control BMPs. Written inspection reports shall be filed with other facility information and be available for Regional Water Board review if requested.

(b) Restaurants

Level of inspections: Each Permittee, in cooperation with its appropriate department (such as health or public works), 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 3 (BMPs at Restaurants) shall be implemented, unless the pollutant generating activity does not occur.

Table 3. BMPs at Restaurants

Pollutant-Generating Activity	BMP Narrative Description	2003 California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.
Waste/Hazardous Materials Storage, Handling and	Distribution of educational materials on storm water	By Municipality

Pollutant-Generating Activity	BMP Narrative Description	2003 California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.
Disposal	pollution prevention practices to the public	
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

(c) 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 4 (BMPs at Automotive Service Facilities) are being implemented, unless the pollutant generating activity does not occur.

Table 4. BMPs at Automotive Service Facilities

Pollutant-Generating Activity	BMP Narrative Description	2003 California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.
Unauthorized Non-Storm	Effective elimination of non-	SC-10

Pollutant-Generating Activity	BMP Narrative Description	2003 California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.
Water Discharges	storm water discharges	
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

(d) 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 5 (BMPs at Retail Gasoline Outlets) are being implemented, unless the pollutant generating activity does not occur.

Table 5. BMPs at Retail Gasoline Outlets

Pollutant-Generating Activity	BMP Narrative Description	2003 California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.
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

- (e) 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 6 (BMPs at Nurseries) are being implemented, unless the pollutant generating activity does not occur.

Table 6. BMPs at Nurseries

Pollutant-Generating Activity	BMP Narrative Description	2003 California Stormwater BMP Handbook Industrial and Commercial BMP Identification No.
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

(f) 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 as having exposure will be notified that they must obtain coverage under the Industrial General Permit. 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 the *California Stormwater Industrial and Commercial BMP Handbook (2003)*. The Permittees shall require implementation of additional treatment control BMPs where the storm water from the MS4 discharges to a CWA section 303(d) listed water body; or
 - (C) Has applied and has a current No Exposure Certification (and WDID number) for facilities subject to this requirement.
- (g) Ensure Compliance of Critical Sources
- (1) BMP Implementation: In the event that a Permittee determines that a BMP is infeasible at any site, including those specified in the *California Stormwater Industrial and Commercial BMP Handbook (2003)*, 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 adequate to achieve water quality objectives, Permittees may require additional site-specific controls, such as treatment control BMPs.
 - (2) Environmentally Sensitive Areas (ESAs) and Impaired Waters: For critical sources that discharge to ESAs or that are tributary to CWA section 303(d) listed impaired water bodies, the Permittees shall require operators to implement additional controls to reduce pollutants in storm water runoff that are causing or contributing to exceedances of water quality objectives.
 - (3) 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.

- (A) 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, shall include a follow-up inspection within four weeks from the date of the initial inspection.
- (B) 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 further enforcement action as established through authority in its municipal code and ordinances or through the judicial system.
- (C) 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 CWC section 13260: A Permittee may refer a violation(s) of 13260 by Industrial and Commercial facilities to the Regional Water Board provided that that 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 General Permit, 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 Industrial General Permit, Permittees may escalate referral of such violations to the Regional Water Board 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 Industrial General Permit.
 - (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.

- (c) Investigation of Complaints Regarding Facilities – Transmitted by the Regional Water Board Staff: Each Permittee shall initiate, within one business day, investigation of complaints regarding industrial/commercial facilities within its jurisdiction. The initial investigation shall include, at a minimum, a limited inspection of the site/facility to determine if the site/facility is effectively complying with the municipal storm water urban runoff ordinances, and 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 the Sonoma County Environmental Crimes 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.

PART 4 – Planning and Land Development Program

1. The Permittees shall implement a Planning and Land Development Program for all New Development and Redevelopment projects subject to this Order to:
 - (a) Minimize the adverse impacts from storm water runoff on the biological integrity of receiving waters and the beneficial uses of water bodies in accordance with requirements under CEQA (Cal. Pub. Resources Code § 21100), and local government ordinances.
 - (b) Minimize the percentage of impervious surfaces on land developments to support the percolation and infiltration of storm water into the ground.
 - (c) 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.
 - (d) Properly select, design and maintain Treatment Control BMPs and Hydromodification Control BMPs to address pollutants that are likely to be generated, reduce post-development surface flows, assure long-term function, and to avoid the breeding of vectors.¹⁰

¹⁰ Treatment BMPs when designed to drain within 72 hours of the end of rainfall minimize the potential for the breeding of vectors.

- (e) Prioritize the selection of post-development BMPs 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) Low Impact Development Strategies (see the following Special Provisions Part 5).
 - (2) Integrated watershed-wide water resources management strategies.
 - (3) Multi-benefit Landscape Feature BMPs.
 - (4) Treatment/detention ponds, constructed wetlands, etc.
 - (5) Approved modular/ proprietary treatment control BMPs that are based on LID concepts and that meet pollution removal goals.
 - (6) Approved offset project.
2. Entitlement Process:
 - (a) Each Permittee shall incorporate into its entitlement process standard procedures in order to consider potential storm water quality impacts early in the planning process of any new development and redevelopment project. The Permittees' shall clearly demonstrate the developer and Permittee considered storm water quality site issues before the facilities/projects reach final design. The Permittees must demonstrate involvement in the conceptual storm water quality design at either of two different points in project planning and permitting process:
 - (1) During the discretionary approval process (land use permit) of a proposed project, when the Permittee must exercise judgment or deliberation in order to approve or disapprove a development or significant redevelopment project, or
 - (2) During the ministerial approval process of issuing a grading, building, demolition, or similar "construction" permits in which only fixed standards or objective measures are applied.
3. New Development Projects – for purposes of this Order, impervious surface is defined as an area that has been modified in such a way as to reduce storm water runoff capture and percolation into underlying soils. Such surfaces include rooftops, walkways, and parking areas. Permeable pavements shall be considered impervious for this section if they have subdrains to preclude infiltration into underlying soils.
 - (a) Development projects subject to Permittee conditioning and approval for requiring the design and implementation of post-construction treatment controls to mitigate storm water pollution, prior to completion of the project(s), are:
 - (1) All development projects equal to 1.0 acre or greater of impervious area.
 - (2) Industrial park with 5,000 square feet or more of impervious surface area.

- (3) Commercial strip mall with 5,000 square feet or more of impervious surface area.
- (4) Retail gasoline outlet with 5,000 square feet or more of impervious surface area.
- (5) Restaurant (SIC 5812) with 5,000 square feet or more of impervious surface area.
- (6) Parking lot with 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 5,000 square feet or more of impervious surface area.
- (8) Automotive service facilities with (SIC 5013, 5014, 5541, 7532-7534 and 7536-7539) 5,000 square feet or more of impervious surface area.
- (9) Redevelopment projects in subject categories that meet Redevelopment thresholds (identified in the following Special Provisions Part 4.3).
- (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, surface water body or habitat.
 - (B) Create 2,500 square feet or more of impervious surface area.
- (11) Single-family hillside homes.
 - (A) Measures to be implemented:
 - (i) Conserve natural areas.
 - (ii) Protect slopes and channels.
 - (iii) Provide storm drain system stenciling and signage.
 - (iv) Divert roof runoff to vegetated areas before discharge unless the diversion would result in slope instability.
 - (v) Direct surface flow to vegetated areas before discharge unless the diversion would result in slope instability.

4. Redevelopment Projects

- (a) Redevelopment projects subject to Permittee conditioning and approval for the design and implementation of post-construction treatment 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 in development categories identified in Special Provisions Part 4.3.
 - (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 to protect water quality from storm water flows.

- (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 to protect water quality from storm water flows, 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, is not considered a routine maintenance activity.
 - (c) Existing single-family structures are exempt from the Redevelopment requirements unless such projects create, add, or replace 10,000 square feet of impervious surface area.
5. Effective Date: The New Development and Redevelopment requirements shall apply to projects or project phases that have not received tentative tract map, use permit or other discretionary permit prior to (180 days after Order adoption date.)

PART 5 – New Development/Redevelopment Integrated Water Quality/Water Resource Plan

1. The Permittees shall develop a New and Redevelopment Integrated Water Quality/Water Resource Plan for Executive Officer approval that presents a framework upon which all new and redevelopment project will be ranked for their overall risk to critical water resources. The overall risk the project poses to the receiving waters will include individual risk estimates for three, primary risks: hydromodification; water quality; and integrated water quality/water resource impacts associated with the proposed project.

The framework will identify, at a minimum, three overall risk levels – low risk projects (e.g., infill project in a watershed with less sensitive receiving waters, etc.); medium risk projects (e.g., somewhat sensitive); and high risk projects (e.g., a new development next to a spawning stream, a project near valuable wetland habitat or high water quality aquifer).

The plan shall include a detailed risk categorization system and appropriate interventions required for specific risks.

2. Integrated Water Quality/Resources Management Criterion
 - (a) Permittees shall require that all New Development and Redevelopment projects develop a risk system to identify areas of opportunity in the

covered area for special water quality/water resource interventions. For example, where increased recharge could offset the need to transport water (and thereby help reduce climate change impacts) the discharges will flag these as areas where infiltration and recharge may be more appropriate.

- (b) Any excess surface discharge of the storm water runoff shall be mitigated in accordance with Special Provisions Part 4.1

3. Low Impact Development (LID) Measures

- (a) All new development and redevelopment projects identified in Special Provisions Part 4 shall integrate Low Impact Development (LID) principles into project design. LID is a storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect predevelopment hydrologic functions.

- (b) The Permittees shall develop a LID technical guidance manual no later than (365 days from the Order's adoption date) for use by land planners and developers. The LID guidance manual shall include objectives and specifications for integration of LID strategies in the areas of:

- (1) Site assessment.
- (2) Site planning and layout.
- (3) Vegetative protection, revegetation, and maintenance.
- (4) On-site soil protection
- (5) Retention of natural runoff infiltration, storage and evapo-transpiration rates.
- (6) Techniques to minimize land disturbance.
- (7) Techniques to implement LID measures.
- (8) Integrated water resources management practices.
- (9) LID design and flow modeling guidance.
- (10) Hydrologic analysis.
- (11) LID offset credits.

- (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 (Part 6.6, below) through a training program. The LID training program shall 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 guidance manual 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.
4. Hydromodification (Flow/Volume/Duration) Control Criteria
- (a) Each Permittee shall require all New Development and Redevelopment projects identified in Special Provisions Part 4 to implement hydrologic control measures, to prevent accelerated downstream erosion and to protect stream habitat in receiving waters. 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-development storm water runoff flow rates, time of concentration, volume and duration.
 - (1) Description
 - (A) Hydromodification control may include one, or a combination of on-site, regional or subregional hydromodification control BMPs, LID strategies, or stream restoration measures, with preference given to LID strategies and on-site hydromodification control BMPs. The requirement to use these measures will be driven by the hydromodification risk posed by the project. Any in-stream restoration measure may be proposed in conjunction with hydromodification BMPs, shall not adversely affect the beneficial uses of the receiving waters and appropriate permits shall be obtained prior to starting any restoration projects.
 - (B) The Permittees shall develop an area specific plan with input from local stakeholders and Regional Water Board staff by (two years after adoption) to address hydromodification based on accepted practices for Executive Officer approval. The plan shall be consistent with the requirements of this Order and may include:
 - (i) A stream stability risk system – a regional and watershed approach to estimating the sensitivity of all receiving waters. The system could use tiers to estimating and validating risk, tier 1 may be GIS/stream power based, tier 2 may be rapid assessment field methods, and tier 3 may be full analysis of hydromodification risk.
 - (ii) A numerical model to predict the hydrological changes resulting from new development.
 - (iii) A numerical model to identify effective end of pipe or flow duration control mitigation strategies.

- (iv) A simplified method that relies on LID and if the LID BMPs are sized appropriately, more rigorous modeling is not required.
- (C) Existing single-family structures are exempt from the Hydromodification control requirements unless such projects disturb one acre or more of land.
- (2) Interim Criteria
The Interim Hydromodification Control Criteria to protect receiving waters until Permittees complete Hydromodification Control Plans (HCPs) are as follows: Projects shall implement hydromodification controls such that storms up to and including the 2-year 24-hour storm event post development hydrograph peak flow, duration, time of concentration and volume will match within one percent the storm event pre-development peak flow and volume hydrograph.
- (3) Final Criteria
 - (A) The Permittees shall develop watershed specific HCPs by (one year) after the completion of the area specific hydromodification plan.
 - (i) The HCP shall identify:
 - (I) Stream classifications.
 - (II) Flow rate and duration control methods.
 - (III) Sub-watershed mitigation strategies.
 - (IV) Stream restoration/preparation measures aimed at protecting or enhancing beneficial uses in the specific receiving waters downstream of projects.
 - (B) The HCP shall be consistent with the requirements of this Order and 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) Ensure no reduction of ground water recharge rates based on natural sites conditions
 - (v) Description of authorized Hydromodification Management Control BMPs.
 - (vi) Hydromodification Management Control BMP Design Criteria.
 - (vii) For flow duration control methods, the range of flows to control for, and goodness of fit criteria.
 - (viii) Allowable low critical flow, Q_c , which initiates sediment transport.
 - (ix) Description of the approved Hydromodification Model.

- (x) Any alternate Hydromodification Management Model and Design.
- (xi) Stream Restoration Measures Design Criteria.
- (xii) Monitoring and Effectiveness Assessment Record Keeping.

5. Water Quality Mitigation Criteria

- (a) As part of the integrated plan, the Permittees will develop and implement a water quality risk system aimed at setting objectives for the specific project based on watershed needs and interests.
- (b) For the medium water quality risk projects, for example, each Permittee shall require all New Development and Redevelopment projects identified in Special Provisions Part 4 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 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 runoff produced from a 0.92 inch storm event, prior to its discharge to a storm water conveyance system;¹¹
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 (discuss)
 - (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.
 - (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.

¹¹ This option is available only for construction projects that disturb land area less than 5 acres.

PART 6 – Implementation of New Development/Redevelopment Post-Construction BMPs

1. Maintenance Agreement and Transfer
 - (a) Each Permittee shall require that all new development and redevelopment projects subject to post-construction BMP requirements provide verification of maintenance provisions for Structural BMPs, Treatment Control BMPs, and Hydromodification Control BMPs by way of 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
 - (A) A signed statement from the public entity assuming responsibility for all Structural BMP, Treatment Control BMP, and Hydromodification Control 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.
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 no later than (365 days after Order adoption date).
 - (1) Implement a GIS or other electronic system for tracking projects that have been conditioned for construction/ 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 O&M Certification.

- (H) Maintenance Records.
 - (I) Inspection Date and Summary.
 - (J) Corrective Action.
 - (K) Date Certificate of Occupancy Issued.
 - (L) Replacement or Repair Date.
- (b) Each Permittee shall inspect all development sites upon completion of construction and prior to the issuance of occupancy certificates to ensure proper installation of LID measures, 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) Each Permittee shall verify proper maintenance and operation of post-construction BMPs previously approved for new development and redevelopment. 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 (365 days after Order adoption date), of post-construction BMPs to assess operation conditions with particular attention to:
 - (A) For Non-proprietary BMPs – hydraulic function, failure, invasive vegetation, vector risk, fugitive material, sediment clogging, and improper modifications.
 - (B) For Proprietary BMPs – solids removal, pump-out, blockage and drawdown drainage.
 - (3) Criteria and procedures for post construction Treatment Control and Hydromodification Control BMP repair, replacement, or re-vegetation.
- (d) Each Permittee shall undertake enforcement based on the results of the inspection.
3. Permitting Authorities Post-Construction BMP Implementation Coordination and Enforcement
- (a) The Regional Water Board, State Water Board, or U.S. EPA may include the following actions for coordination of the Permittees' program with the post-construction BMP provisions of the statewide construction activity storm water general permit or individual construction activity storm water permits.
- (1) Absence, Inadequate or Ineffective Post-Construction BMPs.
 - (A) If the permitting authorities' inspection does not readily identify the implementation of post-construction control BMPs at the site, progressive enforcement action will be initiated against the Permittee and/ or project owner/ developer.
 - (B) If the permitting authorities' inspection identifies the implementation of post-construction BMPs, but they are determined to be inadequate or ineffective (e.g. undersized, or

non-specific to pollutants of concern, or poorly maintained), progressive enforcement action will be initiated against the Permittee and/ or project owner/ developer.

- (C) Failure to implement or the implementation of inadequate or ineffective BMPs may be grounds for the permitting authorities to deny the construction activity storm water permit Notice of Termination (NOT) for the project.

4. Alternative Post-Construction Storm Water Mitigation Programs
- (a) A Permittee may apply to the Regional Water Board for approval of a regional or sub-regional storm water mitigation program to substitute in part or wholly for on-site 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 improved storm water quality.
 - (2) Protect stream habitat.
 - (3) Be fiscally sustainable and has secure funding.
 - (4) Promote cooperative problem solving by diverse interests.
 - (5) Be completed in four years or less including the construction and start-up of treatment facilities.
- (c) Nothing in these provisions shall be construed as to delay the implementation of post-construction control requirements, as approved in this Order.
5. Mitigation Funding
- (a) A Permittee may create a management framework to fund regional or subregional solutions to storm water pollution, where any of the following situations occur:
- (1) A waiver for impracticability is granted;
 - (2) Funds become available;
 - (3) Off-site mitigation is required because of loss of environmental habitat; or
 - (4) An approved watershed management plan, or an integrated water resources management plan, or a regional storm water mitigation plan, or a wetlands recovery plan exists that incorporates an equivalent or improved strategy for storm water pollution mitigation.
6. Developer Technical Guidance and Information
- (a) The Permittees shall update their Storm Water Management Plan 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 and removal efficiency ranges (ASCE/ U.S. EPA International BMP Database, CASQA New Development BMP Handbook, technical reports, local data on BMP performance, and the scientific literature).
 - (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) Criteria 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.
7. 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 effectiveness, 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.

PART 7 – State Statute Conformity

1. CEQA Document Update
 - (a) Each Permittee shall incorporate into its CEQA process no later than (6 months from 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 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 water bodies.
 - (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.
 - (H) Potential to cause or contribute to an exceedance of a water quality standard.
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.*

PART 8 – Development Construction Program

1. Soil disturbing activities during construction and demolition exacerbate sediment losses. Sediment is a primary pollutant impacting beneficial uses of watercourses. Sediments, and other construction activity pollutants must be properly controlled to reduce or eliminate adverse impacts.
2. Grading Restrictions
- (a) Each Permittee shall implement a program to control storm water discharges from construction activity at all construction sites within its jurisdiction. During the wet season, the program shall ensure that the following requirements are effectively implemented at all the construction sites in the categories listed below:
 - (1) No grading shall occur between November 1 – April 15 (wet season) for construction projects in the following areas of high erosivity:
 - (A) On hillsides with slopes 20% or steeper prior to land disturbance (If hillside development is not defined by a zoning ordinance, then the prohibition will apply to steep or long continuous

- slopes, or areas with silty soils, fine sands, or soils lacking vegetative cover.).
- (B) Directly discharging to a water body listed on the CWA § 303 (d) list for siltation or sediment; or
 - (C) Within or adjacent to an environmentally sensitive area (ESAs).
- (b) If grading operations in these areas are not completed before the onset of the wet season beginning October 1st, grading shall be halted and effective erosion control measures shall be put in place to minimize erosion. Grading shall not resume until after April 15th. Depending on the project area, the developer shall implement the Erosion and Sediment control BMPs listed in the following Tables 7, 8, and 9.
- (c) A Grading Prohibition Variance may be granted by the Permittee where the project proponent can demonstrate through plan review, inspections, monitoring and use of an iterative BMP process that the proposed BMP measures can be reasonably expected to meet the following goals:
- (1) Keep storm water from causing or contributing to the degradation of water quality.
 - (2) Ensure that Total Suspended Solids discharged from the site is 100mg/L or less.
 - (3) Ensure that Turbidity of the discharge from the site is 50 NTU or less.
 - (4) Keep storm water from impairing beneficial uses.

If a variance is granted by the Permittee, a monitoring program must also be required to ensure BMP measures' effectiveness.

3. Construction Sites Less than an Acre
- (a) Each Permittee shall require the implementation of a minimum set of BMPs in combination at all construction sites (see Table 7. BMPs at Construction sites less than 1 acre) to prevent erosion and sediment loss, and the discharge of construction wastes.¹² Where the Erosivity Factor (R) for the construction project is 50 or greater, erosion controls (erosion avoidance) are the preferred BMPs.¹³

Table 7. 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

¹² 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.

¹³ Fact Sheet, *Construction Rainfall Erosivity Waiver* (2001) EPA 833-F-00-014; *Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE)* (1997), USDA Agricultural Handbook No. 703.

Minimum Set of BMPs for All Construction Sites	CASQA Handbook	Caltrans Handbook
For Erosion Control		
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). ¹⁴	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

4. Construction Sites 1 acre or greater but less than 5 acres
 - (a) Each Permittee shall require the implementation of the BMPs in Table 8 (BMPs at Construction sites 1 acre or greater but less than 5 acres) in addition to the ones identified in Table 7 (BMPs at Construction sites less than 1 acre) at all construction sites 1 acre and greater but less than 5 acres to prevent erosion and sediment loss, and the discharge of construction wastes.

Table 8. 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

¹⁴ Poned storm water may be discharged at a concentration of Total Suspended Solids (TSS) of 100mg/L or less.

BMPs	CASQA Handbook	Caltrans Handbook
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
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

5. Construction Sites 5 acres and Greater
 - (a) Each Permittee shall require the implementation of the BMPs in Table 9 (BMPs at Construction sites 5 acres or greater) in addition to the ones identified in Table 7 (BMPs at Construction sites less than 1 acre) and Table 8 (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.

Table 9. 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

6. Local Agency Requirements
 - (a) Each Permittee shall require for all construction sites 1 acre or greater, compliance with all conditions identified in the preceding Special Provisions Part 8 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 permit for construction projects. If

the Local SWPPP is revised, the Permittee shall review and approve those revisions. The Permittees' approval signature shall be contained within the first pages of the Local SWPPP (with sufficient room for approval of revisions.)

- (i) The Permittee shall not approve any Local SWPPP unless it contains appropriate construction site BMPs, specific locations, and maintenance schedules.
 - (ii) A Local SWPPP may substitute for the State SWPPP if the Local SWPPP is at least as inclusive in controls and BMPs as the State SWPPP.
 - (iii) The Local SWPPP must include the rationale used for selecting or rejecting BMPs. The project architect, or engineer of record, or authorized qualified designee, must sign a statement on the Local SWPPP to the effect:
 - (l) *"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 assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, 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."*
 - (B) The Local SWPPP certification shall be signed by the landowner as follows:

- (i) Corporation - by a responsible corporate officer which means the following:
 - (I) President, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - (II) Manager of the construction activity if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - (ii) Partnership or sole proprietorship - by a general partner or the proprietor; or
 - (iii) Municipality or other public agency - by an elected official, a ranking management official (e.g., County/ City Administrative Officer, City Manager, Director of Public Works, or City Engineer).
7. 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;
 - (3) Prevent the discharge of release agents including soybean oil, other oils, or diesel to the storm water drainage system or watercourses.
 - (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 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 watercourses.
- (12) Protect stockpiles with a cover or sediment barriers during a rain.

8. 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.

9. 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 further joint enforcement actions for violation of municipal storm water ordinances and the Construction Activities Storm Water General Permit (Construction General Permit) 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 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.

- (e) Each Permittee shall inspect all construction sites at least once within the 60 day period preceding the wet season to ensure wet weather readiness.

10. 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 Construction General Permit or Small LUP General Permit¹⁵ unless:

- (1) Proof of coverage under a State NPDES permit is demonstrated (a copy of a letter from the State Water Board showing a valid Waste Discharger Identification Number (WDID) for that site).
- (2) Demonstration or Certification that a SWPPP has been prepared by the project developer. A Local SWPPP may substitute for the State SWPPP if the Local SWPPP is at least as inclusive in controls and BMPs as the State SWPPP.
- (3) Proof of an updated NOI(s) 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.

11. 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 Special Provision Part 3.4. At a minimum, the Permittee's good faith effort shall be documented with:

- (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 Construction General Permit 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 Construction

¹⁵ 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.

General Permit 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,¹⁶ an initial investigation of complaint(s) 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.

PART 9 – Public Agency Activities Program

1. Each Permittee shall implement a Public Agency Activities Program to minimize storm water pollution impacts from public agency activities. Public Agency requirements consist of:
 - (a) Public Construction Activities Management.
 - (b) Vehicle Maintenance/Material Storage Facilities/Corporation Yards Management/Municipal Operations.

¹⁶ Permittees may comply with the Order 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.

- (c) Landscape and Recreational Facilities Management.
 - (d) Storm Drain Operation and Management.
 - (e) Streets and Roads Maintenance.
 - (f) Infrastructure Maintenance - Long-term.
 - (g) Public Industrial Activities Management.
 - (h) Emergency Procedures.
 - (i) Employee Training.
2. Public Construction Activities Management
- (a) Each Permittee shall implement and comply with the Planning and Land Development Program requirements in Special Provisions Part 4 of this Order at all Permittee owned or operated public construction projects.
 - (b) Each Permittee shall implement and comply with the Development Construction Program requirements in Special Provisions Part 8 of this Order at all Permittee owned or operated construction projects for projects identified in Special Provisions Part 8.
 - (c) Each Permittee shall obtain coverage under the Construction General Permit for construction activities and projects that are:
 - (1) Covered under one (or more) Capital Improvement Projects (including but not limited to street repaving, new streets, channel clearing¹⁷) or contract, and that individually or cumulatively disturb 1 acre or more of land; or
 - (2) Less than 1 acre, but are part of a larger common plan of development that in total disturbs 1 or more acres of land; and
 - (3) Linear construction project(s) that disturb 5 or more acres of land.
 - (d) Each Permittee shall obtain coverage under the Small LUP General Permit when disturbing at least 1 acre, but less than 5 acres of land during linear construction (land area includes trenching and staging areas).
3. Vehicle Maintenance/Material Storage Facilities/Corporation Yards Management/Long Term Maintenance Programs
- (a) Each Permittee shall implement the following BMPs¹⁸ at all 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

¹⁷ A CWA §401 certification may be required separately from the Regional Water Board for activities that occur within or adjacent to Waters of the U.S.. The Permittee shall obtain all necessary permits and certifications from the State and federal permitting authorities before commencing soil disturbing activities.

¹⁸ These BMPs are identified in Appendix B of the *Caltrans Storm Water Quality Handbook Maintenance Staff Guide, May 2003*, and its addenda.

the footnote below,¹⁹ each Permittee shall also implement the BMPs in the Caltrans Storm Water Quality Handbook Maintenance Staff Guide 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

¹⁹ 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.

Activity Specific BMPs	Page
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
Draw Bridge Maintenance	B-58
Other Structures	B-59
Pump Station Cleaning	B-59
Tube and Tunnel Maintenance and Repair	B-61
Ferryboat Operations	B-62
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

Activity Specific BMPs	Page
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

(b) Each Permittee shall obtain coverage under the Construction General Permit no later than (7 days after Order adoption date) for long-term maintenance programs including maintenance of flood control channels (such as vegetation removal), maintenance or replacement of streets, sidewalks, roads, and any other project that the Permittee undertakes including all Capital Improvement Projects (CIP) if either 1 or more acres of land are disturbed by grading, clearing or excavation activities for an individual project or cumulatively as part of several projects involving a soil disturbance.

4. 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.

5. 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, habitat manipulation, modification of cultural practices, and use of resistant varieties. Each Permittee shall implement a jurisdiction-wide IPM program and includes the following:

- (1) Pesticides are used only if, after 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 Organo-phosphates and Pyrethroids do not threaten water quality.
 - (5) Partner with other agencies and organizations to ensure that pesticide use within their jurisdiction does not threaten water quality.
 - (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) Comply with the provisions and the monitoring requirements for application of aquatic pesticides to surface waters (WQ Order No. 2004-0008-DWQ).
 - (3) 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.
 - (4) Ensure that no banned or unregistered pesticides are stored or applied.
 - (5) 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.
 - (6) Implement procedures to encourage the retention and planting of native vegetation to reduce water, pesticide and fertilizer needs; and
 - (7) 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.

6. 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 and/ or debris.
 - Priority B: Catch basins that are designated as consistently generating moderate volumes of trash and/ or debris.
 - Priority C: Catch basins that are designated as generating low volumes of trash and/ or debris.
- (2) Each Permittee shall clean 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.
- (3) In addition to the preceding schedule, Permittees shall ensure that any catch basin that is at least 25% full of trash and/ or debris 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, that the following measures are implemented:
 - (A) That conditions be placed on any special use permit issued for such event; and
 - (B) Require the proper management of trash and litter generated; and
 - (C) Arrange for temporary screens to be placed on catch basins; or
 - (D) Clean out 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 at all transit stops in commercial areas, near educational institutions, and in areas subject to high trash generation within its jurisdiction no later than (6 months after Order adoption date).
- (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 rainy season begins.
 - (2) Each Permittee shall record and re-stencil or re-label within 15 days of inspection, catch basins with illegible stencils.
- (e) Trash Excluders
- (1) Each Permittee shall install trash excluders, or equivalent devices on catch basins to prevent the discharge of trash to the storm drain system no later than (365 days after Order adoption date) in commercial areas, industrial areas, and near educational institutions (i.e. areas subject to high trash generation), except in sites where application of such BMP(s) alone will cause flooding. Lack of maintenance that causes flooding is not an acceptable exception to the requirement.
- (f) Storm Drain Maintenance
- (1) Each Permittee shall implement a program for Storm Drain Maintenance no later than (180 days after Order adoption date) 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 storm season.
 - (C) Eliminate the discharge of contaminants during MS4 maintenance and clean outs.
 - (D) Quantify the amount of materials removed using standard measures 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.
 - (C) Notification to appropriate sewer and 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 within a treatment control BMP when being maintained shall be:
 - (A) Hauled away and legally disposed of;
 - (B) Discharged to the sanitary sewer system (with permits or authorization); or
 - (C) 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 BMPs²⁰

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

- 7. Streets and Roads
 - (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 Construction and Reconstruction
 - (1) Each Permittee shall implement the following BMPs for road reconstruction:
 - (A) Drain Inlet protection from sediments.
 - (B) Dewatering of below grade construction areas.
 - (C) Secondary containment for cold mix.
 - (D) Sheeting underneath cold mix (during storage) to prevent discharge of spray release, and
 - (E) Sheeting to cover cold mix (during storage).
 - (F) If street material is to be concrete, then provide a vehicle wash off area that is isolated from the MS4.
 - (c) Post Construction Controls
 - (1) Municipal activities involving pothole repairs and square cut patching will not trigger post construction controls.
- 8. Infrastructure Maintenance - Long-term
 - (a) Each Permittee shall obtain coverage under the Construction General Permit for all long-term maintenance programs including but not limited to any project under the Capital Improvement Program (CIP) including but not limited to: pavement replacement; sidewalk replacement; channel maintenance; roadside maintenance (such as: vegetation removal); or

²⁰ Technology based effluent limits.

grading, clearing or excavation activities that disturb 1 or more acres of land either for an individual project or as part of a long-term city/county plan that may be less.

9. Public Industrial Activities Management
 - (a) Each Permittee shall obtain separate coverage under the Industrial General Permit for any municipal activity subject to U.S. EPA regulations at CFR 122.26 for the discharge of storm water associated with industrial activity. These facilities include, but are not limited to:
 - (1) Publicly owned wastewater treatment plants with a design flow of 1 MGD or more or required to have an approved pretreatment program under 40 CFR 403.
 - (2) Landfills that receive or have received industrial waste or subject to regulation under Subtitle D of EPRCA.
 - (3) Hazardous Waste Treatment, Storage and Disposal Facilities.
 - (4) Steam Electric Power Generating Facilities.
 - (5) Airports (SIC Major Group 45).
 - (6) Ports (SIC Major Group 44).
 - (7) Local and Suburban Transit (SIC Major Group 41).
10. 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 7 business days after the situation of emergency has passed.
11. Municipal Employee and Municipal Contractor Training
 - (a) Each Permittee shall, no later than (6 months after Order adoption date 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 (6 months after Order adoption date and annually thereafter before June 30), train all of their employees and 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 (6 months after Order adoption date) 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.

PART 10 – Illicit Connections and Illicit Discharges Elimination Program

1. Each Permittee shall eliminate all Illicit Connections and Illicit Discharges (IC/ID) 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.
2. 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 (2 years after Order adoption date), map all permitted connections to their storm drain system. All Permittees shall map incidents of illicit connections and discharges on their baseline maps, and shall transmit this information to the Regional Water Board no later than (2 years after Order adoption date). Permittees shall use this information to identify priority areas for further investigation and elimination of IC/ID.
3. 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.
4. Illicit Connections
 - (a) Screening for Illicit Connections

- (1) Each Permittee shall submit in the annual report:
 - (A) A GIS layer showing the location and length of underground pipes 18 inches and greater in diameter, and channels within their jurisdiction in accordance with the following schedule:
 - (i) All channeled portions of the storm drain system no later than (365 days after Order adoption date).
 - (ii) All portions of the storm drain system consisting of storm drain pipes 36 inches in diameter or greater, (no later than 3 years after Order adoption date).
 - (iii) All portions of the storm drain system consisting of storm drain pipes 18 inches in diameter or greater, (no later than 5 years after Order adoption date).
 - (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)²¹. Permittees shall conduct field screening 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, and that have not been screened after (3 years before Order adoption date), no later than (5 years after Order adoption date).
 - (B) High priority areas identified during the mapping of illicit connections and discharges, and that have not been screened after (3 years before Order adoption date), no later than (5 years after Order adoption date).
 - (C) All portions of storm drain systems 50 years or older in age and that have not been screened after (3 years before Order adoption date), no later than (5 years after Order adoption date).
 - (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.

²¹ *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

- (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 -
Each Permittee shall keep records of all illicit connection investigations and the formal enforcement taken to eliminate all illicit connections.
5. Illicit Discharges
- (a) Investigation -
Each Permittee shall investigate an illicit/ illegal discharge during or immediately following containment and cleanup activities, and shall take formal 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 clean up all illegal discharges, including hazardous substances.
 - (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.

PART 11 – REPORTING PROGRAM

1. The Permittees shall convene an adhoc working group to develop an Electronic Reporting Program, the basis of which shall be the requirements in this Order and the questions in the attached Monitoring Report and Program Report for approval by the Regional Water Board Executive Officer. The Committee shall no later than (6 months after Order adoption date) submit the electronic reporting form and use the form each 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 Permittees shall submit by December 15th of each year beginning the year of 2009, 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).

- (a) The Annual Report shall document the status of the Municipal Storm Water Program, an integrated summary of the results of analyses.
4. Plans shall be submitted to the Regional Water Board Executive Officer in the form of one hard copy and one compact disk (CD) copy (or an electronic equivalent).
 5. Study Reports shall be submitted to the Regional Water Board Executive Officer in the form of one hard copy and one compact disk (CD) copy (or an electronic equivalent).
 6. Progress Reports shall be submitted to the Regional Water Board Executive Officer in the form of one hard copy and one compact disk (CD) copy (or an electronic equivalent).

Certification

I, Catherine E. Kuhlman, 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, North Coast Region, on December 11, 2008.

Catherine E. Kuhlman
Executive Officer