CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

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-2005-0026
NPDES NO. CAG616001

I. Discharger and Facility Information

The City of South Lake Tahoe (City), El Dorado County, and Placer County submitted Reports of Waste Discharge in April 2005 to request 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. For the purposes of this permit, the City, El Dorado County, and Placer County are considered Co-Permittees under this NPDES Permit and are referred to collectively as "Permittees".

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

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 "Municipal NPDES Permit."

II. Findings

The California Regional Water Quality Control Board, Lahontan Region (hereinafter Regional Board), finds:

1. Permittees are Dischargers of Urban Runoff

The City, El Dorado County, and Placer County discharge storm water/urban runoff to surface and ground waters of the LTHU. These discharges occur within various hydrologic sub-areas (watersheds) throughout the LTHU. Storm

water/urban runoff from the Permittees storm water collection, conveyance and treatment facilities, includes those discharges from residential, commercial, industrial, and construction areas within the Permit Area.

Board Order 6-00-82, adopted October 12, 2000, previously regulated urban runoff discharge from the City, El Dorado County, and Placer County. Order 6-00-82 expires on October 12, 2005, necessitating this updated Municipal NPDES Permit.

2. Discharge Characteristics

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.

3. Pollutants of Concern

Lake Tahoe is losing transparency at a rate of approximately one foot per year. Transparency loss is due to elevated levels of very fine sediment (particles less than 10 microns) and increased algal growth rates. Consequently the primary pollutants of concern for storm water treatment in the LTHU are very fine inorganic sediment particles (less than 10 microns) and the nutrients that support algal growth (nitrogen and phosphorus).

4. Storm Water Management Programs

The previous Municipal NPDES Permit did not require the Permittees to develop and implement comprehensive, activity-based storm water management programs. Storm water management efforts to date have primarily consisted of implementing and maintaining erosion control and storm water treatment projects. State and federal funding partners have provided the bulk of the capital costs associated with water quality improvement project implementation. The local government contribution has been centered upon maintaining storm water collection, conveyance, and treatment facilities along with conducting project effectiveness studies and funding education and outreach programs.

Storm water management programs that include construction, commercial, industrial, and residential site controls coupled with a facilities inspection program and a thorough public outreach and education plan will further improve urban runoff water quality within each Permittee's jurisdiction.

5. Legal Authority

This Order is issued pursuant to Section 402 of the Federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and Chapter 5.5, Division 7 of the California Water Code (Water Code). It shall serve as an NPDES permit for point source and non-point source discharges from the Permit Area to surface waters. This Order also serves as Waste Discharge Requirements pursuant to Article 4, Chapter 4 of the Water Code for discharges that are not subject to regulation under CWA section 402.

6. Basin Plan

The Regional Board has adopted and the State Water Resources Control Board (SWRCB) and the USEPA have approved the *Water Quality Control Plan for the Lahontan Region* (Basin Plan). The Basin Plan incorporates SWRCB plans and policies by reference, contains beneficial use designations and water quality objectives for all waters of the Lahontan Region, provides numeric runoff standards for storm water runoff in the LTHU, and provides a strategy for protecting beneficial uses of surface and groundwaters throughout the Lahontan Region. Dischargers regulated by this Municipal NPDES Permit must comply with the water quality standards in the Basin Plan and amendments thereto. Copies of the Basin Plan are available at the Regional Board office or it can be accessed on the Internet at http://www.swrcb.ca.gov/rwqcb6/BPlan/Bplan.pdf.

7. Beneficial Uses - Surface Waters

The beneficial uses of the surface waters of Lake Tahoe and its tributaries, as set forth and defined in the Basin Plan for the Lahontan Region, include: municipal and domestic supply, agricultural supply, water contact recreation, non-contact water recreation, ground water recharge, freshwater replenishment, navigation, commercial and sport fishing, cold freshwater habitat, wildlife habitat, preservation of biological habitats of special significance, rare, threatened, or endangered species, migration of aquatic organisms, spawning, reproduction, and development, water quality enhancement, and flood peak attenuation/flood water storage.

8. Beneficial Uses - Ground Water

The beneficial uses of the groundwaters of the LTHU Department of Water Resources Groundwater Basin No. 6-5.02, as set forth and defined in the Basin Plan, include: municipal and domestic supply, and agricultural supply.

9. CEQA

This action to adopt an NPDES permit is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21100, et seq.) in accordance with Section 13389 of the California Water Code.

10. Anti-Degradation Policy

40 Code of Federal Regulations (CFR) 131.12 requires that State water quality standards include an anti-degradation policy consistent with the federal policy. The State Board established California's anti-degradation policy in State Board Resolution 68-16, which incorporates the requirements of the federal anti-degradation policy. Resolution 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings.

11. Monitoring and Reporting

40 CFR 122.48 requires all NPDES permits to specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the California Water Code authorize the water boards to require technical and monitoring reports. The Monitoring and Reporting Program section establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment C and is hereby incorporated into this Order.

12. Notification of Interested Parties

The Regional Board has notified the Permittees and interested agencies and persons of its intent to prescribe Waste Discharge Requirements and an NPDES Municipal Permit for the discharge and has provided them with an opportunity to submit their written comments and recommendations.

13. Consideration of Public Comment

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that Order No. 6-00-82 is rescinded, and, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act, and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements herein.

III. Discharge and Other Prohibitions

A. Unless specifically granted, authorization pursuant to the Municipal NPDES Permit does not constitute an exemption to applicable discharge prohibitions prescribed in the Basin Plan.

B. Storm water discharges regulated by the Municipal NPDES 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.

C. 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.

D. Discharge of fresh concrete or grout to surface waters is prohibited.

E. The discharge of oil, gasoline, diesel fuel, any petroleum derivative, any toxic chemical, or hazardous waste is prohibited.

F. The discharge of waste, including wastes contained in storm water, shall not cause a pollution, threatened pollution, or nuisance as defined in Section 13050 of the California Water Code.

G. At no time shall surplus or waste 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.

H. 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 Lake Tahoe Basin is prohibited.

I. The 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 Lake Tahoe Basin 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 lands below the high-water rim of Lake Tahoe or within the 100-year floodplain of any tributary to Lake Tahoe, is prohibited.

IV. Non-Storm Water Discharge Prohibitions

A. Each Permittee, within its jurisdiction, shall effectively prohibit all types of non-storm water discharges into its storm water collection, conveyance, and treatment facilities unless such discharges are either authorized by a separate NPDES permit or are not prohibited in accordance with this Order.

B. Pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1) the following categories of non-storm water discharges need only be prohibited from entering the Permittees storm water collection, conveyance, and treatment facilities if such categories of discharges are identified by the Permittee as a source of pollutants to waters of the United States:

1. Waterline flushing
2. Landscape irrigation
3. Diverted stream flows
4. Rising groundwater
5. Uncontaminated groundwater infiltration [as defined by 40 CFR 35.2005(201)]
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. Lawn watering
15. Individual residential car washing
16. Flows from riparian habitats and wetlands
17. De-chlorinated swimming pool, spa, or hot tub water
18. Fire fighting flows

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. Not prohibit the discharge category and implement, but instead require the responsible party(s) to implement, Best Management Practices (BMPs) that will reduce the pollutants to levels prescribed in the Section V of this Order; and

3. Submit the following information to the Regional Board for approval within 90 days upon identification of such discharge category:

a. The non-storm water discharge category listed above that the Permittee elects not to prohibit; and
b. The BMPs for each discharge category listed above that the Permittee will implement, or require the responsible party(s) to implement, to prevent or reduce pollutants to the levels specified in Section V of this Order.

V. Discharge Specifications

A. Effluent Limitations

1. All storm water/urban runoff flows generated within each Permittees jurisdiction that discharge to publicly owned or maintained land treatment or infiltration systems or to surface waters shall not contain constituents in excess of the following limits:

Constituent	Units*	Land Treatment/ Infiltration Systems	Surface Waters
Total Nitrogen	mg/L as N	5.0	0.5
Total Phosphorus	mg/L as P	1.0	0.1
Turbidity	NTU	200	20
Oil and Grease	mg/L	40	2.0
Total Iron	mg/L	4.0	0.5

*mg/L = milligrams constituent per storm water liter
*NTU = nephelometric turbidity units.

2. The above-referenced effluent limits for discharges to land treatment and infiltration systems do not apply to temporary best management practices intended to capture runoff from construction sites. The land treatment and infiltration system limits apply only to permanent storm water treatment structures that are not directly connected to surface or ground waters.

3. In accordance with the Water Quality Control Plan for the Lahontan Region, all areas within each Permittee's jurisdiction shall be retrofitted to comply with the numeric storm water effluent limits in V.A.1 above by November 30, 2008.

4. All storm water generated within the Permittee's jurisdiction that is discharged to surface waters shall not contain substances in concentrations that are toxic to, or that produce detrimental physiological responses to human, plant, or animal life.

B. Receiving Water Quality Objectives

1. The discharge of storm water/urban runoff flows generated within the Permittee's jurisdiction to surface waters shall not raise the constituent levels above chemical water quality objectives, cited in Attachment D.

2. The Basin Plan includes numeric and narrative water quality objectives and provides general direction on determining compliance with these objectives (Attachment E). In accordance with the Basin Plan, the discharge of storm water/urban runoff flows generated within the Permittees jurisdiction to surface or ground waters shall not cause a violation of the following water quality objectives for waters of the LTHU:

   a. Color - 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.

   b. Tastes and Odors - 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.

   c. Floating Material - 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.

   d. Suspended Materials - Waters shall not contain suspended material in concentrations that cause a nuisance or adversely affect the water for beneficial uses.

   e. Settleable Material - 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).

   f. 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.

   g. Biostimulatory Substances - 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.

h. Sediment - 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.

i. Turbidity - 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.

j. pH - 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.

k. Dissolved Oxygen - 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.

l. Bacteria - 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.

m. 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.

n. Toxicity - 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.

o. Pesticides - 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.

p. Chemical Constituents - 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.

VI. Legal Authority

A. Each Permittee shall establish, maintain, and enforce adequate legal authority to control pollutant discharges **into** and **from** its storm water collection, conveyance, and treatment facilities through ordinance or other regulatory mechanism. This legal authority must, at a minimum, authorize the Permittee to:

1. Control the runoff discharge pollutant contributions associated with industrial, commercial, and construction activity **to** storm water conveyance and treatment facilities and control the quality of runoff **from** industrial, commercial, and construction sites. This requirement applies to industrial and construction sites that are covered under separate general industrial or construction storm water permits as well as to those that are not. Each Permittee shall update and enforce its grading ordinances if necessary to comply with this Order.

2. Prohibit **all** identified non-storm discharges into and from Permittees storm water collection, conveyance, and treatment facilities (except those discharges listed in Section IV.B above) including but not limited to:

a. Sewage;

b. Discharges resulting from cleaning, repair, or maintenance of any type of equipment or facility including motor vehicles, concrete-related equipment, and portable toilet servicing;

c. Discharges of wash water from mobile operations such as steam cleaning, carpet cleaning, and power washing;

d. Discharges of wash water from the cleaning or hosing of impervious surfaces in municipal, industrial, or commercial, areas including parking lots, streets, driveways, sidewalks, patios, plazas, work yards, and outdoor eating and drinking areas;

e. Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;

f. Discharges of pool, hot tub, or fountain water containing chlorine or other chemicals;

g. Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related waste; and

h. Discharge of food-related wastes (e.g. grease, fish processing, restaurant wash water, etc.).

3. Prohibit and eliminate illicit connections to public storm water collection, conveyance, and treatment facilities;

4. Control the discharge of spills, dumping, or material disposal other than storm water to public storm water collection, conveyance, and treatment facilities;

5. Create tiered enforcement mechanisms to enforce compliance with Permittee storm water ordinances and other regulatory mechanisms;

6. Carry out inspections and monitoring necessary to determine compliance with local ordinances and permits and with this Order, including the illicit discharge prohibition. This means the Permittees must have authority to enter, sample, inspect, review and copy records, and require regular reports from industrial facilities discharging to public storm water collection, conveyance, and treatment facilities, including construction sites; and

7. Require the use of BMPs to prevent or reduce pollutant discharge.

B. By **October 12, 2006**, each Permittee shall provide to the Regional Board a statement certified by its legal counsel that the Permittee has or does not have adequate legal authority to implement and enforce each of the requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and this Order. This statement shall include:

1. 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;

2. Citation of urban runoff related ordinances and the reasons they are enforceable;

3. Identification of the local administrative and legal procedures available to mandate compliance with urban runoff related ordinances and therefore with the conditions of this Order;

4. Description of how these ordinances or other legal mechanisms are implemented and appealed; and

5. Description of whether the municipality can issue administrative orders and injunctions or if it must go through the court system for enforcement actions.

If the Permittee does not have adequate legal authority to implement and enforce Permit requirements, the Permittee shall provide a detailed plan describing how adequate legal authority shall be developed, including a detailed timeline with identified milestones.

VII. 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.

The requirements outlined in A-L below describe the necessary components of a comprehensive storm water management program. The Regional Board recognizes it will take time to develop and implement these components and acknowledges the Permittees will need to spend significant resources to develop effective storm water management programs.

The Permittees SWMPs, consequently, shall describe a clear process for expanding their current storm water activities into a thorough, consistent, unified Storm Water Management Program that incorporates, at a minimum, the elements described in A-L below.

Upon adoption of this Order, each Permittee shall review and modify its submitted SWMP as needed to address the requirements A-L below and submit a revised SWMP no later than **July 15, 2006** for Regional Board approval.

Any revisions and/or improvements to the approved SWMP shall be included in the Annual Report as needed.

A. Retrofit Component

Permittees shall continue to participate in the Lake Tahoe Environmental Improvement Program, administered by the Tahoe Regional Planning Agency, by planning, designing, and constructing erosion control and storm water treatment retrofit projects within its jurisdiction. Each individual SWMP shall identify completed and planned projects and provide a draft schedule for completing remaining retrofit requirements.

Permittees shall endeavor to design erosion control and storm water treatment projects to meet the water quality goals and other requirements contained in this Order, including numeric effluent limits. Permittees shall maintain a database of completed projects that includes the number and location of installed BMPs, the treated watershed area, amount of impervious area, land use, and the project discharge point(s). The use of a Geographical Information System (GIS) database is highly recommended, but not required.

B. 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. At a minimum the construction component plan shall address:

B.1 Grading Ordinance Review
B.2 Construction and Grading Approval Process
B.3 Source Identification
B.4 Prioritization Based on Threat to Water Quality
B.5 Construction Site Inspection
B.6 Construction Activity Education

B.1 Grading Ordinance Review (Construction)

Each Permittee shall review, and update if needed, its grading ordinances to ensure compliance with this Order. The grading ordinance or other regulatory mechanisms shall require implementation of water quality protection BMPs and other measures during all construction phases. Such measure should include the following BMPs or their equivalent:

a. Erosion prevention
b. Slope stabilization
c. Phased grading and realistic scheduling to ensure projects are complete or winterized by October 15th of each year.
d. Revegetation/soil stabilization as early as feasible
e. Native/existing vegetation preservation

f. Stream Environment Zone protection
g. Source control and temporary construction BMP maintenance
h. Retention and proper management of sediment and other construction pollutants on site.

B.2 Construction and Grading Approval Process (Construction)

Prior to approval of local construction and grading permits, Permittees shall require each proposed construction and grading project that involves more than three cubic yards of soil disturbance to implement measures to reduce pollutant discharges from the construction site. Each Permittee shall include the following requirements or their equivalent in its local grading and construction permits:

a. Require project proponent to develop and implement a plan to manage storm water and non-storm water discharges from the site at all times;

b. Require project proponent to emphasize erosion prevention as the most important measure for keeping sediment on site during construction;

c. Require project proponent to utilize sediment controls as a supplement to erosion prevention for keeping sediment on-site during construction, and not as the single or primary method;

d. Require project proponent to minimize areas that are cleared and graded to only the portion of the site that is necessary for construction;

e. Require project proponent to minimize exposure time of disturbed soil areas;

f. Require project proponent to temporarily stabilize, reseed and/or mulch disturbed soil areas as rapidly as possible;

g. Require project proponent to mulch, revegetate, landscape, or otherwise stabilize disturbed areas as early as feasible;

i. Require project proponent to stabilize all slopes;

j. Require project proponent to winterize all graded areas no later than October 15 of each year; and

k. Require project proponents subject to the General NPDES Permit for Storm Water Discharges Associated With Construction Activities in the Lake Tahoe Hydrologic Unit (hereinafter General Construction Permit) to provide evidence of coverage, or application for coverage, under the General Construction Permit.

B.3 Source Identification (Construction)

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

B.4 Threat to Water Quality Prioritization (Construction)

To establish priorities for construction oversight activities under this Order, Permittees shall develop a prioritization process for its watershed-based inventory (developed pursuant to VII.B.3 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) soil erosion potential; (2) site slope; (3) project size and type; (4) stage of construction; (5) proximity to receiving water bodies; and (6) any other factors the Permittee deems relevant.

B.5 Inspection of Construction Sites (Construction)

a. Each Permittee shall conduct construction site inspections for compliance with its ordinances (grading, storm water, etc.), permits (construction, grading, etc.), and this Order. Inspections shall include review of site erosion control and BMP implementation plans.

b. Each Permittee shall establish inspection frequencies and priorities as determined by the threat to water quality prioritization described in VII.B.4 above. During the construction season (May 1 through October 15 of each year), each Permittee shall inspect, at a minimum, each high priority construction site (as determined by prioritization pursuant to V.B.4 above) weekly.

c. Based upon site inspection findings, each Permittee shall implement all follow-up actions necessary to comply with this Order.

B.6 Construction Activity Education (Construction)

a. Internal: Municipal Staff

Permittees shall implement an education program to educate construction, building, and grading review staff and inspectors about:

(1) This Order and local water quality laws and regulations applicable to construction and grading activities.

(2) The connection between construction activities and water quality impacts (i.e., impacts from sediment discharges to surface water).

(3) How erosion can be prevented.

(4) How impacts to receiving water quality resulting from construction activities can be minimized (i.e., through implementation of various source control and structural BMPs).

b. External: Project Applicants, Contractors, Developers, Property Owners, and other Responsible Parties

Permittees shall develop a program to educate project applicants, contractors, developers, property owners, and other responsible parties about the topics outlined in VII.B.6.a above.

C. Industrial Component

Each Permittee shall develop and implement an Industrial Component to reduce pollutants in runoff from industrial sites within its jurisdiction. Industrial sites include but are not limited to: Manufacturing Facilities, Hazardous Waste Treatment, Storage, or Disposal Facilities, Solid Waste Transfer Stations, Recycling Facilities, Transportation Facilities, and Sewage or Wastewater Treatment Facilities. At a minimum the industrial component shall address:

C.1 Source Identification
C.2 Prioritization Based on Threat to Water Quality
C.3 Industrial Site Outreach

C.1 Source Identification (Industrial)

Each Permittee shall develop and annually update as needed an inventory of industrial sites the Permittee has identified within its jurisdiction regardless of site ownership. The inventory shall include the following minimum information for each industrial site: name, address, and a narrative site description. The use of a Geographical Information System (GIS) database is highly recommended, but not required.

C.2 Threat to Water Quality Prioritization (Industrial)

To establish priorities for industrial oversight activities, the Permittee shall prioritize its watershed-based inventory developed pursuant to VII.C.1 above by threat to water quality. In evaluating threat to water quality each Permittee should consider (1) type of industrial activity; (2) materials used in industrial processes; (3) wastes generated; (4) pollutant discharge potential; (5) non-storm water discharges; (6) size of facility; (7) proximity to receiving water bodies; and (8) any other factors the Permittee deems relevant.

C.3 Industrial Site Outreach

Each Permittee shall develop a program to inform high priority industrial site operators of the importance of storm water runoff control and storm water pollution prevention. Outreach efforts shall include information regarding local ordinances or other regulatory measures and associated tiered enforcement mechanisms applicable to industrial site runoff. Permittees shall inform Regional Board staff of any industrial site that does not comply with local regulatory measures or this Order.

D. Commercial Component

Each Permittee shall implement a Commercial Component to reduce pollutants in runoff from commercial sites. At a minimum, the commercial component shall address:

D.1 Source Identification
D.2 Commercial Site Inspections
D.3 Commercial Site Enforcement

D.1 Source Identification and Prioritization (Commercial)

Each Permittee shall develop and annually update an inventory of high priority threat to water quality commercial activities/sources. (If any commercial site/source listed below is inventoried as an industrial site, as required under section VII.C.1 of this Order, it is not necessary to also

inventory it as a commercial activities/source). The commercial source inventory should consider the following business types:

(a) Automobile mechanical repair, maintenance, fueling, or cleaning;
(b) Equipment repair, maintenance, fueling, or cleaning;
(c) Automobile and other vehicle body repair or painting;
(d) Retail or wholesale fueling;
(e) Eating or drinking establishments;
(f) Mobile carpet, drape or furniture cleaning;
(g) Concrete mixing or cutting;
(h) Painting and coating;
(i) Golf courses, parks and other recreational areas/facilities;
(j) Mobile pool and spa cleaning;
(k) Snow removal activities
(k) Other commercial sites/sources that the Permittee determines may contribute a significant pollutant load to its storm water collection, conveyance, and treatment facilities.

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

D.2 Commercial Site Inspection

Each Permittee shall develop a program to inspect high priority commercial sites and sources as needed. Based upon site inspection findings, each Permittee shall implement all follow-up actions necessary to comply with this Order.

D.3 Commercial Site Enforcement

Each Permittee shall enforce its storm water ordinance for commercial sites and sources as necessary to maintain compliance with this Order.

E. Residential Component

Each Permittee shall implement a Residential Component to prevent or reduce pollutants in runoff from residential land use areas and activities. At a minimum the residential component shall address:

E.1 Threat to Water Quality Prioritization
E.2 Residential Areas and Activities Outreach and Enforcement

E.1 Threat to Water Quality Prioritization (Residential)

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

- Automobile repair and maintenance;
- Off-pavement automobile parking;
- Home and garden care activities and product use (pesticides, herbicides, and fertilizers);
- Disposal of household hazardous waste (e.g., paints, cleaning products);
- Snow removal activities;
- Domestic animal and/or livestock wastes;
- Any other residential source that the Permittee determines may contribute a significant pollutant load to its storm water collection, conveyance, and treatment facilities.

E.2 Residential Areas and Activities 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.

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 Order.

F. Road and Facility Inspection Component

Each Permittee shall develop and implement a comprehensive facilities inspection program to assess maintenance needs. At a minimum, the facilities inspection program shall include:

F.1 Storm Water Collection and Conveyance Inspection
F.2 Storm Water Treatment Facility inspection
F.3 Road Shoulder Inspection
F.4 Source Identification

F.1 Storm Water Collection and Conveyance Inspection

Each Permittee shall inspect its storm water collection and conveyance facilities at least once annually and maintain a database of inspection findings. Permittees shall inspect storm drain inlets, pipes, culverts, curb and gutter, asphalt dikes, rock lined or vegetated swales, and any

other storm water collection and conveyance device for signs of needed maintenance, evidence of erosion, damage from snow removal or other equipment, and for accumulated sediment and debris (pine needles, trash, etc.). Each Permittee shall document and prioritize identified maintenance needs. All inspection findings shall be documented and reported in accordance with the attached Monitoring and Reporting Program.

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

F.2 Storm Water Treatment Facility Inspection

Each Permittee shall inspect its storm water treatment facilities at least once annually and maintain a database of inspection findings. Permittees shall inspect storm water treatment basins, treatment vaults, treatment swales, wetland treatment systems, and any other storm water treatment facility for signs of needed maintenance, evidence of erosion, accumulated sediment and debris, (pine needles, trash, etc.), and vegetative cover, if applicable. Each Permittee shall document and prioritize identified maintenance needs. All inspection findings shall be documented and reported in accordance with the attached Monitoring and Reporting Program.

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

F.3. Road Shoulder Inspection

Each Permittee shall inspect road shoulders within its jurisdictional boundaries at least once annually for evidence of erosion and document all inspection findings. Each Permittee shall document and prioritize identified maintenance needs.

F.4 Source Identification

As part of its storm water collection, conveyance, and treatment facility 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. Each Permittee shall document and prioritize identified maintenance needs. All source identification information collected pursuant to this requirement shall be included in the inspection findings as required by VII.F.1, VII.F.2, and VII.F.3.

G. Traction Abrasive and Deicer Application and Recovery

Each Permittee shall develop and document a comprehensive program to manage traction abrasive and deicer application and recovery procedures. The SWMP shall include details of the following:

G.1 Application Areas
G.2 Street Sweeping
G.3 Sediment Collection Operations
G.4 Staff Training

G.1 Application Areas

Each Permittee shall provide a detailed area map showing areas where either the Permittee or other Permittee approved entity (if applicable) apply traction abrasive and deicing material and include a discussion of factors affecting application rates.

G.2 Street Sweeping

Each Permittee shall provide details regarding street sweeping procedures. Information shall include, at a minimum, the following details:

- Number and type of street sweepers owned and operated by the Permittee;
- Procedures that determine which streets are swept and what frequency;
- Procedures to target sweeping operations at applied traction and deicer materials;
- Swept material disposal location and documentation methods;
- Identification of key personnel responsible for street sweeper operations; and
- Discussion of need for additional sweeping equipment and/or personnel to maximize traction material recovery.

G.3 Sediment Collection Operations

Each Permittee shall provide details regarding maintenance activities to remove collected sediment from storm water collection, conveyance, and treatment facilities. Information shall include, at a minimum, the following details:

- Number and type of pieces of equipment for sediment removal owned and operated by the Permittee;
- Procedures that determine sediment is removed from a collection, conveyance, and treatment facilities and with what frequency;

- Material disposal location and documentation methods;
- Identification of key personnel responsible for sediment removal operations; and
- Discussion of need for additional pieces of sediment removal equipment and/or personnel to operate such equipment to maximize traction material recovery.

G.4 Staff Training

Permittees shall describe a program to train responsible staff of the water quality implications of material application and the importance of efficient, effective recovery. The training program shall include, at a minimum, the following details:

- Information regarding how traction abrasives and deicing material are potential water quality pollutants
- Importance of quick material recovery
- Importance of avoiding soil disturbance when snow plowing

H. Education Component

Permittees shall implement an Education Component using any appropriate media to (1) increase the knowledge of the target communities regarding impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) encourage the behavior of target communities to reduce pollutant releases to the environment. At a minimum the education component shall consider the following target audiences:

- Municipal Departments and Personnel
- Construction Site Owners and Developers
- Industrial Owners and Operators
- Commercial Owners and Operators
- Residential Community, General Public, and School Children

H.1 All Target Communities

At a minimum the Education Program for each target audience shall contain information on the following topics where applicable:

- Requirements of local municipal permits and ordinances (e.g., storm water and grading ordinances and permits)
- Impacts of urban runoff on Lake Tahoe water quality
- Importance of good housekeeping (e.g., sweeping impervious surfaces instead of hosing)
- Pollution prevention and safe alternatives
- Household hazardous waste collection

- BMPs: Site specific, structural, and source control
- BMP maintenance
- Non-storm water disposal alternatives (e.g., all wash waters)
- Pet and animal waste disposal
- Equipment and vehicle maintenance and repair
- Public reporting mechanisms
- Importance of native vegetation/mulch for preventing soil erosion

H.2 Municipal, Construction, Industrial, and Commercial Communities

In addition to the topics listed in H.1 above, the Municipal, Construction, Industrial, and Commercial Communities shall also be educated on the following topics where applicable:

- Basic urban runoff training for appropriate personnel
- Illicit Discharge Detection and Elimination observations and follow-up during daily work activities
- Lawful disposal of vacuum truck and sweeping equipment waste
- Water quality impacts associated with land development (including residential construction and redevelopment)
- Storm Water Quality Improvement Committee project planning and design processes
- How to conduct a storm water inspection
- Spill response, containment, & recovery

H.3 Residential, General Public, School Children Communities

In addition to the topics listed in H.1 above the Permittees shall implement a program to provide education materials to Residential, General Public, and School Children Communities on the following topics where applicable:

- Public reporting information resources
- Residential BMP requirements
- Residential car washing and auto maintenance BMPs
- Community activities (e.g., Adopt a Watershed Programs citizen monitoring, creek/beach cleanups, environmental protection organization activities, etc.)

I. Illicit Discharge Detection and Elimination Component

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 address:

I.1 Illicit Discharges and Connections Identification and Elimination
I.2 Investigation / Inspection and follow-up
I.3 Ordinance Enforcement
I.4 Public Reporting of Illicit Discharges and Connections
I.5 Disposal of Used Oil and Toxic Materials

I.1 Illicit Discharges and Connections

Permittees shall develop and implement a program to actively seek and eliminate illicit discharges and connections into its storm water collection and conveyance facilities. Each Permittee shall take steps eliminate all detected illicit discharges, discharge sources, and connections.

I.2 Investigation / Inspection and Follow-Up

Permittees shall establish 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.

I.3 Ordinance Enforcement

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.

I.4 Public Reporting of Illicit Discharges and Connections

Permittees 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.

I.5 Disposal of Used Oil and Toxic Materials

Permittees shall facilitate the proper management and disposal of used oil, toxic materials, and other household hazardous wastes. Such facilitation shall include educational activities, public information activities, and establishment of collection sites operated by the Permittee or other entity.

J. Public Participation Component

Permittees shall incorporate mechanisms for public participation in the implementation of their Storm Water Management Plans.

K. SWMP Effectiveness Component

As part of its individual SWMP, each Permittee shall develop a long-term strategy to assess the effectiveness and successful implementation of its individual SWMP. The long-term assessment strategy shall identify specific direct and indirect measurements that each Permittee will use to track the long-term progress of its SWMP towards achieving improvements in receiving water quality. Methods used for assessing effectiveness should include the following or their equivalent: surveys, pollutant loading estimations, and receiving water quality monitoring. The long-term strategy shall also discuss the role of monitoring data in substantiating or refining the assessment.

As part of its individual Annual Report, each Permittee shall include an assessment of the effectiveness of its SWMP using the direct and indirect assessment measurements and methods developed in its long-term assessment strategy.

L. Fiscal Analysis Component

Each Permittee shall secure the resources necessary to meet the requirements of this Order.

As part of its individual SWMP, each Permittee shall develop a strategy to conduct a fiscal analysis of its urban runoff management program in its entirety. To demonstrate the financial resources needed to implement the conditions of this Order, each Permittee shall conduct an annual fiscal analysis as part of its Annual Report. This analysis shall, for each fiscal year covered by this Order, 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.

VIII. SWMP Revision and Implementation

Prior to July 15, 2006 each Permittee shall review its submitted SWMP for compliance with the above requirements and, if necessary, revise its SWMP.

At a minimum, each individual SWMP submitted on **July 15, 2006** shall contain the following information for the following components:

A. Municipal Facilities Retrofit Component

1. List of erosion control and storm water treatment projects planned for construction from 2006 to 2010.
2. Description of project prioritization methods.
3. Commitment to continue supporting the Storm Water Quality Improvement Committee and associated project delivery tools.
4. Detailed plan and schedule to develop and implement a project-tracking database no later than **May 1, 2007**. The plan shall include database development milestones and provisions for reporting progress to the Regional Board.

B. Construction Component

1. Detailed plan and schedule to review and update grading and other construction ordinances and other regulatory mechanisms to comply with the conditions of this Order. Ordinance updates, if needed, shall be completed no later than **May 1, 2009**.
2. A description of the proposed modified construction and grading approval process, if needed. If not needed, include a description of how the current process meets the conditions of this Order.
3. Updated construction and grading project requirements in local grading and construction permits, if needed.
4. A completed inventory of construction sites subject to local grading and construction permits for the 2006 construction season. Inventory shall be submitted no later than **May 1, 2006** and annually thereafter.
5. Detailed plan to conduct construction site prioritization based on threat to water quality. Construction site prioritization shall begin no later than **May 1, 2006.**
6. A description of planned inspection frequencies.
7. A description of inspection and documentation/tracking methods.
8. A description of enforcement mechanisms and how they will be used.
9. A description of the construction education program and how it will be implemented.

C. Industrial Component

1. A completed inventory of identified industrial sites. Inventory shall be submitted no later than **May 1, 2007** and updated annually thereafter as needed.
2. Detailed plan to conduct industrial site prioritization based on threat to water quality. Industrial site prioritization shall be completed no later than **May 1, 2007.**
3. A description of planned industrial site outreach efforts.
4. A description of how non-compliant sites will be identified and a process for notifying the Regional Board as needed.

D. Commercial Component

1. A completed inventory of high priority commercial activities/sites. Inventory shall be submitted no later than **May 1, 2007** and updated annually thereafter as needed.
2. A description of planned inspection frequencies for high priority sites.
3. A description of inspection and documentation/tracking methods.
4. A description of enforcement mechanisms and how they will be used.

E. Residential Component

1. Detailed plan to identify high priority residential areas and activities that will be used to direct outreach efforts.
2. Which pollution prevention methods will be encouraged for implementation, and how and where they will be encouraged.
3. How the Permittee proposes to assist residential BMP implementation in high priority areas.
4. A description of enforcement mechanisms and how they will be used.

F. Road and Facility Inspection Component

1. A description of current inspection practices and any proposed changes in inspection frequency or methods.
2. A plan to develop and implement a facilities and inspection findings database. The plan must include a detailed timeline with measurable milestones to establish a functioning database by **May 1, 2007**.
3. A response plan to address maintenance needs identified by required inspections.

G. Traction Abrasive and Deicer Application and Recovery

1. A description of current traction abrasive and deicer application on all Permittee's roads and recovery practices, including application area map.
2. A description of current disposal sites for recovered material.

3. A discussion of factors limiting recovery operations.
4. A description of proposed program activities to maximize recovery operations.

H. Education Component

The SWMP shall include a description of the content, form, and frequency of education efforts for each target community.

I. Illicit Discharges Detection and Elimination Component

1. A description of the program to actively seek and eliminate illicit discharges and connections.
2. A description of efforts to facilitate public reporting of illicit discharges and connections, including a public hotline.
3. A description of investigation and inspection procedures to follow-up on inspections, public reports, or other information that indicates potential illicit discharges and connections.
4. A description of enforcement mechanisms and how they will be used.
5. A description of efforts to facilitate proper disposal of used oil and other toxic materials.

J. Public Participation Component

Provide a description of how public participation will be included in the implementation of the SWMP.

K. SWMP Effectiveness Assessment Component

Provide a description of strategies to be used for assessing the long-term effectiveness of the SWMP.

L. Fiscal Analysis Component

1. A description of the strategy to be used to conduct a fiscal analysis of the urban runoff management program.
2. A description of identified funding needs.
3. A discussion of proposed methods for addressing funding shortfalls. Funding plan must include a detailed timeline with measurable milestones to secure needed funding. Permittees are encouraged to explore a variety of sources to adequately fund a program that, at a minimum, meets the requirements of this Order.

IX. Impaired Water Bodies/TMDL

CWA Section 303(d) and 40 CFR 130.7 require States to identify water quality impaired water bodies and pollutants of concern and develop Total Maximum Daily Loads (TMDLs). A TMDL is a quantitative assessment of the total pollutant load that can be discharged from all sources and assimilated by a water body while still meeting water quality standards. The Regional Board is currently in the process of developing TMDLs for listed water bodies within its Region, including Lake Tahoe. Once the Regional Board and USEPA approve TMDLs, the Permittees' storm water discharges to an impaired water body will be subject to waste load allocations. The Regional Board will take a separate action, outside of the approval of this Order, to establish the TMDLs and waste load allocations.

The Regional Board expects to adopt waste load allocations for storm water discharges in the Lake Tahoe Basin during the term of this Order. In the interim period between adoption of this Order and the establishment of applicable waste load allocations, each Permittee shall implement a storm water sediment and nutrient load reduction strategy to protect water quality.

To implement a pollutant load reduction strategy each Permittee shall identify storm water discharge points, estimate drainage area for each point, and use this information to estimate pollutant loads at each discharge location. Once developed, Permittees can use this strategy to prioritize erosion control project implementation by placing a greater emphasis on those points that discharge large pollutant loads directly to surface waters.

By **May 1, 2007** each Permittee shall develop and submit a pollutant load reduction strategy plan that will include, at a minimum, steps to (1) identify and map every storm water outfall within its jurisdiction and calculate the drainage area for each outfall; (2) develop a method to prioritize erosion control and storm water treatment projects; and (3) implement projects based on identified priorities.

X. Table of Required Submittals

Task No.	Task	Permit Section	Submittal/Required Completion Date	Frequency
1	Non-storm water discharge categories the Permittee elects not to prohibit and associated BMPs.	IV.C.3	Within 90 days of determining a non-storm water discharge is identified as a pollutant source	As needed
2	Statement of legal authority	VI.B.1-VI.B.5	October 12, 2006	Once

3	Revise Storm Water Management Plan	VII, VII.A-VII.L	July 15, 2006	Once, update annually as needed
4	Implement erosion control/storm water treatment project tracking database	VIII.A.4	May 1, 2007	Ongoing
5	Update grading and construction related ordinances to comply with this Order	VIII.B.1	May 1, 2009	Once
6	Implement construction project inventory	VIII.B.4	May 1, 2006	Ongoing
7	Implement construction project prioritization program	VIII.B.5	May1, 2006	Ongoing
8	Complete industrial site inventory	VIII.C.1	May 1, 2007	Once, update as needed
9	Implement industrial site prioritization program	VIII.C.2	May 1, 2007	Ongoing
10	Complete commercial site/activity inventory	VIII.D.1	May 1, 2007	Once, update as needed
11	Implement facilities inspection findings database	VIII.F.2	May 1, 2007	Ongoing
12.	Develop pollutant load reduction strategy	IX	May 1, 2007	Once

XI. Water Quality Improvement Strategies

A. Erosion Control Project Design Approach

The California Tahoe Conservancy amended its erosion control project grant guidelines in 2001 to include a "Preferred Design Approach." The approach reflects the current assessment of available technologies and experience in implementing erosion control projects in the Lake Tahoe basin. The Preferred Design Approach emphasizes project elements that prevent erosion (source control) and that reduce the total runoff volume (hydrologic design considerations). Source control and hydrologic design considerations are often the most cost effective measures to improve storm water quality.

The Regional Board supports the Preferred Design Approach as an effective means to plan and design erosion control projects and encourages Permittees to emphasize source control and hydrologic design criteria as well as explore new storm water treatment technologies to construct projects to meet numeric effluent discharge limits.

B. Sediment Source Control Handbook

In April 2005 the California Alpine Resort Environmental Cooperative, with funding from the Regional Board and support from the Sierra Business Council, released a handbook for reducing erosion and controlling sediment sources on alpine ski runs. The handbook describes guiding principles for approaching soil stabilization projects, provides technical notes for selecting and implementing various soil stabilization treatments, and includes a detailed literature review referencing appropriate information for staff involved in implementing and monitoring sediment source control projects.

Although the Sediment Source Control Handbook was developed to guide ski resort managers in developing and implementing sediment control projects, the handbook provides valuable planning tools for all sediment source control activities. The handbook offers proven methods supported by monitoring data to reduce erosion and control sediment.

Since soil stabilization is an integral part of the Permittees erosion control program and the handbook includes proven soil stabilization methods, the Permittees shall review and implement the handbook guidance when planning, designing, and implementing soil stabilization projects. The Sediment Source Control Handbook can be found on the Regional Board website at: **http://www.waterboards.ca.gov/lahontan/cerec.html**

C. Miscellaneous Best Management Practices

Best Management Practices (BMPs) are defined in 40 CFR 122.2 as "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States." For purposes of this Order, BMPs may include non-structural (e.g. public education, regulatory authority, planning, etc.) and structural (e.g. infiltration structures, sediment control devices, etc.) controls. In addition to BMPs specified in Section VII of this Order, each Permittee shall implement, at a minimum, the following BMPs throughout its jurisdiction:

1. Permittees shall take measures to limit vehicle traffic and parking on unpaved areas within jurisdictional rights-of-way.
2. Permittees shall not unnecessarily modify existing drainage ways, earthen ditches, or stream channels unless such modification is necessary for soil stabilization and/or water quality improvement.
3. Permittees shall require all soil disturbance activities to cease and temporary erosion control measures immediately installed if adverse weather conditions threaten to transport sediment from the project site.
4. All disturbed soils shall be adequately stabilized prior to removing temporary erosion control measures.

5. Permittees shall operate snow removal equipment in a way that avoids roadside soil and vegetation disturbance.

XII. 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 **October 12, 2010**. 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 October 12, 2005.

"Original Signed By"
HAROLD J. SINGER
EXECUTIVE OFFICER

Attachments:
A. Definitions
B. Fact Sheet
C. Monitoring and Reporting Program
D. Receiving Water Limits
E. Compliance with Water Quality Objectives
F. Standard Provisions, Reporting Requirements, and Notifications

ATTACHMENT A

DEFINITIONS

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

2. **Best Management Practices (BMPs)** are methods that have been determined to be the most effective, practical means of preventing or reducing pollution from non-point sources, such as pollutants carried by storm water runoff. "BMP" is a broad term that refers to many of the actions that are required under or could be completed as part of the Permit, including behavioral BMPs such as education (e.g., placing inlet stencils and regularly educating municipal staff and others about measures to reduce pollution in stormwater) or discharging wash water to the sanitary sewer instead of the storm drain, structural BMPs such as source controls (e.g., double containment for hazardous materials) and treatment controls (e.g. vegetated swales and detention basins) to treat runoff before it is discharges to the storm drain or local waterway, and other practices that prevent or reduce pollutants from reaching the storm drain or other waters.

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

4. **"Construction"** means constructing, clearing, grading, or excavation that results in soil disturbance. Construction includes structure tear-down. It does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of facility, nor does it include emergency construction activities required to immediately protect public health and safety.

5. **"Co-permittee"** means a permittee to an NPDES Permit that is only responsible for permit conditions relating to the discharge for which is it operator.

6. "**CFR"** means Code of Federal Regulations.

7. **"CWA"** means Clean Water Act.

8. **"Designated Public Access Points"** means any pedestrian, bicycle, equestrian, or public vehicular point of access to jurisdictional channels in the area of the County subject to permit requirements.

9. **"Development"** shall mean any construction, rehabilitation, redevelopment or reconstruction of any public or private residential project (whether single-family, multi-unit or planned unit development); industrial, commercial, retail and other non-

residential projects, including public agency projects; or mass grading for future construction.

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

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

12. **"Effluent limitation"** means any restriction imposed by the Regional Board on quantities, discharge rates, and concentrations of "pollutants" which are "discharges" from "point sources" into "waters of the United States, " the water of the "contiguous zone," or the ocean.

13. **"Environmental Protection Agency"** or **"EPA"** or **USEPA** means the United States Environmental Protection Agency.

14. **"Environmentally Sensitive Areas"** means an area "in which plant or animal like or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human activities and developments" (California Public Resources Code § 30107.5). ESAs subject to storm water mitigation requirements are: areas designated as an Area of Special Biological Significance (ASBS) by the State Water Resources Control Board, an area designated as a significant natural resource by the California Resources Agency, or an area identified by the Discharger as environmentally sensitive for water quality purposes, based on the Regional Board Basin Plan and CWA Section 303(d) Impaired Water-bodies List.

15. **"Facility or Activity"** means any NPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program.

16. **"Hillside"** means property located in an area with known erosive soil conditions, where the development contemplates grading on any natural slope that is 25% or greater and where grading contemplates cut or fill slopes.

17. **"Illicit Connection"** shall mean any man-made conveyance that is connected to the storm drain system without a permit or through which prohibited non-storm water

flows are discharges, excluding roof-drains and other similar type connections. Examples include channels, pipelines, conduits, inlets, or outlets that are connected directly to the storm drain system.

18. **"Illicit Discharge"** means any discharge to the storm drain system that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term illicit discharge includes all non storm-water discharges except discharges pursuant to an NPDES permit, discharges that are identified in this order, and discharges authorized by the Regional Board Executive Officer.

19. **"Infiltration"** means the downward entry of water into the surface of the soil.

20. **"LTHU"** means Lake Tahoe Hydrologic Unit

21. **"MS4"** see Municipal Separate Storm Sewer System.

22. **"Municipal Separate Storm Sewer System"** means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) owned by a State, city, town or other public body, that is designed or used for collecting or conveying storm water, which is not a combined sewer, and which is not part of a publicly owned treatment works. Commonly referred to as an "MS4".

23. **"National Pollutant Discharge Elimination System (NPDES)"** means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA. The term includes an "approved program."

24. **"NPDES"** means National Pollutant Discharges Elimination System.

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

26. **"Non-Storm Water Discharge"** means discharge other than storm water runoff or snowmelt.

27. **"Outfall"** means the point where a municipal separate storm sewer discharges to waters of the United States and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other waters of the United States and are used to convey waters of the United States.

28. **"Parking Lot"** means land area or facility for the parking of commercial or business or private motor vehicles.

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

30. "**Pollutant**" means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, dirt, and industrial, municipal, and agricultural waste discharged into water**.**

31. **"Pollutants of Concern"** means a prioritized list of pollutants identified in the SWMP as requiring additional investigation.

32. **"Potable Water Sources"** means flows from drinking water storage, supply and distribution systems including flows from system failures, pressure releases, system maintenance, well development, pump testing fire hydrant flow testing; and flushing and dewatering of pipes, reservoirs, vaults, and wells.

33. **"Priority Pollutants"** are those constituents referred to in 40 CFR 401.15 and listed in the EPA NPDES Application Form 2C, pp. V-3 through V-9.

34. **"Rain Event"** means any rain event greater that 0.1 inch in 24 hours.

35. **"Redevelopment"** means, but is not limited to, the expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; land disturbing activities related with structural or impervious surfaces. Redevelopment that results in the creation or addition of 5,000 square feet or more of impervious surfaces is subject to the requirements for storm water mitigation. If the creation or addition of impervious surfaces is fifth percent or more of the existing impervious surface area, then storm water runoff from the entire area (existing and additions) must be considered for purposes of storm water mitigation. If the creation or additions is less than fifty percent of the existing impervious area, then storm water runoff from only the addition area needs mitigation.

36. **"Regional Administrator"** means the Regional Administrator of the Regional Office of the Environmental Protection Agency or the authorized representative of the Regional Administrator.

37. **"Restaurant"** means a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC Code 5812).

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

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

40. **"Stream Environment Zone"** refers to lands classified as "1b" by the Tahoe Regional Planning Agency within the Bailey Land Capability Classification System.

41. **"Surface Waters"** include but are not limited to wetlands, lakes, and streams either perennial or ephemeral, and other waters that flow in natural or artificial impoundments. "Surface water" does not include impoundments used exclusively for storm water disposal.

42. **"SWMP"** shall mean the Storm Water Management Plan. The SWMP shall address conditions and requirements of new development.

43. **"SWQIC"** refers to the Storm Water Quality Improvement Committee.

44. **"State General Permit"** shall mean a permit issued by the State Water Resources Control Board or the Regional Board pursuant to 40 CFR § 122 and 123 to regulate a category of point sources. The term State General Permit includes but is not limited to the General Permit for Storm Water Discharges Associated with Construction Activity and the General Permit for Storm Water Discharges Associated with Industrial Activities and the terms and requirements of both. In the event the EPA revokes the delegation of permitting authority of the State Water Resources Control Board, then the term State General Permit shall also refer to any EPA administered stormwater control program for industrial, construction, and any other category of activities.

45. **"Storm Water Pollution Prevention Plan"** shall mean a plan, as required by a State General Permit, identifying potential pollutant sources and describing the design, placement and implementation of BMPs, to effectively prevent non-storm water Discharges and reduce Pollutants in Storm Water Discharges during activities covered by the General Permit.

46. **"Storm Water"** shall mean storm water runoff, snowmelt runoff, and surface runoff and drainage. [40 CFR 122.26 (b)(13)]

47. **"Structural BMP"** means any structural facility designed and constructed to mitigate the adverse impacts of storm water runoff pollution (e.g. canopy, structural enclosure). The category may include both treatment control BMPs and source control BMPs.

48. **"Total Maximum Daily Load (TMDL)"** means the amount of pollutant, or property of a pollutant, from point, nonpoint, and natural background sources, that may be discharged to a water quality-limited receiving water. Any pollutant loading above the TMDL results in a violation of applicable water quality standards.

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

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

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

52. **"Water Quality Standards and Water Quality Objectives"** applicable to the Permittee include those contained in the [Insert Region Name here] Regional Water Quality Control Plan (Basin Plan), the California Ocean Plan, the National Toxics Rule, the California Toxics Rule, and other state or federally approved surface water quality plans. Such plans are used by the Regional Board to regulate all discharges, including storm water discharges.

53. **"Waters of the State"** means any surface water or groundwater, including saline waters, within boundaries of the state.

54. **"Waters of the United States or Waters of the U.S."** means:

    1) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
    2) All interstate waters, including interstate "wetlands";
    3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
        a) Which are or could be used by interstate or foreign travelers for recreational or other purposes;
        b) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

c) Which are used or could be used for industrial purposes by industries in interstate commerce,

4) All impoundments of waters otherwise defined as waters of the United States under this definition;
5) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
6) The territorial sea; and
7) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraph (a) through h (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.22(m), which also meet the criteria of this definition) are not waters of the United States. This exclusion supplies only to man-made bodies of water, which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. [See Note 1 of this section.] Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with US EPA.

55. "**Waste"** includes sewage and any and all other waste substances, liquid, solid gaseous, or radioactive associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.

56. **"Watercourse"** shall mean any natural or artificial channel for passage of water, including jurisdictional channels.

57. **"Wet Season"** means the calendar period beginning October 1 through April 15.

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

ATTACHMENT B

LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD

STATEMENT OF BASIS

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-2005-0026
NPDES NO. CAG616001

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 storm water discharges under the NPDES Program. Subsequently, in 1990, the U.S. Environmental Protection Agency (U.S. EPA) promulgated regulations for permitting storm water 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. These regulations, known as the Phase I regulations, require operators of medium and large MS4s to obtain storm water permits. On December 8, 1999, U.S. EPA promulgated regulations, known as Phase II, requiring permits for storm water discharges from Small MS4s and from construction sites disturbing between one and five acres of land.

Portions of El Dorado County and Placer County and the entire jurisdiction of the City of South Lake Tahoe lie within the Lake Tahoe watershed. Because Lake Tahoe is an Outstanding National Resource Water negatively impacted by urban runoff, 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 Storm Water Permit provided the Regional Board a mechanism to work with the local municipalities to improve storm water management and maintenance practices in the Tahoe area.

NPDES Storm Water Permits expire five years following adoption and Order 6-92-02 was belatedly updated in October 2000 by Order 6-00-82.

This Permit renews and updates the previous NPDES Storm Water Permit (Order 6-00-82) and requires the jurisdictions to develop comprehensive storm water management programs to further control runoff from construction, industrial, and residential properties as well as enhance storm water facility inspection practices and extend public education and outreach programs.

Lake Tahoe – Impaired Water

Lake Tahoe is designated an Outstanding National Resource Water renowned for its extraordinary clarity and deep blue color. Since the 1960s, Lake Tahoe has become impaired by declining transparency and increasing phytoplankton productivity due to elevated fine sediment and nutrient loading attributable to urban development and other anthropogenic activities. Clarity monitoring has shown Lake Tahoe has lost approximately thirty feet of clarity in the last thirty years and the lake continues to lose transparency at an estimated rate of one foot per year.

The Water Quality Control Plan for the Lahontan Region identifies specific Water Quality Objectives for Lake Tahoe. Lake Tahoe does not currently meet the following transparency objective:

> "For Lake Tahoe, the secchi disk transparency shall not be decreased below the levels recorded in 1967-71, based on a statistical comparison of seasonal and annual mean values."

Consequently, the Regional Board placed Lake Tahoe on the CWA 303(d) list of impaired waters. Based on rigorous water quality monitoring and watershed modeling, the cause of impairment (i.e. the cause of transparency loss) is elevated fine sediment, nitrogen, and phosphorus concentrations. The Lake Tahoe Watershed Assessment (USDA 2000) identified urban runoff as one of the primary controllable sources of the pollutants responsible for clarity decline.

Urban Runoff Problem

Steep slopes, erodible soils, and a short growing season make the Lake Tahoe watershed acutely sensitive to development disturbance. Practices that may have little impact elsewhere can cause severe erosion in the Tahoe basin, increasing sediment and nutrient loads to the lake.

Urban development causes two important changes to the native landscape. First, natural vegetated pervious ground cover is converted to impervious surfaces such as roadways, streets, rooftops, and parking lots. Natural vegetated soil can both absorb rainwater and snowmelt and remove pollutants, providing an effective natural purification process. Because impervious surfaces can neither absorb water nor remove pollutants, the natural purification characteristics of the landscape are lost.

Second, urban development creates new pollution sources. Areas disturbed for construction and development loosen previously stabilized soils, serving as a sediment source. Urban development also contributes car emissions, car maintenance wastes, municipal sewage, pesticides, fertilizers, pet wastes, road traction abrasives, and trash. Storm water from some land use types, such as heavily fertilized areas, may be particularly rich in pollutants.

Furthermore, the increased volume, increased velocity, and discharge duration of storm water runoff from developed areas has the potential to greatly accelerate downstream erosion and impair stream habitat in natural drainage. Studies have demonstrated a direct correlation between the degree of imperviousness of a given area and the degradation of its receiving waters.

Traction Abrasives Management

As discussed above, traction abrasive application is a potential threat to urban runoff water quality. The previous NPDES Permit required Permittees to conduct annual chemical analysis to assess the nutrient content and gradation of applied material. Regional Board staff are working with other interested agencies to determine whether a specification for nutrients and physical properties is appropriate.

The updated Municipal NPDES Permit requires measuring the amount of abrasive material applied and recovered and requires the Permittees to evaluate ways to improve application efficiency and maximize recovery. The Permittees will use this information to prioritize maintenance activities and evaluate storm water treatment facility effectiveness.

Controlling Storm Water Discharges

Storm water quality is very difficult to manage because discharges are not continuous, highly predictable events. Rather, discharges are intermittent and weather-dependent in nature (i.e., rainfall and snowmelt). There are a wide range of pollutants in storm water, and concentrations vary depending on storm events. Further difficulty in controlling storm water discharges comes from the large number of outfalls where storm water is discharged.

Two basic control options exist for storm water. One is to prevent pollutants from coming into contact with storm water in the first place by using source control best management practices (BMPs). The second option is treatment BMPs.

Source control BMPs include activities as diverse as changing vehicle and equipment maintenance activities to prevent the leaking of oil or other fluids; landscape design, installation, and maintenance to minimize storm water runoff; land use zoning to reduce the intensity of urbanization in sensitive watersheds; covering up materials that are stored outside and exposed to rainfall and runoff; disconnecting continuous storm water flow paths; stabilizing eroding slopes; limiting traction abrasive application; recovering

traction abrasives through street sweeping and vacuum truck operations; and prohibiting or restricting the use of certain chemicals that are causing a pollution problem (e.g., pesticides, or phosphorus in watersheds that drain to lakes). Source control BMPs such as soil restoration and revegetation can also be used to enhance infiltration rates to reduce storm water runoff volume. Where source control BMPs are feasible, they can be very effective in preventing storm water contamination and limiting the amount of storm water collected for treatment.

Treatment BMPs include detention or retention ponds, filtration and infiltration devices, and constructed wetlands that are designed to capture runoff and treat it using physical, biological, and/or chemical processes. Other treatment BMPs involve routing pre-treated runoff to natural vegetated areas for infiltration and vegetative uptake. The effectiveness and feasibility of treatment BMPs is variable, subject to some debate, and much remains to be learned. Treatment BMPs can be very costly to design, build, maintain, and operate.

Permittee Accomplishments to Date

With funding from State and federal sources, El Dorado County, Placer County, and the City of South Lake Tahoe have been implementing erosion control and storm water treatment projects in the Lake Tahoe basin for more than twenty years. These projects have predominantly involved installing roadside storm water collection systems (such as asphalt dike, curb and gutter) coupled with simple, easy to maintain sediment collection devices (drop inlets, “sand cans”) and detention/retention basins. Capital improvements have also included several stream environment zone restoration projects designed to reduce channel erosion and provide opportunities for natural runoff treatment.

In the spring of 2002 a working group of the Lake Tahoe Basin Executives chartered the Storm Water Quality Improvement Committee (SWQIC) to improve erosion control and storm water treatment project delivery. Specifically, the SWQIC purpose is to build consensus on project design, improve the project development and review process, and develop project planning and delivery tools. The local jurisdictions have been active partners in the committee and have been instrumental in drafting guidance documents to improve the project delivery process. Project proponents began implementing the new project design and delivery process in early 2004 and the SWQIC has prepared and presented multiple training sessions to inform consultants, agency staff, and other interested persons about the new project development tools and share recent project experiences.

Combined with preferred project design guidance required by local funding agencies, the SWQIC planning and delivery process continues to help project proponents implement more effective erosion control and storm water treatment projects.

Storm Water Management Plans

The primary goal of this NPDES Storm Water permit is to require the Permittees to develop comprehensive storm water management programs. Although the three Lake

Tahoe municipalities have a variety of programs and activities that involve storm water project implementation and facilities maintenance, they do not have all-inclusive programs that effectively manage all aspects required by the CWA. For example, the Permittees have relied on the Regional Board and other regulatory agencies to manage and enforce storm water discharges from construction, industrial, and residential properties.

The updated permit requires the jurisdictions to prepare and implement a Storm Water Management Plan that outlines a clear planning process for (1) continuing erosion control and storm water treatment project implementation; (2) inspecting and controlling runoff from construction sites; (3) inspecting and controlling runoff from industrial sites; (4) inspecting and controlling runoff from commercial sites; (5) inspecting and controlling runoff from residential properties; (6) developing a storm water education program for municipal staff and the public; (7) detecting and eliminating illicit discharges; (8) providing for public participation; (9) assessing program effectiveness; (10) inspecting roadways and other municipal storm water facilities; (11) managing traction abrasive and deicing application and recovery; and (12) evaluating program funding needs and providing a fiscal management plan.

These requirements are consistent with those outlined in federal regulations (40 CFR 12.26(d)(2)(iv)) and will provide the Permittees with the opportunity to develop broad storm water management programs to reduce pollutant loads to Lake Tahoe and take a "master plan" approach toward storm water project implementation.

Numeric Effluent Limits

In 1980, the State Water Resources Control Board adopted numeric effluent limits for storm water discharges in the Lake Tahoe Basin. The Regional 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 Regional Board applies the numeric effluent standards on a site or project specific basis in response to identified erosion or runoff problems. The effluent limits for discharges to surface waters apply generally to surface runoff leaving a specific project area and specifically to any storm water runoff that flows directly into a surface water including streams, rivers, lakes, or other surface flows that are hydraulically connected to surface waters.

The effluent limits for discharges to infiltration systems apply to such facilities as trenches, ponds, dry wells, and underground infiltration galleries. These limits are less stringent than the discharges to surface water because infiltration can effectively filter sediment and other pollutants from urban runoff discharges. Incorporating vegetation into infiltration systems can also potentially reduce dissolved nutrient concentrations. Infiltration systems located in areas where the separation between high groundwater and the bottom of the infiltration facility is less than five feet maybe required to meet the effluent limits for surface water discharges.

The numeric effluent limits contained in the Basin Plan (as described above) are included in the updated NPDES Storm Water Permit. For consistency with the previous NDPES Storm Water Permit and Basin Plan requirements that specify a twenty year compliance date for facilities retrofit, the updated NPDES Storm Water Permit includes a November 2008 compliance date for the numeric effluent limits.

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 which 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.

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 Regional 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 22 September 1989 to administer the NPDES Program governing discharges to waters of the United States.

Records Retention

The Permittees are required to retain records of all monitoring information and copies of all requires required by this Municipal NPDES Permit for a period of at least five years

from the date generated. This period may be extended by required of the State Board or Regional Board.

ATTACHMENT C

LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD

MONITORING AND REPORTING PROGRAM
NO. R6T-2005-0026
NPDES NO. CAG616001

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

I. Monitoring Program Requirements

A. Facilities Inspection

Visual inspection of storm water collection, conveyance, and treatment facilities is the most efficient tool to assess facility function and evaluate maintenance needs. Permittees shall inspect all storm water collection and conveyance facilities at least once annually. Such facilities shall include, but not be limited to:

- Storm drain inlets
- Sediment collection devices (sand cans, etc.)
- Storm drain pipes
- Curb and gutter
- Asphalt dikes
- Rock lined ditches
- Vegetated swales
- Storm water outfalls/discharge points
- Treatment basins
- Treatment vaults
- Road shoulders

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 develop and 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:

(1) Inspector's name
(2) Date and time
(3) Field conditions at the time of the inspection
(4) Inspection location
(5) Observed facility conditions
(6) An assessment of needed maintenance or other follow-up actions
(7) Prioritization of needed maintenance

B. Construction Site Inspections

Permittees shall establish construction site inspection frequencies based on the water quality prioritization described in Storm Water Management Plan Requirements (Section VII.B.4 of Order R6T-2005-0026). At a minimum, Permittees shall conduct weekly inspections during the construction season of:

(1) High priority construction projects
(2) Construction projects overseen by the Permittee (e.g. erosion control projects)

Permittees shall develop and 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:

(1) Inspector's name
(2) Date and time
(3) Field conditions at the time of the inspection
(4) Inspection location
(5) Observed facility conditions
(6) An assessment of follow up and enforcement actions taken, if needed.

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:

1. 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 truck operations. Permittees shall report separate sediment amounts recovered by sweeping and vacuum equipment, respectively.

D. Outfall Inventory

Each Permittee shall develop a detailed inventory of all storm water outfalls within its jurisdiction and identify the tributary area draining to each outfall. The inventory shall include all pipes, curb openings, and open channels that discharge urban runoff to surface waters or stream environment zones (see "outfall" definition in Attachment A). Tributary area information shall include percent imperviousness, percent treated area (private property and commercial BMPs, erosion control project areas, etc.), and any known problem areas within the tributary area (bare soils, active erosion, etc.). The use of an automated database system, such as Geographical Information System is highly recommended, but not required.

E. Storm Water Management Plan (SWMP) Review and Update

Each Permittee shall annually review its SWMP to assess progress toward stated goals and milestones. The annual review shall compare program achievements for the previous year against planned activities in each program area for the previous calendar year.

Based on the annual review, each Permittee shall propose SWMP updates as needed to reflect accomplished tasks, program activities for the upcoming year, and identified resource needs to meet the SWMP requirements outlined in Order R6T-2005-0026.

II. Annual Reporting Requirements

Permittees shall develop and submit an Annual Report that describes program activities for each calendar year (January 1-December 31). Annual reports shall be submitted no later than **March 15** of each year and shall include the following elements:

A. Facilities Inspection Report

Permittees shall provide a summary report of all facilities inspections performed pursuant to the SWMP requirements provided in Section VII.F of Order R6T-2005-0026 and 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. Permittees shall submit the first facilities inspection report by **March 15, 2006** and annually thereafter.

B. Construction Site Inspection Report

Permittees shall provided a detailed summary report of all construction inspections performed pursuant to Section VII.B of Order R6T-2005-0026 and Section I.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. The Permittees shall submit the first construction site inspection report by **March 15, 2007** and annually thereafter.

C. Traction Abrasive and Deicing Material Report

Permittees shall submit a summary report of the monitoring data collected pursuant to Section I.C of this Monitoring and Reporting Program. The Permittees shall submit the first traction abrasive and deicing material report by **March 15, 2006** and annually thereafter.

D. Outfall Inventory Report

Permittees shall submit an annual report describing progress on the comprehensive storm water outfall inventory described in Section IX of Order R6T-2005-0026 and Section I.D of this Monitoring and Reporting Program. Permittees shall describe plans to complete the storm water outfall inventory no later than **March 15, 2009.** The first outfall inventory report shall be submitted by **March 15, 2006** and annually thereafter until the inventory is complete.

E. SWMP Review and Update Report

Permittees shall submit a detailed report describing internal SWMP review efforts and associated findings. Each Permittee shall annually review its storm water management program to assess progress in the program areas outlined in Sections VII.A-VII.L of Order R6T-2005-0026. Include descriptions of completed milestones and proposed ongoing activities for each program area. The first SWMP Review and Update Report shall be submitted by **March 15, 2007** and annually thereafter.

F. Fiscal Analysis Report

Permittees shall submit a detailed report describing actions taken to secure funding necessary to implement the comprehensive storm water management program described in Section VII.L of Order R6T-2005-0026. The report shall discuss completed milestones and proposed ongoing activities. The first Fiscal Analysis Report shall be submitted on **March 15, 2007** and annually thereafter.

G. Pollutant Load Reduction Strategy Report

Permittees shall submit a detailed report describing a proposed pollutant load reduction strategy as required by Section IX or Order R6T-2005-0026. The report shall be submitted by **March 15, 2007.**

H. Table of Report Submittals

Task No.	Task	Monitoring and Reporting Section	Submittal Date	Frequency
1	Facilities Inspection Report	II.A	3/15/06	Annually
2	Construction Site Inspection Report	II.B	3/15/07	Annually
3	Traction Abrasive and Deicing Material Report	II.C	3/15/06	Annually
4	Outfall Inventory Report	II.D	3/15/06	Annually
5	SWMP Review and Update Report	II.E	3/15/07	Annually
6	Fiscal Analysis Report	II.F	3/15/07	Annually
7	Pollutant Load Reduction Strategy Report	II.G	3/15/07	Annually

I. 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.

Attachment: General Provisions for Monitoring and Reporting

ATTACHMENT D

WATER QUALITY OBJECTIVES FOR CERTAIN WATER BODIES
LAKE TAHOE HYDROLOGIC UNIT

	Surface Waters	Objective (mg/L except as noted) [1,2]						
		TDS	Cl	SO_4	B	N	P	Fe
1	Lake Tahoe	60 65	3.0 4.0	1.0 2.0	0.01 -	0.15 -	0.008 -	--
2	Fallen Leaf Lake	50 -	0.30 0.50	1.3 1.4	0.01 0.02	See Table 5.1-4 for additional objectives		
3	Griff Creek	80 -	0.40 -	--	--	0.19 -	0.010 -	0.03 -
4	Carnelian Bay Creek	80 -	0.40 -	--	--	0.19 -	0.015 -	0.03 -
5	Watson Creek	80 -	0.35 -	--	--	0.22 -	0.015 -	0.04 -
6	Dollar Creek	80 -	0.30 -	--	--	0.16 -	0.030 -	0.03 -
7	Burton Creek	90 -	0.30 -	--	--	0.16 -	0.015 -	0.03 -
8	Ward Creek	70 85	0.30 0.50	1.4 2.8	--	0.15 -	0.015 -	0.03 -
9	Blackwood Creek	70 90	0.30 -	--	--	0.19 -	0.015 -	0.03 -
10	Madden Creek	60 -	0.10 0.20	--	--	0.18 -	0.015 -	0.015 -
11	McKinney Creek	55 -	0.40 0.50	--	--	0.19 -	0.015 -	0.03 -
12	General Creek	50 90	1.0 1.5	0.4 0.5	--	0.15 -	0.015 -	0.03 -
13	Meeks Creek	45 -	0.40 -	--	--	0.23 -	0.010 -	0.07 -
14	Lonely Gulch Creek	45 -	0.30 -	--	--	0.19 -	0.015 -	0.03 -
	continued...							

WATER QUALITY OBJECTIVES FOR CERTAIN WATER BODIES
LAKE TAHOE HYDROLOGIC UNIT

See Fig. 5.1-1	Surface Waters	Objective (mg/L except as noted) [1,2]						
		TDS	Cl	SO_4	B	N	P	Fe
15	Eagle Creek	35 -	0.30 -	--	--	0.20 -	0.010 -	0.03 -
16	Cascade Creek	30 -	0.40 -	--	--	0.21 -	0.005 -	0.01 -
17	Tallac Creek	60 -	0.40 -	--	--	0.19 -	0.015 -	0.03 -
18	Taylor Creek	35 -	0.40 0.50	--	--	0.17 -	0.010 -	0.02 -
19	Upper Truckee River	55 75	4.0 5.5	1.0 2.0		0.19 -	0.015 -	0.03 -
20	Trout Creek	50 60	0.15 0.20	--	--	0.19 -	0.015 -	0.03 -

[1] Annual average value/90th percentile value.
[2] Objectives are as mg/L and are defined as follows:
B Boron
Cl Chloride
SO_4 Sulfate
Fe Iron, Total
N Nitrogen, Total
P Phosphorus, Total
TDS Total Dissolved Solids (Total Filterable Residues)

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, where 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 F

STANDARD PROVISIONS, REPORTING REQUIREMENTS, AND NOTIFICATIONS FOR NPDES PERMITS

A. STANDARD PROVISIONS

1. Duty To Comply [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. Duty to Mitigate [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. Inspection and Entry [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. Upset [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.

12 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. Duty to Reapply [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. Duty to Provide Information [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. Planned Changes [40 CFR 122.41(l)(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(l)(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. Transfers [40 CFR 122.41(l)(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(l)(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;

b. Any discharge of treated or untreated wastewater, including reclaimed or recycled wastewater, resulting from pipeline breaks, obstruction, surcharge or any other circumstance;

c. 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. Non-storm 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(l)(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(l)(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. Signatory Requirements [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.