## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

### **MEETING OF SEPTEMBER 14, 2011**

Kings Beach

ITEM:

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**SUBJECT:** 

PUBLIC HEARING: UPDATED WASTE DISCHARGE REQUIREMENTS (WDR) AND NATIONAL POLLUTANT

**ELIMINATION SYSTEM (NPDES) PERMIT FOR** 

STORMWATER/URBAN RUNOFF DISCHARGES FROM EL DORADO COUNTY, PLACER COUNTY, AND THE CITY OF

SOUTH LAKE TAHOE WITHIN THE LAKE TAHOE

HYDROLOGIC UNIT, PLACER AND EL DORADO COUNTIES

**CHRONOLOGY:** 

A September Public Hearing is scheduled to solicit public testimony regarding a proposed update to the permit described above, known as the NPDES Municipal Stormwater Permit. Water Board staff issued a tentative update to the NPDES Municipal Stormwater Permit on August 10, 2011 to interested parties and requested written comments by September 15, 2011. Board staff will consider comments received and issue a proposed NPDES Municipal Stormwater Permit at least 30 days prior to the November 9 and 10, 2011 Water Board meeting.

The agenda announcement for the November 9 and 10, 2011 Water Board meeting is expected to be available on or about October 20, 2011 and will be accessible on the internet at: <a href="http://www.waterboards.ca.gov/lahontan/board">http://www.waterboards.ca.gov/lahontan/board</a> info/agenda/

**DISCUSSION:** 

Portions of El Dorado County and Placer County and the entire jurisdiction of the City of South Lake Tahoe lie within the Lake Tahoe Hydrologic Unit. Because Lake Tahoe is an Outstanding National Resource Water negatively impacted by urban runoff discharged from these municipalities, the Lahontan Water Board adopted Order 6-92-02 in January 1992 as part of the Phase I NPDES program to regulate municipal stormwater systems on the California side of the Lake Tahoe watershed. The NPDES Municipal Stormwater Permit provided the Water Board a mechanism to work with the local municipalities to improve stormwater management practices in the Tahoe area.

NPDES Municipal Stormwater Permits expire five years following adoption, and Order 6-92-02 was belatedly updated in October 2000 by Order 6-00-82. The subsequent permit update, Order R6T-2005-0026, required the Permittees to develop comprehensive stormwater management programs to further control runoff from construction, industrial, and residential properties, as well as

enhance stormwater facility inspection practices and extend public education and outreach programs.

This permit update maintains the previous stormwater management program requirements and adds pollutant load reduction and associated monitoring requirements to implement the Lake Tahoe Total Maximum Daily Load program.

The Water Board will not be taking any formal action at the September 14<sup>th</sup> Public Hearing. However, the Water Board anticipates considering the proposed updated NPDES Municipal Stormwater Permit for adoption at the November Water Board meeting on November 9<sup>th</sup> or 10<sup>th</sup> in South Lake Tahoe.

Water Board staff has met with Permittees and other stakeholders to discuss the tentative NPDES Municipal Stormwater Permit. Issues raised during these discussions that you may hear during this Public Hearing include:

- 1. Cost of compliance is too great, especially in light of reduced and uncertain state and federal funding.
- 2. Load reduction schedule is too aggressive.
- 3. Lack of confidence in load estimation and condition assessment tools.

### RECOMMENDA-TION:

This is an information item only; no Water Board action will be taken at the conclusion of this meeting. The Water Board may provide direction to staff as appropriate.

ENCLOSURE	ITEM	Bates Number	
1	Cover letter for Order No. R6T-2000-tentative (i.e., NPDES Municipal Stormwater Permit)		
2	Order No. R6T-2000-tentative	7-5	
	Attachment A – Fact Sheet	7-29	
	Attachment B – Pollutant Load Allocation Tables	7-40	
	Attachment C - Monitoring and Reporting Program	7-43	
	Attachment D – Lake Clarity Crediting Program Handbook V1.0	7-59	
-	Attachment E – Selected Water Quality Objectives	7-61	
	Attachment F - Compliance with Water Quality Objectives	7-66	
	Attachment G – Standard Provisions, Reporting Requirements, and Notifications	7-70	

# **ENCLOSURE 1**



Secretary for

**Environmental Protection** 

# California Regional Water Quality Control Board

Lahontan Region

2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150 (530) 542-5400 • Fax (530) 544-2271 www.waterboards.ca.gov/lahontan



August 10, 2011

Interested Parties,

TENTATIVE UPDATED WASTE DISCHARGE REQUIREMENTS/NPDES PERMIT AND MONITORING AND REPORTING PROGRAM FOR THE CITY OF SOUTH LAKE TAHOE, EL DORADO COUNTY, AND PLACER COUNTY STORM WATER/URBAN RUNOFF DISCHARGE, EL DORADO AND PLACER COUNTIES

Enclosed are tentative updated waste discharge requirements/NPDES permit and monitoring and reporting program for the City of South Lake Tahoe, El Dorado County, and Placer County storm water/urban runoff discharge (Permit). The Water Board requests that you review the enclosed documents and provide us with your written comments no later than September 15, 2011.

Permit Table IV.B and monitoring and reporting program Table I.B are not complete at this time. The Lake Clarity Crediting Program Handbook (v0.99; Attachment D) will soon be updated to v1.0. The Water Board will insert needed values in Tables IV.B and I.B and will circulate a revised draft Permit with the updated Handbook for a 30-day review and comment period on September 30, 2011.

If you should have any questions or wish to discuss these waste discharge requirements, you may contact me by phone at (530) 542-5439 or by email RLarsen@waterboards.ca.gov.

Robert Larsen

**Environmental Scientist** 

Attachment: Order R6T-2011-(tentative)

BL/adw/T:Muni2011.CovLtr.doc

File Under: Municipal NPDES Storm Water - 1 each in Placer, El Dorado, and City of SLT

# **ENCLOSURE 2**

#### STATE OF CALIFORNIA

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

ORDER NO. R6T-2011-(TENT) NPDES NO. CAG616001

UPDATED WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR

STORM WATER/URBAN RUNOFF DISCHARGES FROM EL DORADO COUNTY, PLACER COUNTY, AND THE CITY OF SOUTH LAKE TAHOE WITHIN THE LAKE TAHOE HYDROLOGIC UNIT

### **FINDINGS**

The California Regional Water Quality Control Board, Lahontan Region (hereinafter referred to as the Water Board) finds that:

## A. Discharger Information and Permit History

- 1. The City of South Lake Tahoe (City), El Dorado County, and Placer County discharge storm water/urban runoff to surface waters of the Lake Tahoe Hydrologic Unit (LTHU). These discharges occur within various hydrologic sub-areas (watersheds) throughout the LTHU. The City, El Dorado County, and Placer County are considered Co-Permittees under this National Pollutant Discharge Elimination System (NPDES) Permit and are referred to collectively as "Permittees".
- 2. These Updated Waste Discharge Requirements and NPDES Permit for Storm Water/Urban Runoff Discharges from El Dorado County, Placer County, and the City of South Lake Tahoe will be referred to throughout this Order as the "Permit."
- 3. Prior to issuance of this Permit, storm water discharges from the Permit Area were covered under Order No. R6T-2005-0026, adopted by the Regional Water Board on October 12, 2005, which replaced Order No. 6-00-82, adopted by the Regional Water Board on October 12, 2000.
- 4. The Permittees submitted Reports of Waste Discharge in April 2010 requesting renewal of waste discharge requirements under the National Pollutant Discharge Elimination System (NPDES) program to permit storm water discharges from municipal storm collection, conveyance, and treatment facilities within their jurisdictions.

### B. Permit Area

 The jurisdictional areas of the City, El Dorado County, and Placer County that fall within the LTHU are considered the "Permit Area." The Permittees are responsible for all storm water/urban runoff discharges in the Lake Tahoe watershed within the LTHU of their respective City and Counties.

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Federal, state, regional, or local entities within the Permittees'
jurisdictional boundaries and not currently named in this Permit may
operate storm drain facilities and/ or discharge storm water to storm
drains and receiving waters covered by this NPDES Permit. The
Permittees may lack legal jurisdiction over these entities under State
and Federal constitutions.

The Water Board will coordinate with these entities not named in this Permit that operate storm drain facilities and/ or discharge storm water to storm drains and receiving waters covered by this NPDES Permit to implement programs that are consistent with the requirements of this Permit.

3. Permittees should work cooperatively to control the contribution from pollutants from one jurisdiction to an adjacent jurisdiction through interagency agreements or other formal arrangements.

## C. Nature of Discharge

- 1. Municipal point source discharges of runoff from urbanized areas remain a leading cause of impairment of surface waters in California. Urban runoff contains wastes, as defined in the California Water Code, and pollutants, as defined in the federal Clean Water Act, and adversely affects the waters of the State and their designated beneficial uses. The most common pollutant categories in urban runoff within the LTHU include total suspended solids, sediment (due to anthropogenic activities); pathogens (e.g., bacteria, viruses, protozoa); nutrients (e.g., nitrogen and phosphorus); oxygen demanding substances (decaying vegetation, animal waste); oil, grease, and other petroleum hydrocarbons; and trash. In general, the pollutants that are found in municipal storm water runoff can harm human health and aquatic ecosystems.
- In addition, the high volumes and high velocities of storm water discharged from municipal separate storm sewer systems (MS4s) into receiving waters can adversely impact aquatic ecosystems and stream habitat and cause stream bank erosion and physical modifications. These changes are collectively termed "hydromodification".

3. Lake Tahoe's deep water transparency, as measured by the Secchi disk, has been declining since transparency measurement began in the late 1960's. The Lake Tahoe TMDL Report (November 2010) identifies elevated levels of very fine sediment (particles less than 16 microns) and increased algal growth rates as the causes of transparency loss. Consequently, the primary pollutants of concern for storm water treatment in the LTHU are the number of fine sediment particles (less than 16 microns) and the mass of nutrients that support algal growth (nitrogen and phosphorus).

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- 4. One of the leading sources of very fine sediment particles is roadways. To enhance the safety of motorists in the winter months, the Permittees' winter roadway operations include the application of traction abrasive and deicing materials. Traction abrasives, when left on the road surface following snowmelt, can be a significant source of the pollutants of concern if not properly applied and recovered.
- 5. Stormwater runoff within the Permittees jurisdiction generally flows into pipes and open channels and often passes through pretreatment vaults, treatment basins, and infiltration structures before being discharged to surface waters land. This Permit describes all stormwater management infrastructure maintained by the Permittees as "collection, conveyance, and treatment facilities". For purposes of this Permit, collection, conveyance, and treatment facilities are synonymous with "municipal separate storm sewer systems" or MS4s.

### D. Federal, State and Regional Regulations

- The Water Quality Act of 1987 added § 402(p) to the Clean Water Act (CWA) (33U.S.C. § 1251-1387). This section requires the United States Environmental Protection Agency (U.S. EPA) to establish regulations setting forth NPDES requirements for storm water discharges in two phases.
  - a. U.S. EPA Phase I storm water regulations were directed at MS4s serving a population of 100,000 or more, and storm water discharges associated with ten categories of industrial activities, including construction activities disturbing more than 5 acres. In addition, municipalities whose storm water discharges contribute to violations of water quality standards or is a signification contributor of pollutants to waters of the United States may also be issued a NPDES permit under Phase I. Consequently, some MS4s that serve a population below 100,000, such as the Permittees, were brought into the Phase I program by NPDES permitting authorities.

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- The Phase 1 regulations were published on November 16, 1990 (55 Fed. Reg. 47990).
- b. U.S. EPA Phase II storm water regulations are directed at storm water discharges not covered in Phase I, including small MS4s (population of less than 100,000) in urbanized areas, small construction projects (less than 5 acres, but greater than 1 acre), municipal facilities with delayed coverage under the Intermodal Surface Transportation Efficiency Act of 1991, and other discharges for which the U.S. EPA Administrator or the State determines that the storm water discharge contributes to a violation of a water quality standard, or is a significant contributor of pollutants to waters of the U.S. The Phase II Final Rule was published on December 8, 1999 (64 Fed. Reg. 68722).
- 2. The CWA allows the U.S. EPA to authorize states with an approved environmental regulatory program to administer the NPDES program in lieu of the U.S. EPA. The State of California is an authorized State. The Porter-Cologne Water Quality Control Act (California Water Code) authorizes the State Water Resources Control Board (State Water Board), through the Regional Water Boards, to regulate and control the discharge of wastes that could affect the quality of waters of the State, including waters of the United States, and tributaries thereto.
- 3. Under CWA § 303(d), States are required to identify a list of impaired water bodies and develop and implement Total Maximum Daily Loads (TMDLs) for these waterbodies (33 USC § 1313(d)(1)). Lake Tahoe is listed on the CWA § 303(d) impaired water bodies list. On November 16, 2010 the Water Board adopted an amendment to its Water Quality Control Plan to incorporate a TMDL for Lake Tahoe. The amendment established waste load allocations for urban stormwater discharges for fine sediment particles, total nitrogen, and total phosphorus. This Permit incorporates approved waste load allocations for municipal storm water discharges in the LTHU and requires the preparation of Pollutant Load Reduction Plans to meet established waste load allocations.
- 4. This Permit does not constitute an unfunded local government mandate subject to subvention under Article XIIIB, Section (6) of the California Constitution for several reasons, including, but not limited to, the following.

First, this Permit implements federally mandated requirements under CWA § 402, subdivision (p)(3)(B)(33 U.S.C. § 1342(p)(3)(B)). This includes federal requirements to effectively prohibit non-storm water discharges and to include such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. The

authority exercised under this Permit is not reserved state authority under the Clean Water Act's savings clause (cf. Burbank v. State Water Resources Control Bd. (2005) 35 Cal.4<sup>th</sup> 613, 627-628 [relying on 33 U.S.C. § 1370, which allows a state to develop requirements which are not "less stringent" than federal requirements]), but instead, is part of a federal mandate to develop pollutant reduction requirements for municipal separate storm sewer systems. To this extent, it is entirely federal authority that forms the legal basis to establish the permit provisions. (See, City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region (2006) 135 Cal.App.4th 1377, 1389; Building Industry Ass'n of San Diego County v. State Water Resources Control Bd. (2004) 124 Cal.App.4th 866, 882-883.)

Likewise, this Permit implements federally mandated requirements under 303(d) of the CWA and section 122.44(d)(1)(vii)(B) of the Code of Federal Regulations. Specifically, the provisions of this Permit to implement the Lake Tahoe TMDL are federal mandates. The CWA requires TMDLs to be developed for waterbodies that do not meet federal water quality standards (33 U.S.C. § 1313(d)). Once the U.S. EPA or a state develops a TMDL, federal law requires that permits must contain effluent limitations consistent with the assumptions of any applicable waste load allocation. (40 CFR 122.44(d)(1)(vii)(B)).

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

The Clean Water Act and the Porter-Cologne Water Quality Control Act largely regulate storm water with an even hand, but to the extent there is any relaxation of this even-handed regulation, it is in favor of the local agencies. Except for municipal separate storm sewer systems, the Clean Water Act requires point source dischargers, including discharges of storm water associated with industrial or construction activity, to comply strictly with water quality standards. (33 U.S.C. §

1311(b)(1)(C), Defenders of Wildlife v. Browner (1999) 191 F.3d 1159, 1164-1165 [noting that industrial storm water discharges must strictly comply with water quality standards].) As discussed in prior State Water Resources Control Board decisions, in many respects this Permit does not require strict compliance with water quality standards. (SWRCB Order No. WQ 2001-15, p. 7.) The Permit, 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 subject to certain voting requirements contained in the California Constitution. (See California Constitution XIII D, section 6, subdivision (c); see also *Howard Jarvis Taxpayers Association v. City of Salinas* (2002) 98 Cal. App. 4th 1351, 1358-1359.). The ability of a local agency to defray the cost of a program without raising taxes indicates that a program does not entail a cost subject to subvention. (*County of Fresno v. State of California* (1991) 53 Cal.3d 482, 487-488.)

Fourth, the Permittees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in federal Clean Water Act section 301, subdivision (a) (33 U.S.C. § 1311(a)). To the extent that the local agencies have voluntarily availed themselves of the permit, the program is not a state mandate. (Accord *County of San Diego v. State of California* (1997) 15 Cal.4th 68, 107-108.) 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 XIIIB, Section (6) of the California Constitution.

- 5. The Water Board adopted a Water Quality Control Plan (Basin Plan) for the Lahontan Region on March 31, 1995. The Basin Plan specifies the beneficial uses of water bodies within the LTHU and contains both narrative and numerical water quality objectives for these waters. The following beneficial uses identified in the Basin Plan apply to all watersheds covered by this Permit:
  - a. Municipal and domestic supply,
  - b. Agricultural supply,
  - c. Water contact recreation,

- d. Non-contact water recreation,
- e. Ground water recharge.
- f. Freshwater replenishment,
- g. Navigation,
- h. Commercial and sport fishing,
- i. Cold freshwater habitat,
- j. Wildlife habitat,
- k. Preservation of biological habitats of special significance,
- I. Rare, threatened, or endangered species,
- m. Migration of aquatic organisms,
- n. Spawning, reproduction, and development,
- o. Water quality enhancement, and
- p. Flood peak attenuation/flood water storage
- 6. State Water Board Resolution No. 68-16 contains the state Antidegradation Policy, titled "Statement of Policy with Respect to Maintaining High Quality Waters in California" (Resolution 68-16), which applies to all waters of the state, including ground waters of the state, whose quality meets or exceeds (is better than) water quality objectives. Resolution No. 68-16 is considered to incorporate the federal Antidegradation Policy (40 CFR131.12) where the federal policy applies, (State Water Board Order WQO 86-17). Administrative policies that implement both federal and state antidegradation policies acknowledge that an activity that results in a minor water quality lowering, even if incrementally small, can result in violation of Antidegradation Policies through cumulative effects, for example, when the waste is a cumulative, persistent, or bioaccumulative pollutant.

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:

- Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
- b. 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.
- c. Where high quality waters constitute an outstanding National resource, including waters of exceptional recreational or ecological significance like Lake Tahoe, that water quality shall be maintained and protected.
- 7. The requirements in this Permit may be more specific or detailed than those enumerated in federal regulations under 40 CFR122.26 or in U.S. EPA guidance. However, the requirements have been designed to implement and 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.

### E. Storm Water Management Plans

- The 2005 permit (Order R6T-2005-0026) required the Permittees to develop and implement comprehensive, activity-based storm water management programs that include construction, commercial, industrial, and residential site controls coupled with a facilities inspection program and thorough public outreach and education plans. Each Permittee prepared and submitted detailed Storm Water Management Plans (SWMPs) as required.
- The current SWMPs provide the necessary framework for the Permittees' storm water programs. Although it will be necessary for the Permittees to revisit and amend the SWMPs to reflect current conditions and planned activities, the Permittees need not prepare new SWMPs.

### F. Total Maximum Daily Loads – Lake Tahoe

1. On November 16, 2010 the Water Board adopted Resolution R6T-2010-0058, amending the Basin Plan to incorporate the Total Maximum Daily Load (TMDL) for sediments and nutrients for Lake Tahoe, designed to restore Lake Tahoe to meet the water quality objective for the lake's deep water transparency. The TMDL identified pollutant loads by source category, and set load allocations for each source category and identified an implementation plan for restoring Lake Tahoe's deep water transparency.

- 2. The approved Basin Plan amendment requires the Permittees and the California Department of Transportation (CalTrans) to meet load reduction requirements specified by the Lake Tahoe TMDL. Pollutant load allocation tables are included in Attachment B of this Permit. The Basin Plan acknowledges that these agencies will likely consider a variety of different design storms for facility sizing, alternative treatment options, roadway operations practices, and local ordinances to reduce average annual pollutant loads to meet waste load allocation requirements.
- 3. The Basin Plan amendment and the Lake Tahoe TMDL require Lake Tahoe basin municipalities and the CalTrans to develop and implement comprehensive Pollutant Load Reduction Plans (PLRPs) to describe how proposed operations and maintenance activities, capital improvements, facilities retrofit projects, ordinance enforcement, and other actions will meet required pollutant load reduction requirements. PLRPs provide the Permittees the opportunity to prioritize pollutant load reduction efforts and target sub-watersheds that generate the highest annual average pollutant loads.
- 4. The Water Board developed the Lake Clarity Crediting Program to establish protocols for accounting and tracking pollutant load reductions within the urban environment.
- 5. On February 9, 2011 the Water Board Executive Officer issued the Permittees and the California Department of Transportation an Order to submit technical reports in accordance with California Water Code Section 13267 requiring the development of jurisdiction-specific baseline load estimates for the Lake Tahoe TMDL pollutants of concern. The baseline pollutant load estimates, submitted by the Permittees on September 15, 2011, provide the basis for translating percent-reduction requirements defined by the TMDL into jurisdiction specific pollutant load allocations.
- 6. The Lake Tahoe TMDL requires new development and redevelopment project proponents and private property Best Management Practice retrofit efforts to first consider opportunities to infiltrate stormwater runoff from impervious surfaces. At a minimum, permanent stormwater infiltration facilities must be designed and constructed to infiltrate runoff generated by the 20 year, 1-hour storm, which equates to approximately one inch of runoff over all impervious surfaces during a 1-hour period. Infiltrating runoff volumes generated by the 20 year, 1-hour storm may not be possible in some locations due to shallow depth to seasonal groundwater levels, unfavorable soil conditions, or other

site constraints such as existing infrastructure or rock outcroppings. For new development or redevelopment projects, site constraints do not include the existing built environment. In the event that site constraints prohibit opportunities to infiltrate the runoff volume generated by a 20 year, 1-hour storm, project proponents must either (1) meet the numeric effluent limits contained in Basin Plan Table 5.6-1, or (2) document coordination with one of the Permittees or CalTrans to demonstrate that stormwater treatment facilities treating private property discharges and public right-of-way stormwater are sufficient to meet the Permittees' or CalTrans; average annual fine sediment and nutrient load reduction requirements.

7. The Basin Plan amendment and the Lake Tahoe TMDL requires municipalities to annually demonstrate on a catchment (i.e. subwatershed) basis that no increased loading in fine sediment particle, total nitrogen, and total phosphorus will result from any land-disturbing activity permitted in the catchment. Efforts to eliminate the increased loads from these land disturbing activities will not be counted towards achieving annual load reduction requirements.

### G. Public Notification

- 1. The issuance of waste discharge requirements pursuant to California Water Code section 13370 et seq. is exempt from the California Environmental Quality Act in accordance with California Water Code section 13389. County of Los Angeles et al., v. California Water Boards et al., (2006), 143 Cal.App.4h 985.
- The Water Board has notified the Permittees, and interested agencies and persons of its intent to issue waste discharge requirements for this discharge, and has provided them with an opportunity to make statements and submit their comments.
- 3. This Permit shall serve as a NPDES permit, pursuant to CWA § 402, and shall take effect 90 days from Order adoption date provided the Regional Administrator of the U.S. EPA has no objections.
- 4. Pursuant to Cal. Water Code § 13320, any aggrieved party may seek review of this Permit by filing a petition with the State Board within 30 days of the date of adoption of the Permit 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

5. This Permit may be modified or alternatively revoked or reissued prior to its expiration date or any administrative extension thereto, in accordance with 40 CFR122.41(f) and 122.62.

IT IS HEREBY ORDERED that Order No. R6T-2005-0026 is rescinded, and in order to meet the provisions contained in Division 7 of the Cal. Water Code and regulations adopted thereunder, and the provisions of the CWA and regulations adopted thereunder, the Permittees shall comply with the following:

### I. Non-Storm Water Discharges

- A. The Permittees shall, within their respective jurisdictions, effectively prohibit non-stormwater discharges into its collection, conveyance, and treatment facilities and receiving waters, except where such discharges:
  - 1. Originate from a State, Federal, or other source for which they are preempted from regulating by State or Federal law; or
  - Are covered by a separate individual or general NPDES permit, or conditional waivers; or
  - 3. Flows from fire fighting activities.
- B. Pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1) the following categories of nonstorm water discharges need only be prohibited from entering the Permittees storm water collection, conveyance, and treatment facilities and receiving waters if such categories of discharges are identified by the Permittee (it its SWMP) as a source of pollutants to waters of the United States and the State of California:
  - 1. Waterline flushing
  - 2. Landscape irrigation
  - 3. Diverted stream flows
  - 4. Rising groundwater
  - 5. Uncontaminated groundwater infiltration [as defined by 40 CFR 35.2005(20)]
  - 6. Uncontaminated pumped groundwater
  - 7. Discharges from potable water sources
  - 8. Fountain drains
  - 9. Air conditioning condensation
  - 10. Irrigation water
  - 11. Springs
  - 12. Water from crawl space pumps
  - 13. Footing drains
  - 14. Flows from riparian habitats and wetlands

- C. When a non-storm water discharge category listed above is identified as a source of pollutants to waters of the State, Permittees shall either:
  - 1. Prohibit the discharge category from entering its storm water collection, conveyance, and treatment system; or
  - 2. Authorize the discharge category and require implementation of appropriate or additional Best Management Practices to ensure that the discharge will not be a source of pollutants; or
  - 3. Require or obtain coverage under separate Regional or State Water Board permit for the discharge.

### **II. Other Prohibitions**

- A. Discharges from the Permittees collection, conveyance, and treatment facilities that cause or contribute to a violation of narrative or numeric water quality standards and objectives are prohibited.
- B. Discharges from the Permittees collection, conveyance, and treatment facilities shall not cause or contribute to a condition of nuisance.
- C. Unless specifically granted, authorization pursuant to this Permit does not constitute an exemption to applicable discharge prohibitions prescribed in the Basin Plan.
- D. Storm water discharges regulated by this Permit shall not contain a hazardous substance equal to or in excess of a reportable quantity listed in 40 CFR Part 117 and/or 40 CFR Part 302.
- E. The removal of vegetation or disturbance of ground surface conditions between October 15 of any year and May 1 of the following year is prohibited. Where it can be shown that granting a variance would not cause or contribute to the degradation of water quality, a variance to the dates stated above may be granted in writing by the Executive Officer.
- F. Discharge of concrete or grout to surface waters is prohibited.
- G. The discharge of oil, gasoline, diesel fuel, any petroleum derivative, any toxic chemical, or hazardous waste is prohibited.
- H. At no time shall earthen materials be placed in surface water drainage courses, within the 100-year flood plain of any surface water, below the high water line of Lake Tahoe, or in such a manner as to allow the discharge of such materials to adjacent undisturbed land or to any surface water drainage course.

- The discharge or threatened discharge, attributable to new development in Stream Environment Zones, of solid or liquid waste, including soil, silt, sand, clay, rock, metal, plastic, or other organic, mineral or earthen materials to Stream Environment Zones in the LTHU is prohibited.
- J. The discharge, or threatened discharge, attributable to human activities, of solid or liquid waste materials, including soil, silt, clay, sand, and other organic and earthen materials to the surface waters of the LTHU is prohibited.
- K. The discharge or threatened discharge, attributable to human activities, of solid or liquid waste materials, including soil, silt, clay, sand and other organic and earthen materials, to lands below the high-water rim of Lake Tahoe or within the 100-year floodplain of any tributary to Lake Tahoe, is prohibited.

## III. Storm Water Program Implementation

## A. Legal Authority

- 1. Permittees shall maintain and enforce the necessary legal authority to prohibit, including, but not limited to:
  - a. Illicit connections and illicit discharges,
  - b. The discharge of non-storm water to the Permittees' storm water collection, conveyance, and treatment facilities from:
    - (1) Washing or cleaning of gas stations, auto repair garages, or other types of automotive service facilities
    - (2) Mobile auto washing, carpet cleaning, steam cleaning, sandblasting and other such mobile commercial and industrial operations
    - (3) Areas where repair of machinery and equipment which are visibly leaking oil, fluid or antifreeze, is undertaken
    - (4) Storage areas for materials containing grease, oil, or other hazardous substances, and uncovered receptacles containing hazardous materials
    - (5) Swimming pool and hot tubs
    - (6) Industrial/ Commercial areas
    - (7) Concrete truck cement, pumps, tools, and equipment washout
    - (8) Spills, dumping, or disposal of materials such as fuel or chemical wastes, batteries, and any other materials which have the potential to adversely impact water quality
    - (9) Trash container leachate
- 2. Permittees shall maintain and enforce adequate legal authority to:

- 14
- a. Control through interagency agreement, the contribution of pollutants from one municipal jurisdiction to another
- b. Require persons within their jurisdiction to comply with conditions in the Permittees' ordinances, permits, or orders (i.e. hold dischargers to its collection, conveyance, and treatment facilities accountable for their contributions of pollutants and flows)
- c. Remove illicit connections to public storm water collection, conveyance, and treatment facilities
- d. Control the discharge of spills, dumping, or material disposal other than storm water to public storm water collection, conveyance, and treatment facilities
- e. Utilize enforcement measures (e.g., stop work orders, notice of violations, fines, referral to City, County, and/ or District Attorneys, etc.) by ordinances, permits, contracts, orders, administrative authority, and civil and criminal prosecution
- f. Control the quality of storm water runoff from industrial and construction sites
- g. Carry out all inspections, surveillance and monitoring procedures necessary to determine compliance and non-compliance with permit conditions including the prohibition on illicit discharges.
- h. Require the use of control measures to prevent or reduce the discharge of pollutants to achieve water quality objectives
- 3. No later than March 15, 2012 each Permittee shall submit a statement certified by its legal counsel that the Permittee possesses all necessary legal authority to comply with this Permit through adoption of ordinances and/ or municipal code modifications. This statement shall include:
  - a. Identification of all departments within the jurisdiction that conduct urban runoff related activities and their roles and responsibilities under this Order. Include an up-to-date organization chart specifying these departments and key personnel positions.
  - b. Citation of urban runoff related ordinances and the reasons they are enforceable.
  - c. Identification of the local administrative and legal procedures available to mandate compliance with urban runoff related ordinances.
  - d. Description of how these ordinances or other legal mechanisms are implemented and actions taken can be appealed.
  - e. Description of how the municipality can issue administrative orders and injunctions, or if it must go through the court system for enforcement actions.

### B. Storm Water Management Plans

Federal Regulations (40 CFR 122.26(d)(2)(iv)) require the Permittees to develop and implement a Storm Water Management Plan (SWMP) during the term of this Order. Each Permittee shall amend its SWMP to include components 1-3 below. Permittees shall submit amended SWMPs for Water Board Executive Officer approval no later than <u>March 15, 2013.</u>

### 1. Construction Component

Each Permittee shall implement a Construction Component of its SWMP to reduce pollutants in runoff from construction sites that involve more than three cubic yards of soil disturbance during all construction phases. The SWMP shall include a description of procedures for identifying inspection priorities and enforcing control measures. At a minimum the construction component plan shall address the following:

### a. Construction Site Inventory

Permittees shall develop and annually update an inventory of construction sites within its jurisdiction that involve more than three cubic yards of soil disturbance. This requirement is applicable to all construction sites regardless of whether the construction site is subject to the General Construction Permit (Order R6T-2011-0019). The use of a Geographical Information System (GIS) database is highly recommended, but not required.

### b. Construction Site Prioritization and Inspection

Permittees shall develop a prioritization process for its watershedbased inventory (developed pursuant to III.B.1.a above) by threat to water quality. Each construction site shall be classified as a high, medium, or low threat to water quality. In evaluating threat to water quality each Permittee should consider (1) fine sediment source potential; (2) site slope; (3) project size and type; (4) stage of construction; (5) proximity and connectivity to receiving water bodies; and (6) any other factors the Permittee deems relevant.

Each Permittee shall conduct construction site inspections for compliance with its ordinances (grading, storm water, etc.), permits (construction, grading, etc.), and discharge prohibitions contained in this Permit. Inspections shall include review of site erosion control and BMP implementation plans. Inspection frequencies and priorities shall be determined by the threat to water quality prioritization. During the construction season (May 1 through

October 15 of each year), each Permittee shall inspect, at a minimum, each high priority construction site once per week.

Based on site inspection findings, each Permitee shall implement all follow-up actions necessary to comply with this Permit.

### 2. Commercial, Industrial, and Residential Component

Each Permittee shall develop and implement measures to reduce pollutants in runoff from commercial, industrial, and residential properties within its jurisdiction. The purpose of this Component is to identify potential pollutant sources on private property, prioritize existing or potential water quality threats associated with different land uses, and provide outreach, education, and enforcement measures to reduce and/or eliminate stormwater pollution from these sources.

a. Commercial and Industrial Site Inventory and Prioritization

Each Permittee shall develop and annually update an inventory of high priority commercial and industrial activities and sources. The commercial and industrial source inventory should consider the following business types:

- (1) Automobile mechanical repair, maintenance, or cleaning:
- (2) Automobile and other vehicle body repair or painting;
- (3) Retail or wholesale fueling;
- (4) Eating or drinking establishments:
- (5) Mobile carpet, drape or furniture cleaning;
- (6) Concrete mixing or cutting:
- (7) Painting and coating;
- (8) Mobile pool and spa cleaning;
- (9) Snow removal activities

The use of a Geographical Information System (GIS) database is highly recommended, but not required.

b. Commercial and Industrial Site Inspection, Outreach, and Enforcement

Each Permittee shall implement a program to inspect high priority commercial and industrial sites as needed. Based upon site inspection findings, each Permittee shall implement all follow-up actions necessary to comply with this Permit. Outreach efforts shall include information regarding local ordinances or other regulatory measures and associated tiered enforcement mechanisms applicable to industrial site runoff.

Permittees shall also enforce their storm water ordinances and other regulatory mechanisms for all commercial and industrial activities as necessary to maintain compliance with this Permit.

c. Residential Property - Source Identification and Prioritization

Each Permittee shall identify high priority residential areas and activities for targeted outreach and education. At a minimum, these areas/activities should include:

- (1) Automobile repair and maintenance;
- (2) Off-pavement automobile parking;
- (3) Home and garden care activities and product use (pesticides, herbicides, and fertilizers);
- (4) Disposal of household hazardous waste (e.g., paints, cleaning products);
- (5) Snow removal activities
- d. Residential Property Outreach and Enforcement

Permittees shall develop and implement a program to target education and outreach efforts toward identified high priority activities. Such outreach program should include coordination with other Lake Tahoe Basin agencies involved with BMP implementation, including but not limited to the Tahoe Resource Conservation District and the Tahoe Regional Planning Agency Erosion Control Team.

Permittees shall also enforce their storm water ordinances and other regulatory mechanisms for all residential areas and activities as necessary to maintain compliance with this Permit.

### 3. Stormwater Facilities Inspection Component

Each Permittee shall develop and implement a comprehensive inspection program to assess stormwater collection, conveyance and treatment facilities condition and maintenance needs.

- a. Each Permittee shall inspect its storm water collection, conveyance and treatment facilities at least once annually and maintain a database of inspection findings.
- b. As part of its storm water collection, conveyance, and treatment facilities inspections, each Permittee shall evaluate and identify potential pollutant sources including but not limited to: private

property/residential runoff, commercial site runoff, eroding cut slopes, eroding road shoulders, intercepted groundwater discharges, excessive traction abrasive application, and construction site tracking.

c. Each Permittee shall document and prioritize identified maintenance needs and perform needed maintenance to ensure stormwater facilities effectively collect, convey, and treat urban runoff as designed.

## 4. Education Component

Permittees shall implement an Education Component using any appropriate media to (1) increase the community's knowledge of the effect of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) encourage community behavior to reduce pollutant releases to the environment.

### 5. <u>Illicit Discharge Detection and Elimination Component</u>

Permittees shall implement an Illicit Discharge Detection and Elimination Component containing measures to actively seek and eliminate illicit discharges and connections. At a minimum the Illicit Discharge Detection and Elimination Component shall include the following elements:

- a. Each Permittee shall establish and implement a program to investigate and inspect any portion of the storm water collection and conveyance system that indicates a reasonable potential for illicit discharges, illicit connections, or other sources of non-storm water. Each Permittee shall establish criteria to identify portions of the system where such follow-up investigations are appropriate.
- b. Each Permittee shall implement and enforce its ordinances, orders, or other legal authority to prevent and eliminate illicit discharges and connections to its storm water collection and conveyance system. Each Permittee shall also implement and enforce its ordinance or other regulatory mechanism to eliminate detected illicit discharges and connections to its storm water collection, conveyance, and treatment system.
- c. Each Permittee shall promote, publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from its storm water collection and conveyance system. Each Permittee shall facilitate public reporting through development and operation of a public hotline. Public

hotlines can be Permittee-specific or shared by Permittees. All storm water hotlines should be capable of receiving reports in both English and Spanish 24 hours per day, seven days per week. Permittees shall respond to and resolve each reported incident. Each Permittee shall keep a record of all reported incidents and how each was resolved.

## C. Fiscal Analysis Component

Each Permittee shall annually conduct a fiscal analysis of its urban runoff management program in its entirety, including operations and maintenances costs and secure the resources necessary to meet the requirements of this Permit. This analysis shall, for each fiscal year covered by this Permit, evaluate the expenditures (such as capital, operation and maintenance, education, and administrative expenditures) necessary to accomplish the activities of the Permittee's storm water management program. Such analysis shall include a description of the source(s) of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.

# IV. <u>Lake Tahoe Total Maximum Daily Load Implementation – Pollutant Load Reduction Requirements</u>

### A. Baseline Pollutant Loads

The Lake Tahoe TMDL expresses waste load allocations for the urban upland source as percent reductions from a basin-wide baseline load. The baseline basin-wide pollutant loads for the TMDL reflect conditions as of water year 2003/2004 (October 1, 2003 – September 30, 2004), hereafter referred to as "baseline".

To translate basin-wide urban runoff waste load allocations into jurisdiction-specific waste load allocations, the Water Board has required the Permittees to conduct a jurisdiction-scale baseline load analysis as the first step in the implementation process. Each permittee has completed this analysis, and the submitted baseline pollutant load estimates are the basis for the pollutant load allocations in this Permit (Table IV.B).

Permittees may gather additional information in the future to enhance the accuracy of the baseline load analysis. Similarly, numeric models used to estimate pollutant loads may be improved over time. If a Permittee determines that updated load estimation tools or other information are expected to change its baseline pollutant load estimate it may submit a request to the Water Board to amend its baseline load estimate.

### B. Pollutant Load Reduction Requirements

For the first five year milestone, jurisdiction-specific waste load reduction requirements are calculated by multiplying the urban uplands basin-wide load reduction percentage for each pollutant by each jurisdiction's individual baseline load. Each jurisdiction must reduce fine sediment particle (FSP), total phosphorus (TP), and total nitrogen (TN) loads by 10%, 7%, and 8%, respectively, by **November 9, 2016.** 

Table IV.B – Allowable pollutant loading for the first five year TMDL milestone

Jurisdiction	Baseline FSP	FSP Allowable Load	Baseline TP	TP Allowable Load	Baseline TN	TN Allowable Load
El Dorado						
County						
Placer						
County						
City of						
South Lake						
Tahoe						

### C. Pollutant Load Reduction Plans

Each Permittee shall prepare a detailed plan describing how they will meet the pollutant load reduction requirements described in Section IV.B above. Permittees shall submit a plan no later than <u>March 15, 2013</u> that shall include, at a minimum, the following elements:

### 1. Catchment registration schedule

The Pollutant Load Reduction Plan (PLRP) shall include a list of catchments that will likely be registered pursuant to the Lake Clarity Crediting Program to meet load reduction requirements. The list should include catchments where capital improvement projects have been constructed since May 1, 2004 and where projects are expected to be constructed during this Permit term. The list should also include catchments where Permittees plan actions other than capital improvements (such as enhanced operations and maintenance). The plan shall describe which catchments the Permittee anticipates it will register for each year of this Permit term.

### 2. Proposed pollutant control measures

For each catchment in the registration plan, the PLRP shall describe proposed stormwater program activities to reduce fine sediment particle, total phosphorus, and total nitrogen loading.

### 3. Pollutant load reduction estimates

For each catchment in the registration plan (or a representative catchment subset) Permittees shall provide estimates of both baseline pollutant loading and expected pollutant loading to demonstrate that proposed actions will, over the course of this Permit term, reduce the Permittee's jurisdiction-wide pollutant load by the amounts specified in Section IV.B above.

### 4. Load reduction schedule

The PLRP shall describe a schedule for achieving the pollutant load reduction requirements described in Section IV.B above. The schedule shall include an estimate expected pollutant load reductions for each year of this Permit term based on preliminary numeric modeling results.

### 5. Annual adaptive management

The PLRP shall include a description of the internal process and procedures to annually assess stormwater management activities and associated load reduction progress. The adaptive management discussion shall describe how the Permittee will use information from the previous years' implementation effort to make needed adjustments to ensure compliance with the load reduction requirements specified in Section IV.B.

The Water Board will circulate the submitted PLRPs for public review and will consider PLRP acceptance at a Water Board meeting.

### D. Development impacts

Activities such as new development or re-development have the potential to increase localized (i.e. on a parcel scale) pollutant loading. Permittees must reduce fine sediment particle, total nitrogen, and total phosphorus loads to meet load reduction requirements described above. Efforts to eliminate the increased loads from these land-disturbing activities will not be counted towards the annual load reduction requirements.

In accordance with the attached Monitoring and Reporting Program, each Permittee must annually demonstrate on a catchment (i.e. sub-watershed) basis that no net increased loading in fine sediment particle, total nitrogen,

and total phosphorus will result from any land-disturbing activity permitted in the catchment.

## E. Pollutant Load Reduction Progress

To demonstrate pollutant load reduction progress, each Permittee shall submit a Progress Report by <u>March 15, 2013</u>. The Progress Report shall include:

- 1. Documentation of all projects the Permittee completed between the May 2004 and October 2011.
- Pollutant load reduction estimates for all projects and any other load reduction actions up to October 15, 2011. The report shall compare the pollutant load estimates for work completed with the pollutant load reduction requirements described in Section IV.B above.

## V. Table of Required Submittals

Submittal	Permit Section	Submittal/Required Completion Date
Statement of Legal Authority	III.A	March 15, 2012
Pollutant Load Reduction Plan	IV.C	March 15, 2013
Amended Stormwater	III.B	March 15, 2013
Management Plan		
Pollutant Load Reduction	IV.E	March 15, 2013
Progress Report		

## VI. Administrative Provisions

- A. The Regional Board reserves the right to revise any portion of this Order upon legal notice to and after opportunity to be heard is given to all concerned parties.
- B. Each Permittee shall comply with the Standard Provisions, Reporting Requirements, and Notifications contained in Attachment F of this Order. This includes 24 hour/5 day reporting requirements for any instance of non-compliance with this Order as described in section B.6 of Attachment F.
- C. All plans, reports, and subsequent amendments submitted in compliance with this Order shall be implemented immediately (or as otherwise specified) and shall be an enforceable part of this Order upon submission to the Regional Board. All Permittee submittals must be adequate to implement the requirements of this Order.

D. This Order expires on **November 9, 2016**. The Permittees must file a report of waste discharge in accordance with Title 23, California Code of Regulations, no later than 180 days in advance of such date as application for an updated Municipal NPDES Permit.

I, Harold J. Singer, Executive Officer, do herby certify that the forgoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on November 12, 2011.

HAROLD J. SINGER EXECUTIVE OFFICER

Attachments:

- A. Fact Sheet
- B. Pollutant Load Allocation Tables
- C. Monitoring and Reporting Program
- D. Lake Clarity Crediting Program Handbook V1.0
- E. Selected Water Quality Objectives
- F. Compliance with Water Quality Objectives
- G. Standard Provisions, Reporting Requirements, and Notifications

## ATTACHMENT A

## CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

### FACT SHEET FOR

UPDATED WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR

STORM WATER/URBAN RUNOFF DISCHARGES FROM EL DORADO COUNTY, PLACER COUNTY, AND THE CITY OF SOUTH LAKE TAHOE

ORDER NO. R6T-2011-(TENTATIVE)
NPDES NO. CAG616001

Pursuant to the requirements of section 124.8 and 124.56 of title 40 the Code of Federal Regulations (C.F.R.), this Fact Sheet briefly sets forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit.

### Background

In 1972, the federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a NPDES permit. The 1987 amendments to CWA added section 402(p), which established a framework for regulating stormwater discharges under the NPDES Program. Subsequently, in 1990, the U.S. Environmental Protection Agency (U.S. EPA) promulgated regulations for permitting stormwater discharges from industrial sites (including construction sites that disturb five acres or more) and from municipal separate storm sewer systems (MS4s) serving a population of 100,000 people or more. (40 C.F.R. 122.26.) These regulations, known as the Phase I regulations, require operators of medium and large MS4s to obtain stormwater permits. On December 8, 1999, U.S. EPA promulgated regulations, known as Phase II, requiring permits for stormwater discharges from Small MS4s and from construction sites disturbing between one and five acres of land. (40 C.F.R. 122.30 - 122.37.) The Phase I regulations provide that States, such as California, with approved NPDES programs, may require any discharger who contributes to a violation of water quality standards or is a significant contributor of pollutants to waters of the United States to obtain stormwater permits regardless of population size. (40 C.F.R. 122.26(a)(v).)

Portions of El Dorado County and Placer County and the entire jurisdiction of the City of South Lake Tahoe (hereafter referred to as "municipalities" or "Permittees") lie within the Lake Tahoe Hydrologic Unit. Because Lake Tahoe is an Outstanding National Resource Water negatively impacted by urban runoff discharged from these municipalities, the Lahontan Regional Water Quality Control Board adopted Order 6-92-02 in January 1992 as part of the Phase I NPDES program to regulate MS4s on the California side of the Lake Tahoe watershed. The NPDES Stormwater Permit provided the Water Board a mechanism to work with the local municipalities to improve stormwater management practices in the Tahoe area.

NPDES Stormwater Permits expire five years following adoption, and Order 6-92-02 was belatedly updated in October 2000 by Order 6-00-82. The subsequent permit update, Order R6T-2005-0026, required the municipalities to develop comprehensive stormwater management programs to further control runoff from construction, industrial, and residential properties, as well as enhance stormwater facility inspection practices and extend public education and outreach programs.

This permit update maintains the previous stormwater management program requirements and adds pollutant load reduction and associated monitoring requirements to implement the Lake Tahoe Total Maximum Daily Load program.

## **Legal Authority**

The CWA authorized the United States Environmental Protection Agency (USEPA) to permit a state to serve as the NPDES permitting authority in lieu of the USEPA. The State of California has in-lieu authority for the NPDES program. The Porter-Cologne Water Quality Control Act authorized the State Water Resources Control Board (State Board), through the Water Boards, to regulate and control the discharge of pollutants into waters of the State. The State Board entered into a Memorandum of Agreement with the USEPA on September 22, 1989 to administer the NPDES Program governing discharges to waters of the United States.

The terms of this permit implements the federal requirements under the CWA sections 402(p) and 303(d), and the associated regulations. The terms of this permit are no more stringent than those that could have been adopted in a permit issued by U.S. EPA itself.

## **Lake Tahoe Total Maximum Daily Load**

Lake Tahoe is designated an Outstanding National Resource Water by the State Water Resources Control Board and the United States Environmental Protection Agency due to its extraordinary deep water transparency. However, the lake's deep water transparency has been impaired over the past four decades by increased fine sediment particle inputs and stimulated algal growth caused by elevated nitrogen and phosphorus loading.

The Water Board, and the Nevada Division of Environmental Protection (NDEP) developed the bi-state Lake Tahoe Total Maximum Daily Load (TMDL) to identify the pollutants responsible for deep water transparency decline, quantify the major pollutant sources, assess the lake's assimilative capacity, and develop a plan to reduce pollutant loads and restore Lake Tahoe's deep water transparency, as measured by the Secchi depth to the annual average levels recorded in 1967-1971.

The ongoing decline in Lake Tahoe's water quality is a result of light scatter from fine sediment particles (primarily particles less than 16 micrometers in diameter) and light absorption by phytoplankton. The addition of nitrogen and phosphorus to Lake Tahoe contributes to phytoplankton growth. Fine sediment particles are the most dominant pollutant contributing to the impairment of lake waters, accounting for roughly two thirds of the lake's impairment. Consequently, fine sediment particles, total nitrogen, and total phosphorus are the pollutants of concern at Lake Tahoe.

To achieve the transparency standard, estimated fine sediment particle, phosphorus, and nitrogen loads must be reduced by 65 percent, 35 percent, and 10 percent, respectively. Given the magnitude of the needed load reductions and the current available understanding of load reduction options, achieving the load reductions needed to meet the transparency standard is expected to take 65 years. A 20-year interim transparency goal, known as the Clarity Challenge, requires basinwide pollutant load reductions to be achieved within 15 years, followed by five years of monitoring to confirm that 24 meters of Secchi depth transparency has been reached. Implementation efforts must reduce basin-wide fine sediment particle, phosphorus, and nitrogen loads by 32 percent, 14 percent, and 4 percent, respectively, to achieve this goal.

The TMDL pollutant source analysis identified runoff from urban land uses as the primary source of fine sediment particle loading to Lake Tahoe, and the pollutant load allocations establish needed pollutant load reductions. The most significant and currently quantifiable load reduction opportunities are within the urban land uses. Because urbanized areas discharge the overwhelming bulk of the average annual fine sediment particle load reaching Lake Tahoe, much of the load reductions must be accomplished from this urban upland source. Even if it were feasible to completely eliminate the fine sediment particle load from the other three sources, forest upland, atmospheric deposition, and stream channel erosion, the transparency standard would never be met.

Consequently, the Lake Tahoe TMDL implementation plan emphasizes actions to reduce fine sediment particle and associated nutrient loading from urban stormwater runoff. Due to the magnitude of both the pollutant source and related control opportunities, the Water Board has devoted time and resources to develop detailed tools and protocols to quantify, track, and account for pollutant loads associated with urban runoff.

This NPDES Stormwater Permit is an important implementation tool that holds the municipal jurisdictions on the California side of the Lake Tahoe Basin accountable for achieving water quality improvements required by the Lake Tahoe TMDL.

### **Baseline Load Estimates**

The Lake Tahoe TMDL expresses waste load allocations for the urban upland source as percent reductions from a basin-wide baseline pollutant load. The basin-wide baseline pollutant load reflects conditions as of water year 2003/2004 (October 1, 2003 - September 30, 2004). To translate basin-wide waste load allocations for urban runoff into jurisdiction-specific waste load allocations for each of the municipalities, the Water Board required each of the municipalities to conduct a jurisdiction-scale baseline load analysis as the first step in the TMDL implementation process. To ensure comparability between the basin-wide baseline pollutant load estimates and the jurisdiction-scale baseline pollutant load estimates, municipalities have used a set of standardized baseline condition values consistent with those used to estimate the 2003/2004 basin-wide pollutant loads. Specifically, baseline pollutant load estimate calculations reflect infrastructure, land development conditions, and operations and maintenance practices that were in effect in October 2004. Table IV.B of the permit identifies the baseline of each pollutant of concern for each jurisdiction and sets out the allowable load.

### **Lake Clarity Crediting Program**

With funding from the United States Environmental Protection Agency, the Water Board undertook an assessment of water quality trading opportunities at Lake Tahoe. The project team, led by Environmental Incentives, LLC., determined that before any water quality trading could occur, a standard unit of water quality benefit must be established. To meet this need, the project team, working with various Lake Tahoe stakeholders, developed the Lake Clarity Crediting Program.

The Lake Clarity Crediting Program provides a system of tools and methods to allow urban jurisdictions to link projects, programs, and operations and maintenance activities to estimated pollutant load reductions. In addition to providing a consistent method to track compliance with TMDL pollutant load reduction requirements, the Lake Clarity Crediting Program provides specific

technical guidance for calculating jurisdiction-scale baseline load estimates. The Lake Clarity Crediting Program makes use of cutting-edge numeric modeling tools and field inspection methods to estimate water quality benefits and link modeled estimates to actual on-the-ground conditions. This program, the first of its kind in the nation, provides a robust method to hold municipalities responsible for required water quality improvements and offers transparent protocols for demonstrating progress.

This NPDES Stormwater Permit requires the municipalities to use the Lake Clarity Crediting Program Handbook to assess compliance with load reduction requirements.

### **Pollutant Load Reduction Plans**

The Lake Tahoe TMDL requires Lake Tahoe basin municipalities to develop and implement comprehensive Pollutant Load Reduction Plans (PLRPs) describing how proposed operations and maintenance activities, capital improvements, facilities retrofit projects, ordinance enforcement, and other actions will meet required pollutant load reduction requirements. PLRPs provide the Permittees the opportunity to prioritize pollutant load reduction efforts and target subwatersheds, or catchments that generate the highest annual average pollutant loads in a cost effective manner.

By necessity, the PLRPs are expected to provide only a general implementation plan that identifies specific catchments targeted for implementation and expected load reduction measures. The Permit requires the municipalities to estimate the anticipated cumulative water quality benefit over a five year period and support those estimates with representative modeling results. As implementation progresses, these estimates will be refined as the municipalities declare credits pursuant to the Lake Clarity Crediting Program. Over time, the Permittees will likely need to adjust their individual PLRPs to reflect updated information regarding implementation progress and load reduction estimate refinement.

This NPDES Stormwater Permit implements the requirement to develop and submit PLRPs consistent with Lake Tahoe TMDL requirements. While the PLRPs do not alter pollutant load reduction requirements or other performance standards, they do describe the municipalities' methods and plans to achieve compliance. Therefore the Water Board will review, and if appropriate, accept the PLRPs.

The Monitoring and Reporting Program requires the Permittees to annually assess PLRP progress and, if necessary, propose changes. If a Permittee chooses to add or remove catchments from it's PLRP or proposes to change it's overall load reduction approach, the Water Board will review any proposed changes and, if appropriate, accept revised PLRPs.

### **Numeric Effluent Limits**

The CWA provides that storm water permits for MS4 discharges shall contain controls to reduce the discharge of pollutants to the "maximum extent practicable" and such other provisions as the State determines appropriate for the control of such pollutants. (CWA 402(p)(3)(B)(iii).) Under this provision, the Water Board has the authority to include requirements for reducing pollutants in storm water discharges as necessary for compliance with water quality standards. (Defenders of Wildlife v. Browner, 191 F.3d 1159, 1166 (9<sup>th</sup> Cir. 1999).) In fact, the U.S. EPA has recommended that where MS4 discharges have the reasonable potential to cause or contribute to a water quality standard excursion, EPA recommends that, where feasible, the permitting authority exercise its discretion to include numeric effluent limitations as necessary to meet water quality standards. ("Revisions to the November 22, 2002 Memorandum 'Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs'," November 12, 2010 (hereafter referred to as "US EPA 2010 Memorandum") at p. 2)) US EPA recognizes that numeric water quality based effluent limits can be set out as pollutant concentrations, pollutant loads or numeric parameters acting as surrogates for pollutants, such as storm water flow volume or percentage or amount of impervious cover. (US EPA 2010 Memorandum at p. 2.)

In 1980, the State Water Resources Control Board adopted numeric effluent limits for storm water discharges in the Lake Tahoe Basin. The Water Board included these limits for discharges to infiltration systems and discharges to surface waters in the Water Quality Control Plan for the Lahontan Region (Basin Plan), amended in 1995. The numeric effluent limits contained in the Basin Plan were included in previous iterations of the NPDES Stormwater Permit.

Where a State or EPA has established a TMDL for an impaired water that includes WLAs for storm water discharges, permits for MS4 discharges must contain effluent limits and conditions consistent with the requirements and assumptions of the WLAs in the TMDL. (40 CFR 122.44(d)(1)(vii)(B).) U.S. EPA recommends that WLAs for NPDES-regulated storm water discharges should be disaggregated into specific categories, as was done for the Lake Tahoe TMDL. WLAs were established for four source categories – urban uplands, forest uplands, atmospheric deposition, and stream channel erosion. (US EPA Memorandum at p. 5.) This updated permit replaces the previously referenced numeric effluent limits with pollutant load reduction requirements established by the Lake Tahoe TMDL. By defining water quality improvement requirements in terms of mass-based, average annual loading of the pollutants of concern, this updated permit is consistent with recent US EPA guidance and provides a direct link to the transparency problem, the Lake Tahoe TMDL, and all associated research and monitoring findings.

The mass-based limitations on storm water discharges are protective of the Lake Tahoe transparency standard and are supported by extensive scientific analysis performed for the development of the TMDL. Rather than imposing concentration-based limitations at discrete discharge points, the Water Board has adopted mass-based limitations on a watershed basis that are expected to reduce pollutant loads to levels needed to achieve the transparency standard. As such, replacing the concentration-based limitations with whole lake, mass-based loading limitations is equally as protective as the previous numeric effluent limitations, implements the approved Lake Tahoe TMDL, and complies with anti-backsliding requirements set forth in 40 CFR section 122.44(I).

## **Storm Water Management Plans**

To provide consistency with federal regulations (40 CFR 122.26(d)(2)(iv)) and address deficiencies noted by a United States Environmental Protection Agency audit of Order 6-00-82, the primary goal of the previous NPDES Stormwater permit (R6T-2005-0026) was to require the Permittees to develop comprehensive stormwater management programs. The pervious permit required the jurisdictions to prepare and implement a Storm Water Management Plan to (1) continue erosion control and storm water treatment project implementation; (2) inspect and control runoff from construction, industrial, commercial, and residential sites; (3) develop a storm water education program for municipal staff and the public; (4) detect and eliminate illicit discharges; (5) provide for public participation; (6) assess program effectiveness; (6) inspect roadways and other municipal storm water facilities; (7) manage traction abrasive and deicing application and recovery; and (8) evaluate program funding needs and provide fiscal management plan.

The Permittees successfully met the requirements of the previous permit to develop and implement Storm Water Management Plans. The established Storm Water Management Plans continue to provide a programmatic framework for implementing stormwater management activities and this updated permit acknowledges the utility of the existing Stormwater Management Plans and requires the Permittees to revisit and update the plans to reflect current conditions.

### **Nondegradation Objective**

On October 28, 1968, the State Water Resources Control Board adopted Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," establishing a nondegradation policy for the protection of water quality. This policy, referred to in the Basin Plan as the Nondegradation Objective, requires continued maintenance of existing high quality waters.

Under the Nondegradation Objective, whenever the existing quality of water is better than that needed to protect all existing and probable future beneficial uses, the existing high quality shall be maintained until or unless it has been demonstrated to the State that any change in water quality will be consistent with the maximum benefit of the people of the State, and will not unreasonably affect present and probable future beneficial uses of such water. Therefore, unless these conditions are met, background water quality concentrations (the concentrations of substances in natural waters as they existed in 1968, when the degradation policy was adopted, that are unaffected by waste management practices or contamination incidents) are appropriate water quality goals to be maintained. In accordance with 40 CFR 131.12(a)(3), no permanent or long term reduction in water quality is allowed in areas, like Lake Tahoe, that have been given special protection as Outstanding National Resource Waters.

Storm water discharges from the municipal jurisdictions are contributing to the degradation of Lake Tahoe, which violates the above-referenced objective. This updated NPDES Storm Water Permit is intended to improve storm water quality and reduce the negative impacts associated with urban runoff.

### **Public Participation**

This proposed Municipal NPDES Permit has been developed for review and comment by the public. As a step in the Water Board approval process, the Lahontan Water Board staff developed a "tentative" Permit for circulation and will distribute a "proposed" Permit for a 30-day review and comment period. The Lahontan Water Board encourages public participation in the Permit adoption process.

### Notification of Interested Parties

On August 10, 2011 the Lahontan Water Board notified dischargers, interested agencies, and other interested parties of its intent to update the Municipal NPDES Permit for stormwater discharges from the City of South Lake Tahoe and portions of El Dorado and Placer Counties within the Lake Tahoe Hydrologic Unit. The Water Board provided interested parties with the opportunity to submit written comments and recommendations on the draft tentative permit by September 15, 2011. Notification was provided through mailing, list serve system emails, and posting on the Lahontan Water Board website. Lahontan Water Board staff revised the permit based on comments received on the tentative draft, and on October 1, 2011 the Lahontan Water Board notified dischargers, interested agencies, and other interested parties that a proposed permit was available for public review. Notification was provided through mailing, list serve system emails, newspaper notifications, and posting on the Lahontan Water Board website.

### Written Comments

The staff determinations are proposed. Interested persons are invited to submit written comments concerning this proposed Permit. Written comments must be submitted either in person, by email, or by U.S. mail to the Lahontan Water Board. The mailing address for the Lahontan Water Board is 2501 Lake Tahoe Blvd, South Lake Tahoe, CA 96150. Email comments may be submitted to the attention of Robert Larsen at <a href="mailto:RLarsen@waterboards.ca.gov">RLarsen@waterboards.ca.gov</a>.

To be fully considered by staff and the Lahontan Water Board, written comments must be received at the Lahontan Water Board within ten days of the Public Hearing to consider adopting the updated permit. Comments received after that date will be forwarded on to the Lahontan Water Board.

### Public Workshop

The Lahontan Water Board conducted a public workshop on September 14, 2011 to discuss issues relating to the tentative Permit with the Board and interested parties.

### **Public Hearing**

The Lahontan Water Board has scheduled a public hearing to consider adopting the updated permit. The Board meeting is scheduled as follows:

Date:

November 9 and 10, 2011

Time:

To be determined

Location:

Lake Tahoe Community College

1 College Drive

South Lake Tahoe, CA 96150

Interested persons are invited to attend. At the public meeting, the Lahontan Water Board will hear testimony, if any, pertinent to the discharge and the Permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. The public can access the current agenda for changes in dates and locations at the Water Board website: www.waterboards.ca.gov/lahontan

### Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Lahontan Water Board regarding the final Permit. The petition must be submitted within 30 days of the Lahontan Water Board's action to the following address:

State Water Resources Control Board

Office of Chief Counsel P.O. Box 100, 1001 | Street Sacramento, CA 95812-0100

### Information and Copying

The tentative Permit, comments received, and other information are on file and may be inspected at the Lahontan Water Board at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday, at 2501 Lake Tahoe Boulevard, South Lake Tahoe, CA 96150. Copying of documents may be arranged through the Lahontan Water Board by calling (530) 542-5400.

### Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Lahontan Water Board, reference this Permit, and provide a name, address, and phone number.

### Additional Information

Requests for additional information or questions regarding this order should be directed to Robert Larsen, Environmental Scientist, at 530-542-5439 or by email at <a href="mailto:RLasen@waterboards.ca.gov">RLasen@waterboards.ca.gov</a>.

# **ATTACHMENT B**

### ATTACHMENT B

### POLLUTANT LOAD ALLOCATION TABLES

Fine Sediment Particle Load Allocations by Pollutant Source Category.

	Baseline Load	Load					Milest	one Loa	Milestone Load Reductions	tions					Standard Attainment	
	Basin-Wide Load	% of Basin-Wide		10	15	20	25	30	35	40	45	50	55	09		
	(Particles/yr)	Load	5 yrs	YIS	VIS	VIS	yrs	yrs	yrs	yrs	yrs	VIS	VIS	YES	65 yrs	
Forest Upland	4.1E+19	%6	6%	%6	12%	12%	13%	14%	15%	16%	17%	18%	19%	20%	20%	
Urban Upland	3.5E+20	72%	10%	21%	34%	38%	41%	45%	48%	52%	55%	29%	62%	2999	71%	
Atmosphere	7.5E+19	16%	8%	15%	30%	32%	35%	37%	40%	42%	45%	47%	50%	52%	55%	
Stream Channel	1.7E+19	3%	13%	26%	53%	26%	%09	63%	%19	70%	74%	77%	81%	85%	86%	
Basin Wide Total	4.8E+20	100%	10%	19%	32%	35%	38%	42%	44%	47%	51%	55%	28%	%19	65%	

Total Nitrogen Load Allocations by Pollutant Source Category.

D	Baseline Load					Milest	Milestone Load Reductions	d Reduc	tions					Standard Attainment
Nitrogen	ide		10	15	20	25	30	35	40	45	50	55	09	;
Load (MT/yr)	Load	5 yrs	VIS.	VIS	yrs	yrs	VIS	yrs	yrs	yrs	VIS	VIS	VIS	65 yrs
Forest Upland 62	18%	%0	%0	%0	0%	0%	0%	0%	0%	0%	0%	0%	%0	260
Urban Upland 63	18%	%8	14%	19%	22%	25%	28%	31%	34%	37%	40%	43%	46%	50%
Atmosphere 218	63%	%0	%0	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Stream Channel 2	1%	%0	%0	%0	%0	0%	0%	9%0	0%	260	0%	260	%0	960
Basin Wide Total 345	100%	2%	3%	4%	5%	969	%9	7%	7%	8%	8%	%6	%6	10%

Total Phosphorus Load Allocations by Pollutant Source Category.

Basin-Wide Phosphorus         % of Basin-Wide I.oad (MT/yr)         70         15         20         25         30         35         40           I.oad (MT/yr)         Load (MT/yr)         1%         1%         1%         2%         1%         2%         33         40           I.s         47%         7%         14%         21%         2%         1%         1%         2%	1															Standard
Basin-Wide Phosphorus         % of Phosphorus         10         15         20         25         30         35         40           Load (MT/yr)         Load (MT/yr)         1.0ad         5 yrs         yrs <th>Phosphorus</th> <th>Baseline</th> <th>Load</th> <th></th> <th></th> <th></th> <th></th> <th>Milest</th> <th>one Loa</th> <th>d Redu</th> <th>ctions</th> <th></th> <th></th> <th></th> <th></th> <th>Attainment</th>	Phosphorus	Baseline	Load					Milest	one Loa	d Redu	ctions					Attainment
Basin-Wide Phosphorus         % of Basin-Wide Load (MT/yr)         10         15         20         25         30         35         40           1 coad (MT/yr)         Load (MT/yr)         Load (MT/yr)         1%         1%         1%         1%         1%         2%         1%         1%         1%         1%         2%         1%         1%         2%         1%         1%         2%         1%         2%																
Phosphorus         Basin-Wide         10         15         20         25         30         35         40           Load (MT/yr)         Load         5 yrs		Basin-Wide	Jo %													
Load (MT/yr)         Load         5 yrs		Phosphorus	Basin-Wide		10	15	20	25	30	35	40	45	20	55	09	
12         32%         1%         1%         1%         1%         2%         1%         1%         2%         2%         2%         2%         2%         2%         2%         2%         2%         33%         36%         38%         42%         48%         48%           7         18%         9%         17%         33%         36%         39%         42%         48%         48%           1         3%         8%         15%         30%         32%         34%         36%         38%         40%		Load (MT/yr)	Load	5 yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	yrs	65 yrs
18         47%         7%         14%         21%         23%         26%         28%         31%         33%           7         18%         9%         17%         33%         36%         39%         42%         48%           1         3%         8%         15%         30%         32%         34%         36%         38%         40%	Forest Upland	12	32%	1%	1%	1%	2%	%1	%1	2%	2%	2%	2%	2%	3%	3%
7         18%         9%         17%         33%         36%         39%         42%         45%         48%           1         3%         8%         15%         30%         32%         34%         36%         38%         40%	Urban Upland	18	47%	7%	14%	21%	23%	26%	28%	31%	33%	36%	38%	41%	44%	46%
1 3% 8% 15% 30% 32% 34% 36% 38% 40%	Atmosphere	7	18%	%6	17%	33%	36%	36%	42%	45%	48%	51%	53%	298	28%	%19
	Stream Channel	-	3%	8%	15%	30%	32%	34%	36%	38%	40%	42%	44%	46%	48%	51%
<b>Basin Wide Total</b> 38 100% 5% 10% 17% 19% 22% 24% 26% 28% 3	Basin Wide Total	38	100%	5%	10%	17%	19%	22%	24%	26%	28%	30%	32%	33%	34%	35%

# ATTACHMENT C

### **ATTACHMENT C**

### STATE OF CALIFORNIA

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

MONITORING AND REPORTING PROGRAM
ORDER NO. R6T-2011-(TENT)
NPDES NO. CAG616001

UPDATED WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR

STORM WATER/URBAN RUNOFF DISCHARGES FROM EL DORADO COUNTY, PLACER COUNTY, AND THE CITY OF SOUTH LAKE TAHOE WITHIN THE LAKE TAHOE HYDROLOGIC UNIT

### I. Pollutant Load Reduction Monitoring Requirements

### A. Lake Clarity Crediting Program

The Lake Tahoe TMDL established pollutant load estimates and load reduction requirements for total nitrogen, total phosphorus, and fine sediment particles that source categories must meet on an average annual basis. The Lake Clarity Program (Crediting Program) defines a system to evaluate and track pollutant load reductions to demonstrate compliance with the load reduction requirements for fine particle sediment in the TMDL. This system provides methods for consistently linking implementation of pollutant controls to expected water quality benefits by using average annual pollutant load estimates generated by numeric modeling tools. It sets Lake Clarity Credits (credits) for actions taken to reduce pollutant loads as required by the Lake Tahoe TMDL load allocations. Credits are used in this Monitoring and Reporting Program to provide a consistent metric for assessing compliance with average annual pollutant load reduction requirements. The Crediting Program therefore provides a comprehensive and consistent accounting system to track pollutant load reductions of fine particle sediment into the LTHU from urban stormwater, establishes a consistent approach for estimating load reductions, provides methods to assess ongoing performance of implementation actions, and guides interaction between the Water Board and Permittees regarding load reduction progress assessment.

Load reductions are defined as the difference between the estimated average annual amount of pollutants entering Lake Tahoe under standard baseline conditions and the estimated average annual amount of

pollutants entering the lake under expected conditions. Effective implementation of <u>any</u> pollutant control can generate credits, provided that the Permittees effectively demonstrate to the Water Board that the action is (1) expected to reduce the load of the pollutants of concern to Lake Tahoe from urban land uses,, (2) supported by reasonable load reduction estimate, and (3) will be effectively implemented and maintained over time.

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Credits are acknowledged, or *awarded*, for effective ongoing implementation of pollutant controls within an urban subwatershed, or *catchment*. Credit potential for a catchment is based on the estimation of load reduction from baseline to expected conditions, and actual awarded credits are based upon comparing actual conditions with expected conditions.

Effective implementation of pollutant controls results in actual conditions of urban lands and treatment best management practices (BMPs) that are at or better-than the expected conditions, and which are used as the basis for load reduction estimates. Actual conditions, as assessed during annual inspections, are compared to the expected conditions to determine the appropriate amount of credit to award in a given year. When actual conditions are at or better-than expected conditions, the actual pollutant loading from the catchment is likely to be the same or better than the expected pollutant loading and full credit will be awarded. If actual conditions are worse than expected, the actual loading is likely to be higher than expected loading and the credit award will be less than the full credit potential amount.

Credits are awarded and tracked annually. The credit accounting period is a water year, October 1 through September 30. Each year is a unique accounting period – credits awarded in one year cannot be used to meet requirements in a subsequent year.

The following sections briefly describe components of the Crediting Program protocols and establish phased Crediting Program implementation requirements.

### B. Credit Definition and Credit Requirements

The Crediting Program Handbook defines one (1) Lake Clarity Credit as equal to  $1.0 \times 10^{16}$  fine sediment particles with a diameter smaller than 16 micrometers ( $\mu$ m).

By <u>November 12, 2016</u> each Permittee must earn and maintain enough credits to demonstrate, at a minimum, a 10 percent reduction of fine sediment particles from its baseline load in accordance with Table I.B below.

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Table I.B - Lake Clarity Credit Requirements

Jurisdiction	Lake Clarity Credit Requirement
El Dorado County	
Placer County	
City of South Lake	
Tahoe	

### C. Crediting Program Handbook

The Lake Clarity Crediting Program Handbook version 1.0 (Handbook) defines the protocols for implementing the Crediting Program. The Handbook describes the roles and responsibilities of different organizations, scientists, and interested stakeholders and includes detailed technical guidance for estimating load reductions, preparing catchment credit schedules, reporting conditions and awarding credits. The Handbook provides forms, templates, and examples to aide users in implementing the process.

Because the Handbook contains the detailed guidance and technical information needed for the Permittees to implement the Crediting Program, the Crediting Program Handbook version 1.0 is hereby incorporated into this Monitoring and Reporting Program as Attachment D. All Handbook references to "regulator" should be understood to mean the Water Board.

### D. Catchment Credit Schedules

The credit potential for an urban catchment (or subwatershed) is based on estimates of load reduction from baseline to expected conditions. The Crediting Program Handbook describes a document called a *catchment credit schedule*, which defines the baseline condition for all catchments and provides the means to inventory treatment facilities, roadways, private property BMPs, and other pollutant controls. This information is then used to compare with the expected conditions after the implementation of pollutant controls and forms the basis for the load reduction estimate and establishes the credit potential for a given catchment.

Crediting Program Handbook Chapter 1 describes the steps for developing a catchment credit schedule and submitting it for Water Board approval. Handbook Appendix A includes a complete example of each step in the process of establishing a catchment credit schedule, and the Tools and Templates section of the Handbook provides detailed instructive support. Generally, the process steps are:

1. Estimate pollutant load reductions and draft catchment credit schedule (see Handbook section 1.1).

2. Verify pollutant load reduction estimate and catchment credit schedule (see Handbook section 1.2).

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3. Register catchment in the Accounting and Tracking Tool (see Handbook section 1.3).

To demonstrate proficiency at developing catchment credit schedules and to document pollutant load reduction actions, each Permittee shall prepare and register at least two (2) catchment credit schedules by <u>March 15</u>, <u>2012</u> and register additional catchments as needed by March 15 every year thereafter to ensure each Permittee will earn enough credits to meet the requirements contained in Table I.B above.

### E. Condition Assessments

Credits are awarded annually by the Water Board for ongoing implementation of effective pollutant control measures that result in actual, observable conditions of urban lands and treatment BMPs that are consistent with the expected conditions used to estimate pollutant load reductions. Actual conditions, as determined by field inspection findings, are compared to expected conditions to determine the appropriate credit award.

To ensure that actual field conditions are consistent with expected conditions used to estimate pollutant load reductions, each Permittee shall conduct treatment BMP and roadway condition assessments as described in the Crediting Program Handbook for all registered catchments.

Handbook Chapter 2.1 describes the process for defining inspection needs, performing facilities inspections, and recording results for registered catchments. Handbook Appendix B includes a detailed example of condition assessment inspection and reporting. Handbook Appendix C provides an overview of how actual conditions are compared with expected conditions to determine how much credit will be awarded.

Permittees shall use the Best Management Practices Maintenance Rapid Assessment Methodology (BMP RAM) and the Road Rapid Assessment Methodology (Road RAM) or their equivalents to assess, score, and document the actual condition of treatment BMPs and roadways. Permittees may define different assessment methods for pollutant control strategies other than treatment BMPs or roadway operations as part of the catchment credit schedule development and verification process.

BMP and Road RAM technical documents, users manuals, and databases can be found on the Water Board's website at:

http://www.waterboards.ca.gov/lahontan/water\_issues/programs/tmdl/lake\_tahoe/index.shtml#imp

The BMP and Road RAM technical documents and users manuals are hereby incorporated into this Monitoring and Reporting Program by reference.

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### F. Condition Assessment Method Alternatives

Should a Permittee consider using a treatment facility assessment method other than the BMP RAM, the Permittee must submit a detailed proposal to the Water Board no later than <u>March 15, 2012</u>. The submittal must demonstrate that any proposed equivalent method will effectively evaluate treatment facility condition based on treatment process (infiltration, particle settling, media filtration, or nutrient cycling), is capable of evaluating the condition of the BMP on a 0-5 scale, with 5 representing the highest functioning condition, and produces repeatable results that are consistent with the BMP RAM.

Should a Permittee consider using a roadway condition assessment method other than the established Road RAM, it must submit a detailed proposal to the Water Board Executive Officer no later than **March 15**, **2012**. The submittal must demonstrate that any proposed equivalent method will effectively evaluate roadway condition based on field observations of sediment accumulation, can demonstrably extrapolate results to other roadway areas, is capable of evaluating the condition of representative roadway segments on a 0-5 scale, with 5 representing the cleanest condition, and produces repeatable results consistent with the Road RAM.

The initial submittal for alternative condition assessment methods need not contain all technical information of the proposed alternative methods, but must establish a schedule for fully developing and submitting details for Water Board approval. Water Board staff and the Executive Officer will review any proposed alternatives and will bring the proposals before the Water Board for consideration. Permittees shall used the established Road and BMP RAM protocols during the period of time while alternative methods are being develop and before such methods have been approved by the Executive Officer.

### II. Inspection Requirements

### A. Stormwater Facilities Inspections

Visual inspection of storm water collection, conveyance, and treatment facilities is the most efficient tool to assess facility function and evaluate maintenance needs.

For portions of a Permittee's jurisdiction <u>not</u> included in a Crediting Program registered catchment, Permittees shall inspect all storm water collection and conveyance facilities **at least once annually.** Permittees

shall conduct facilities inspections between May 1 and September 1 of each year to provide the opportunity to perform facilities maintenance as needed.

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Storm water facilities shall be inspected for signs of needed maintenance, evidence of erosion, damage from snow removal equipment, and accumulated sediment and debris. During inspections, Permittees shall also assess potential storm water pollutant sources including but not limited to:

- Private property/residential runoff
- Commercial property runoff
- Eroding cut slopes
- Eroding road shoulders
- Traction abrasive application
- · Dislodged sediment from snow removal activities
- Vehicles tracking sediment onto the roadway
- Parking related erosion

Permittees shall implement an inspection documentation and tracking system to record inspection findings and prioritize maintenance needs. At a minimum, the tracking system shall provide mechanisms to document the following:

- Inspector's name
- Date and time of inspection
- Field and weather conditions at the time of the inspection
- Mapped inspection location
- Observed facility condition at time of inspection
- An assessment of needed maintenance or other follow-up actions
- Prioritization of needed maintenance

### B. Construction Site Inspections

Permittees shall establish construction site inspection frequencies based on the water quality prioritization described in Permit Section III.B.1. At a minimum, Permittees shall conduct weekly inspections during the construction season of high priority construction projects and construction projects overseen by the Permittee (e.g. erosion control projects).

Permittees shall implement a construction site inspection documentation and tracking system to record inspection findings. At a minimum, the tracking system shall provide mechanisms to document the following:

- Inspector's name
- Date and time of inspection
- Field and weather conditions at the time of the inspection

- Inspection location
- Observed facility conditions
- An assessment of follow up and enforcement actions taken, if needed.

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### C. Traction Abrasive and Deicing Material

The goal of traction abrasive monitoring program is to measure the quantity of material applied and recovered. To meet that objective, Permittees shall implement a program that, at a minimum, includes the following:

- A program to track and record the total amount of abrasive and deicing material applied to its roads and parking areas per winter season. Materials applied to Permittee roads by other approved entities shall be tracked and recorded along with Permittee applied material.
- 2. A program to track and record the location that maintenance crews, Permittee contractors, or other approved entities apply abrasive and deicing material (e.g. amount applied per "zone").
- 3. A program to track and record the amount of sediment and other material recovered from sweeping and vacuum extraction operations. Permittees shall report separate sediment amounts recovered by sweeping and vacuum equipment, respectively.

### III. Water Quality Monitoring Requirements

### A. Catchment Scale Runoff Water Quality Monitoring

The Crediting Program and associated load estimation tools, including the Pollutant Load Reduction Model (PLRM), estimate the average annual pollutant load reductions at a catchment scale as a result of pollutant control actions. Stormwater monitoring is needed to verify that implementing cumulative pollutant control actions is resulting in measurable pollutant load reductions at the catchment outfall. Demonstrating pollutant load reductions at select catchment outlets will verify that the jurisdictions cumulative pollutant control actions are effective and confirm credit awards are warranted.

To assess the water quality at the urban catchment outfalls and provide load estimation tool comparison data, each Permittee shall develop a monitoring plan that will, at a minimum:

1. Establish monitoring locations at stormwater outfalls at the down-gradient discharge locations (i.e. outfalls) of no less than two (2) Crediting Program registered catchments.

- Obtain continuous flow data at the catchment outfall and report data as seasonal [Winter/Spring (December 1-May 31) and Summer/Fall (June 1-November 30)] total outflow volumes (in cubic feet).
- 3. Collect water samples from the outfall to measure the range of pollutant concentrations experienced at the catchment outlet.

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4. Analyze all collected water samples for the Lake Tahoe TMDL pollutants of concern. The priority pollutant is fine sediment particles (FSP) less than 16 micrometers (μm) in diameter, reported as the number of particles per liter of water. Samples collected and analyzed for FSP shall span the range of expected FSP concentrations experienced at the selected catchment outfall with an emphasis on capturing samples that represent the upper 25% of FSP concentrations experienced.

Total nitrogen, total phosphorus, and total suspended solids sample analyses may be conducted with lesser frequency than FSP analyses provided Permittees demonstrate the proposed approach will adequately reflect the range of nutrient concentrations at the catchment outlet.

- 5. Collect continuous turbidity measurements (30 minute intervals) concurrently with flow at the catchment outfall as a proxy for FSP concentrations. Relate FSP concentration results to instantaneous turbidity measurements by developing an FSP concentration/turbidity rating curve that correlates FSP concentration data collected over the range of conditions to measured turbidity.
- 6. Use collected data to estimate the average concentration of each pollutant for each season monitored.
- 7. Calculate the total load (mass in kilograms for total nitrogen, total phosphorus, and total suspended solids and number of particles for FSP) of each pollutant for each season monitored as the product of the total seasonal volume and the average seasonal concentration.
- 8. Use long-term regional meteorological data to identify whether the data were collected during very dry, dry, average, wet, or very wet seasons.
- Follow quality assurance protocols established by the Regional Stormwater Monitoring Program (RSWMP) Quality Assurance Project Plan (May 2011) for all sampling activities.

10. Maintain monitoring locations and collect samples for the 2012/13 water year (October 1 – September 30) and for each water year thereafter for the remainder of this permit term.

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### B. Best Management Practice (BMP) Effectiveness Monitoring

The PLRM and other pollutant load estimation tools use the best available information to assess water quality benefits expected from implementing stormwater treatment devices and other BMPs. Condition assessments are used to verify that the condition of a BMP or specific land use is being maintained at an acceptable condition. BMP effectiveness monitoring is needed to verify that each Permittee's BMP implementation and maintenance practices are resulting in actual measured pollutant load reductions. BMP effectiveness monitoring is also need to improve installation and maintenance practices for various BMPs to optimize water quality benefits.

Each Permittee's monitoring plan must, at a minimum, describe efforts to:

- 1. Select at least one (1) stormwater treatment device or other BMP and monitor effectiveness for at least three successive years.
- If the selected BMP is a flow-through structure/device, obtain continuous flow at the inlet and outlet to support seasonal [Winter/Spring (December 1-May 31) and Summer/Fall (June 1-November 30)] inflow and outflow volume reporting.

If the selected BMP is not a flow-through device, devise a reasonable obtain continuous flow at the inlet to support seasonal volume reporting of stormwater treated/infiltrated/contained by the BMP.

If the selected BMP is a pollutant source control measure, the Permittee need not report hydrology and the monitoring plan shall describe methods to calculate the mass of pollutant controlled per land surface area.

- Collect influent (or up gradient) and effluent (or down gradient) stormwater samples to assess treatment device/activity performance
- 4. Collect water samples from the inlet and outlet to measure the range of pollutant concentrations at BMP inlet and outlet.
- Analyze all collected water samples for the Lake Tahoe TMDL pollutants of concern. The priority pollutant is FSP reported as the number of particles per liter of water. Samples collected and analyzed for FSP shall span the range of expected FSP

concentrations experienced at the inlet and outlet with an emphasis on capturing samples that represent the upper 25% of FSP concentrations experienced.

Total nitrogen, total phosphorus, and total suspended sediment sample resolution can be conducted with lesser frequency than FSP analyses provided Permittees demonstrate the proposed approach will provide a representative sampling of the range of pollutant concentrations.

- 6. Use collected data to estimate the average concentration of each pollutant for each season monitored.
- 7. If evaluating a pollutant or hydrologic source control BMP, describe a data collection approach and reasonable extrapolation method to estimate volume of runoff eliminated (hydrologic source control) or the mass of the pollutant, or number of particles eliminated per unit area of the land surface affected (pollutant source control). Describe how this value will be used to estimate pollutant loads controlled per season [Winter/Spring (December 1-May 31) and Summer/Fall (June 1-November 30)].
- 8. Use long-term regional meteorological data to identify whether the data were collected during very dry, dry, average, wet, or very wet seasons.
- 9. Follow quality assurance protocols established by the Regional Storm Water Monitoring Program Quality Assurance Project Plan (May 2011) for all sampling activities.
- 10. Maintain monitoring locations and collect samples for the 2012/13 water year (October 1 September 30) and for each water year thereafter for the remainder of this permit term.

### C. Monitoring Plan

By <u>August 15, 2012</u> each Permittee shall prepare a stormwater monitoring plan to implement the requirements described in Sections III.A and III.B above.

For catchment outfall monitoring the plan shall describe how the requirements in Section III.A above will be met, including which catchments the Permittee proposes to monitor, proposed monitoring instrumentation, proposed sampling frequency, data management and proposed analysis and reporting methods. The monitoring shall include a detailed discussion of the rationale for chosen sampling sites, methods, and frequency and a discussion of how the proposed monitoring will support, enhance, or otherwise inform the Permitee's existing load

estimation or condition assessment methods and the Permittee's pollutant load reduction program.

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For the BMP effectiveness monitoring, the plan shall describe how the requirements in Section III.A above will be met, including a description of the selected stormwater treatment device or BMP, a discussion of influent (or upstream) and effluent (downstream) monitoring locations, and a description of how the proposed monitoring will evaluate the effectiveness of the chosen BMP and provide information to improve the collective understanding of how the chosen BMP should be installed and maintained over time.

The Water Board Executive Officer will review submitted monitoring plans to ensure that proposed monitoring will meet the requirements outlined in Sections III.A and III.B above.

### D. Stormwater Monitoring Data Management

Electronic data shall be in a format compatible with the Surface Water Ambient Monitoring Program (SWAMP) database (See <a href="http://mpsl.mlml.calstate.edu/swdataformats.htm">http://mpsl.mlml.calstate.edu/swdataformats.htm</a>). Permittees shall maintain an information management system that will support electronic transfer of data to the Regional Data Center of the California Environmental Data Exchange Network (CEDEN).

Permittees shall make electronic reports available through a regional data center, and optionally through their web sites. Permittees shall notify stakeholders and members of the general public about the availability of electronic and paper monitoring reports through notices distributed through appropriate means, such as an electronic mailing list.

### E. Stormwater Monitoring Compliance Options

To promote cost savings through economies of scale and avoid monitoring redundancy, Permittees may obtain monitoring data through various organizational structures, including use of data obtained by other parties.

Permittees may also choose to comply with the stormwater monitoring requirements through a collaborative effort. Should the Permittees chose to conduct monitoring described in Sections III.A and III.B above as part of a collaborative effort, the group may submit a single stormwater monitoring plan to fulfill the requirement contained in Section III.C above.

Any collaborative monitoring plan shall include plans to collect samples from no less than four (4) urban catchments and evaluate performance of no less than two (2) BMPs. Selected catchments shall represent a range of urban land use condition, size, maintenance practices, and other

relevant variables to avoid overlap in collected monitoring data. Similarly, selected BMPs must reflect differing treatment processes and treatment approaches implemented by the Permittees to provide a range of useful monitoring findings. The submitted monitoring plan shall describe how the proposed collaborative effort will effectively enhance the usefulness of collected data, achieve cost savings, and meet the requirements outlined in Sections III.A and III.B above.

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For each monitoring component that is conducted collaboratively, Permittees shall prepare a single report on behalf of all contributing Permittees; separate water quality monitoring reports are not required.

If an existing collaborative organization or other research and monitoring effort has initiated plans before the adoption of this Permit to conduct monitoring that would fulfill the requirements described in Sections III.A, III.B, and III.C above, the Permittees may request the Water Board adjust monitoring and reporting dates to synchronize with such efforts.

### IV. <u>Annual Reporting Requirements</u>

For each water year (October 1-September 30), Permittees shall develop and submit an Annual Report no later than **March 15** of each year and shall include the following elements:

### A. Pollutant Load Reduction Reporting

Each Permittee must describe actions taken to fulfill the requirements of Monitoring and Reporting Section I. Specifically, each Permittee's annual report must include a list of catchments registered in the Accounting and Tracking Tool and a summary of applicable condition assessment results for all registered catchments pursuant to Section I.D above.

Each Permittee shall list its total credit award as of March 15 each year to demonstrate progress at meeting the requirement to reduce fine sediment particle loading by 10 percent of each jurisdictions' established baseline load as described by Table I.B above.

Each Permittee shall describe load reduction progress in context of its Pollutant Load Reduction Plan (PLRP), including a discussion of whether catchment registration, associated load reduction estimates, and implementation actions are consistent with the submitted and accepted PLRP.

Each Permittee shall provide a statement confirming compliance with Permit Section IV.D. The statement shall include a summary of development and or redevelopment projects permitted by the Permittee during the previous water year and confirmation that any change in pollutant loading has been documented by registering the applicable catchment in the Crediting Program.

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### B. Facilities Inspection Report

The annual report shall include a summary report of all facility inspections performed pursuant to Section I.A of this Monitoring and Reporting Program. The report shall include a list of all areas inspected, a description of identified pollutant sources and/or problem areas, and any planned or completed maintenance and/or enforcement follow up activities.

### C. Construction Site Inspection Report

The annual report shall include a detailed summary report of all construction inspections performed pursuant to Section II.B of this Monitoring and Reporting Program. The summary report shall include a list of all construction sites inspected, a description of identified problems, and any planned or completed enforcement follow up activities.

### D. Traction Abrasive and Deicing Material Report

The annual report shall include a summary report of the monitoring data collected pursuant to Section II.C of this Monitoring and Reporting Program.

### E. Stormwater Monitoring Report

Each Permittee shall annually submit a comprehensive electronic report summarizing the previous water year (October 1 – September 30) and cumulative stormwater monitoring results from the catchment load monitoring and BMP effectiveness evaluations.

If Permittees are working collaboratively to meet the requirements specified in Section III of this Monitoring and Reporting Program, a single report for participating Permittees will be accepted.

The stormwater monitoring report shall include, at a minimum, the following:

- 1. A discussion of monitoring purpose and study design rationale.
- 2. Details of the data collection methods, sampling protocols and analytical methods including detection limits.
- 3. Quality Assurance/Quality Control summaries.
- 4. Maps and descriptions of all monitoring locations including latitude and longitude coordinates and data obtained at each location.
- 5. Raw analytical data that includes sample identification, collection date, time and analytical reporting results for all collected samples.

- 6. Documentation of data management procedure.
- 7. Details of data analysis, calculations and assumptions to obtain results and draw conclusions.

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- 8. Catchment outlet monitoring data tables and graphical data summaries that include seasonal total volume (cubic feet), seasonal average concentrations (milligrams/liter and number of particles/liter) and load (kilograms and number of particles) of each pollutant outlined in section III.A.4. For long-term catchment monitoring, provide recent data in context with cumulative comparable results from previous years, noting trends. Consider the season type (wet, dry, average, etc) for each seasonal data point when evaluating trends and inter-annual variability in catchment results.
- 9. For flow-through BMPs data tables and graphical data summaries of seasonal volume (cubic feet), average inlet and outlet pollutant concentrations (milligrams/liter and number of particles/liter) and pollutant loads (kilograms and number of particles) for each pollutant outlined in section III.B.4. Permittees shall report the seasonal stormwater volume (cubic feet) and pollutant load reduced (kilograms and number of particles) for each pollutant for each season of measure.
- 10. For hydrologic or pollutant source control BMPs data tables and graphical summaries of seasonal stormwater volumes (cubic feet) (hydrologic source control) as a result of the BMP implementation and maintenance or seasonal pollutant mass (kilograms and number of particles) reduced over the area of land surface subject to the chosen BMP for all each pollutant described in Section III.B.4. For multi-year BMP evaluations, provide recent data in context with cumulative comparable results from previous years, noting trends.
- 11. An assessment of annually collected data in the context of the water year type using the regional meteorological analysis and provide interpretation of this data relative to average annual estimates.
- 12. A discussion lessons learned from stormwater monitoring efforts including, but not limited to, catchment water quality improvement strategies, pollutant sources analyses, pollutant fate and transport within sampled catchments, BMP design and/or implementation improvements, and maintenance strategy effectiveness (including techniques or frequency).

### F. Illicit Discharge Report

To assess compliance with Permit Sections I.A and III.B.5 each Permittee shall annually submit a report describing actions taken to prevent unauthorized non-stormwater discharges and report any identified illicit discharges to its collection, conveyance, and treatment facilities. The report shall include a description of any education, outreach, or inspection activities conducted pursuant to Permit Sections III.B.1, III.B.2, III.B.3 and III.B.4 that support the Permittee's program to prohibit unauthorized non-stormwater discharges.

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### G. Provisions

Permittees shall comply with the "General Provisions for Monitoring and Reporting" dated September 1, 1994 that is attached to and made part of this Monitoring and Reporting Program.

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# ATTACHMENT D

### **ATTACHMENT D**

# LAKE CLARITY CREDITING PROGRAM HANDBOOK

Available on the Water Board Website:

www.waterboards.ca.gov/lahontan/water issues/programs/tmdl/lake tahoe/docs/lccp handbook.pdf

# ATTACHMENT E

### **ATTACHMENT E**

# SELECTED WATER QUALITY OBJECTIVES LAKE TAHOE HYDROLOGIC UNIT

- <u>Color</u> Waters shall be free of coloration that causes a nuisance or adversely affects the water for beneficial uses. The natural color of fish, shellfish or the surface water resources used for human consumption shall not be impaired.
- <u>Tastes and Odors</u> Waters shall not contain taste or odor producing substances in concentrations that impart undesirable tastes or odors to fish, shellfish or other inland surface water resources used for human consumption, or cause nuisance or adversely affect the water for beneficial uses.
- <u>Floating Material</u> Waters shall not contain floating material, including solids, liquids, foams and scum, in concentrations that cause a nuisance or adversely affect the water for beneficial uses.
- <u>Suspended Materials</u> Waters shall not contain suspended material in concentrations that cause a nuisance or adversely affect the water for beneficial uses.
- <u>Settleable Material</u> Waters shall not contain substances in concentrations that result in the deposition of material that cause nuisance or adversely affect the water for beneficial uses. The concentration of settleable material in surface waters shall not be raised by more than 0.1 milliliter per liter (ml/l).
- Oil and Grease Waters shall not contain oils, greases, waxes or other materials that result in a visible film or coating on the surface of the water or on objects in the water that cause nuisance or that otherwise adversely affect the water for beneficial uses.
- <u>Biostimulatory Substances</u> Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses.
- <u>Sediment</u> The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
- <u>Turbidity</u> Waters shall be free of changes in turbidity that cause a nuisance or adversely affect the water for beneficial uses. Increases in Turbidity shall not exceed background levels by more than 10 percent.
- <u>pH</u> The pH shall not be depressed below 7.0 nor raised above 8.4. Changes in normal ambient pH levels shall not exceed 0.5 units.

- <u>Dissolved Oxygen</u> The dissolved oxygen concentrations in terms of percent saturation, shall not be depressed by more than 10 percent, nor shall the minimum dissolved oxygen concentration at any time be less than 80 percent of saturation or less than 7.0 milligrams per liter whichever is more restrictive.
- <u>Bacteria</u> Surface waters shall not contain concentrations of coliform organisms attributable to human wastes. Also, the fecal coliform concentration based on a minimum of five samples for any 30-day period, shall not exceed a log mean of 20 Colony Forming Units (CFU)/100 milliliters (mL), nor shall more than 10 percent total samples during any 30-day period exceed 40 CFU/100 mL. The median concentration of coliform organisms, in ground waters, over any seven-day period shall be less than 2.2 CFU/100 mL.
- Temperature The natural receiving water temperature shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such an alteration in temperature does not create a nuisance, or adversely affect the water for beneficial uses. The temperature of waters with beneficial use designation of cold waters shall not be raised above natural levels.
- <u>Toxicity</u> All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration. The survival of aquatic life in surface waters subjected to a waste discharge shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with the requirements for "experimental water" as described in the American Public Health Association's *Standard Methods for the Examination of Water and Wastewater*, latest edition.
- <u>Pesticides</u> The summation of concentrations of total identifiable chlorinated hydrocarbons, organophosphates, carbonates, and other pesticide and herbicide groups, in any water of the LTHU, shall not exceed the lowest detectable levels, using the most recent detection procedures available. There shall be no increase in pesticide concentrations found in sediments or aquatic life.
- <u>Chemical Constituents</u> Ground waters shall not contain concentrations of chemical constituents in excess of the limits specified in California Code of Regulations, Title 22, Chapter 15, Article 4, Section 64435, Tables 2 and 4, or in amounts that adversely affect the water for agricultural beneficial uses.

# WATER QUALITY OBJECTIVES FOR CERTAIN WATER BODIES LAKE TAHOE HYDROLOGIC UNIT

	Surface Waters		C	Objective (m	ng/L excep	ot as noted	) 1,2	
		TDS	CI	SO₄	В	N	Р	Fe
1	Lake Tahoe	<u>60</u> 65	3.0 4.0	<u>1.0</u> 2.0	<u>0.01</u>	<u>0.15</u>	<u>0.008</u> -	
2	Fallen Leaf Lake	<u>50</u>	<u>0.30</u> 0.50	<u>1.3</u> 1.4	<u>0.01</u> 0.02	See Tab	le 5.1-4 for objectives	
3	Griff Creek	<u>80</u>	<u>0.40</u> -			<u>0.19</u> -	<u>0.010</u>	0.03
4	Carnelian Bay Creek	<u>80</u> -	<u>0.40</u>	<del></del>	<b>*</b> **	<u>0.19</u>	<u>0.015</u> -	<u>0.03</u>
5	Watson Creek	<u>80</u> -	<u>0.35</u> -			<u>0.22</u> -	<u>0.015</u>	<u>0.04</u> -
6	Dollar Creek	<u>80</u> -	<u>0.30</u> -			<u>0.16</u> -	<u>0.030</u> -	<u>0.03</u>
7	Burton Creek	<u>90</u> -	<u>0.30</u> -		~~	<u>0.16</u>	<u>0.015</u>	<u>0.03</u> -
8	Ward Creek	<u>70</u> 85	<u>0.30</u> 0.50	<u>1.4</u> 2.8		<u>0.15</u> -	<u>0.015</u> -	0.03
9	Blackwood Creek	<u>70</u> 90	<u>0.30</u> -	<b></b>		<u>0.19</u> -	<u>0.015</u> -	<u>0.03</u>
10	Madden Creek	<u>60</u> -	<u>0.10</u> 0.20		1	<u>0.18</u> -	<u>0.015</u>	<u>0.015</u>
11	McKinney Creek	<u>55</u> -	0.40 0.50		**	<u>0.19</u>	<u>0.015</u> -	<u>0.03</u> -
12	General Creek	<u>50</u> 90	<u>1.0</u> 1.5	<u>0.4</u> 0.5		<u>0.15</u> -	<u>0.015</u>	<u>0.03</u>
13	Meeks Creek	<u>45</u> -	<u>0.40</u> -			<u>0.23</u> -	<u>0.010</u> -	<u>0.07</u> -
14	Lonely Gulch Creek	<u>45</u>	<u>0.30</u> -			<u>0.19</u>	<u>0.015</u> -	0.03
	continued							

See Fig. 5.1-1	Surface Waters		C	Objective (m	ıg/L excep	t as noted	) 1,2	
		TDS	CI	SO₄	В	N	Р	Fe
15	Eagle Creek	<u>35</u> -	<u>0.30</u> -		1	<u>0.20</u> -	<u>0.010</u>	<u>0.03</u> -
16	Cascade Creek	<u>30</u>	<u>0.40</u> -			<u>0.21</u> -	<u>0.005</u> -	<u>0.01</u> -
17	Tallac Creek	<u>60</u>	<u>0.40</u> -			<u>0.19</u> -	<u>0.015</u> -	<u>0.03</u> -
18	Taylor Creek	<u>35</u> -	<u>0.40</u> 0.50			<u>0.17</u> -	<u>0.010</u>	<u>0.02</u> -
19	Upper Truckee River	<u>55</u> 75	<u>4.0</u> 5.5	<u>1.0</u> 2.0		<u>0.19</u> -	<u>0.015</u> -	<u>0.03</u> -
20	Trout Creek	<u>50</u> 60	<u>0.15</u> 0.20			<u>0.19</u>	<u>0.015</u>	<u>0.03</u> -

B Boron

CIChloride

SO<sub>4</sub>Sulfate

Fe Iron, Total

N Nitrogen, Total P Phosphorus, Total

TDS Total Dissolved Solids (Total Filterable Residues)

<sup>&</sup>lt;sup>1</sup> Annual average value/90th percentile value.
<sup>2</sup> Objectives are as mg/L and are defined as follows:

# ATTACHMENT F

# **General Direction Regarding Compliance With Objectives**

This section includes general direction on determining compliance with the nondegradation. narrative and numerical objectives described in this Chapter. (Specific direction on compliance with certain objectives is included, in italics, following the text of the objective.) It is not feasible to cover all circumstances and conditions which could be created by all discharges. Therefore, it is within the discretion of the Regional Board to establish other, or additional, direction on compliance with objectives of this Plan. Where more than one objective is applicable, the stricter objective shall apply. (The only exception is where a regionwide objective has been superseded by the adoption of a site-specific objective by the Regional Board.) Where objectives are not specifically designated, downstream objectives apply to upstream tributaries.

### **Narrative and Numerical Objectives**

The sections below provide additional direction on determining compliance with the narrative and numerical objectives of this Basin Plan.

#### Pollution and/or Nuisance

In determining compliance with narrative objectives which include the terms "pollution" and or "nuisance," the Regional Board considers the following definitions from the Porter-Cologne Water Quality Control Act.

**Pollution** -- an alteration of the waters of the State by waste to the degree which unreasonably affects either of the following:

- such waters for beneficial uses.
- facilities which serve these beneficial uses.

"Pollution" may include "contamination." Contamination means an impairment of the quality of the waters of the State by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. Contamination includes any equivalent effect resulting from the disposal of waste, whether or not waters of the State are affected.

**Nuisance** -- Anything which meets all of the following requirements:

 Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use

- of property, so as to interfere with the comfortable enjoyment of life or property.
- Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
- Occurs during or as a result of the treatment or disposal of wastes.

References to Taste and Odor, Human Health and Toxicity (also see "acute toxicity" and "chronic toxicity," below):

In determining compliance with objectives including references to Taste and Odor, Human Health or Toxicity, the Regional Board will consider as evidence relevant and scientifically valid water quality goals from sources such as drinking water standards from the California Department of Health Services (State "Action Levels"), the National Interim Drinking Water Standards, Proposition 65 Lawful Levels, National Ambient Water Quality Criteria (USEPA's "Quality Criteria for Water" for the years 1986, 1976 and 1972; "Ambient Water Quality Criteria," volumes 1980, 1984, 1986, 1987 and 1989), the National Academy of Sciences' Suggested No-Adverse- Response Levels (SNARL), USEPA's Health and Water Quality Advisories, as well as other relevant and scientifically valid evidence.

### References to Agriculture or AGR designations:

In determining compliance with objectives including references to the AGR designated use, the Regional Board will refer to water quality goals and recommendations from sources such as the Food and Agriculture Organization of the United Nations, University of California Cooperative Extension, Committee of Experts, and McKee and Wolf's "Water Quality Criteria" (1963).

### References to "Natural High Quality Waters":

The Regional Board generally considers "natural high quality water(s)" to be those waters with ambient water quality equal to, or better than, current drinking water standards. However, the Regional Board also recognizes that some waters with poor chemical quality may support important ecosystems (e.g., Mono Lake).

### References to "10 percent significance level":

A statistical hypothesis is a statement about a random variable's probability distribution, and a decision-making procedure about such a statement

is a hypothesis test. In testing a hypothesis concerning the value of a population mean, the null hypothesis is often used. The null hypothesis is that there is no difference between the population means (e.g., the mean value of a water quality parameter after the discharge is no different than before the discharge.) First a level of significance to be used in the test is specified, and then the regions of acceptance and rejection for evaluating the obtained sample mean are determined.

At the 10 percent significance level, assuming normal distribution, the acceptance region (where one would correctly accept the null hypothesis) is the interval which lies under 90 percent of the area of the standard normal curve. Thus, a level of significance of 10 percent signifies that when the population mean is correct as specified, the sample mean will fall in the areas of rejection only 10 percent of the time.

If the hypothesis is rejected when it should be accepted, a Type I error has been made. In choosing a 10 percent level of significance, there are 10 chances in 100 that a Type I error was made, or the hypothesis was rejected when it should have been accepted (i.e., one is 90 percent confident that the right decision was made.)

The 10 percent significance level is often incorrectly referred to as the 90 percent significance level. As explained above, the significance level of a test should be low, and the confidence level of a confidence interval should be high.

References to "Means" (e.g., annual mean, mean of monthly means), "Medians" and "90th percentile values":

"Mean" is the arithmetic mean of all data. "Annual mean" is the arithmetic mean of all data collected in a one-year period. "Mean of monthly mean" is the arithmetic mean of 30-day averages (arithmetic means). The median is the value which half of the values of the population exceed and half do not. The average value is the arithmetic mean of all data. For a 90th percentile value, only 10% of data exceed this value.

Compliance determinations shall be based on available analyses for the time interval associated with the discharge. If only one sample is collected during the time period associated with the water quality objective, (e.g., monthly mean), that sample shall serve to characterize the discharge for the entire interval. Compliance based upon multiple

samples shall be determined through the application of appropriate statistical methods.

Standard Analytical Methods to Determine Compliance with Objectives Analytical methods to be used are usually specified in the monitoring requirements of the waste discharge permits. Suitable analytical methods are:

- those specified in 40 CFR Part 136, and/or
- those methods determined by the Regional Board and approved by the USEPA to be equally or more sensitive than 40 CFR Part 136 methods and appropriate for the sample matrix, and/or
- where methods are not specified in 40 CFR Part 136, those methods determined by the Regional Board to be appropriate for the sample matrix

All analytical data shall be reported uncensored with method detection limits and either practical quantitation levels or limits of quantitation identified. Acceptance of data should be based on demonstrated laboratory performance.

For bacterial analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000. The detection method used for each analysis shall be reported with the results of the analysis. Detection methods used for coliforms (total and fecal) shall be those presented in Standard Methods for the Examination of Water and Wastewater (American Public Health Association et al. 1992), or any alternative method determined by the Regional Board to be appropriate.

For acute toxicity, compliance shall be determined by short-term toxicity tests on undiluted effluent using an established protocol (e.g., American Society for Testing and Materials [ASTM], American Public Health Association, USEPA, State Board).

For chronic toxicity, compliance shall be determined using the critical life stage (CLS) toxicity tests. At least three approved species shall be used to measure compliance with the toxicity objective. If possible, test species shall include a vertebrate, an invertebrate, and an aquatic plant. After an initial screening period, monitoring may be reduced to the most sensitive species. Dilution and control waters should be obtained from an unaffected area of the receiving waters. For rivers and streams, dilution water should be obtained immediately upstream of the discharge. Standard dilution water can be used if

the above sources exhibit toxicity greater than 1.0 Chronic Toxicity Units. All test results shall be reported to the Regional Board in accordance with the "Standardized Reporting Requirements for Monitoring Chronic Toxicity" (State Board Publication No. 93-2 WQ).

### Application of Narrative and Numerical Water Quality Objectives to Wetlands

Although not developed specifically for wetlands, many surface water narrative objectives are generally applicable to most wetland types. However, the Regional Board recognizes, as with other types of surface waters such as saline or alkaline lakes, that natural water quality characteristics of some wetlands may not be within the range for which the narrative objectives were developed. The Regional Board will consider site-specific adjustments to the objectives for wetlands (bacteria, pH, hardness, salinity, temperature, or other parameters) as necessary on a case-by-case basis.

The numerical criteria to protect one or more beneficial uses of surface waters, appropriate, may directly apply to wetlands. For example, wetlands which actually are, or which recharge, municipal water supplies should meet human health criteria. The USEPA numeric criteria for protection of freshwater aquatic life, as listed in Quality Criteria for Water-1986, although not developed specifically for wetlands, are generally applicable to most wetland types. As with other types of surface waters, such as saline or alkaline lakes, natural water quality characteristics of some wetlands may not be within the range for which the criteria were developed. Adjustments for pH, hardness, salinity, temperature, or other parameters may be necessary. The Regional Board will consider developing site-specific objectives for wetlands on a case-by-case basis.

# ATTACHMENT G

### STANDARD PROVISIONS, REPORTING REQUIREMENTS, AND NOTIFICATIONS FOR NPDES PERMITS

### A. STANDARD PROVISIONS

### 1. <u>Duty To Comply</u> [40 CFR 122.41(a)(1)]

The discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this Order has not yet been modified to incorporate the requirement.

### 2. Need to Halt or Reduce Activity Not a Defense [40 CFR 122.41(c)]

It shall not be a defense for the discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Order. Upon reduction, loss, or failure of a treatment facility, the discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored or an alternative method of treatment is provided. This provision applies, for example, when the primary source of power of a treatment facility fails, is reduced, or is lost.

### 3. <u>Duty to Mitigate</u> [40 CFR 122.41(d)]

The discharger shall take all reasonable steps to minimize or prevent any discharge or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment.

### 4. Proper Operation and Maintenance [40 CFR 122.41(e)]

The discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the discharger only when the operation is necessary to achieve compliance with the conditions of this Order.

### 5. Permit Actions [40 CFR 122.41(f)] [California Water Code § 13381]

This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this Order;
- b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- d. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

The filing of a request by the discharger for modification, revocation and reissuance, or termination of this Order, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

### 6. Property Rights [40 CFR 122.41(g)] [California Water Code §13263(g)]

This Order does not convey any property rights of any sort or any exclusive privilege. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from liabilities under federal, state, or local laws, nor create a vested right for the discharger to continue the waste discharge.

### 7. <u>Inspection and Entry</u> [40 CFR 122.41(i)] [California Water Code § 13267(c)]

The discharger shall allow the Lahontan Regional Water Quality Control Board (Regional Board), or an authorized Regional Board representative, or an authorized representative of the USEPA (including an authorized contractor acting as a representative of the Regional Board or USEPA), upon presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order:
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the Clean Water Act or California Water Code, any substances or parameters at any location.

### 8. Bypass of Treatment Facilities [40 CFR 122.41(m)]

### a. Definitions

- (1) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

### b. Bypass not Exceeding Limitations

The discharger may allow any bypass to occur which does not cause effluent limitations of this Order or the concentrations of pollutants set forth in Ocean Plan Table A or Table B to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs c. and d. of this provision.

### c. Notice

- (1) Anticipated bypass. If the discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.
- (2) Unanticipated bypass. The discharger shall submit notice of an unanticipated bypass as required in section B.7 of this Attachment.

### d. Prohibition of Bypass

Bypass is prohibited, and the Regional Board may take enforcement action against the discharger for bypass, unless:

- (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and
- (3) The discharger submitted notices as required under paragraph c. of this section.

The Regional Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Board determines that it will meet the three conditions listed above in paragraph d.(1) of this section.

### 9. <u>Upset</u> [40 CFR 122.41(n)]

### a. Definition

"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based effluent limitations because of factors beyond the reasonable control of the discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

### b. Effect of an Upset

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph c. of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

### c. Conditions Necessary for a Demonstration of Upset

A discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An upset occurred and that the discharger can identify the cause(s) of the upset:
- (2) The permitted facility was at the time being properly operated;
- (3) The discharger submitted notice of the upset as required in section B.7 of t this Attachment; and
- (4) The discharger complied with any remedial measures required under Provision A.5. of this Attachment C.

### d. Burden of Proof

In any enforcement proceeding the discharger seeking to establish the occurrence of an upset has the burden of proof.

### 10. Other Effluent Limitations and Standards [40 CFR 122.44(b)(1)]

If any toxic effluent standard or prohibition specified in such effluent standard or prohibition is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant that is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this Order, the Regional Board may institute proceedings under these regulations to modify or revoke and reissue the Order to conform to the toxic effluent standard or prohibition.

- 11. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the non-complying discharge.
- The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
- 13. The discharger shall comply with any interim effluent limitations as established by addendum, enforcement action, or revised waste discharge requirements that have been, or may be, adopted by this Regional Board.

### B. REPORTING REQUIREMENTS

### 1. <u>Duty to Reapply</u> [40 CFR 122.41(b)]

This Order expires on October 15, 2010. If the discharger wishes to continue any activity regulated by this Order after the expiration date of this Order, the discharger must apply for and obtain new waste discharge requirements. The discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations not later than 180 days in advance of the expiration date of this Order as application for issuance of new waste discharge requirements.

### 2. <u>Duty to Provide Information</u> [40 CFR 122.41(h)]

The discharger shall furnish to the Regional Board, State Water Resources Control Board (State Board), or USEPA, within a reasonable time, any information which the Regional Board, State Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order, or to determine compliance with this Order. The discharger shall also furnish to the Regional Board, State Board, or USEPA, upon request, copies of records required to be kept by this Order.

### 3. <u>Planned Changes</u> [40 CFR 122.41(1)(1)]

The discharger shall give notice to the Regional Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 122.29(b);
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in this Order, nor to notification requirements under 40 CFR 122.42(a)(l); or
- c. The alteration or addition results in a significant change in the discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of conditions in this Order that are different from or absent in the existing Order, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

### 4. Anticipated Non-Compliance [40 CFR 122.41(1)(2)]

The discharger shall give advance notice to the Regional Board of any planned changes in the permitted facility or activity that may result in noncompliance with the requirements of this Order.

### 5. <u>Transfers</u> [40 CFR 122.41(1)(3)]

This Order is not transferable to any person except after notice to the Regional Board. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the discharger and incorporate such other requirements as may be necessary under the Clean Water Act or the California Water Code in accordance with the following:

### a. Transfers by Modification [40 CFR 122.61(a)]

Except as provided in paragraph b. of this reporting requirement, this Order may be transferred by the discharger to a new owner or operator only if this Order has been modified or revoked and reissued, or a minor modification made to identify the new discharger and incorporate such other requirements as may be necessary under the Clean Water Act or California Water Code.

### b. Automatic Transfers [40 CFR 122.61(b)]

As an alternative to transfers under paragraph a. of this reporting requirement, any NPDES permit may be automatically transferred to a new discharger if:

- (1) The current discharger notifies the SDRWQCB at least 30 days in advance of the proposed transfer date in paragraph b.(2) of this reporting requirement;
- (2) The notice includes a written agreement between the existing and new dischargers containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
- (3) The SDRWQCB does not notify the existing discharger and the proposed new discharger of his or her intent to modify or revoke and reissue the Order. A modification under this subparagraph may also be a minor modification under 40 CFR Part 122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph b.(2) of this reporting requirement.

### 6. Twenty-four Hour Reporting [40 CFR 122.41(1)(6)]

Each Permittee shall develop and submit criteria by which to evaluate events of noncompliance to determine whether they pose a threat to human or environmental health. Using these criteria the discharger shall report any noncompliance with this Order or any noncompliance that may endanger human health or environmental health. Any information shall be provided orally to the Regional Board within 24 hours from the time the discharger becomes aware of the circumstances. A written description of any noncompliance shall be submitted to the Regional Board within five days of such an occurrence and contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information that must be reported within 24 hours under this reporting requirement:

- a. Any unanticipated bypass which exceeds any effluent limitation in this Order;
- Any discharge of treated or untreated wastewater, including reclaimed or recycled wastewater, resulting from pipeline breaks, obstruction, surcharge or any other circumstance;
- Any discharge or spill of raw or potable water not authorized by this order or resulting from pipeline breaks, obstruction, surcharge or any other circumstance;
- d. Any upset which exceeds any effluent limitation in this Order;

- e. Any spill or discharge of non-storm water not authorized by this Order. Nonstorm water discharges not prohibited by the Permittees pursuant to Section IV of this Order need not be reported under this section; and
- f. Any violation of this Order.

### 7. Other Non-Compliance [40 CFR 122.41(1)(7)]

The discharger shall report all instances of noncompliance not reported elsewhere under other sections of this Order at the time annual reports are submitted.

### 8. Other Information [40 CFR 122.41(1)(8)]

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge, or submitted incorrect information in a Report of Waste Discharge, or in any report to the Regional Board, it shall promptly submit such facts or information.

### 9. <u>Signatory Requirements</u> [40 CFR 122.41(k)(1) and 40 CFR 122.22]

All applications, reports, or information submitted to the Regional Board shall be signed and certified.

- a. All Reports of Waste Discharge shall be signed as follows:
  - (1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (a) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or (b) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
  - (3) For a municipality, State, Federal or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (a) the chief executive officer of the agency; or (b) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA).

- b. All reports required by this Order, and other information requested by the Regional Board shall be signed by a person described in paragraph a. of this reporting requirement, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - (1) The authorization is made in writing by a person described in paragraph a. of this reporting requirement;
  - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and,
  - (3) The written authorization is submitted to the Regional Board.
- c. If an authorization under paragraph b. of this reporting requirement is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph b. of this reporting requirement must be submitted to the Regional Board prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Any person signing a document under paragraph a. or b. of this reporting requirement shall make the following certification:
  - I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
- 10. Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this Order shall be available for public inspection at the offices of the Regional Board. As required by the Clean Water Act, Reports of Waste Discharge, this Order, and effluent data shall not be considered confidential.
- 11. The discharger shall submit reports and provide notifications as required by this Order to the following:

DOUGLAS F. SMITH
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION
2501 LAKE TAHOE BOULEVARD
SOUTH LAKE TAHOE, CA 96150

Telephone: (530) 542-5453

Fax: (530) 544-2271

### C. NOTIFICATIONS

### 1. California Water Code Section 13263(g)

No discharge of waste into the waters of the state, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the state are privileges, not rights.

- 2. The Regional Board has, in prior years, issued a limited number of individual NPDES permits for non-storm water discharges to municipal storm water conveyance systems. The Regional Board or State Board may in the future, upon prior notice to the Permittee(s), issue an NPDES permit for any non-storm water discharge (or class of non-storm water discharges) to a municipal storm water conveyance system. Permittees may prohibit any non-storm water discharge (or class of non-storm water discharges) to a municipal storm water conveyance system that is authorized under such separate NPDES permits.
- 3. Enforcement Provisions [40 CFR 122.41(a)(2)] [California Water Code §§ 13385 and 13387]

The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any condition or limitation of this Order, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Clean Water Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation of this Order, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any

condition or limitation of this Order, and who knows at that time that he or she thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Clean Water Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

- 4. Except as provided in Standard Provisions A.10. and A.11. of this Attachment, nothing in this Order shall be construed to relieve the discharger from civil or criminal penalties for noncompliance.
- 5. Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties to which the discharger is or may be subject to under Section 311 of the Clean Water Act.
- 6. Nothing in this Order shall be construed to preclude institution of any legal action o relieve the discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.
- 7. This Order shall become effective on October 12, 2005, provided the USEPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.