

ATTACHMENT V—REGION SPECIFIC REQUIREMENTS

PART 1 NORTH COAST REGION

1. North Coast Regional Water Board Resolution R1-2004-0087 directs its staff to utilize existing regulatory programs to address sources of sediment within sediment impaired watersheds. The Department owns road right-of-way and other property within watersheds that are listed as impaired for sediment. Some of these facilities have sources of sediment (eroding shoulders, failed culverts, unstabilized cut and fill slopes, etc) that discharge into sediment impaired waterbodies. Consistent with Resolution R1-2004-0087 and the Water Quality Control Plan for the North Coast Region, the Department shall take the following steps in watersheds listed for sediment to identify, prioritize and control sources of sediment that discharge anthropogenic amounts of sediment into impaired waters. These requirements are in addition to any watershed-specific TMDL implementation requirements listed in Attachment IV of this Order. Steps to be taken include:
 - (a) Inventory: Identify sources of excess sediment or threatened discharge, and quantify the discharge or threatened discharges from the source(s).
 - (b) Prioritize: Prioritize efforts to control discharge of excess sediment based on, but not limited to, severity of threat to water quality and beneficial uses, the feasibility of source control, and source site accessibility. The inventory and prioritized steps shall be completed within two (2) years of the adoption of this Order and updated annually.
 - (c) Implement: Develop and implement feasible sediment control practices to prevent, minimize, and control the discharge.
 - (d) Monitor and Adapt: Use monitoring results to direct adaptive management measures in order to refine and adjust erosion control practices and implementation schedules, until sediment discharge is reduced and no longer causes a violation of any sediment related narrative or numeric objective.

Each District within the North Coast Region shall include a time schedule for the above-referenced activities within the District Workplan for Regional Water Board approval. The time schedule shall implement the required activities as quickly as feasible. An annual update on activities and compliance with the projected time schedule shall be included in each subsequent annual report.

2. Removal of riparian vegetation may result in a threatened discharge or an exceedance of a water quality objective. The North Coast Region has many watersheds that are impaired for excess sediment and temperature. Riparian

vegetation shall be protected and restored to the greatest extent feasible and removal may require permitting by the Regional Water Board.

**PART 2
SAN FRANCISCO BAY REGION**

1. Copper

a. The Department shall implement the control measures and report on those control measures according to the provisions below. The purpose of these provisions is to implement the control measures identified in the San Francisco Bay Basin Water Quality Control Plan (Basin Plan) amendment necessary to support the copper site-specific objectives in San Francisco Bay. The Department may implement Provisions 1.b and 1.c alone or in collaboration with Bay Area urban runoff Permittees.

b. Vehicle Brake Pads

- i. The Department shall participate in efforts to reduce the copper discharged from automobile brake pads to surface waters via urban runoff.
- ii. The Department shall participate in the Brake Pad Partnership (BPP) process to develop California legislation phasing out copper from certain automobile brake pads sold in California.
- iii. The Department shall report on legislation development and implementation status in Annual Reports during the Permit term. In the 2013 Annual Report, the Department shall assess status of copper water quality issues associated with automobile brake pads and recommend brake pad-related actions for inclusion in subsequent permit terms if needed.

c. Studies to Reduce Copper Uncertainties

- i. The Department shall conduct or cause to be conducted technical studies to investigate possible copper sediment toxicity and technical studies to investigate sub-lethal effects on salmonids.
- ii. Technical uncertainties regarding copper effects in the Bay are described in the Basin Plan's implementation program for copper site-specific objectives. These uncertainties include toxicity to Bay benthic organisms possibly caused by high copper concentrations as well as possible impacts to the olfactory system of salmonids. The Department shall submit in the Year 1 Annual Report the specific manner in which these information needs will be accomplished and describe the studies to be performed with a schedule. The Department shall report the findings and results of the studies completed, planned, or in progress in the Year 3 Annual Report.

2. Trash Load Reduction

- a. The Department shall demonstrate compliance with Discharge Prohibition 7, Table 4-1 of the San Francisco Bay Regional Water Board Basin Plan¹ through the timely implementation of control measures and other actions to reduce trash loads from the Department's MS4 by 40% by 2015, 70% by 2018, and 100% by 2023 as further specified below.

During the term of this Order, the Department shall develop and implement a Short-Term Trash Load Reduction Plan. The Plan shall be designed to attain a 40 percent reduction in trash loads from the Department's MS4 by July 1, 2015. The Department shall also develop and begin implementation of a Long-Term Trash Load Reduction Plan to attain a 70 percent reduction in trash loads from the MS4 by 2018 and 100 percent reduction by 2023.

b. Short-Term Trash Load Reduction

- i. **Short-Term Trash Loading Reduction Plan** – The Department shall submit a Short-Term Trash Load Reduction Plan, including an implementation schedule, to the Regional Water Board by February 1, 2013. The Plan shall describe control measures and best management practices that are currently being implemented and the current level of implementation and additional control measures and best management practices that will be implemented, and/or an increased level of implementation designed to attain a 40 percent trash load reduction from its MS4 by July 1, 2015.

The Short-Term Trash Load Reduction Plan shall account for required mandatory minimum Full Trash Capture devices called for in section 2.b.iii.

- ii. **Baseline Trash Load and Trash Load Reduction Tracking Method** – The Department shall determine the baseline trash load from its MS4 to establish the basis for trash load reductions from its MS4 and submit the determined baseline trash load level to the Regional Water Board by February 1, 2013, along with documentation of methodology used to determine the load level. The submittal shall also include a description of the trash load reduction tracking method that will be used to account for trash load reduction actions and to demonstrate progress toward and attainment of trash load reduction levels. The submittal shall account for the drainage areas in the Department's jurisdiction that are associated

¹ San Francisco Bay Basin Plan, Chapter 4 – Implementation, Table 4-1 Prohibitions, Prohibition 7, which is consistent with the State Water Board's Enclosed Bays and Estuaries Policy, Resolution 95-84, prohibits the discharge of rubbish, refuse, bark, sawdust, or other solid wastes into surface waters or at any place where they would contact or where they would be eventually transported to surface waters, including flood plain areas.

with the baseline trash load from its MS4, and the baseline trash load level per unit area by land use type and drainage area characteristics used to derive the total baseline trash load level.

In the determination of applicable areas that generate trash loads for inclusion in the Baseline Trash Load, the Department may propose areas for exclusion, with supporting documentation that the areas demonstrate no material trash presence. Such documentation may include data from the maintenance of existing trash capture devices, data from trash flux measurements in the MS4 and the water column of streams during wet weather, and litter audits of high-traffic areas.

The Department shall submit a progress report by February 1, 2012, that describes its approach for determining its baseline trash load and trash load reduction method. The report shall also include the types and examples of documentation that will be used to propose exclusion areas, and the land use characteristics and estimated area of potentially excluded areas.

- iii. **Minimum Full Trash Capture** – The Department shall install and maintain full trash capture devices, to treat runoff from an area that cumulatively totals at least ten percent of the Department’s right-of-way by July 1, 2015.

All installed devices that meet the following full trash capture definition may be counted toward this requirement regardless of date of installation. A full capture system or device is any single device or series of devices that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate Q resulting from a one-year, one-hour, storm in the subdrainage area.

c. Long-Term Trash Load Reduction

- i. The Department shall submit a Long-Term Trash Load Reduction Plan, including an implementation schedule, to the Regional Water Board by February 1, 2015. The Plan shall describe control measures and best management practices that are being implemented and the level of implementation and additional control measures and best management practices that will be implemented, and/or an increased level of implementation designed to attain a 70 percent trash load reduction from its MS4 by July 1, 2018, and 100 percent trash load reduction by July 1, 2023.
- ii. In each Annual Report, the Department shall provide a summary of its trash load reduction actions (control measures and best management practices) including the types of actions and levels of implementation, and the total trash loads by volume removed. Beginning with the 2012 Annual

Report, the Department shall also report its percent annual trash load reduction relative to its Baseline Trash Load.

- iii. The Department shall retain records for review providing supporting documentation of trash load reduction actions and the volume removed from full trash capture devices and from additional control measures or best management practices implemented. Data may be combined for specific types of full trash capture devices deployed in the same drainage area. These records shall have the specificity required for the trash load reduction tracking method established pursuant to subsection 2.b.iii of this Part.

3. Sediment Load Reduction

The Department shall implement the following provisions to reduce excessive erosion and sediment inputs into San Francisco Bay Region waters:

- a. The Department shall consider the use of bioengineering systems principles to provide long-term stability to riparian systems for all new projects. Designs shall include a process for including native riparian plantings into creek stabilization projects.
- b. The Department shall consider the performance guidelines established for the applications of soil bioengineering systems developed by federal and state agencies in the design of bank and slope stabilization projects and justify variances from these guidelines to the Regional Water Board.
- c. The Department shall establish a monitoring program to track the long-term success of soil bioengineering systems.
- d. Reporting: The Department shall describe in the Annual Report the implementation of bioengineering system principles, results of the monitoring program, and an evaluation of the effectiveness of soil bioengineering systems.

4. Storm Water Pump Stations

- a. The objective of this provision is to prevent the discharge of water with low dissolved oxygen (DO) from pump stations, and to explore the use of pump stations for trash capture and removal from waters to protect beneficial uses of receiving waters.
- b. Operation and Maintenance of Pump Stations
The Department shall develop and implement measures to operate, inspect, and maintain these facilities to eliminate non-storm water discharges containing pollutants, and to reduce pollutant loads in the storm water discharges to comply with water quality standards.
- c. The Department shall comply with the following implementation measures to reduce polluted water discharges from its pump stations:
 - i. Complete an inventory of pump stations within the Department's jurisdiction in Region 2, including locations and key characteristics² within one year of permit adoption.
 - ii. Inspect and collect DO data from all pump stations twice a year during the dry season after July 1, starting in 2011. DO monitoring is exempted where all discharge from a pump station remains in the storm water collection system or infiltrates into a dry creek immediately downstream.
 - iii. If DO levels are at or below 3 milligrams per liter (3 mg/L), apply corrective actions, such as continuous pumping at a low flow rate, aeration, or other appropriate methods to maintain DO concentrations of the discharge above 3 mg/L. Verify corrective actions are effective by increasing the DO monitoring interval to weekly until two weekly samples are above 3 mg/L.
 - iv. Starting in fall 2011, inspect pump stations a minimum of two times during the wet season in the first business day after ¼-inch and larger storm events after a minimum of a two week antecedent period with no precipitation. Post-storm inspections shall collect and report presence and quantity estimates of trash, including presence of odor, color, turbidity, and floating hydrocarbons. Remove debris and trash and replace any oil absorbent booms, as needed.

² Characteristics include name of pump station, latitude and longitude in WGS 84, number of pumps, drainage area in acres, dominant land use(s), first receiving water body, maximum pumping capacity of station in gallons per minute (gpm), flow measurement capability (Y or N), flow measurement method, average wet season discharge rate in gpm, dry season discharge (Y, N, or unknown), nearest municipal wastewater treatment plant, wet well storage capacity in gallons, trash control (Y or N), trash control measure, and date built or last updated.

- d. The Department shall report information resulting from 3.c.ii.-iv. including DO monitoring data and subsequent corrective actions taken to verify compliance with the 3 mg/L implementation level, in its Annual Report, and maintain records of inspection and maintenance activities and volume or mass of waste materials removed from pump stations.

5. Conditionally Exempt Non-Storm Water Discharges

- a. Discharges from water line flushing and potable water sources (Provision B.2.k. and B.2.m.) shall be dechlorinated prior to discharge.
- b. Discharges of landscape irrigation water (Provision B.2.l.) are conditionally exempt in the San Francisco Bay Region if they are minor, incidental discharges.

PART 3
LOS ANGELES REGION

1. General Discharge Provisions

Discharges of Summer Dry Weather flows from the Department's MS4 into Santa Monica Bay or into Marina Del Rey Harbor Basins D, E, or F, including Mothers' Beach (County of Los Angeles) that cause or contribute to exceedances of the bacteria Receiving Water Limitations are prohibited.

2. Pilot Project/Retrofit BMPs

The Department shall submit a plan no later than six months after the effective date of this Order to maintain and operate BMPs installed in the Los Angeles Region under its Pilot Retrofit Study. The Plan shall provide justification for any pilot project BMP that has been decommissioned or is proposed to be decommissioned, including the reasons for not undertaking a retrofit of such BMPs to make them operable to provide a water quality benefit.

PART 4
CENTRAL VALLEY REGION

Sacramento and San Joaquin River Delta

The Department shall perform the following to identify, reduce or eliminate the impacts of its discharges to the Sacramento and San Joaquin River Delta:

1. Enhance the Department's BMPs for Discharges to the Delta.

The Department shall implement additional BMPs for activities associated with discharges to the Delta. The additional BMPs shall be described in the District Work Plans.

2. Methyl Mercury Program for Treatment Measures that Pond Water and Discharge to the Delta.

The Department shall coordinate with Central Valley Regional Water Board staff to develop and implement a plan for monitoring methyl mercury in the influent and effluent of treatment measures that discharge to the Delta. The plan must also include monitoring of the receiving water for methyl mercury. The plan shall be submitted for Regional Water Board Executive Officer approval by the end of Year 1.

PART 5 LAHONTAN REGION

The Department shall implement the program specified in the SWMP. The Department shall also implement any additional requirements contained in this section.

Lahontan Region: The Water Quality Control Plan for the Lahontan Region (Basin Plan) has additional requirements which have been historically applied to the Department's permits and which apply to this NPDES Permit in the Lahontan Region. These requirements include:

1. Numerical effluent limitations (NELs) for storm water discharges to surface waters within the Lake Tahoe Hydrologic Unit, as specified in Table 5.6-1 of the Basin Plan³.
2. The following nonstorm water discharges to surface waters, which are permitted under Nonstorm Water Provision B.2. of this Order, are prohibited within the Lahontan Region unless specifically authorized by the Executive Officer:
 - a. Water line-flushing discharges.
 - b. Potable water resource discharges.
 - c. Uncontaminated pumped ground water discharges that would violate numerical effluent limitations within the Lake Tahoe Hydrologic Unit or receiving water objectives throughout the Lahontan Region, as specified in Chapter 3 of the Basin Plan.
 - d. Air conditioning condensate discharges (not applicable to vehicles).
3. Storm water/urban runoff collection, treatment, and/or infiltration disposal facilities shall be designed, installed, and maintained for the discharge of storm water runoff from all impervious surfaces generated by the 20-year, one-hour design storm (1) within the Truckee River Hydrologic Unit (3/4-inch of rain), (2) within the East Fork Carson River and West Fork Carson River Hydrologic Units (one inch of rain), and (3) within the Mammoth Creek Hydrologic Unit above the 7,000-foot elevation (one inch of rain).
4. Within the Lake Tahoe Hydrologic Unit, the Department shall implement a pollutant load reduction program by retrofitting its roadways and facilities to reduce loading of fine sediment particles (less than 16 microns in diameter), total nitrogen, and total phosphorus to Lake Tahoe and its tributaries. The program shall include implementing a combination of source control techniques and treatment facilities effective at removing the pollutants of concern. Treatment facilities shall be designed and constructed following a strategic approach that focuses on removing

³ A Basin Plan Amendment for the Lake Tahoe TMDL was adopted in November 2010 that modifies the implementation of the NELs. Once approved by the State Water Board, OAL, and USEPA, these NELs will only apply to construction activities.

pollutants from areas and discharge points with the highest loading rates and greatest connectivity to surface waters.

5. In 2009, the Department completed the Natural Environment as Treatment (NEAT) study and report for 38 miles of roadway within the Lake Tahoe Hydrologic Unit. The NEAT approach is consistent with the strategic approach required by this permit. Projects developed within the NEAT study area shall be designed and constructed based on the priority areas identified by the study.
6. The Department shall reduce fine sediment particle, total nitrogen, and total phosphorus loads discharged to Lake Tahoe in accordance the pollutant load allocation schedule described in the Basin Plan amendment adopted by the Lahontan Regional Board on November 16, 2010⁴. This requirement shall become effective after approval of the Basin Plan amendment by the State Water Board, USEPA, and the Office of Administrative Law, and upon written notice from the State Water Board that the same version of the TMDL has been fully approved by all three agencies and is in effect.
7. The Department shall continue to participate in the latest Environmental Improvement Program (EIP) for Lake Tahoe to identify projects, and develop and fund an implementation and maintenance program, and develop a funding mechanism for storm water runoff and erosion control projects in the Lake Tahoe Hydrologic Unit.
8. Within the Truckee River Hydrologic Unit, the Department shall participate with the Town of Truckee and Placer County in implementing the Truckee River Water Quality Monitoring Program. Pursuant to Water Code section 13383, the Department shall develop and implement a supplemental water quality monitoring program that addresses its pollutant discharges to surface waters in the watershed; alternately, the Department may participate in a cost-sharing program in coordination with the Town of Truckee and Placer County to support their Truckee River Water Quality Monitoring Program. Such programs shall be subject to the approval of the Lahontan Regional Water Quality Control Board Executive Officer.

The Department shall report the amounts of deicer and traction sand materials applied to roadways within the Truckee River Hydrologic Unit, and the amount of traction sand recovered during each water year (October 1 through September 30). The information shall be reported as part of the annual Lahontan Region Report specified in requirement 12 below.

The Department shall identify legacy sites that are sources of sediment discharges in the Truckee River Hydrologic Unit. Legacy sites are areas where previous land disturbance is a continuing source of erosion. Such areas may include eroding cut

⁴ Proposed Water Quality Control Plan Amendments, Total Maximum Daily Load for Sediment and Nutrients in Lake Tahoe, November 16, 2010.

or fill slopes, historical fill pads, undersized culverts, and other features that require mitigation. The Department shall develop an inventory of these legacy sites and a program to implement appropriate sediment controls as funding allows. The inventory of legacy sites and the progress toward mitigating their impacts shall be reported in accordance with requirement 12 below.

9. Unless granted a variance by the Lahontan Water Board Executive Officer, there shall be neither removal of vegetation nor disturbance of existing ground surface conditions between October 15 of any year and May 1 of the following year, except when there is an emergency situation that threatens the public health or welfare. This prohibition period applies to the Lake Tahoe, Truckee River, East Fork Carson River, and West Fork Carson River Hydrologic Units and above the 5,000-foot elevation in the portions of Mono and Inyo Counties within the Lahontan Region.

10. Project Review Requirements

- a. The Department shall participate in early project design consultation for all projects within the Lake Tahoe, Truckee River, and Mammoth Creek Hydrologic Units.
- b. The Department must solicit Lahontan Water Board staff review when project development/design is at the 30 percent design level. Consultation with Lahontan Water Board staff shall continue throughout the remainder of the design development and environmental review process.

11. Snow and Ice Control

Wherever abrasives and/or de-icing agents are used by the Department on highways within the Lake Tahoe Hydrologic Unit, the following must be recorded and reported to the Lahontan Water Board:

- a. The storage location and source of the abrasive materials.
- b. The volume and mass of abrasives and deicing agents used and recovered on individual highway segments.
 - 1) Individual highway segments must be less than five miles in length in areas where application rates are unspecified and in areas that may receive repeated applications of up to 1000 pounds of abrasive per lane mile.
 - 2) Individual highway segments must be less than 10 miles in length in areas that may receive repeated applications of up to 600 pounds of abrasive per lane mile.
 - 3) The Department must develop and implement methods for tracking and estimating applications and recovery volumes and mass on individual segments, as needed, and report the estimation method with the volume and mass.

12. Reporting/Notification Issues

An annual Lahontan Region Report covering the prior water year (October 1 through September 30) must be submitted to the State and Lahontan Water Board annually by January 15 of each year that includes the following:

- a. Results of the items specified in requirements 8 and 11 above.
- b. A summary of the Department's EIP activities in the Lake Tahoe Hydrologic Unit, including progress on implementing the EIP, any changes in EIP project delivery scheduling from the prior year, proposed dates for completion, and funding considerations.
- c. A description of activities conducted (e.g., treatment facilities implemented, source control, maintenance activities) to reduce fine particle sediment and nutrient loads from Department discharges in the Lake Tahoe Hydrologic Unit.
- d. A description of all pilot studies conducted and other innovative approaches tested for the purpose of reducing fine particle sediment in the Department's discharges. The Department shall also summarize the results of all completed and ongoing pilot studies relating to pollutant reductions in the Lake Tahoe Hydrologic Unit.

The annual report must conform to the format most-recently accepted by the Lahontan Water Board Executive Officer (***LAHONTAN REGION REPORT***).

PART 6
SAN DIEGO REGION

1. In connection with a Consent Decree entered to resolve litigation in United States v. California Department of Transportation (No. 97-0037-EIG), the Department agreed to implement certain retrofit and permanent post-construction treatment controls in watersheds under the jurisdiction of the San Diego Regional Water Board. Specifically, in a Certificate of Compliance submitted to USEPA on July 1, 2008, and in subsequent written correspondence dated August 12, 2008, October 3, 2008, and January 7, 2009, the Department represented that it would meet the requirements of paragraph 6.61 of the Consent Decree with a retrofit program as proposed at Table 5-3 of its proposed 2004 permit reapplication/SWMP, setting out a list of Approved Treatment BMPs, as supplemented by the list of controls identified in Table 2-5 of the Department's May 2007 Project Planning and Design Guide, at page 2-12. The foregoing information is part of the administrative record for this Order and the terms of this Order are consistent with the understandings and agreements reached in the Consent Decree, the Certificate Compliance, and the referenced subsequent written correspondence.