CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION
MEETING OF MARCH 9-10, 2016
SOUTH LAKE TAHOE

ITEM 9
Public Hearing - General Waste Discharge Requirements and National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activity in the Lake Tahoe Hydrologic Unit, Counties of Alpine, El Dorado, and Placer

CHRONOLOGY	
June 11, 1993	Lahontan Water Board adopted a National Pollutant Discharge Elimination System (NPDES) permit under Board Order No. 6-93-63 for discharges of storm water from construction activities disturbing five or more acres of land in the Lake Tahoe Hydrologic Unit.
March 10, 2005	Lahontan Water Board adopted/reissued Waste Discharge Requirements (WDRs)/NPDES General Permit under Board Order No. R6T-2005-007 for construction activities disturbing one or more acres of land in the Lake Tahoe Hydrologic Unit.
April 14, 2011	Lahontan Water Board adopted/reissued WDRs/NPDES General Permit under Board Order No. R6T-2011-0019 for construction activities disturbing one or more acres of land in the Lake Tahoe Hydrologic Unit.

BACKGROUND

NPDES permits expire and must be reissued every five years. The current Lake Tahoe NPDES Storm Water Construction General Permit (TCGP, Board Order No. R6T-2011-0019) will remain effective through the end of December 2016. The TCGP regulates construction activities in the Lake Tahoe Hydrologic Unit involving one or more acres of land disturbance, or that are part of a larger common plan of development disturbing one or more acres of land. Water Board staff continues to believe reissuing the TCGP, instead of relying upon the State Water Resources Control Board state-wide NPDES Storm Water Construction General Permit, is necessary to provide the additional provisions necessary to restore and protect the unique characteristics of Lake Tahoe and its tributaries.

The current TCGP has been functioning well. The Proposed Order is an updated version of the current TCGP with some technical changes. The technical changes are intended to address recent Basin Plan amendments and permit implementation issues identified by Water Board staff and stakeholders during the past five years, further enhancing the permit's functionality.

ISSUES
Should the Lahontan Water Board adopt and reissue General Permit requirements with changes for construction activity involving one or more acres of land disturbance in the Lake Tahoe Hydrologic Unit?

DISCUSSION

Water Board staff released a Tentative Order for public comment. The Tentative Order included the following changes compared to the current TCGP:

1. Sampling Rain Events – Eliminated the requirement to sample two rain events during winter conditions, since this is not a practical requirement in the Lake Tahoe basin.
2. Sampling After Business Hours – Eliminated the requirement to collect samples outside of active working/business hours (e.g., holidays, weekends), but the requirement to conduct visual inspections during daylight hours is retained. Staff found that the sampling requirement diverted resources away from ensuring BMPs were functioning properly.
3. Basin Plan – Updated all the Basin Plan prohibitions and exemptions in the TCGP and Attachment F, based upon the Basin Plan amendment that became effective during the current TCGP's term.
4. Consistency – Updated the Notice of Termination requirements to be consistent with options provided in SMARTS (online registry). Added language to prohibit the use of non-photo/biodegradable materials (such as plastic netting) in permanent BMPs to be consistent with state-wide practices.

Water Board staff received comments on the Tentative Order from the California Department of Transportation (Department) and the City of South Lake Tahoe (see Enclosures 2 and 3, respectively). Staff made the additional changes, below, in response to Department recommendations.

1. Visual Inspections – Eliminated the requirement for pre- and during-storm visual inspections during the inactive construction period (October 16 through April 30 of the following year). The requirement is unnecessary since land-disturbing activities have ceased and all sites have been winterized to remain stable during this period. Winterization BMP effectiveness will be maintained through this period when the need to do so is identified during post-storm visual inspections, which are still required during the inactive construction period.
2. Qualified Storm Water Practitioner – Added language to require a written QSP Management Plan that compels better onsite management by the QSP. This change is addressing the practice of some QSPs operating remotely without properly overseeing onsite personnel that conduct inspections and perform maintenance.
3. Training – Strengthened language to require documentation of weekly training of site personnel. The new language is more explicit/stringent than that of the state-wide NPDES Storm Water Construction General Permit.
4. Minor – Staff made a number of minor changes intended to improve clarity and readability.

The Department had one recommendation that Water Board staff finds cannot be accommodated. The Department recommended removing the numerical effluent limitations for storm water discharges to surface waters and land treatment systems, largely based upon challenges encountered in meeting such limitations. Water Board staff explained in its response to the Department that the numerical effluent limitations are in the current TCGP, and must remain in the Proposed Order as they are Basin Plan requirements intended to assist in meeting TMDL goals and objectives. Additionally, NPDES anti-back-sliding rules prevent their removal.

Water Board staff has contacted Department staff since responding to Department comments. Department staff did not express any opposition to the responses.

The City's comments did not result in any changes in preparing the Proposed Order. Water Board staff in its response to the City explained how provisions in the current TCGP and Proposed Order prevent any coverage gaps.

PUBLIC OUTREACH/INPUT

Water Board staff held a public workshop on January 12, 2016. Staff identified the differences between the current TCGP and Tentative Order, answered questions, and solicited input at the workshop.

The opportunity to review the TCGP and to participate in a public hearing regarding the proposed TCGP, were noticed through electronic mailing, Tahoe area newspaper publications, and posting on the Lahontan Water Board website.

RECOMMENDATION

Adopt the Order as proposed.

ENCLOSURE	ITEM	BATES NUMBER
1	Proposed Order	**9-7**
2	Comments Received from the California Department of Transportation with Water Board Staff Responses	**9-169**
3	Comments received from the City of South Lake Tahoe with Water Board Staff Responses	**9-179**

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ENCLOSURE 1

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

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ORDER NO. R6T-2016-PROP
NPDES NO. CAG616002

GENERAL WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY IN THE LAKE TAHOE HYDROLOGIC UNIT, COUNTIES OF ALPINE, EL DORADO, AND PLACER

The following Dischargers are subject to waste discharge requirements as set forth in this General Permit (as authorized by the Notice of Applicability):

Table 1. Discharger Information

Dischargers	Individuals, public agencies, private businesses, and other legal entities performing construction activities within the Lake Tahoe Hydrologic Unit that result in land disturbances of one acre or greater, or less than one acre if part of a larger common plan of development, or as otherwise defined in section II.D.1. of this General Permit.

Table 2. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	**March 10, 2016**
This Order shall become effective on:	**January 1, 2017**
This NPDES Permit shall expire on:	**December 31, 2021**

I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify that this General Permit with all attachments is a full, true, and correct copy of an General Permit adopted by the California Regional Water Quality Control Board, Lahontan Region, on **March 10, 2016.**

PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

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LIST OF ATTACHMENTS

Attachment A -	List of Acronyms
Attachment B -	Glossary
Attachment C -	Construction Site Monitoring and Reporting Program
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Attachment D -	Standard Provisions
Attachment E -	ATS Requirements
Attachment F –	SEZ/Floodplain Waste Discharge Prohibitions and Exemptions
Attachment G -	Water Quality Objectives for Certain Water Bodies
Attachment H -	SWPPP Checklist
Attachment I -	Fact Sheet

I. FINDINGS

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

A. Background. In 1972, 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 National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. On November 16, 1990, the United States Environmental Protection Agency (USEPA) published final regulations that established storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. Regulations (Phase II Rule) that became final on December 8, 1999, lowered the permitting threshold from five acres to one acre.

While federal regulations allow two permitting options for storm water discharges (Individual Permits and General Permits), the Lahontan Water Board has elected to adopt this General Permit that will apply to most storm water discharges associated with construction activity within the Lake Tahoe Hydrologic Unit.

On April 14, 2011, the Lahontan Water Board reissued the *General Permit for Discharges of Storm Water Runoff Associated with Construction Activity Involving Land Disturbance in the Lake Tahoe Hydrologic Unit* (Board Order No. R6T-2011-0019). That General Permit must be reissued to provide continuous coverage for current enrollees. Dischargers of storm water runoff and authorized non-storm water to surface waters in the Lake Tahoe Hydrologic Unit must obtain authorization under this reissued General Permit for construction-related discharges to waters of the United States. To obtain authorization for continued and new-project discharges to waters of the United States, Dischargers must provide a complete application as described in section II of this General Permit.

B. Discharge Description. This General Permit regulates discharges of pollutants in storm water associated with construction activity (storm water discharges) to waters of the United States within the Lake Tahoe Hydrologic Unit from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturbs one or more acres of land surface. Construction activity includes demolition that disturbs the land, clearing, grading, excavation, and other land disturbance activities. Waters as used in this General Permit are defined in section 122.2(a) of title 40 of the Code of Federal Regulations (CFR), and include, but are not limited to, wetlands, rivers and streams, either perennial or ephemeral, which flow in natural or artificial watercourses, lakes and impoundments of waters otherwise defined as waters of the US within the State of

California. Discharges of non-storm water to waters may be necessary for the completion of certain construction projects. Such discharges include those listed in Table 4.1-1 of Attachment F. These discharges are conditionally covered under this General Permit. In some cases, construction activities are coordinated with dredged or fill material discharges regulated separately under CWA sections 401 and 404; these may involve stream diversions on or across a project site, cofferdams and sumps for collecting turbid waters.

C. Legal Authorities. This General Permit is issued pursuant to section 402 of the CWA and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). These waste discharge requirements (WDRs) adopted pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260) shall serve as a NPDES permit for point source discharges of storm water from construction sites disturbing land equal to or in excess of one acre.

Section 122.28 of title 40 of the *Code of Federal Regulations* (40 CFR 122.28) authorizes USEPA and approved states to issue general permits to regulate a point source category if the sources:

1. Involve the same or substantially similar types of operations;
2. Discharge the same type of waste;
3. Require the same type of effluent limitations or operating conditions;
4. Require similar monitoring; and
5. Are more appropriately regulated under a general permit rather than individual permits.

On September 22, 1989, USEPA granted the State of California, through the State Water Resources Control Board (State Water Board) and the nine Regional Water Quality Control Boards, the authority to issue general NPDES permits pursuant to 40 CFR parts 122 and 123. This General Permit meets the criteria 1 through 5 listed above. Regulating many storm water discharges under one permit will greatly reduce the administrative burden associated with permitting individual storm water discharges.

D. Background and Rationale for Requirements. The Lahontan Water Board developed the requirements in this General Permit based on readily available information for similar construction-associated discharges, the State-wide General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ) and the requirements contained in Order No. R6T-2011-0019. In addition, requirements of this General Permit are consistent with Effluent Limitations Guidelines (ELG) and New Source Performance Standards (NSPS) for the Construction and Development point source category. The Fact Sheet, Attachment I, which contains background information and rationale for General Permit requirements, is hereby incorporated into this General Permit and constitutes part of the Findings for this General Permit. Attachments A through H are also incorporated into this General Permit.

E. California Environmental Quality Act (CEQA). This action to adopt a general NPDES permit is exempt from the provisions of chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code sections 21100, et seq.), pursuant to section 13389 of the Water Code.

F. Technology-based Effluent Limitations. Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations (40 CFR 122.44), require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards.

G. Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category. The USEPA published a final rule with revised regulations establishing CWA technology-based effluent limitations guidelines (ELGs) and New Source Performance Standards (NSPS) for the Construction and Development (C&D) point source category; the final C&D rule became effective on May 4, 2015. 40 CFR part 450 establishes technology-based effluent limitations based on best practicable technology (BPT), best available technology (BAT), best conventional pollutant control technology (BCT), and NSPS reflecting the best available demonstrated control technology. For each of BPT, BAT, BCT, and NSPS, the ELGs establish requirements for erosion and sediment controls, soil stabilization, dewatering activities, pollution prevention measures, prohibited discharges, and outlet requirements. Additionally, a BAT numeric effluent limitation for turbidity of 280 NTUs (as a daily maximum value) was set for sites that disturb 10 acres or more of land at one time unless storm water discharges occur as a result of a storm event in that at same day that is larger than the local 2-year, 24-hour storm.

H. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. Water Code section 13263 requires that waste discharge requirements "*implement any relevant water quality control plans that have been adopted and take into consideration the beneficial uses to be protected, the water quality objectives reasonably required for that purpose, other waste discharges, the need to prevent nuisance and the provisions of section 13241*." These requirements, however, only apply to those portions of the permit that exceed the requirements of the federal CWA, and not to those requirements that are necessary to meet the technology-based effluent limitations or the WQBELs necessary to protect water quality objectives for surface waters set out in the Basin Plan. (*City of Burbank v. State Water Resources Control Board*, 35 Cal. 4th 613, 627.)"

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi). This General Permit does not require effluent limitations more stringent than that required by federal law as it includes effluent limitations for discharges that are specified in the *Water Quality Control Plan for the Lahontan Region* (Basin Plan) and carried forward from the prior permit.

I. Storm Water Benchmark Performance Levels. This General Permit also contains concentration-based, pollutant-specific benchmark values for pH in effluent. The benchmarks and related monitoring and reporting requirements contained in this General Permit are consistent with the Basin Plan. The purpose of the benchmarks is to provide a measure of whether a facility's BMPs are meeting performance levels protective of water quality and beneficial uses. This General Permit requires Dischargers to take actions to evaluate excursions from objectives, improve BMP performance if needed when benchmarks are exceeded, and to conduct monitoring and documentation of such actions.

J. Compliance with Effluent Limitations. For purposes of this General Permit, effluent discharges off project boundaries constitute a discharge to surface waters or tributaries to surface waters. This finding is based on the high degree of surface water connectivity in the Lake Tahoe watershed. Therefore, compliance with effluent limitations is required at specified runoff control points where effluent is discharged off project boundaries or to surface waters, including municipal separate storm sewer systems (MS4s). Effluent limits for the discharge to surface waters or MS4s may not apply if the Discharger can document that effluent leaving the project boundaries does not reach surface waters or MS4s.

K. Water Quality Control Plans. The Lahontan Water Board adopted a Basin Plan, which became effective on March 31, 1995 and has been subsequently amended. The Basin Plan designates beneficial uses, establishes water quality objectives (WQOs), and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Lake Tahoe is a water of the state and a traditionally-navigable water of the United States. Designated beneficial uses of surface waters within the Lake Tahoe Hydrologic Unit include municipal and domestic supply (MUN); agricultural supply (AGR); groundwater recharge (GWR); freshwater replenishment (FRSH); water contact recreation (REC-1); non-contact water recreation (REC-2); cold freshwater habitat (COLD); cold

spawning, reproduction, and development (SPWN); commercial and sport fishing (COMM); wildlife habitat (WILD); water quality enhancement (WQE); and flood peak attenuation/flood water storage (FLD). Waters at some locations may also be designated for navigation (NAV); preservation of biological habitats of special significance (BIOL); rare, threatened, or endangered species (RARE); and migration of aquatic organisms (MIGR). Table 5.1-1 in the Basin Plan may be consulted for the beneficial use designations for any specific surface water body.

In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for MUN. Requirements of this General Permit implement the Basin Plan.

L. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

M. Stringency of Requirements for Individual Pollutants. This General Permit contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on turbidity, pH, nitrogen (total), phosphorus (total), iron (total), and grease and oil. In addition, the provisions of this General Permit require the implementation of Best Available Technologies/Best Control Technologies (BAT/BCT) and Best Management Practices (BMPs) to control and abate the discharge of pollutants in storm water discharges, and achieve the numerical and narrative standards of this General Permit and those contained in the Basin Plan[1]. This General Permit's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

N. Antidegradation Policy. 40 CFR 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Lake Tahoe is an Outstanding National Resource Water under the federal policy and afforded the highest protections, such that no permanent or long-term reduction in water quality is allowed. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The

[1] New Source Performance Standards equals the implementation of BAT

Lahontan Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. Discharges in compliance with this General Permit will not result in water quality less than that prescribed in policies and standards, and are therefore consistent with those policies and standards.

O. Anti-Backsliding Requirements. Sections 402(0)(2) and 303(d)(4) of the CWA and federal regulations at title 40, CFR section 122.44(1) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this General Permit are at least as stringent as the effluent limitations in Order No. R6T-2011-0019. Therefore, this General Permit is in compliance with the anti-backsliding provisions of 40 CFR 122.44.

P. Endangered Species Act. This General Permit does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This General Permit requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

Q. Monitoring and Reporting. 40 CFR 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Lahontan Water Board to require technical and monitoring reports. The Construction Site Monitoring and Reporting Program (CSMRP) establishes monitoring and reporting requirements to implement federal and state requirements and is provided in Attachment C.

R. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42. The Lahontan Water Board has also included in this General Permit special provisions applicable to authorized Dischargers. A rationale for the special provisions contained in this General Permit is provided in the attached Fact Sheet.

S. Notification of Interested Parties. The Lahontan Water Board has notified the Dischargers and interested agencies and persons of its intent to prescribe WDRs for the discharge and has given them an opportunity to provide their written comments and recommendations. Details of notification are provided in the Fact Sheet of this General Permit.

T. Consideration of Public Comment. The Lahontan Water Board, in a public meeting, provided an opportunity for a public hearing, and considered all comments

pertaining to the discharge. Details are provided in the Fact Sheet of this General Permit.

IT IS HEREBY ORDERED that all Dischargers indicating their intention to be regulated under the provisions of this General Permit, and all heirs, successors, or assigns, in order to meet the provisions contained in division 7 of the Water Code and regulations adopted thereunder, and the provisions of the CWA and regulations and guidelines adopted thereunder, shall comply with the following:

II. CONDITIONS FOR PERMIT COVERAGE AND NOTIFICATION REQUIREMENTS

A. Legally Responsible Person (LRP)

To obtain authorization for discharges under this General Permit, the project must meet the eligibility requirements specified in section II.D of this General Permit, and the legally responsible person (LRP) or LRP's Approved Signatory (see definition in Attachment B – Glossary) must certify and file Permit Registration Documents (PRDs). Applicants must provide PRDs, an appropriate filing fee, and any additional information, as specified in section II.D.4 as application for issuance of NPDES permit requirements. PRDs must be provided electronically through the State Water Resources Control Board's (State Water Board's) Storm Water Multi-Application and Report Tracking System (SMARTS) at: https://smarts.waterboards.ca.gov/smarts/faces/SwSmartsLogin.jsp.

B. Permit Effective Date

This General Permit is effective on January 1, 2017.

1. **Dischargers Obtaining Coverage On or After January 1, 2017**: All Dischargers seeking coverage under this General Permit on or after January 1, 2017, shall file the required PRDs and filing fee and, prior to commencing land-disturbing activities, must receive a notice through SMARTS indicating the date that coverage begins under the General Permit and the Waste Discharge Identification (WDID) number issued for the project.

2. **Dischargers Previously Covered Under Order No. R6T-2011-0019:** Dischargers previously subject to Order No. R6T-2011-0019 must comply with Order No. R6T-2011-0019 until the Discharger re-enrolls and receives coverage under this General Permit, a Notice of Termination (NOT) for the project is filed and processed, or January 1, 2017, whichever occurs first. On and after January 1, 2017, all coverage under Order No. R6T-2011-0019 is terminated. Previously enrolled Dischargers failing to file PRDs or other information required to complete an application to renew coverage under this General Permit will lose permit coverage on January 1, 2017, and may be subject to enforcement remedies and liability for construction-related discharges without an NPDES permit.

C. General Permit Coverage

1. Dischargers shall be subject to the requirements of and covered by this General Permit only after a WDID number has been issued through SMARTS. In order to demonstrate compliance with coverage requirements for this General Permit, Dischargers must be able to present documentation of a valid WDID number upon request.

2. All Dischargers must implement their Storm Water Pollution Prevention Plan (SWPPP), including their Construction Site Monitoring and Reporting Program (CSMRP) prior to commencement of construction.

3. This General Permit does not pre-empt or supersede the authority of other agencies to prohibit, restrict, or control storm water discharges to MS4s or other watercourses within their jurisdictions.

4. This General Permit does not authorize discharges of fill or dredged material regulated by the US Army Corps of Engineers under section 404 of the CWA and does not constitute water quality certification under section 401 of the CWA.

5. This General Permit does not authorize land-disturbing activities in 100-year floodplains or stream environment zones (SEZ) unless an exemption to applicable waste discharge prohibitions is granted in writing.

6. Lahontan Water Board staff is authorized to issue a single WDID number to a Discharger proposing multiple discharges at multiple locations within the Lake Tahoe Hydrologic Unit, provided that the nature of the discharges and the locations are reported and included in the application information provided with the PRDs for this General Permit.

D. Eligibility Criteria

1. Discharges covered by this General Permit are limited to storm water and authorized non-storm water discharges to surface waters and to land that are associated with construction activities in the Lake Tahoe Hydrologic Unit (Department of Water Resources Hydrologic Unit No. 634.00) as described in any one of the categories listed below:

    a. Construction activity including clearing, grading and excavation activities, except operations that result in land disturbance of less than one acre of total land area, and which are not part of a larger common plan of development or sale.

    b. Construction activity that results in land disturbance of less than one acre if the construction activity is part of a larger common plan of development or sale that disturbs one or more acres.

c. Construction activity that results in land disturbance of one or more acres related to residential, commercial, or industrial development on lands currently used for agriculture or silviculture including, but not limited to, the construction of roads and buildings related to agriculture or silviculture that are considered industrial pursuant to USEPA regulations, such as dairy barns or food processing facilities.

d. Construction activity that results in land disturbance of one or more acres associated with linear underground/overhead utility projects (LUP) including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities), underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

e. Discharges from construction activities that result in land disturbance of one or more acres associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

2. Activities specifically not required or eligible to be covered under this General Permit include:

a. Disturbance to land associated with municipal facilities under an approved NPDES Storm Water Management Program for routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facilities.

b. Disturbances to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and leveling, and soil preparation.

c. Discharges of storm water from areas on tribal lands; construction on tribal lands is regulated by a separate federal permit.

d. Construction activity that disturbs less than one acre of land, and that is not part of a larger common plan of development or sale.

e. Construction activity covered by an individual NPDES Permit for storm water discharges.

3. Upon receipt of the appropriate PRDs, Lahontan Water Board staff will determine if such a discharge satisfies all of the following conditions:

    a. The discharge will be generated from construction activity that does not include any other waste discharge activities, except for those described for authorized non-storm water discharges in section II.D.4., below.

    b. The project does not include permanent disturbance to lands classified as SEZs as defined in the Basin Plan, unless the Lahontan Water Board grants an exemption to applicable discharge prohibitions explicitly in writing.

    c. The project incorporates appropriate temporary BMPs and low impact development (LID) techniques, as feasible, to infiltrate and/or treat storm water runoff from existing and proposed impervious surfaces on the site as required in this General Permit.

    d. The project plans include a SWPPP that proposes specific temporary and permanent measures to prevent the discharge of pollutants from the site.

    e. The project plans include projected dates for:

        i. Completion of construction;

        ii. Completion of storm water infiltration and/or treatment facilities; and

        iii. Completion of any necessary restabilization and revegetation.

4. Discharges of non-storm water may be necessary for certain construction projects. Such discharges include, but are not limited to, irrigation of vegetation, erosion control measures, pipe flushing and testing, and construction dewatering. These discharges are authorized under the following conditions:

    a. The discharge does not violate any other provision of this General Permit.

    b. The discharge is not prohibited by the Basin Plan or, if required by the Basin Plan, a prohibition exemption from the Lahontan Water Board has been granted in writing for discharge prohibitions contained in the Basin Plan.

    c. The Discharger has included and implemented specific BMPs required by this General Permit to prevent or reduce the contact of the non-storm water discharge with construction materials or equipment. For dewatering waste, the Discharger has prepared and provided for review a detailed dewatering and monitoring plan that meets the conditions for Exempted Low Threat Discharges (Attachment F) prior to start of dewatering activities.

    d. The discharge does not contain toxic constituents in toxic amounts.

5. Dischargers are eligible for coverage under this General Permit provided that the Discharger provides PRDs and the proper fee to the State Water Board before starting construction activities. Dischargers previously covered under Order No. R6T-2011-0019 must submit their PRDs and receive approval before continuing construction activities after January 1, 2017. PRDs shall include the Notice of Intent (NOI), site maps, and SWPPP. If an Active Treatment System (ATS) is proposed to be used, information required in Attachment E must also be provided as part of the PRDs. An ATS is distinct from other BMPs in that they include the use of chemical coagulation, chemical flocculation, or electro-coagulation to aid in the reduction of turbidity. For proposed construction activity on easements or on nearby property by agreement or permission, the entity responsible for the construction activity must provide the PRDs and filing fee, and shall be responsible for development of the SWPPP. The NOI must be signed in accordance with the signatory requirements of the Standard Provisions (Attachment D).

   The filing fee shall be provided to:

   SWRCB
   Storm Water Section
   P.O. Box 1977
   Sacramento, CA 95812

   Or hand delivered to:

   SWRCB
   Storm Water Section
   1001 I Street – 15th Floor
   Sacramento, CA 95814

6. Construction activities that involve alteration of a lake-bed or stream channel may require prior written agreement with the California Department of Fish and Wildlife. A copy of the application, and any written agreement or agreement waiver must be provided with the NOI.

7. The Discharger, upon written request, provides additional information necessary to ascertain whether the discharge meets the criteria for coverage under this General Permit.

8. No discharge under this General Permit is authorized until a written WDID number is issued.

9. Notwithstanding the provisions of this section, the Lahontan Water Board may consider adoption of an individual NPDES permit for any discharge, after due notice and a public meeting, when desirable or necessary.

E. Termination of Coverage

1. The Discharger will retain coverage under this General Permit and be billed annually until a NOT is requested through SMARTS and approved by Lahontan Water Board staff. Permit coverage may be terminated based on one of the following:

    a. Construction is complete or suspended – For NOT approval, the Discharger must certify in the NOT request that:

        i. The construction project is complete and there is no potential for construction-related storm water pollution or pollutant discharges;

        ii. All construction materials and waste have been removed from the project site and disposed of properly;

        iii. All elements of the SWPPP have been completed;

        iv. Permanent BMPs have been installed and all disturbed soil areas (DSA) are stabilized to prevent and control erosion (RUSLE/RUSLE 2 or Custom Method); and

        v. Post-construction storm water control requirements have been met; or

    b. The site cannot discharge storm water to waters of the United States – For NOT approval, the Discharger must certify that all storm water is either retained on site or all storm water is discharged to off-site evaporation or percolation ponds; or

    c. Storm water discharge from the site is now subject to another NPDES general or individual permit – For NOT approval, the Discharger must certify the NPDES permit number and date of coverage; or

    d. The site was transferred to another operator/owner – For NOT approval the Discharger must certify the date of transfer, notify the new operator/owner, and provide the new operator/ owner contact information. If the project lands are transferred to new ownership before construction is complete, the Discharger must temporarily stabilize the site such that it remains stable until construction activity resumes. The new owner must also apply for coverage under this General Permit, as described above, and may be liable for construction related discharges without an NPDES permit for any period when the project discharge is not covered under this General Permit.

2. As part of the NOT request, the Discharger must provide site photographs and a written narrative describing how the site has been and will remain stabilized. Site-specific evaluation of stability may include parameters such as slope and aspect, percent total cover, percent vegetative cover, vegetation type, soil nutrient and organic matter content, and soil infiltration rate.

3. For sites where final stabilization relies on the establishment of mature vegetation, the Discharger must describe and certify that a plan is in place to monitor and maintain stable conditions until the site is self-sustaining.

4. The Discharger is required to pay the annual fee (as specified in the annual billing received from the State Water Board) until the permit coverage is officially terminated in writing by Lahontan Water Board staff. Lahontan Water Board staff may inspect the site, as necessary, to determine if the project qualifies for permit termination. If Lahontan Water Board staff denies termination of coverage under the General Permit, written notification with the reasons for denial will be provided through SMARTS.

III. DISCHARGE PROHIBITIONS

The Basin Plan contains certain waste discharge prohibitions that apply region-wide or specifically to the Lake Tahoe Hydrologic Unit and are listed below. Waste discharge prohibitions listed below do not apply to discharges of storm water when wastes in the discharge are controlled through the application of management practices or other means and the discharge does not cause a violation of WQO. Additionally, the Lahontan Water Board has determined non-storm water discharges, such as construction dewatering and other construction-related discharges, may qualify as low threat discharges that are exempt from applicable region-wide and hydrologic unit/area waste discharge prohibitions under certain conditions. Waste discharge prohibition exemptions allowed under the Basin Plan are presented in Attachment F and, except for discharges listed in Attachment F, Table 4.1-1, must be specifically granted in writing by the Lahontan Water Board.

Region-wide Prohibitions

A. The discharge of waste that causes violation of any narrative or numeric WQO contained in the Basin Plan is prohibited.

B. Where any numeric or narrative WQO contained in the Basin Plan is already being violated, the discharge of waste that causes further degradation or pollution is prohibited.

C. The discharge of waste that could affect the quality of waters of the state that is not authorized by the State or Regional Board through waste discharge requirements, waiver of waste discharge requirements, NPDES permit, cease and desist order, certification of water quality compliance pursuant to CWA section 401, or other appropriate regulatory mechanism is prohibited.

D. The discharge of untreated sewage, garbage, or other solid wastes into surface waters of the Region is prohibited.

E. The discharge of pesticides to surface waters or ground waters is prohibited.

Lake Tahoe Hydrologic Unit Prohibitions

F. The discharge attributable to human activities of any waste or deleterious material to surface waters of the Lake Tahoe Hydrologic Unit is prohibited.

G. The discharge attributable to human activities of any waste or deleterious material to land below the highwater rim of Lake Tahoe or within the 100-year floodplain of any tributary to Lake Tahoe is prohibited.

H. The discharge attributable to human activities of any waste or deleterious material to SEZs in the Lake Tahoe Hydrologic Unit is prohibited.

I. The discharge or threatened discharge attributable to new pier construction of wastes to significant spawning habitats or to areas immediately offshore of stream inlets in Lake Tahoe is prohibited.

J. The discharge of garbage or other solid waste to lands within the Lake Tahoe Basin is prohibited.

K. The discharge of industrial waste within the Lake Tahoe Basin is prohibited. Industrial waste is defined as any waste resulting from any process or activity of manufacturing or construction.

IV. EFFLUENT LIMITATIONS

Storm water runoff generated from land disturbing activities should be infiltrated to the greatest extent possible. Waters infiltrated into soils should not contain excessive concentrations of nutrients that may exceed the filtering capacity of the soils and vegetation.

Runoff that is allowed to discharge off the project boundaries must meet the following effluent limitations.

A. All storm water runoff generated within the project area that is discharged to surface waters, MS4s, or other storm water conveyances must not contain constituents in excess of the following numeric effluent limitations (NEL):

Table 3. Storm Water Effluent Limitations

Parameter	Units	Maximum Daily Effluent Limitations For Discharge
Total Nitrogen (as N)	mg/L	0.5
Total Phosphorus (as P)	mg/L	0.1
Total Iron	mg/L	0.5
Turbidity	NTU	20*
Grease and Oil	mg/L	2
Note* - For ATS use, 10 NTU as daily average and 20 NTU for any single sample.		

B. All waters generated within the project area, or as a result of the development of the project, that are discharged to surface waters, MS4s, or other storm water conveyances must not contain the following:

1. Substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, or animal life; and

2. Coliform organisms attributable to human wastes.

C. For protection of receiving waters the pH of effluent samples should not fall outside of the range of 6.0 to 9.0. This range is set as a numeric benchmark level. If the pH of effluent is outside of the benchmark, the Discharger must investigate the cause of the excursion and implement appropriate corrective measures. If the pH levels are determined to be from natural causes, the Discharger must provide data (e.g., from run-on) to demonstrate this condition.

V. RECEIVING WATER LIMITATIONS

The following objectives apply to all surface waters within the Lake Tahoe Hydrologic Unit and include both region-wide receiving water limits and receiving water limits established for specific water bodies within the Lake Tahoe Hydrologic Unit. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA or amendments thereto, the Lahontan Water Board may revise and modify this General Permit accordingly. The discharge of waste must not cause or contribute to a violation of the following objectives.

A. Receiving Water Limits for Surface Waters – Region-wide

1. Ammonia

The neutral, unionized ammonia species (NH_3) is highly toxic to freshwater fish. The fraction of toxic NH_3 to total ammonia species ($NH_4^+ + NH_3$) is a function of temperature and pH. Basin Plan Tables 5.1-5 and 5.1-6 were derived from USEPA ammonia criteria for freshwater. Ammonia concentrations shall not exceed the values listed for the corresponding conditions in these tables. For temperature and pH values not explicitly identified in these tables, the most conservative value

neighboring the actual value may be used or criteria can be calculated from numerical formulas developed by the USEPA.

2. Bacteria, Coliform

Waters shall not contain concentrations of coliform organisms attributable to anthropogenic sources, including human and livestock wastes.

The fecal coliform concentration during any 30-day period shall not exceed a log mean of 20/100 ml, nor shall more than 10 percent of all samples collected during any 30-day period exceed 40/100 ml. *The log mean shall ideally be based on a minimum of not less than five samples collected as evenly spaced as practicable during any 30-day period. However, a log mean concentration exceeding 20/100 ml for any 30-day period shall indicate violation of this objective even if fewer than five samples were collected.*

3. 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.

4. Chemical Constituents

Waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels (MCLs) or secondary maximum contaminant levels (SMCLs) based upon drinking water standards specified in the following provisions of title 22 of the California Code of Regulations (CCR) which are incorporated by reference into this General Permit: Table 64431-A of section 64431 (Inorganic Chemicals), Table 64431-B of section 64431 (Fluoride), Table 64444-A of Section 64444 (Organic Chemicals), Table 64449-A of section 64449 (SMCLs-Consumer Acceptance Limits), and Table 64449-B of section 64449 (SMCLs-Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

Waters designated as AGR shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes).

Waters shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses.

5. Chlorine, Total Residual

For the protection of aquatic life, total chlorine residual shall not exceed either a median value of 0.002 mg/L or a maximum value of 0.003 mg/L. Median values shall be based on daily measurements taken within any six-month period.

6. Color

Waters shall be free of coloration that causes nuisance or adversely affects the water for beneficial uses.

7. Dissolved Oxygen

The dissolved oxygen concentration, as percent saturation, shall not be depressed by more than 10 percent, nor shall the minimum dissolved oxygen concentration be less than 80 percent of saturation.

For waters with the beneficial uses of COLD, COLD with SPWN, WARM, and WARM with SPWN, the minimum dissolved oxygen concentration shall not be less than that specified in Basin Plan Table 5.1-8.

8. Floating Materials

Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect the water for beneficial uses.

For natural high quality waters, the concentrations of floating material shall not be altered to the extent that such alterations are discernable at the 10 percent significance level.

9. Oil and Grease

Waters shall not contain oils, greases, waxes or other materials in concentrations 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.

For natural high quality waters, the concentration of oils, greases, or other film or coat generating substances shall not be altered.

10. Nondegradation of Aquatic Communities and Populations

All wetlands shall be free from substances attributable to wastewater or other discharges that produce adverse physiological responses in humans, animals, or plants; or which lead to the presence of undesirable or nuisance aquatic life.

All wetlands shall be free from activities that would substantially impair the biological community as it naturally occurs due to physical, chemical and hydrologic processes.

11. pH

In fresh waters with designated beneficial uses of COLD, changes in normal ambient pH levels shall not exceed 0.5 pH units. For all other waters, the pH shall not be depressed below 6.5 nor raised above 8.5.

The Regional Board recognizes that some waters of the Region may have natural pH levels outside of the 6.5 to 8.5 range. Compliance with the pH objective for these waters will be determined on a case-by-case basis.

12. Radioactivity

Radionuclides shall not be present in concentrations which are deleterious to human, plant, animal, or aquatic life, nor which result in the accumulation of

radionuclides in the food web to an extent which presents a hazard to human, plant, animal, or aquatic life.

Waters designated as MUN shall not contain concentrations of radionuclides in excess of the limits specified in Table 4 of section 64443 (Radioactivity) of title 22 of the CCR which is incorporated by reference into this General Permit. This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

13. 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 the water for beneficial uses.

14. Settleable Materials

Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. For natural high quality waters, the concentration of settleable materials shall not be raised by more than 0.1 milliliter per liter.

15. Suspended Materials

Waters shall not contain suspended materials in concentrations that cause nuisance or that adversely affects the water for beneficial uses.

For natural high quality waters, the concentration of total suspended materials shall not be altered to the extent that such alterations are discernible at the 10 percent significance level.

16. Suspended Sediment

Suspended sediment concentrations in streams tributary to Lake Tahoe shall not exceed a 90th percentile value of 60 mg/L. (This objective is equivalent to the Tahoe Regional Planning Agency's regional "environmental threshold carrying capacity" standard for suspended sediment in tributaries.)

17. Taste and Odor

Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish or other edible products of aquatic origin, that cause nuisance, or that adversely affect the water for beneficial uses. For naturally high quality waters, the taste and odor shall not be altered.

18. Temperature

The natural receiving water temperature of all waters shall not be altered unless it can be demonstrated to the satisfaction of the Lahontan Water Board that such an alteration in temperature does not adversely affect the water for beneficial uses.

For waters designated COLD, the temperature shall not be altered.

Temperature objectives for COLD interstate waters and WARM interstate waters are as specified in the "Water Quality Control Plan for Control of Temperature in

the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California" including any revisions. This plan is summarized in Basin Plan Chapter 6 (Plans and Policies) and included in Basin Plan Appendix B.

19. 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. *Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration and/or other appropriate methods as specified by the Lahontan Water Board.*

The survival of aquatic life in surface waters subjected to a waste discharge, or other controllable water quality factors, 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 defined in *Standard Methods for the Examination of Water and Wastewater* (American Public Health Association, et al. 1998).

20. Turbidity

Waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity shall not exceed natural levels by more than 10 percent.

B. Receiving Water Limits for Surface Waters - Certain Water Bodies

The following objectives (listed alphabetically) and the objectives listed in Attachment G are in addition to the region-wide objectives specified above and supersede the region-wide objectives in the event of any conflict. These objectives apply to certain surface waters of the Lake Tahoe Hydrologic Unit. The discharge of waste must not cause or contribute to a violation of these objectives.

1. Algal Growth Potential

For Lake Tahoe, the mean algal growth potential at any point in the Lake shall not be greater than twice the mean annual algal growth potential at the limnetic reference station. *The limnetic reference station is located in the north central portion of Lake Tahoe. It is shown on maps in annual reports of the Lake Tahoe Interagency Monitoring Program. Exact coordinates can be obtained from the U.C. Davis Tahoe Research Group.*

2. Biological Indicators

For Lake Tahoe, algal productivity and the biomass of phytoplankton, zooplankton, and periphyton shall not be increased beyond the levels recorded in 1967-71, based on statistical comparison of seasonal and annual means. *The "1967-71 levels" are reported in the annual summary reports of the "California-Nevada-Federal Joint Water Quality Investigation of Lake Tahoe" published by the California Department of Water Resources.*

3. Clarity

For Lake Tahoe, the vertical extinction coefficient shall be less than 0.08 per meter when measured below the first meter. When water is too shallow to determine a reliable extinction coefficient, the turbidity shall not exceed 3 Nephelometric Turbidity Units (NTU). In addition, turbidity shall not exceed 1 NTU in shallow waters not directly influenced by stream discharges. *The Lahontan Water Board will determine when water is too shallow to determine a reliable vertical extinction coefficient based upon its review of standard limnological methods and on advice from the U.C. Davis Tahoe Research Group.*

4. Conductivity, Electrical

In Lake Tahoe, the mean annual electrical conductivity shall not exceed 95 umhos/cm at 25°C at any location in the Lake.

5. pH

In Lake Tahoe, the pH shall not be depressed below 7.0 nor raised above 8.4.

6. Plankton Counts

For Lake Tahoe, the mean seasonal concentration of plankton organisms shall not be greater than 100 per ml and the maximum concentration shall not be greater than 500 per ml at any point in the Lake.

7. Suspended Sediment

Suspended sediment concentrations in streams tributary to Lake Tahoe shall not exceed a 90th percentile value of 60 mg/L. (This objective is equivalent to the Tahoe Regional Planning Agency's regional “environmental threshold carrying capacity” standard for suspended sediment in tributaries.)

8. Transparency

For Lake Tahoe, the annual average Secchi disk deep water transparency shall not be decreased below 29.7 meters, the levels recorded in 1967-71.

The discharge shall not cause or contribute to a violation of any applicable water quality standard for receiving water adopted by the Lahontan Water Board or State Water Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. Discharges shall not cause or contribute to the receiving WQOs listed in Attachment G to be exceeded for the specified surface waters and tributaries thereto. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal CWA or amendments thereto, the Lahontan Water Board may revise and modify this General Permit in accordance with such more stringent standards.

C. Receiving Water Limits for Ground Waters – Regionwide

The Dischargers shall not cause or contribute to a violation of the following objectives, which apply to all ground waters of the Lahontan Region, including the Lake Tahoe Basin:

1. Bacteria, Coliform

In ground waters designated as MUN, the median concentration of coliform organisms over any seven-day period shall be less than 1.1/100 milliliters.

2. Chemical Constituents

Ground waters designated as MUN shall not contain concentrations of chemical constituents in excess of the MCLs or SMCLs based upon drinking water standards specified in the following provisions of title 22 of the CCR which are incorporated by reference into this General Permit: Table 64431-A of section 64431 (Inorganic Chemicals), Table 64431-B of section 64431 (Fluoride), Table 64444-A of section 64444 (Organic Chemicals), Table 64449-A of section 64449 (SMCLs-Consumer Acceptance Limits), and Table 64449-B of section 64449 (SMCLs-Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

Waters designated as AGR shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes).

Ground waters shall not contain concentrations of chemical constituents that adversely affect the water for beneficial uses.

3. Radioactivity

Ground waters designated as MUN shall not contain concentrations of radionuclides in excess of the limits specified in Table 4 of section 64443 (Radioactivity) of title 22 of the CCR which is incorporated by reference into this General Permit. This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

4. Taste and Odor

Ground waters shall not contain taste or odor-producing substances in concentrations that cause nuisance or that adversely affect beneficial uses. For ground waters designated as MUN, at a minimum, concentrations shall not exceed adopted SMCLs specified in Table 64449-A of section 64449 (SMCLs-Consumer Acceptance Limits), and Table 64449-B of section 64449 (SMCLs-Ranges) of title 22 of the CCR which is incorporated by reference into this General Permit. This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

VI. PROVISIONS

A. Standard Provisions

1. Dischargers shall comply with all Standard Provisions included in Attachment D, which are made part of this General Permit.

B. Reopener Provisions

1. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the Federal Water Pollution Control Act or amendments thereto, the Lahontan Water Board may revise and modify this General Permit in accordance with such standards.

2. The Lahontan Water Board may reopen this General Permit to establish new conditions or effluent limitations should monitoring data or other new information indicate that a constituent is discharged at a level that will do any of the following:

   a. Cause, have reasonable potential to cause, or contribute to an in-stream excursion above any water quality criteria or objective; or

   b. Cause, have reasonable potential to cause, or contribute to a violation of any WQO in the Basin Plan.

3. The Lahontan Water Board may reopen this General Permit to reflect any site-specific objectives established for the waterbody or changes to beneficial uses for the waterbody resulting from a use attainability analysis or Basin Plan amendment.

4. The Lahontan Water Board may reopen this General Permit to reflect any changes needed to implement amendments to the Basin Plan.

C. Provisions for Administrative Continuance This General Permit continues in force and effect until a new General Permit is issued or the Lahontan Water Board rescinds this General Permit.

D. Additional Provisions

1. Dischargers shall comply with the following additional provisions:

   a. Failure to comply with this permit may constitute a violation of the Water Code and/or the CWA, and is grounds for enforcement action or for permit termination, revocation and re-issuance, or modification.

   b. The Water Code and the CWA provide for civil liability and criminal penalties for violations of the permit limits including imposition of civil liability or referral to the Attorney General.

   c. Provisions of the permit are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

   d. Pursuant to Water Code section 13263(g), no discharge of waste into the waters of the state, whether or not the discharge is made pursuant to waste discharge requirements, shall create a vested right to continue the

discharge. All discharges of waste into waters of the state are privileges, not rights.

e. Pursuant to Water Code section 13260(c), any change in the ownership and/or operation of property subject to the permit shall be reported to the Lahontan Water Board. Notification of applicable permit requirements shall be furnished in writing to the new owners and/or operators, and a copy of such notification shall be sent to the Lahontan Water Board.

f. If a Discharger becomes aware that any information provided to the Lahontan Water Board is incorrect, the Discharger shall immediately notify the Lahontan Water Board, in writing, and correct that information.

g. Pursuant to Water Code section 13267 and/or section 13383, Dischargers shall comply with the CSMRP, and future revisions thereto, in Attachment C of this General Permit, and any additional monitoring requirements as specified by the Lahontan Water Board Executive Officer.

2. Unless specifically granted in writing by the Lahontan Water Board, authorization pursuant to this General Permit does not constitute an exemption to applicable discharge prohibitions prescribed in the Basin Plan.

3. Dischargers must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to drainage systems or other water courses under their jurisdiction, including applicable requirements in municipal storm water management programs developed to comply with NPDES General Permits issued to local agencies by the Lahontan Water Board.

4. Dischargers shall at all times fully comply with engineering plans, specifications, and technical reports provided with the PRDs.

5. Dischargers shall at all times fully comply with the SWPPP and Rain Event Action Plan (REAP).

6. In accordance with section 13260 of the Water Code, Dischargers shall file a report with the Lahontan Water Board of any material change or proposed change in the character, location, or volume of the discharge. Any proposed material change in the operation shall be reported to the Lahontan Water Board at least 30 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant new soil disturbances, all proposed expansion of development, and increase in impervious surface coverage, or any change in drainage characteristics at the project site.

7. Order No. R6T-2011-0019 is rescinded on December 31, 2016, except for enforcement purposes.

VII. TRAINING QUALIFICATIONS AND CERTIFICATIONS REQUIREMENTS

A. General

Dischargers shall ensure that persons responsible for developing and implementing storm water pollution controls specified by this General Permit shall be appropriately trained and certified in accordance with the requirements below. Additionally, project SWPPP requirements shall be communicated by training all contractor and subcontractor personnel conducting activities that could affect storm water runoff quality. Training may be both formal and informal, as appropriate, and shall at a minimum be provided during pre-construction meetings and regular onsite meetings conducted during the course of the project. Training shall be documented and kept as part of the SWPPP records.

Dischargers shall certify in the Annual Report that persons responsible for implementing the requirements of this General Permit have the required qualifications and training.

B. SWPPP Certification Requirements

1. Qualified SWPPP Developer: Dischargers shall ensure that SWPPPs are written, amended and certified by a Qualified SWPPP Developer (QSD). A QSD shall have one of the following registrations or certifications, and appropriate experience, as required for:

   a. A California Board of Professional Engineers, Land Surveyors, and Geologist (CBPELSG) license in good standing as a professional civil engineer, professional geologist, and/or professional engineering geologist;

   b. A California registered Landscape Architect;

   c. A professional hydrologist registered through the American Institute of Hydrology;

   d. A Certified Professional in Erosion and Sediment Control (CPESC)™ registered through EnviroCert International, Inc;

   e. A Certified Professional in Storm Water Quality (CPSWQ)™ registered through EnviroCert International, Inc.; or

   f. A professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET).

2. Required QSD Training: A QSD shall have attended a State Water Board-sponsored or -approved QSD training course and pass a required examination covering the course material or meet the State Water Board requirements for a California Board of Professional Engineer, Land Surveyors and Geologists (CBPELSG) licensee.

3. Qualified SWPPP Practitioner: Dischargers shall ensure that implementation of all BMPs required by this General Permit and all other SWPPP elements are overseen and managed by a Qualified SWPPP Practitioner (QSP). A QSP shall be either a QSD or have one of the following certifications:

   a. A certified erosion, sediment and storm water inspector registered through EnviroCert International, Inc.; or

   b. A certified inspector of sediment and erosion control registered through Certified Inspector of Sediment and Erosion Control, Inc.

4. Required QSP Training: A QSP shall have attended a State Water Board-sponsored or -approved QSP training course and pass a required examination covering the course material.

5. QSP Responsibilities: The project QSP is responsible for assisting the Discharger to comply with the General Permit through the proper implementation, management, and monitoring of the SWPPP elements and other General Permit requirements. The QSP must directly manage these activities by being present at the site and/or through a communication plan that allows the QSP to actively and effectively manage trained personnel conducting the SWPPP activities. The SWPPP must include a written plan describing how the QSP will oversee and manage all SWPPP activities and the Discharger must maintain written records documenting the QSP's plan implementation and effectiveness.

   The QSP Management Plan must show how the QSP plans to inspect and report all of the required visual inspections and monitoring requirements, prepare and implement REAPs, prepare and submit water quality exceedance reports, ensure that all employees have current water pollution control training, and correct any construction activities damaging water pollution control practices or causing water pollution.

VIII. BEST MANAGEMENT PRACTICES (BMPS)

Dischargers shall minimize or prevent pollutants in storm water discharges and authorized non-storm water discharges through the use of controls, structures,

and management practices that achieve BAT for toxic and non-conventional pollutants and BCT for conventional pollutants. Storm water controls and control locations must be described in the SWPPP for the project site. At a minimum, the following types of storm water control measure BMPs must be described in the SWPPP and implemented for the project.

A. Site Management

Dischargers shall implement appropriate site management measures to control pollutants in site runoff for construction materials that are potential threats to water quality if discharged. The control measures shall include, but are not limited to, the following items.

1. Conduct an inventory of the products used and/or expected to be used and the end products that are produced and/or expected to be produced. This does not include materials and equipment that are designed to be outdoors and exposed to environmental conditions (i.e., poles, equipment pads, cabinets, conductors, insulators, bricks, etc.).

2. Identify potential pollutant sources and areas of the site where BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. This potential pollutant source list shall identify all non-visible pollutants which are known, or should be known, to occur on the construction site. At a minimum, when developing BMPs, the Discharger shall:

    a. Consider the quantity, physical characteristics (e.g., liquid, powder, solid), and locations of each potential pollutant source handled, produced, stored, recycled, or disposed of at the site.

    b. Consider the degree to which pollutants associated with those materials may be exposed to and mobilized by contact with storm water.

    c. Consider the direct and indirect pathways that pollutants may be exposed to storm water or authorized non-storm water discharges. This shall include an assessment of past spills or leaks, non-storm water discharges, and discharges from adjoining areas.

3. Schedule land-disturbing activities to minimize the duration that bare soils are exposed to erosion. Schedule BMP implementation to coincide with land-disturbing activities - avoid installing BMPs when and where they are not needed.

4. Store chemicals in watertight containers with appropriate secondary containment to prevent any spillage or leakage, and protect from precipitation and surface run-on. For hazardous liquids used in active work

areas, place in appropriate temporary secondary containment when not in use.

5. Separate snow storage and disposal areas from surface waters to prevent direct discharge and avoid surface runoff. Treatment and retention capacity of storm water basins and similar facilities on the land surface must not be compromised by snow storage/management activities. Treatment facilities shall be designed to accommodate snowmelt runoff from designated snow storage and disposal areas.

6. Protect permanent infiltration facilities from receiving turbid discharges or other polluted storm water runoff. If permanent infiltration facilities are used as temporary BMPs, the capacity and functionality of the facilities shall be maintained and/or renovated as needed to ensure pre-project capacity and function prior to requesting General Permit termination.

7. When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible.

8. Prevent the discharge of pollutants from sanitation facilities (e.g., portable toilets) to the storm water drainage system or receiving water. Sanitation facilities shall be cleaned/replaced as necessary, and inspected regularly for leaks and spills.

9. Cover waste disposal containers at the end of every business day and during a rain event.

10. Contain and securely protect stockpiled waste material from wind and rain at all times unless actively being used.

11. Protect all loose piles of soil, silt, clay, sand, debris, or other earthen materials such that sediment is prevented from leaving the site.

12. Prevent ground compaction and disturbance activities in unpaved areas not subject to construction. All non-construction areas shall be identified and protected by fencing or other means to limit access. These control measures shall be inspected periodically and shall be repaired when necessary to maintain effectiveness.

13. Develop a spill response plan prior to commencement of construction activities. The plan shall include:

    a. Descriptions of equipment and materials required to be on site for cleanup of spills/leaks; and
    b. Descriptions of appropriate spill response procedures, the responsible personnel, and the training records of such personnel. Include

provisions to respond to potentially large spills that are beyond the capacity of the contractor to respond.

14. Ensure the containment of concrete washout areas and other washout areas that may contain additional pollutants so there is no discharge into the underlying soil and onto the surrounding areas.

15. Prevent the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters.

16. Conduct equipment and vehicle fueling, maintenance and repair activities only in designated areas with appropriate BMPs and containment for spills.

17. Activities such as grading, filling, and clearing of vegetation that disturb soil are prohibited during periods of inclement weather that cause saturated, muddy, or unstable soil conditions. Additionally, by October 15 of each year all disturbed areas must be permanently stabilized or temporarily winterized to prevent excess sediment and other pollutants from discharging off the project site, and land-disturbing activities must cease from October 16 to April 30 of the following year. Winterized means to implement appropriate BMPs to prevent and minimize erosion and soil movement from the site in storm water in a manner that will remain effective until May 1 of the following year.

    Special regulations apply to construction activities occurring between October 16 and April 30, as follows:

    a. All areas of the project site must be adequately winterized by October 15 as a condition for continued work on the site.
    b. The Lahontan Water Board Executive Officer may grant variances to allow limited grading and land disturbance during this period when finding in writing that controls are in place to protect water quality.

B. Sediment and Erosion/Stabilization Controls

Dischargers shall implement a combination of sediment and erosion controls to prevent or minimize sediment discharges from the site. Control measures shall include, but are not limited to, the following items.

1. Install temporary sediment controls for the down-gradient perimeter of the project site, and/or any location where storm water or authorized non-storm water may discharge from the project site, prior to the initiation of any construction-related activities.

2. Install temporary gravel bag dikes, fiber rolls, filter fabric fence, or other equivalent measures as necessary to control erosion and runoff.

3. Install temporary check dams such as gravel bag dikes in concentrated flow lines to slow and detain water flows and retain sediment.

4. Protect drain inlets and outfall structures with appropriate controls for erosion and to minimize sediment discharges.

5. Prevent off-site tracking of earthen materials from the construction site onto adjacent roads and public ways. Dischargers shall control access points, install stabilized entrances/exits for vehicle and equipment traffic operating on the site, and implement sweeping as necessary where tracking prevention is not complete.

6. Provide and maintain natural buffers around surface waters and direct storm water runoff to vegetated areas, unless infeasible.

7. If used, sediment basins must be designed according to the methods provided in California Storm Water Quality Association's (CASQA's) Construction BMP Guidance Handbook or equivalent methods certified by a CBPELSG.

8. Control storm water volume and velocity within the site to minimize soil erosion and offsite discharges.

9. Direct all run-on surface flows from offsite, to the maximum extent possible, away from all disturbed areas.

10. Surface flows from the project site shall be controlled to prevent downstream erosion at any point.

11. Minimize the disturbance of steep slopes and control the amount of soil exposed to erosion at any particular time during construction activity.

12. Control soil compaction and preserve topsoil as feasible.

13. Implement an effective combination of temporary sediment and erosion controls on DSA prior to the onset of precipitation events.

14. Remove all temporary BMPs and permanently stabilize or vegetate all finished graded areas. Revegetated areas shall be completed using specifications necessary for successful growth and soil cover, and maintained as needed to ensure adequate growth and root development until vegetation becomes established. If mulch cover only is used for stabilization from erosion, Dischargers must demonstrate the mulch will

provide ongoing effectiveness in preventing soil erosion. The following measures are recommended:

a. Depending on the level of disturbance and site conditions, wood chip mulch, pine needle mulch, rock, or other suitable materials may be applied on disturbed surfaces in lieu of vegetation;

b. Whenever practical, seeds collected from the project site area should be added to the seed mix being applied during revegetation;

c. Whenever practical, natural revegetation and native mulch will be the preferred method of stabilization; and

d. Limit the use of plastic materials contained in permanent BMPs.

15. Wind erosion shall be controlled to prevent nuisance and to prevent the transport of dust and soil particles into the air, off the project site, into any surface waters, or into any drainage course.

C. Construction Site Dewatering or Diversions

Construction site dewatering waste must not be discharged to surface waters or tributaries thereto, including MS4s, unless the discharge meets the criteria for a low threat discharge, or meets the criteria for other exemptions presented in Attachment F.

Prior to conducting dewatering activities on a site covered by this General Permit, Dischargers must prepare a dewatering plan as part of the SWPPP. Lahontan Water Board staff will require Dischargers to provide the dewatering plan as part of the project PRDs or upon determining dewatering is necessary.

The dewatering/diversion plan shall, at a minimum, include the following:

1. An explanation of alternatives considered for discharges to land, and why alternatives to discharging to surface waters are infeasible.

2. An assessment of whether soil and/or groundwater contaminated by foreign waste material is present in the dewatering area.

3. The location of the discharge area or outfall and name of receiving water.

4. A description of the discharge or diversion method and plan drawings as necessary.

5. The frequency and estimated volume and rate of discharge.

6. Expected pollutants and concentrations in discharge, and control measures to be applied and maintained to ensure that the discharge will not cause a violation of water quality objectives.

7. A monitoring plan for effluent and/or receiving waters. Monitoring may include visual observations and/or sample collection and analysis.

D. Inspection, Maintenance and Repair

Dischargers shall conduct inspections of sites and BMPs in accordance with the requirements of the CSMRP described in Attachment C. Dischargers shall ensure that all inspection, maintenance and repair work is performed or supervised by a QSP representing the Discharger. The QSP may delegate any or all of these activities to an employee appropriately trained to do the tasks. Training must be documented and records kept with the SWPPP. Training documentation must be made available to Lahontan Water Board staff upon request.

Dischargers shall conduct maintenance or repair of failed or inadequate BMPs within 72 hours of identification by a QSP or other trained personnel, or before the next predicted rain event, whichever is sooner.

E. Rain Event Action Plan (REAP)

From the dates of May 1 through October 15 of each year, and during periods in which construction activity is conducted under a variance to the BMP requirements of this General Permit (section VIII.A.16.), Dischargers shall ensure a QSP develops a REAP no later than the calendar day (24 hours) prior to any anticipated precipitation event. An anticipated precipitation event is any weather pattern that is forecast to have a 30 percent or greater chance of producing 0.1 inch of precipitation as rainfall in the project area. During periods when thunderstorm activity is anticipated, the Discharger shall monitor weather conditions during the course of the day, and prepare and implement a REAP if the chance of thunderstorms becomes 30 percent or greater, or when visual observations indicate imminent precipitation. The QSP shall obtain, for each day of construction operations, a printed copy of precipitation forecast information from the National Weather Service (NWS) Forecast Office and keep the copy with the SWPPP monitoring records. Dischargers may access the daily forecasts by entering the city or zip code of the project's location at the following website: http://www.srh.noaa.gov/forecast. The intensity of predicted precipitation may be found at the link for the "Forecast Weather Table Interface."

The REAP shall be available onsite, and a QSP shall implement the REAP prior to the onset of an actual precipitation event. The REAP must be

checked and updated daily for storms expected to last over a period of several days.

The REAP shall be developed for all phases of construction until the permit coverage is terminated by Lahontan Water Board staff. A REAP, at a minimum, shall include:

1. QSP name and contact number;

2. The date(s) rain is predicted to occur, and predicted chance of rain;

3. A description of all DSAs, material storage areas, stockpiles, vehicle and equipment storage and maintenance areas, and waste management areas to be protected.

4. For each area described above, list specific items to review and actions to perform prior to the rain event;

5. A description of the labor required or to be provided to complete the protective actions required.

6. A certification by the QSP that the REAP will be carried out as required by this General Permit; and

7. A printout of the NWS weather forecast.

F. Active Treatment Systems (ATS)

Dischargers choosing to implement an ATS on a project site shall comply with all of the requirements in Attachment E of this General Permit.

G. Post-Construction Storm Water Control Requirements

All disturbed soils areas must be stabilized to control sediment and other pollutants from entering surface waters. All permanent BMPs used for erosion and sediment control must <u>not</u> contain non-photo/biodegradable materials. Additionally, post-construction storm water controls must meet the criteria below for minimizing and reducing storm water runoff.

<u>Municipal and Public Roadway Storm Water Treatment Requirements:</u> Municipal jurisdictions and state highway departments must design projects to meet requirements in the respective municipal storm water NPDES permits.

<u>New Development, Redevelopment, and Existing Development Storm Water Treatment Requirements:</u> For new development, re-development, and existing development retrofit projects, Dischargers shall implement low-impact development (LID) techniques and infiltrate stormwater runoff from

impervious surfaces and other developed areas where natural percolation of precipitation is impeded following completion of construction. At a minimum, permanent storm water infiltration facilities must be designed and constructed to infiltrate runoff generated by the 20 year, 1-hour storm which equates to approximately one inch of runoff during a 1-hour period.

Where conditions permit, project proponents are encouraged to consider designing post-construction runoff controls in accordance with LID techniques and infiltration facilities to accommodate runoff volumes in excess of the 20 year, 1-hour storm to provide additional storm water treatment. Additional information on LID can be found at the National LID Clearinghouse website: http://www.lid-stormwater.net/clearinghouse/index.html.

Runoff from parking lots, retail and commercial fueling stations, and other similar land uses may contain oil, grease, and other hydrocarbon pollutants. Project proponents designing treatment facilities for these areas must include pre-treatment devices to remove hydrocarbon pollutants prior to infiltration or discharge and contingency plans to prevent spills from polluting groundwater.

Infiltrating runoff volumes generated by the 20 year, 1-hour storm may not be possible in some locations due to shallow depth to seasonal groundwater levels, unfavorable soil conditions, or other site constraints such as existing infrastructure or rock outcroppings. In the event that site conditions do not provide opportunities to infiltrate the runoff volume generated by a 20 year, 1-hour storm, project proponents must either (1) provide information showing how treatment facilities are expected to meet the numeric effluent limits in Table 5.6-1 of the Basin Plan, or (2) document written acceptance by the local municipality or state highway department to demonstrate that the publicly-owned or municipal storm water treatment facilities treating private property storm water discharges are sufficient to provide adequate treatment to meet any average annual fine sediment and/or nutrient load reduction requirements that may be established by the Lahontan Water Board for the municipality.

IX. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Dischargers must develop and implement a SWPPP to meet the objectives specified below. This General Permit establishes the following requirements for the development and implementation of a SWPPP. Lahontan Water Board staff may require additional information to be added in a SWPPP depending on the nature or complexity of a project. A checklist for developing the SWPPP is provided in Attachment H.

A. OBJECTIVES

A SWPPP shall be developed and implemented for each construction site covered by this General Permit. The SWPPP shall be designed to comply with

requirements to implement BMPs to achieve compliance with effluent limits and receiving water objectives. The SWPPP shall be developed and amended, when necessary, to meet the following objectives:

1. Identify pollutant sources including sediment sources that may affect the quality of storm water discharges associated with construction activity.

2. Identify non-storm water discharges.

3. Identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the construction site.

4. Identify all effluent discharge outfall locations, sampling and analysis strategy and protocols, and a sampling schedule for discharges from the identified outfalls for the project area.

B. PERMIT REGISTRATION DOCUMENTS (PRDs)

The SWPPP shall include a copy of the NOI.

C. SWPPP CERTIFICATION AND TRAINING REQUIREMENTS

1. The SWPPP shall be prepared, signed, and certified by a QSD, who meets the requirements as described in section VII.B. of this General Permit. The SWPPP must also identify the QSP, as defined in section VII.B. of this General Permit.

2. The SWPPP shall include procedures to ensure that all required inspections, maintenance, and repair activities are consistent with the requirements of this General Permit. These procedures shall include identification of specific personnel and the training required to perform inspections, maintenance, and repair. The SWPPP must include a written description of how the QSP will oversee and manage the SWPPP activities. The QSP must be present at the site to oversee SWPPP implementation unless a written communication plan is developed to allow the QSP to manage the site from an off-site location. Any QSP communication plan and all records must be retained in accordance with the record-keeping requirements of this General Permit.

   A QSP must also provide weekly training on storm water pollution control topics. Training activities must be documented and kept with the SWPPP. Training records must include the date, a description of the topics covered by training, copies of any training materials, the trainer's name, and a list of the training participants with printed names and signatures.

D. AVAILABILITY AND PUBLIC RECORDS ACCESS

The SWPPP and any amendments shall be kept on site during construction activity and made available upon request of a representative of the Lahontan Regional Water Board or any local storm water management agency which receives the storm water discharge.

The SWPPP is considered a report that shall be available to the public under section 308(b) of the CWA. Upon request by members of the public, Dischargers shall make available for review a copy of the SWPPP directly to the requestor.

E. LIST OF CONTRACTORS/SUBCONTRACTORS

The SWPPP shall contain a list of all contractors and subcontractors responsible for implementing the SWPPP. This information shall be added to the SWPPP once the contractors and subcontractors selected to implement the SWPPP are determined

F. REQUIRED CHANGES

1. Dischargers shall amend the SWPPP whenever there is a change in construction, or operations, which may affect the discharge or pollutants to surface waters, ground waters, or a municipal or other storm drain system. Lahontan Water Board staff may require SWPPP amendments to be provided for review and may require modifications.

2. Dischargers shall maintain the SWPPP such that it reflects the actual site conditions for the duration of the project, including keeping DSA maps current as the project progresses. Changes in BMP implementation features or activities shall be documented and included as amendments to the SWPPP. An amendment log shall be maintained in the SWPPP that summarizes all changes to the SWPPP for the duration of the project.

3. Lahontan Water Board staff, or a local agency with the concurrence of the Lahontan Water Board staff, may require Dischargers to amend the SWPPP if it is in violation of any condition of this General Permit.

G. PROJECT INFORMATION

The SWPPP shall include the following information:

1. A copy of this General Permit shall be kept and maintained by Dischargers and be available at all times to operating personnel.

2. Project description;

3. WDID number;

4. Site address and driving directions;

5. Emergency contact person and 24-hour phone number; and

6. Potential construction site pollutants of concern and sources.

H. MAPPING REQUIREMENTS

The SWPPP shall include the following maps:

1. Project Location Map: A topographic map extending one-quarter mile beyond the property boundaries of the construction site, clearly showing: the construction site perimeter and surface water boundaries (including drainage channels, springs, SEZs, 100-year floodplain areas, and wetlands), and the designated discharge locations where the effluent will be controlled and monitored. The requirements of this paragraph may be included in the site map required under the following paragraph if appropriate.

2. Map(s) of a scale sufficient to clearly show:

   a. The project's construction limit boundaries;

   b. Areas used to store construction materials, equipment, stockpiles, spoils and wastes, including concrete mixing and washout areas;

   c. Vehicle and equipment access, fueling, cleaning, storage and service areas;

   d. Existing and planned paved areas and buildings;

   e. Areas of existing vegetation to be preserved;

   f. Surface water locations, including SEZ boundaries mapped according to the criteria in the Basin Plan, section 5.7; 100-year floodplain boundaries; ephemeral and intermittent waterways, springs, and wetlands;

   g. BMPs: Specific locations of storm water structures and controls to be used during construction. Each control structure shall be represented by a standard symbol as indicated in the site map legend;

   h. Existing or pre-construction storm water structures and controls to reduce sediment and other pollutants in storm water discharges;

   i. DSAs: All active DSAs shall be delineated on a map as the project progresses. DSA maps must be kept updated to reflect site conditions.

Once an area is stabilized or winterized, it should be hatched out or otherwise notated to indicate it is no longer disturbed;

j. Drainage patterns and slopes anticipated after major grading activities;

k. Post-construction storm water structures and controls;

l. The locations designated for storm water discharge sampling. See Attachment C for additional detail regarding sampling requirements.

3. Information shown on all maps must be legible (i.e., avoid showing too much information on one map). All maps must include a north arrow, scale (either bar or text format), and a legend with symbols legible in black and white print for all required information. Standard symbols for pollution control structures must be included in the legend of applicable maps.

I. CONSTRUCTION AND BMP IMPLEMENTATION SCHEDULE

The SWPPP shall include:

1. The anticipated start and end dates of construction as well as phases of significant grading activities and work in or near drainages or receiving waters.

2. The schedule for deployment of BMPs. BMPs must be implemented, modified, and maintained appropriately for the site and weather conditions encountered during the project.

J. SITE MANAGEMENT

The SWPPP shall include:

1. A description of the control measures and management practices to meet the requirements of section VIII of this General Permit.

2. The location of site management controls, shown on a map as described in the Mapping Requirements (section IX.H.).

3. Standard specifications (including engineered drawings if applicable) for construction and installation of such controls.

K. SEDIMENT AND EROSION/STABILIZATION CONTROLS

The SWPPP shall include:

1. A description of control measures and management practices to meet the requirements of section VIII of this General Permit.

2. The location of all sediment and erosion/stabilization controls shown on a map as described in the Mapping Requirements (section IX.H.).

3. Standard specifications (including engineered drawings if applicable) for construction and installation of such controls.

L. NON-STORM WATER MANAGEMENT

The SWPPP shall include:

1. A description of control measures and management practices to meet the requirements of section VIII of this General Permit.

2. The location of all non-storm water management controls shown on a map as described in the Mapping Requirements (section IX.H.).

3. Standard specifications (including engineered drawings if applicable) for construction and installation of such controls.

M. SPILL PREVENTION AND RESPONSE

The SWPPP shall include procedures for preventing and responding to spills. All vehicles with refueling capability must have an emergency spill kit on the vehicle. The SWPPP must describe the response procedures and contact information needed to respond to small, medium, and large spill events. The SWPPP must identify the entity that can respond to large spills that are beyond the capacity of the contractor.

N. DEWATERING AND DIVERSIONS

The SWPPP shall include a Dewatering and/or Diversion Plan to meet the requirements of section VIII of this Permit if the Discharger will utilize surface water diversions to bypass natural stream flows, or pumps or siphons for removal or ground water from excavations (dewatering) during construction. A Dewatering and/or Diversion Plan, as required, shall be developed as an attachment to the SWPPP.

O. ACTIVE TREATMENT SYSTEM (ATS) PLAN

If an ATS is used, Dischargers shall develop an ATS Plan in compliance with Attachment E of this General Permit. The ATS Plan shall be included in the SWPPP.

P. POST-CONSTRUCTION STORM WATER MANAGEMENT

The SWPPP shall include:

1. A description of post-construction storm water management structures and controls to meet the requirements of section VIII of this General Permit.

2. The location of all post-construction storm water controls shown on a map as described in the Mapping Requirements (section IX.H.).

3. Standard specifications (including engineered drawings if applicable) for construction and installation of such controls.

4. The operations and maintenance requirements needed to maintain the effectiveness of storm water controls and the responsible party for ensuring that appropriate maintenance is completed.

Q. RAIN EVENT ACTION PLAN (REAP)

The SWPPP shall include records of NWS forecasts and a REAP prior to predicted storm events to meet the requirements of section VIII of this General Permit.

R. CONSTRUCTION SITE MONITORING AND REPORTING PROGRAM (CSMRP)

The SWPPP shall include a CSMRP to meet the requirements of Attachment C.

S. BMP MAINTENANCE AND REPAIR

The SWPPP shall include procedures for conducting maintenance or repair of failed or inadequate BMPs within 72 hours of identification, or before the next predicted rain event, whichever is sooner.

T. OTHER PLANS

This SWPPP may incorporate, by reference, the appropriate elements of other plans required by local, state or federal agencies. A copy of any requirements incorporated by reference shall be kept at the construction site.

X. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this General Permit will be determined as specified below:

A. Compliance with Effluent Limitations

Dischargers must identify all runoff control points where effluent may be discharged off the project boundaries. Monitoring for compliance with effluent limitations is not required if there is no discharge off the project boundaries (e.g., all precipitation is infiltrated on the project site). Compliance with the NELs in section IV of this General Permit is required for any discharge at designated runoff control points that is generated by non-storm water discharges or storm events that do not exceed the rainfall associated with a 20-year, 1-hour storm, which, for purposes of this General Permit, is equal to an intensity of 1 inch of rainfall in a 1-hour period (compliance storm event).

If constituent concentrations of waters entering the project area (run-on) exceed the numerical limitations specified above, there must be no increase in the constituent concentrations in the waters that are discharged from the project area.

Discharge monitoring results shall not be used by Lahontan Water Board staff for determining compliance with NELs for storms with intensities in excess of the compliance storm event or where run-on exceeds the NELs and the discharge does not increase the level of the exceedance. Dischargers are required to provide supporting documentation such as run-on monitoring data, on-site rain gauge data, and/or rainfall data provided by the National Oceanic and Atmospheric Administration (NOAA) to the Lahontan Water Board for any claims that an effluent limit excursion or exceedance occurred due to these circumstances. The supporting information shall clearly show when the sample was collected relative to the occurrence of the compliance storm event (i.e., the time of rainfall relative to the time of sample collection must be documented). The information will be evaluated for the merits of any claim for relief from compliance requirements for the NELs.

Additionally, Dischargers must provide documentation for any claim that effluent leaving the project boundaries does not reach receiving waters or MS4s for relief from the NELs for discharges to surface waters.

B. Multiple Sample Data

The NELs in this General Permit are evaluated as a maximum daily effluent limitation (MDEL). Pursuant to NPDES regulations (40 CFR part 122.2), *maximum daily discharge* limitation means the highest allowable “daily

discharge." Daily discharge means the "discharge or a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of measurement other than mass, the daily discharge is calculated as the average measurement of the pollutant over the day. For purposes of this General Permit, the daily average effluent value is defined as the arithmetic mean of the daily effluent data. When determining compliance when more than one sample result is available due to collection at multiple discharge points and/or multiple times during the calendar day, the Discharger shall compute the arithmetic mean concentration for each day of discharge.

Samples must be representative of the volume and quality of runoff from the site. Sample collection must not be manipulated in such a way as to skew the average daily effluent value. However, Dischargers must provide monitoring data to indicate estimates of the proportional area or flow that each discharge point from the site represents when reporting the data.

C. Maximum Daily Effluent Limitation (MDEL)

If the average daily concentration exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that one day only within the reporting period.

D. Sampling by Other Parties

Sampling may be conducted by persons other than the Discharger. Lahontan Water Board staff, operators of MS4s, or others may analyze storm samples. Samples collected by others may be used with other data to determine MDELs and to conduct compliance determinations, as provided above.

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ATTACHMENT A

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ATTACHMENT A – ACRONYM LIST

ATS - Active Treatment System
BAT – Best Available Technology
BPJ – Best Professional Judgment
BPT – Best Practicable Technology
BCT - Best Conventional Pollutant Control Technology
BMPs - Best Management Practices
C&D – Construction and Development
CASQA – California Storm Water Quality Association
CCR - California Code of Regulations
CEQA - California Environmental Quality Act
CFR – Code of Federal Regulations
CPESC - Certified Professional in Erosion and Sediment Control
CPSWQ - Certified Professional in Storm Water Quality
CSMRP - Construction Site Monitoring and Reporting Plan
CTR – California Toxics Rule
CWA - Clean Water Act
DNQ – Detected, but Not Quantified
DSA - Disturbed Soil Areas
ELG – Effluent Limitations Guidelines
LID – Low Impact Development
LRP – Legally Responsible Person
LUP – Linear Underground/Overhead Utility Projects
MATC – Maximum Allowable Threshold Concentration
MCLs - Maximum Contaminant Levels
MDEL - Maximum Daily Effluent Limitation
MDL – Method Detection Limit
ML - Minimum Level
MRP – Monitoring and Reporting Program
MS4 – Municipal Separate Storm Sewer System
NAL – Numeric Action Level
NEL – Numeric Effluent Limitations
NICET - National Institute for Certification in Engineering Technologies
NOAA – National Oceanic and Atmospheric Administration
NOT – Notice of Termination
NOI - Notice of Intent
NPDES – National Pollutant Discharge Elimination System
NSPS - New Source Performance Standards
NTU – Nephelometric Turbidity Units
NWS – National Weather Service
O&M – Operation and Maintenance
PRDs - Permit Registration Documents
QA/QC – Quality Assurance/Quality Control
QSD - Qualified SWPPP Developer
QSP - Qualified SWPPP Practitioner

REAP - Rain Event Action Plan
RL – Reporting Limit
SAFIT – Southwestern Association of Freshwater Invertebrate Taxonomist
SEZ - Stream Environment Zones
SMCLs – Secondary Maximum Contaminant Levels
SMARTS - Storm Water Multi-Application and Report Tracking System
SWAMP – Surface Water Ambient Monitoring Program
STE – Standard Taxonomic Effort
SWPPP - Storm Water Pollution Prevention Plan
USEPA – United States Environmental Protection Agency
WDID - Waste Discharge Identification
WDRs - Waste Discharge Requirements
WQBELs - Water Quality-Based Effluent Limitations
WQOs – Water Quality Objectives
WQS – Water Quality Standards

ATTACHMENT B

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ATTACHMENT B – GLOSSARY

Active Treatment System (ATS)
A treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation to aid in the reduction of turbidity caused by fine suspended sediment.

Acute Aquatic Toxicity Test
A test to measure the relative severity of chemical toxicity on aquatic life. For aquatic toxicity, an effect observed within 96 hours or less is considered acute.

Anticipated Precipitation Event
An anticipated storm event is any weather pattern that is forecast to have a 30 percent or greater chance of producing precipitation in the project area, as determined by the precipitation forecast information from the National Weather Service Forecast Office (e.g., by entering the zip code of the project's location at http://www.srh.noaa.gov/forecast).

Approved Signatory
A person who has been authorized by the Legally Responsible Person to sign, certify, and electronically submit Permit Registration Documents, Notices of Termination, and any other documents, reports, or information required by the General Permit, the state or Lahontan Water Board, or USEPA. The Approved Signatory must be one of the following:

1. For a corporation or limited liability company: 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 limited liability company; or (b) the manager of the facility if authority to sign documents has been assigned or delegated to the manager of the facility in accordance with corporate procedures;

2. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

3. For a municipality, state, federal, or other public agency: a principal executive officer, ranking elected official, city manager, council president, or any other authorized public employee with managerial responsibility over the construction or land disturbance project (including, but not limited to, project manager, project superintendent, or resident engineer);

4. For the military: any military officer or Department of Defense civilian, acting in an equivalent capacity to a military officer, who has been designated;

5. For a public university: an authorized university official;

6. For an individual: the individual, because the individual acts as both the Legally Responsible Person and the Approved Signatory; or

7. For any type of entity not listed above (e.g. trusts, estates, receivers): an authorized person with managerial authority over the construction or land disturbance project.

Arithmetic Mean (μ)
Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Beneficial Uses
California Water Code defines beneficial uses as those uses of the waters of the state that must be protected against quality degradation as specified in the Basin Plan.

Best Available Technology Economically Achievable (BAT)
As defined by USEPA, BAT is a technology-based standard established by the Clean Water Act as the most appropriate means available on a national basis for controlling the direct discharge of toxic and nonconventional pollutants to navigable waters. The BAT effluent limitations guidelines, in general, represent the best existing performance of treatment technologies that are economically achievable within an industrial point source category or subcategory.

Best Conventional Pollutant Control Technology (BCT)
As defined by USEPA, BCT is a technology-based standard for the discharge from existing industrial point sources of conventional pollutants including biochemical oxygen demand (BOD), total suspended sediment (TSS), fecal coliform, pH, and oil and grease.

Best Management Practices (BMPs)
Storm water control measures including schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States.

Coagulation
The clumping of particles in a discharge to settle out impurities, often induced by chemicals such as lime, alum, and iron salts.

Common Plan of Development
Generally a contiguous area where multiple, distinct construction activities may be taking place at different times under one plan. A plan is generally defined as any piece of documentation or physical demarcation that indicates that construction activities may

occur on a common plot. Such documentation could consist of a tract map, parcel map, demolition plans, grading plans or contract documents. Broad planning documents such as land use master plans, conceptual master plans, or broad-based CEQA or NEPA documents that identify potential projects for an agency or facility are not considered common plans of development.

Compliance Storm Event
The 20-year, 1-hour storm, equal to 1 inch of rainfall during a 1-hour period.

Daily Discharge
The discharge of a pollutant measured during any 24-hour period that reasonably represents a calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the average of the total mass of the pollutant discharged during the day. For pollutants with limitations expressed in other units such as concentration, the daily discharge is calculated as the average measurement of the pollutant throughout the day. The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day from outfalls identified for the project site.

Detected, but Not Quantified (DNQ)
DNQ are those sample results less than the Reporting Limit (RL), but greater than or equal to the laboratory's Method Detection Limit (MDL).

Disturbed Soil Area (DSA)
The total soil disturbance for all construction activities associated with the project. Areas of soil disturbance include but, are not limited to: clearing of the land both for access (i.e., access roads) to the site as well as preparing the site for constructing the project; constructing access roads to the site; grading of the project site in total; equipment staging area, maintenance area, and construction easement if they occur atop a soil surface; material and/or soil stockpiles if atop a soil surface; area of asphalt or concrete pavement removal if it is removed entirely to the soil surface; and area that is related to demolition and removal of existing structures if that demolition and removal is to the soil surface.

Diversion
Activities taken to route flowing water or groundwater around or away from a work site that does not cause a measurable change in water quality upstream or downstream of the work area.

Dewatering
Activities taken to remove excess water in an excavation or impoundment by pumping or other mechanical means. Dewatering fluids generally contain pollutants such as sediment.

Direct Discharge
The addition of any pollutant to waters of the U.S. from any point source including surface runoff that is collected or channeled by human activity; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person that do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances leading into a privately owned treatment works.

Discharger
The Legally Responsible Person or entity subject to this General Permit.

Effluent
Any discharge of water by a discharger either to the receiving water or beyond the property boundary controlled by the discharger.

Effluent Limitation
Any numeric or narrative restriction imposed on quantities, discharge rates, or concentrations of pollutants that are discharged beyond a project boundary from point sources into waters of the U.S., the waters of the contiguous zone, or the ocean.

Effluent Limitation Guideline (ELG)
ELGs are U.S. national standards for wastewater discharges to surface waters and publicly owned treatment works. The USEPA issues ELGs for categories of industrial sources of water pollution under the Clean Water Act.

Emergency
A sudden, unexpected occurrence involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, essential public services, or the environment.

Estimated Chemical Concentration
The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Index Period
The period of time during which bioassessment samples must be collected to produce results suitable for assessing the biological integrity of streams and rivers. Instream communities naturally vary throughout the seasons and sampling during the index period ensures that samples are collected during a period when communities are stable such that year to year consistency is obtained. The index period for the Lake Tahoe Hydrologic Unit is July 1 through August 15.

Legally Responsible Person
The Legally Responsible Person (LRP) will typically be the project proponent. The categories of persons or entities that are eligible to serve as the LRP are set forth below. For any construction or land disturbance project where multiple persons or entities are eligible to serve as the LRP, those persons or entities shall select a single LRP. In exceptional circumstances, a person or entity that qualifies as the LRP may

provide written authorization to another person or entity to serve as the LRP. In such a circumstance, the person or entity that provides the authorization retains all responsibility for compliance with the General Permit. Except as provided in category 2(d), a contractor who does not satisfy the requirements of any of the categories below is not qualified to be an LRP.

The following persons or entities may serve as an LRP:

1. A person, company, agency, or other entity that possesses a real property interest (including, but not limited to, fee simple ownership, easement, leasehold, or other rights of way) in the land upon which the construction or land disturbance activities will occur for the regulated site.

2. In addition to the above, the following persons or entities may also serve as an LRP:

   a. For linear underground/overhead projects (LUPs), the utility company, municipality, or other public or private agency that owns or operates the LUP;

   b. For land controlled by an estate or similar entity, the person who has day-to-day control over the land (including, but not limited to, a bankruptcy trustee, receiver, or conservator);

   c. For pollution investigation and remediation projects, any potentially responsible party that has received permission to conduct the project from the holder of a real property interest in the land; or

   d. For U.S. Army Corp of Engineers projects, the U.S. Army Corps of Engineers may provide written authorization to its bonded contractor to serve as the LRP, provided, however, that the U.S. Army Corps of Engineers is also responsible for compliance with the General Permit, as authorized by the Clean Water Act or the Federal Facilities Compliance Act.

Maximum Daily Effluent Limitation (MDEL)
The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median
The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL)
MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)
ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Municipal Separate Storm Sewer System (MS4)
A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) which is:

1. owned or operated by a state, city, town, borough, county, parish, district, association, or other public body (created pursuant to applicable federal and bi-state laws) having jurisdiction, that discharges to waters of the United States; including special districts under state law such as a sewer district or drainage district, flood control district, Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA;

2. designed or used for collecting or conveying storm water;

3. which is not a combined sewer; and

4. which is not part of a Publicly Owned Treatment Works as defined in 40 CFR 122.2.

New Source Performance Standards
NSPS are pollution control standards issued by the USEPA. NSPS under the CWA set the level of allowable wastewater discharges from new industrial facilities**.**

Non-Storm Water
Any wastewater that is not composed entirely of storm water, as defined below.

Non-Visible Pollutants
Pollutants that cannot be visually observed and are associated with a specific site, material, or activity that can cause a negative impact on water quality. Examples include chlorine, fertilizers, and pesticides/herbicides.

Post-Construction BMPs
Structural and non-structural controls that detain, retain, or reduce the discharge of wastewater and pollutants to receiving waters after final stabilization is attained.

Qualified SWPPP Developer (QSD)
Individual who is authorized to develop and revise SWPPPs.

Qualified SWPPP Practitioner (QSP)
Individual assigned responsibility for non-storm water and storm water visual observations, sampling and analysis, and responsibility to ensure full compliance with the permit and implementation of all elements of the SWPPP and CSMRP.

Rain Event Action Plan (REAP)
A written document specific to each storm event, that when implemented, is designed to protect all exposed portions of the site within 24 hours of any likely precipitation.

Receiving Water
A river, lake, ocean, stream or other watercourse into which effluent is discharged.

Reporting Level (RL)
RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this General Permit. The MLs included in this General Permit correspond to approved analytical methods for reporting a sample result that are selected by the Lahontan Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Routine Maintenance
Activities intended to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Run-on
Waters that originate offsite and flow onto the project site.

Storm Water Multi-Application and Report Tracking System (SMARTS)
The State Water Board's electronic system to manage administrative aspects of this General Permit, including obtaining and terminating coverage, and submitting required data and reports.

Storm Water
Storm water runoff, snow melt runoff, and surface runoff and drainage. It excludes infiltration and runoff from agricultural land.

Structural Controls
Any physical facility designed and constructed to mitigate the adverse impacts of storm water and urban runoff pollution.

Surface Water
All water naturally open to the atmosphere (rivers, lakes, reservoirs, ponds, streams, impoundments, seas, estuaries, etc,).

Waters as used in this General Permit are defined in section 122.2(a) of title 40 of the Code of Federal Regulations (CFR), and include, but are not limited to, wetlands, rivers and streams, either perennial or ephemeral, which flow in natural or artificial watercourses, lakes and impoundments of waters otherwise defined as waters of the US within the State of California

Wadeable Stream
A stream that can be crossed safely by wading during an index period.

Water of the United States
Generally refers to surface waters, as defined by the USEPA in 40 CFR 122.2.

Water Quality Objectives (WQOs)
Water quality objectives are defined in the California Water Code as limits or levels of water quality constituents or characteristics that are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

ATTACHMENT C

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ATTACHMENT C – CONSTRUCTION SITE MONITORING AND REPORTING PROGRAM (CSMRP)

Title 40 of the Code of Federal Regulations at section 122.48 (40 CFR 122.48) requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Lahontan Water Board to require technical and monitoring reports. This CSMRP establishes minimum monitoring and reporting requirements for this General Permit, which implement the federal and California regulations. Additional monitoring may be required as specified by the Lahontan Water Board Executive Officer.

I. GENERAL MONITORING PROVISIONS

A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall be identified in the CSMRP filed as part of the SWPPP with the NOI. Discharge locations may be updated as necessary if certain phases or project segments are completed and permanently stabilized. The updated sampling locations must be maintained in the SWPPP and made available to Lahontan Water Board staff upon request.

B. With the exception of field analysis conducted by Dischargers for turbidity and pH, all laboratories analyzing monitoring samples shall be certified by the State Water Board Division of Drinking Water, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports. Dischargers may conduct their own field analysis of turbidity and pH if the Discharger has sufficient capability (qualified trained employees, properly calibrated and maintained field instruments, etc.) to adequately perform the field analysis.

C. All monitoring instruments and devices used by Dischargers to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.

D. Dischargers shall ensure that all sampling and sample preservation are in accordance with the current edition of “Standard Methods for the Examination of Water and Wastewater” (American Public Health Associate).

E. All sample analyses shall be conducted according to test procedures specified in 40 CFR part 136, or otherwise stated within this Monitoring and Reporting Program.

F. Monitoring results, including non-compliance, shall be reported at intervals and in a manner specified in this Monitoring and Reporting Program.

G. All inspection, maintenance repair and sampling activities at the project location shall be performed or supervised by a Qualified SWPPP Practitioner (QSP) representing the Discharger. The QSP may delegate any or all these activities to an employee appropriately trained to do the task(s). Training documentation must be recorded, maintained with the Storm Water Pollution Prevention Plan (SWPPP), and provided to the Lahontan Water Board upon request.

H. Dischargers are not required to conduct visual inspections or physically collect samples outside of daylight hours, or when conditions exist that would be dangerous to personnel. Dischargers must conduct visual monitoring during daylight hours of any day of the week; however, Dischargers are only required to collect samples for analysis during active business/working days. For projects conducted under a night work schedule, visual inspections and sampling must be conducted during daylight hours at the frequency described above (i.e., visual inspections any day of the week and sampling during days of active work). Winter period (October 16 through April 30) monitoring requirements are also waived if significant environmental impacts would result from road system use to access the activity area, or if worker safety would be compromised. An explanation of the missed monitoring requirements due to these exceptions shall be recorded in writing and provided to Lahontan Water Board staff with the Annual Report.

II. CONSTRUCTION SITE MONITORING AND REPORTING PROGRAM REQUIREMENTS

A. Pursuant to Water Code sections 13383 and 13267, Dischargers subject to this General Permit shall develop and implement a written site-specific Construction Site Monitoring and Reporting Program (CSMRP) in accordance with the requirements of this section. The CSMRP shall be developed prior to the commencement of construction activities, and revised as necessary to reflect project revisions. The CSMRP shall be part of the SWPPP.

B. Dischargers electing to operate an Active Treatment System (ATS) shall develop and implement a supplemental monitoring program for these systems in accordance with the requirements established in Attachment E of this General Permit.

C. The CSMRP shall be developed and implemented to include the monitoring and reporting requirements specified in this CSMRP and shall at a minimum address the following objectives:

1. Demonstrate that the site is in compliance with the discharge prohibitions and applicable effluent limitations.

2. Determine whether non-visible pollutants are present at the construction site and are causing or contributing to exceedances of water quality objectives.

3. Determine whether immediate corrective actions, additional BMPs, or SWPPP revisions are necessary to reduce pollutants in storm water discharges and authorized non-storm water discharges.

4. Determine whether BMPs included in the SWPPP/REAP are effective in preventing or reducing pollutants in storm water discharges and authorized non-storm water discharges.

5. Demonstrate that appropriate sample collection, handling, and analyses procedures are implemented.

III. VISUAL INSPECTIONS

A. During the active construction season (defined as May 1 through October 15 for purposes of this General Permit), an inspection of the construction site shall be made each work day. Dischargers working (under an approved variance) during the period from October 16 through April 30 of the following year shall also conduct inspections on a daily basis. During the winter or inactive period (defined as October 16 through April 30 for purposes of this General Permit), Dischargers must conduct inspections at least once per month during daylight hours unless there is complete snow coverage of the site.

B. During active construction periods, and including Dischargers working (under an approved variance) during the period from October 16 through April 30 of the following year, a construction site inspection shall also be performed within 24 hours prior to an anticipated precipitation event (chance of precipitation as rain is forecasted at 30 percent or greater), daily during extended rain storm events, and within 24 hours after actual rain storm events. These requirements do not apply during snow storm events. Otherwise during the inactive period (October 16 through April 30 the following year), inspections must be conducted only within 24 hours after rain storm events. This requirement does not apply when the inactive site is covered by snow. If Dischargers cannot complete an inspection within the specified time frames, the reason for the delay shall be recorded in writing and maintained with the next inspection report.

C. Inspections shall be performed in accordance with this General Permit, from the commencement of construction activities until termination of coverage under this General Permit. The purpose of the inspections is to

discover potential water quality problems at the construction site so Dischargers can implement corrective measures immediately. The inspections will also be used to document compliance with the conditions of the General Permit and the SWPPP and to evaluate the effectiveness of the SWPPP and the REAP.

D. Inspection procedures shall be specified in the CSMRP. Observations at all designated effluent outfalls and other locations where storm water may discharge from the project boundaries to surface waters or municipal storm sewer systems must be included in the specified procedures. Inspections shall be conducted to identify and report the compliance status for following items, as a minimum:

1. Damage to containment dikes or erosion control fencing.

2. Improperly installed or ineffective erosion control fencing.

3. Unauthorized vehicle access, or vehicle access into designated non-construction areas not subject to disturbance.

4. Boundary fence damage or removal.

5. Disturbed areas with inadequate erosion prevention and sediment control protection.

6. Evidence of any sediment leakage through erosion control fencing or containment dikes.

7. Soil piles and other earthen materials which are unprotected or located in a drainage way.

8. Spilled and improperly stored chemicals, paint, fuel, oil, solvents, sealants, etc.

9. Upstream runoff diversion structures (are in place and operational).

10. Any evidence of sediment tracking from construction equipment.

11. Any signs of soil erosion or deposition down gradient from runoff discharges.

12. Sediment accumulation within onsite storm water drainage control facilities, and facilities in need of maintenance to ensure effectiveness.

13. Any evidence of non-storm water discharges from the project site. The inspection report shall note whether any such discharges are authorized, or are illicit and not authorized. If authorized, the condition of the applicable BMPs must be indicated.

14. Any observed impacts to the receiving water.

E. All inspections shall be recorded and maintained on a construction site inspection form provided as part of the CSMRP. Inspection forms shall be maintained and made available to Lahontan Water Board, State Water Board, or USEPA staff, or designated representative, upon request. At a minimum the following information shall be recorded:

1. Weather conditions at the time of the inspection, including presence or absence of precipitation, estimated time of beginning of storm event, duration of storm event, time elapsed since last storm event, and approximate amount of rainfall in inches.

2. Site information, including stage of construction, activities completed, and approximate area of the site exposed to storm water runoff.

3. A description of BMPs evaluated (i.e., erosion controls, sediment controls, chemical and waste controls, and non-storm water controls) including the locations and any deficiencies noted.

4. Observations of any storm water containment areas to detect leaks and ensure maintenance of adequate freeboard.

5. A description of any non-storm water discharges and spills/leaks observed.

6. Observations at all relevant discharge points and downstream locations in the receiving water, including the presence or absence of floating and suspended materials, sheens, discolorations, turbidity, and odors.

7. Any corrective actions required, including any necessary changes to the SWPPP or REAP and the associated implementation dates.

8. Photographs taken during the inspection, if any.

9. Inspector's name, title, and signature. If the inspector is someone other than the QSP, the QSP must review and certify the accuracy of the inspection record.

10. Corrective actions that have been completed in response to the inspection report and the date that they were completed.

IV. STORM WATER MONITORING

A. Discharge Monitoring Locations

1. Dischargers shall perform sampling and analysis of storm water and non-storm water discharges to characterize discharges associated with construction activity from the entire project disturbed area.

2. Effluent samples shall be collected, at a minimum, at all designated discharge points where storm water and authorized non-storm water is discharged offsite.

3. Dischargers shall ensure that effluent samples are representative of the discharge in each drainage area based on visual observation of the water and upstream conditions.

4. Dischargers shall monitor and report site run-on from surrounding areas if there is a reason to believe run-on may contribute to an effluent limit exceedance. Run-on sampling locations shall be identified in the CSMRP if applicable.

5. Dischargers who deploy an ATS on their site, or a portion of their site, shall collect ATS effluent samples and measurements from the discharge pipe or another location representative of the nature of the discharge.

6. Discharge point monitoring locations shall be identified in the CSMRP and updated if disturbed soil areas change during the course of the project.

B. Receiving Water Monitoring Locations

When receiving water monitoring is determined to apply to the project (see subsection C.3. below), the following shall apply:

1. **Upstream/up-gradient.** Dischargers shall obtain upstream/up-gradient receiving water samples from a representative and accessible location as close as possible to, and upstream from the effluent discharge.

2. **Downstream/down-gradient.** Dischargers shall obtain downstream/down-gradient receiving water samples from a representative and accessible location as close as possible to, and downstream from the effluent discharge.

3. Receiving water monitoring locations shall be identified in the CSMRP.

C. Sampling Requirements

1. **Storm Water Effluent Discharges**

   a. During the active construction season (defined as May 1 through October 15 for purposes of this General Permit), Dischargers shall collect one grab sample from each discharge point where storm water is discharged off the project boundaries and/or to surface waters. A minimum of three samples must be collected for each day that storm water is discharged offsite. If fewer than three discharge points are present at the site, at least three samples shall be collected from the discharge location(s). Dischargers working under an approved variance during the period from October 16 through April 30 of the following year shall also collect samples in accordance with the protocols described above. Samples are only required to be collected during active working/business days.

   b. Samples shall be analyzed onsite for turbidity using portable field instruments calibrated in accordance with manufacturer specifications. If there is a visible oily sheen at any discharge point, a sample shall be collected and analyzed for grease and oil. Samples shall be collected and analyzed, consistent with Table C-1.

2. **Non-visible Pollutants in Effluent**

   Dischargers shall identify in the CSMRP potential non-visible pollutants that may contaminate storm water or non-storm water discharged from the project site (i.e., acids and bases, solvents, lubricants, fertilizers; pollutants known to have been spilled and have contaminated the soil; concrete or soil amendments, such as gypsum, that may result in increased pH). If a breach, malfunction, leakage, or spill is identified that has the potential to result in the discharge of a non-visible pollutant, or the discharge of the non-visible pollutants is expected, Dischargers shall perform sampling for the specific non-visible pollutants at the discharge points corresponding to the applicable drainage area. This includes sampling for pH using a portable field meter when runoff has come into contact with uncured concrete or other materials that could affect the pH of effluent. Dischargers shall also collect and analyze a sample of storm water runoff that has not come into contact with the pollutants of concern for comparison with the non-visible pollutant discharge sample.

   Analyses may include, but are not limited to, indicator parameters such as volatile organic compounds, semi-volatile organic compounds, metals, salts and nutrients such as nitrogen and phosphorus, and other analyses as appropriate. The CSMRP shall specify appropriate

indicator parameters for each non-visible pollutant identified, as well as appropriate analytical methods, detection limits, sampling procedures, and sampling preservation. When possible, these methods should be consistent with 40 CFR part 136 to the maximum extent possible.

For protection of receiving waters the pH of effluent samples should not fall outside of the range of 6.0 to 9.0. This range is set as a numeric action level (NAL). If the pH of effluent is outside of the NAL, Dischargers must investigate the cause of the excursion and implement appropriate corrective measures. If the pH levels are determined to be from natural causes, Dischargers must provide data (e.g., from run-on) to demonstrate this condition.

3. **Receiving Waters**

Receiving water sampling may be required for certain projects such as stream, flood plain, stream environment zone, and other restoration projects where land disturbance is adjacent to surface waters and discrete discharge points and effluent outfalls do not exist. In these cases, receiving water sampling is more appropriate to evaluate potential impacts to water quality and the locations must be identified in the CSMRP in lieu of effluent sampling. For these sites, during the period from May 1 through October 15 of each year, Dischargers shall collect a minimum of three samples per day for each day that storm water or authorized non-storm water is discharged to receiving waters at both upstream locations above the project effects and downstream locations below the project area. Samples shall be analyzed onsite for turbidity using portable field instruments calibrated in accordance with manufacturer specifications. Dischargers working under an approved variance during the period of October 16 through April 30 the following year shall collect samples in accordance with the protocols described above. Samples are only required to be collected during active working/business days. Samples shall be analyzed in accordance with Table C-1. Receiving water sampling does not need to duplicate monitoring requirements if specified separately under a section 401 Water Quality Certification.

4. **Upsets and Unauthorized Discharges**

Receiving water sampling is required if an upset to the storm water controls or other unauthorized effluent is discharged to receiving waters. Samples of the effluent and receiving water, up- and down-stream from the discharge location, must be collected that are representative of the duration and intensity of the discharge. Analyses must be completed in accordance with Table C-1 and include constituents representative of the discharged effluent.

5. **Bioassessments**

Dischargers operating on sites that disturb 30 acres or more of the landscape and have a direct discharge to a wadeable stream or streams shall conduct or participate in benthic macroinvertebrate bioassessment prior to commencement of construction activity, as specified in Attachment C-1.

Table C-1. Monitoring Requirements (May 1 through October 15)

Parameter	Units	Test Method (see notes)	Minimum Detection Limit	Frequency
Turbidity	NTU	1	1 NTU	2
pH	SU	1	0.2 pH	4
Grease and Oil	mg/L	EPA 1664 w/silica gel treatment (SGT)	2 mg/L	3
Non-visible Pollutants		4	4	4
Bioassessment	NA	5	NA	6

Notes:

1 - Shall be field tested with a calibrated portable instrument.

2 - **Effluent**-Minimum of three samples per day storm water is discharged - All designated loctions must be sampled.
Receiving waters – When discharge sampling is determined to be inappropriate, collect three samples per day at designated sampling locations for each day that storm water is discharged to receiving waters.

3 - **Effluent** - When visible sheen is observed at discharge point.
Receiving Water - When upset or unauthorized discharge occurs involving petroleum hydrocarbons

4 - The units, test method, and minimum detection limit shall be identified in the discharger's CSMRP for each non-visible pollutant identified by the discharger. Analytical methods shall be in accordance with 40 CFR Part 136. Monitoring for non-visible pollutants shall be conducted as specified in section IV.C.2 of this MRP (when suspected in the discharge or when the potential to discharge has been determined).

5 - The current SAFIT STEs (November 28, 2006) list requirements for both the Level I and Level II taxonomic effort, and area located at http://www.swrcb.ca.gov/swamp/docs/safit/ste_list.pdf. When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at the State Water Board's SWAMP website.

6 - Applicable only to dischargers with a total project-related ground disturbance of 30 acres or more and a direct discharge to a receiving water. See Attachment C-1.

V. GENERAL REPORTING REQUIREMENTS

A. All data and reports must be submitted through the SMARTS and be certified by the LRP or an approved signatory.

B. All turbidity and pH analytical results collected from field instruments must be reported within five days after storm event conclusion. All other results determined by an analytical laboratory must be submitted within five days of receipt of the results from the laboratory.

C. Dischargers shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR part 136.

D. Dischargers shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

1. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

2. Sample results less than the reporting limit (RL), but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

3. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

E. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time are Dischargers to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

VI. TWENTY-FOUR-HOUR REPORTING

Dischargers shall immediately notify the Lahontan Water Board orally within 24 hours whenever an adverse condition occurs as a result of a discharge. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this General Permit, significant spills of

petroleum products or toxic chemicals, or damage to control facilities that could affect compliance pursuant to section 13267(b) of the California Water Code, a written notification of the adverse condition shall be submitted to the Lahontan Water Board within five (5) business days of occurrence. The written notification shall identify the adverse conditions, describe the actions necessary to remedy the condition and/or the actions implemented to abate the problem from continuing, and specify a timetable, subject to the modifications of the Lahontan Water Board, for remedial actions.

In the event that sampling results exceed any applicable NEL, Dischargers shall orally notify the Lahontan Water Board within 24 hours after the NEL exeedance has been identified and electronically submit all storm event sampling results through the SMARTS within five (5) business days after the NEL exceedance has been identified.

VII. ANNUAL REPORT

On or before **November 30** of each year, Dischargers shall prepare and electronically submit through the SMARTS an Annual Report for the period of October 16 of the previous year through October 15 of the current year. The SMARTS reporting module requests the following information:

A. The project name and location.

B. Any significant problem(s) which occurred during project construction and remedial measures planned or implemented.

C. A summary and evaluation of all sampling and analysis results, including copies of laboratory reports and rain gauge measurements, from monitoring activities conducted pursuant to section IV of this CSMRP.

D. A certified statement indicating whether or not the site has been winterized in accordance with BMPs for erosion prevention and sediment control.

E. Documentation of required QSP certifications and personnel training. Personnel training records shall be maintained on site and include, at a minimum, signed attendance sheets and agendas from pre-construction meetings covering SWPPP requirements. Additional information or training may be recorded as appropriate. The intent of this requirement is to ensure that all construction personnel are educated on their responsibilities for controlling pollutants in storm water and non-storm water discharges.

F. A certified statement indicating whether or not the project site is in compliance with the conditions of the General Permit and the SWPPP. This certification shall be signed by a Qualified SWPPP Practitioner (QSP). This certification should be based upon site inspections required in section III of this CSMRP.

VIII. MONITORING AND REPORTING REQUIREMENTS FOR RESTORATION PROJECTS

Because restoration projects are often executed to improve existing water quality conditions, it is necessary to monitor restoration project effectiveness. Monitoring information can also identify project and/or construction method strengths and weaknesses. This knowledge can feedback into the maintenance of the existing system and also be applied to future water quality improvement projects.

To monitor the success of the restoration of a disturbed area, the project proponent shall submit a detailed Restoration Monitoring Plan as part of the CSMRP with annual performance criteria for the review and approval of the Lahontan Water Board staff. The Restoration Monitoring Plan shall include a contingency plan for actions to be taken if performance criteria are not met.

Ideally, pre- and post-construction monitoring is required to best evaluate the success of the restoration project. Monitoring should include, but not be limited to, assessments of vegetative cover and water quality and quantity measurements. Where appropriate, monitoring should also include up-gradient and down-gradient sampling of water entering a pretreatment system (sediment can, sand and oil trap).

Recommendations for a Restoration Monitoring Plan include the following (need not duplicate monitoring set as part of a section 401 Water Quality Certification, if applicable to the project):

A. Pre- and Post-project surveys of vegetative cover at a representative scale for the site, including an inventory of species diversity and an assessment of the restored soil's ability to infiltrate runoff;

B. Pre- and Post-project cross-sectional surveys of stream channel dimensions and elevations (if applicable);

C. Post-project monitoring of the planting survival;

D. Photo survey including photo-point locations of the disturbed/restored area.

E. Pre- and post-project groundwater level measurements from at least two piezometers installed for observing groundwater levels;

F. Site assessments of the success of the implemented erosion and sediment control measures;

G. Water quality analyses to include Total N, Total P, Conductivity, and Turbidity at a minimum, in addition to other required sampling under this General Permit.

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ATTACHMENT C-1

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ATTACHMENT C-1 – BIOASSESSMENT MONITORING GUIDELINES

Bioassessment monitoring is required for projects that meet all of the following criteria:

1. The project directly discharges runoff to a freshwater wadeable stream (or streams) that is either: (a) listed by the State Water Board or USEPA as impaired due to sediment, and/or (b) tributary to any downstream water body that is listed for sediment; and/or have the beneficial use SPAWN & COLD & MIGRATORY

AND

2. Total project-related ground disturbance exceeds 30 acres. For all such projects, Dischargers shall conduct bioassessment monitoring, as described in this section, to assess the effect of the project on the biological integrity of receiving waters.

Bioassessment shall include:

1. The collection and reporting of specified instream biological data.

2. The collection and reporting of specified instream physical habitat data.

Bioassessment Exception

1. If a site qualifies for bioassessment, but the construction schedule does not allow for pre-construction sampling within the index period, Dischargers shall:

2. Receive Lahontan Water Board approval for the sampling exception.

3. Invest $7,500.00 times the number of samples required into the SWAMP program as compensation.

4. Make a check payable to: Cal State Chico Foundation (SWAMP Bank Account) or San Jose State Foundation (SWAMP Bank Account) and include the WDID number on the check for the amount calculated for the exempted project.

5. Send a copy of the check to the Lahontan Water Board office.

Bioassessment and Physical Habitat Protocols

1. Site Locations and Frequency. Macroinvertebrate samples shall be collected both before ground disturbance is initiated and after the project is completed. The “after” sample(s) shall be collected after at least one winter season resulting in surface runoff has transpired after project-related ground disturbance has ceased. “Before” and “after” samples shall be collected both upstream and downstream of the project’s discharge. Upstream samples should be taken immediately before the sites outfall and downstream samples should be taken immediately after the outfall (when safe to collect the samples). Samples should be collected for each freshwater wadeable stream that is listed as impaired due to sediment,

or tributary to a water body that is listed for sediment. Habitat assessment data shall be collected concurrently with all required macroinvertebrate samples.

2. Index Period. Macroinvertebrate sampling must be conducted between July 1 and August 31, depending on flow conditions (i.e., sampling should occur earlier during the index period in dry years, and later in wet years, but always within the July-August index period).

3. Field Methods. In collecting macroinvertebrate samples and assessing physical habitat, Dischargers shall conduct activities in accordance with the State Water Board's Surface Water Ambient Monitoring Program (SWAMP) protocol "*Collecting Benthic Macroinvertebrate Samples & Associated Physical and Chemical Data for Ambient Bioassessments in California – Standard Operating Procedures Manual.*[1]

4. Laboratory Methods. Macroinvertebrates must be identified and classified according to the Standard Taxonomic Effort (STE) Level 2 of the Southwestern Association of Freshwater Invertebrate Taxonomists (SAFIT),[2] and using a fixed-count of 600 organisms per sample. Organisms of the family *Chironomidae* may be identified to the less-intensive level of subfamily.

5. Quality Assurance. Dischargers or their consultant(s) must have and follow a quality assurance (QA) plan that covers the required bioassessment monitoring. The QA plan must include, or be supplemented to include, a specific requirement for external QA checks (i.e., verification of taxonomic identifications and correction of data where errors are identified). External QA checks must be performed on one of the Discharger's macroinvertebrate samples collected per calendar year, or ten percent of the samples per year (whichever is greater). QA samples must be randomly selected. The external QA checks must be paid for by Dischargers, and performed by the California Department of Fish and Wildlife's Aquatic Bioassessment Laboratory. An alternate laboratory with equivalent or better expertise and performance may be used if approved in writing by Lahontan Water Board staff. A copy of the QA plan must be provided to Lahontan Water Board staff upon request.

6. Sample Preservation and Archiving. For purposes of this CSMRP, the quoted terms are described as follows: The "original sample material" is that material (i.e., macroinvertebrates, organic material, gravel, etc.) remaining after the subsample has been removed for identification. The "remaining subsampled material" is that material (e.g., organic material, gravel, etc.) that remains after the organisms to be identified have been removed from the subsample for identification. (Generally, no macroinvertebrates are present in the remaining subsampled material, but this needs to be verified via QA completeness checks.) The "identified organisms" are those organisms within the subsample that are specifically identified and counted.

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[1] Document may be found on the SWAMP website at http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#methods

[2] The STEs developed and maintained by SAFIT list the requirements for Level I and Level II taxonomic effort, and are located at: http://www.safit.org/ste.html. When new editions are published by SAFIT, they will supersede all previous editions. All editions will be posted at SAFIT's website.

The original sample material must be stored in 70 percent ethanol and retained by Dischargers until: 1) all QA analyses specified herein and in the relevant QA plan are completed; and 2) any data corrections and/or re-analyses recommended by the external QA laboratory have been implemented. The remaining subsampled material must be stored in 70 percent ethanol and retained until completeness checks have been performed according to the relevant QA plan. The identified organisms must be stored in 70 percent ethanol, in separate glass vials for each final ID taxon. (For example, a sample with 45 identified taxa would be archived in a minimum of 45 vials, each containing all individuals of the identified taxon.) Each of the vials containing identified organisms must be labeled with taxonomic information (i.e., taxon name, organism count) and collection information (i.e., site name/site code, waterbody name, date collected, collection method). The identified organisms must be archived (i.e., retained) by Dischargers for a period of not less than three years from the date that all QA steps are completed, and must be checked at least once per year and "topped off" with ethanol to prevent desiccation. The identified organisms must be relinquished to the Lahontan Water Board upon request by any Lahontan Water Board staff.

7. Data Submittal. The macroinvertebrate results and other site and method details (i.e., site name, location coordinates, sample date/time, taxonomic identifications consistent with the specified SAFIT STEs, number of organisms within each taxa, etc.), must be submitted to the Lahontan Water Board in electronic format using a completed Surface Water Ambient Monitoring Program (SWAMP) "Taxonomy Results Template" for Benthic-Bioassessment-Algae. The most current version of SWAMP's Taxonomy Results Template (or an equivalent template compatible with the California Environmental Data Exchange Network, "CEDEN") must be used.

8. Invasive Species Prevention. In conducting the required bioassessment monitoring, Dischargers and their consultants must take all reasonable precautions to prevent the introduction or spread of aquatic invasive species. At minimum, Dischargers and their consultants must follow the recommendations of the California Department of Fish and Wildlife to minimize the introduction or spread of the New Zealand mudsnail.

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ATTACHMENT D

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ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this General Permit. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 CFR 122.41(a).)

2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet been modified to incorporate the requirement. (40 CFR 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a 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. (40 CFR 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize 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. (40 CFR 122.41(d).)

D. Proper Operation and Maintenance

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 backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR 122.41(g).)

2. The issuance of this Order does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations. (40 CFR 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Lahontan Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 CFR 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 CFR 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 CFR 122.41(i)(4).)

G. Bypass

1. Definitions

   "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i).)

   "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 that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Lahontan Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR 122.41(m)(4)(i)):

   a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR 122.41(m)(4)(i)(A));

   b. 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 back-up 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 (40 CFR 122.41(m)(4)(i)(B)); and

   c. The Discharger submitted notice to the Lahontan Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR 122.41(m)(4)(i)(C).)

4. The Lahontan Water Board may approve an anticipated bypass, after considering its adverse effects, if the Lahontan Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR 122.41(m)(4)(ii).)

5. Notice

   a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR 122.41(m)(3)(i).)

   b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the 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. (40 CFR 122.41(n)(1).)

1. 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 Standard Provisions – Permit Compliance I.H.2 below 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. (40 CFR 122.41(n)(2).)

2. 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 (40 CFR 122.41(n)(3)):

   a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR 122.41(n)(3)(i));

   b. The permitted facility was, at the time, being properly operated (40 CFR 122.41(n)(3)(ii));

   c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR 122.41(n)(3)(iii)); and

   d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 CFR 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Lahontan Water Board. The Lahontan Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and

incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR 122.41(j)(1).)

B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), the Discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Lahontan Water Board Executive Officer at any time. (40 CFR 122.41(j)(2).)

Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 CFR 122.41(j)(3)(i));
2. The individual(s) who performed the sampling or measurements (40 CFR 122.41(j)(3)(ii));
3. The date(s) analyses were performed (40 CFR 122.41(j)(3)(iii));
4. The individual(s) who performed the analyses (40 CFR 122.41(j)(3)(iv));
5. The analytical techniques or methods used (40 CFR 122.41(j)(3)(v)); and
6. The results of such analyses. (40 CFR 122.41(j)(3)(vi).)

Claims of confidentiality for the following information will be denied (40 C.F.R. § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 CFR 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 CFR 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Lahontan Water Board, State Water Board, or USEPA within a reasonable time, any information which the Lahontan Water Board, State Water 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. Upon request, the Discharger shall also furnish to the Lahontan Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Lahontan Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, V.B.5, V.B.6, and V.B.7 below. (40 CFR 122.41(k).)

2. For a corporation, all permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) 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 (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 CFR 122.22(a)(1).)

3. For a partnership or sole proprietorship, all permit applications shall be signed by a general partner or the proprietor, respectively. (40 CFR 122.22(a)(2).)

4. For a municipality, State, federal, or other public agency, all permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a

senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA). (40 CFR 122.22(a)(3).).

5. All reports required by this Order and other information requested by the Lahontan Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2, 3, or 4 above, as appropriate, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2, 3, or 4 above, as appropriate (40 CFR 122.22(b)(1));

b. 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.) (40 CFR 122.22(b)(2)); and

c. The written authorization is submitted to the Lahontan Water Board and State Water Board. (40 CFR 122.22(b)(3).)

6. If an authorization under Standard Provisions – Reporting V.B.5 above 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 Standard Provisions – Reporting V.B.5 above must be submitted to the Lahontan Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR 122.22(c).)

7. Any person signing a document under Standard Provisions – Reporting V.B.2, 3, 4, or 5 above 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." (40 CFR 122.22(d).)

Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR 122.22(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Lahontan Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Lahontan Water Board. (40 CFR 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR 122.41(l)(4)(iii).)

24-Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) business days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR 122.41(l)(6)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR 122.41(l)(6)(ii)):

   a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR 122.41(l)(6)(ii)(A).)

   b. Any upset that exceeds any effluent limitation in this Order. (40 CFR 122.41(l)(6)(ii)(B).)

3. The Lahontan Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR 122.41(l)(6)(iii).)

Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 CFR 122.41(l)(5).)

Planned Changes

The Discharger shall give notice to the Lahontan Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR 122.41(l)(1)(ii).)

3. 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 permit conditions that are different from or absent in the existing permit, 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. (40 CFR 122.41(l)(1)(iii).)

Anticipated Noncompliance

The Discharger shall give advance notice to the Lahontan Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 CFR 122.41(l)(2).)

Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR 122.41(l)(7).)

Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Lahontan Water Board, State Water Board, or USEPA, the

Discharger shall promptly submit such facts or information. (40 CFR 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Lahontan Water Board is authorized to enforce the terms of this General Permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387.

ATTACHMENT E

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ATTACHMENT E – ACTIVE TREATMENT SYSTEM (ATS) REQUIREMENTS

Table 1 – Numeric Effluent Limitations, Numeric Action Levels, Test Methods, Detection Limits, and Reporting Units

Parameter	Test Method	Discharge Type	Min. Detection Limit	Units	Numeric Action Level	Numeric Effluent Limitation
Turbidity	EPA 0180.1 and/or field test with a calibrated portable instrument	For ATS discharges	1	NTU	N/A	≤ 10 NTU for Daily Flow-Weighted Average & ≤ 20 NTU for Any Single Sample

A. Dischargers choosing to implement an Active Treatment System (ATS) on their site shall comply with all of the requirements in this Attachment.

B. Dischargers shall maintain a paper copy of each ATS specification onsite in compliance with the record retention requirements in the Special Provisions of this General Permit.

C. ATS Design, Operation and Submittals

1. The ATS shall be designed and approved by a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Professional in Storm Water Quality (CPSWQ); a California registered civil engineer; or any other California registered engineer.

2. Dischargers shall ensure that the ATS is designed in a manner to preclude the accidental discharge of settled floc[1] during floc pumping or related operations.

3. Dischargers shall design outlets to dissipate energy from concentrated flows.

4. Dischargers shall install and operate an ATS by assigning a lead person (or project manager) who has either a minimum of five years construction storm

[1] Floc is defined as a clump of solids formed by the chemical action in ATS systems.

water experience or who is a licensed contractor specifically holding a California Class A Contractors license.[2]

5. Dischargers shall prepare an ATS Plan that combines the site-specific data and treatment system information required to safely and efficiently operate an ATS. The ATS Plan shall be electronically submitted to the State Water Board at least 14 days prior to the planned operation of the ATS and a paper copy shall be available onsite during ATS operation. At a minimum, the ATS Plan shall include:

    a. ATS Operation and Maintenance Manual for All Equipment.

    b. ATS Monitoring, Sampling & Reporting Plan, including Quality Assurance/Quality Control (QA/QC).

    c. ATS Health and Safety Plan.

    d. ATS Spill Prevention Plan.

6. The ATS shall be designed to capture and treat (within a 72-hour period) a volume equivalent to the runoff from a 10-year, 24-hour storm event using a watershed runoff coefficient of 1.0.

D. Treatment – Chemical Coagulation/Flocculation

1. Jar tests shall be conducted using water samples selected to represent typical site conditions and in accordance with ASTM D2035-08 (2003).

2. Dischargers shall conduct, at a minimum, six site-specific jar tests (per polymer with one test serving as a control) for each project to determine the proper polymer and dosage levels for their ATS.

3. Single field jar tests may also be conducted during a project if conditions warrant. For example, if construction activities disturb changing types of soils, which consequently cause change in storm water and runoff characteristics.

E. Residual Chemical and Toxicity Requirements

1. Dischargers shall utilize a residual chemical test method that has a method detection limit (MDL) of 10 percent or less than the maximum allowable threshold

[2] Business and Professions Code Division 3, Chapter 9, Article 4, Class A Contractor: A general engineering contractor is a contractor whose principal contracting business is in connection with fixed works requiring specialized engineering knowledge and skill.

concentration[3] (MATC) for the specific coagulant in use and for the most sensitive species of the chemical used.

2. Dischargers shall utilize a residual chemical test method that produces a result within one hour of sampling.

3. Dischargers shall have a California state certified laboratory validate the selected residual chemical test. Specifically the lab will review the test protocol, test parameters, and the detection limit of the coagulant. Dischargers shall electronically submit this documentation as part of the ATS Plan.

4. If Dischargers cannot utilize a residual chemical test method that meets the requirements above, Dischargers shall operate the ATS in Batch Treatment[4] mode.

5. Dischargers planning to operate in Batch Treatment mode shall perform toxicity testing in accordance with the following:

    a. Dischargers shall initiate acute toxicity testing on effluent samples representing effluent from each batch prior to discharge[5]. All bioassays shall be sent to a laboratory certified by the State Water Board Division of Drinking Water Environmental Laboratory Accreditation Program (ELAP). The required field of testing number for Whole Effluent Toxicity (WET) testing is E113.

    b. Acute toxicity tests shall be conducted with the following species and protocols. The methods to be used in the acute toxicity testing shall be those outlined for a 96-hour acute test in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, USEPA-841-R-02-012" for Fathead minnow, *Pimephales promelas* (fathead minnow). Acute toxicity for *Oncorhynchus mykiss* (Rainbow Trout) may be used as a substitute for testing fathead minnows.

    c. All toxicity tests shall meet quality assurance criteria and test acceptability criteria in the most recent versions of the USEPA test method for WET testing.

    d. Dischargers shall electronically report all acute toxicity testing.

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[3] The Maximum Allowable Threshold Concentration (MATC) is the allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity testing conducted by an independent, third-party laboratory. A typical MATC would be:
The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

[4] Batch Treatment mode is defined as holding or recirculating the treated water in a holding basin or tank(s) until treatment is complete or the basin or storage tank(s) is full.

[5] This requirement only requires that the test be initiated prior to discharge.

F. Filtration

1. The ATS shall include a filtration step between the coagulant treatment train and the effluent discharge. This is commonly provided by sand, bag, or cartridge filters, which are sized to capture suspended material that might pass through the clarifier tanks.

2. Differential pressure measurements shall be taken to monitor filter loading and confirm that the final filter stage is functioning properly.

G. Residuals Management

1. Sediment shall be removed from the storage or treatment cells as necessary to ensure that the cells maintain their required water storage (i.e., volume) capability.

2. Handling and disposal of all solids generated during ATS operations shall be done in accordance with all local, state, and federal laws and regulations.

H. ATS Instrumentation

1. The ATS shall be equipped with instrumentation that automatically measures and records effluent water quality data and flow rate.

2. The minimum data recorded shall be consistent with the Monitoring and Reporting requirements below, and shall include:

   a. Influent Turbidity

   b. Effluent Turbidity

   c. Influent pH

   d. Effluent pH

   e. Residual Chemical

   f. Effluent Flow Rate

   g. Effluent Flow Volume

3. Systems shall be equipped with a data recording system, such as data loggers or webserver-based systems, which records each measurement on a frequency no longer than once every 15 minutes.

4. Cumulative flow volume shall be recorded daily. The data recording system shall have the capacity to record a minimum of seven days continuous data.

5. Instrumentation systems shall be interfaced with system control to provide auto shutoff or recirculation in the event that effluent measurements exceed turbidity or pH.

6. The system shall also assure that upon system upset, power failure, or other catastrophic event, the ATS will default to a recirculation mode or safe shut down.

7. Instrumentation (flow meters, probes, valves, streaming current detectors, controlling computers, etc.) shall be installed and maintained per manufacturer's recommendations, which shall be included in the QA/QC plan.

8. The QA/QC plan shall also specify calibration procedures and frequencies, instrument method detection limit or sensitivity verification, laboratory duplicate procedures, and other pertinent procedures.

9. The instrumentation system shall include a method for controlling coagulant dose, to prevent potential overdosing. Available technologies include flow/turbidity proportional metering, periodic jar testing and metering pump adjustment, and ionic charge measurement controlling the metering pump.

I. ATS Effluent Discharge

1. ATS effluent shall comply with all provisions and prohibitions in this General Permit, specifically the NELs.

2. NELs for discharges from an ATS:

   a. Turbidity of all ATS discharges shall be less than 10 NTU for daily flow-weighted average of all samples and 20 NTU for any single sample.

   b. Residual Chemical shall be less than 10 percent of MATC[6] for the most sensitive species of the chemical used.

3. If an analytical effluent sampling result is outside the range of pH NELs (i.e., is below the lower NEL for pH or exceeds the upper NEL for pH) or exceeds the turbidity NEL (as listed in Table 1), Dischargers are in violation of this General

[6] The Maximum Allowable Threshold Concentration (MATC) is the allowable concentration of residual, or dissolved, coagulant/flocculant in effluent. The MATC shall be coagulant/flocculant-specific, and based on toxicity testing conducted by an independent, third-party laboratory. The MATC is equal to the geometric mean of the NOEC (No Observed Effect Concentration) and LOEC (Lowest Observed Effect Concentration) Acute and Chronic toxicity results for most sensitive species determined for the specific coagulant. The most sensitive species test shall be used to determine the MATC.

Permit and shall electronically file the results in violation within 24 hours of obtaining the results.

4. If ATS effluent is authorized to discharge into a sanitary sewer system, Dischargers shall comply with any pre-treatment requirements applicable for that system. Dischargers shall include any specific criteria required by the municipality in the ATS Plan.

5. Compliance Storm Event:

   Discharges of storm water from ATS shall comply with applicable NELs (above) unless the storm event causing the discharges is determined after the fact to be equal to or larger than the Compliance Storm Event. The Compliance Storm Event for ATS discharges is the 20-year, 1-hour storm, which is equal to 1 inch of rainfall in a 1-hour period. This exemption is dependent on the submission of rain gauge data verifying the storm event is equal to or larger than the Compliance Storm.

J. Operation and Maintenance Plan

1. Each project shall have a site-specific Operation and Maintenance (O&M) Manual covering the procedures required to install, operate and maintain the ATS.[7]

2. The O&M Manual shall only be used in conjunction with appropriate project-specific design specifications that describe the system configuration and operating parameters.

3. The O&M Manual shall have operating manuals for specific pumps, generators, control systems, and other equipment.

K. Sampling and Reporting Quality Assurance/ Quality Check (QA/QC) Plan

A project-specific QA/QC Plan shall be developed for each project. The QA/QC Plan shall include at a minimum:

1. Calibration – Calibration methods and frequencies for all system and field instruments shall be specified.

2. Method Detection Limits (MDLs) – The methods for determining MDLs shall be specified for each residual coagulant measurement method. Acceptable minimum MDLs for each method, specific to individual coagulants, shall be specified.

[7] The manual is typically in a modular format covering generalized procedures for each component that is utilized in a particular system.

3. Laboratory Duplicates – Requirements for monthly laboratory duplicates for residual coagulant analysis shall be specified.

L. Personnel Training

1. Operators shall have training specific to using an ATS and liquid coagulants for storm water discharges in California.

2. The training shall be in the form of a formal class with a certificate and requirements for testing and certificate renewal.

3. Training shall include a minimum of eight hours classroom and 32 hours field training. The course shall cover the following topics:

    a. Coagulation Basics –Chemistry and physical processes

    b. ATS System Design and Operating Principles

    c. ATS Control Systems

    d. Coagulant Selection – Jar testing, dose determination, etc.

    e. Aquatic Safety/Toxicity of Coagulants, proper handling and safety

    f. Monitoring, Sampling, and Analysis

    g. Reporting and Recordkeeping

    h. Emergency Response

M. Active Treatment System (ATS) Monitoring Requirements

Dischargers who deploy an ATS on their site shall conduct the following:

1. Visual Monitoring

    a. A designated responsible person shall be on site daily at all times during treatment operations.

    b. Daily on-site visual monitoring of the system for proper performance shall be conducted and recorded in the project data log.

        i. The log shall include the name and phone number of the person responsible for system operation and monitoring.

ii. The log shall include documentation of the responsible person's training.

2. Operational and Compliance Monitoring

   a. Flow shall be continuously monitored and recorded at not greater than 15-minute intervals for total volume treated and discharged.

   b. Influent and effluent pH must be continuously monitored and recorded at not greater than 15-minute intervals.

   c. Influent and effluent turbidity (expressed in NTU) must be continuously monitored and recorded at not greater than 15-minute intervals.

   d. The type and amount of chemical used for pH adjustment, if any, shall be monitored and recorded.

   e. Dose rate of chemical used in the ATS system (expressed in mg/L) shall be monitored and reported 15-minutes after startup and every 8 hours of operation.

   f. Laboratory duplicates – monthly laboratory duplicates for residual coagulant analysis must be performed and records shall be maintained onsite.

   g. Effluent shall be monitored and recorded for residual chemical/additive levels.

   h. If a residual chemical/additive test does not exist and the ATS is operating in a batch treatment mode of operation refer to the toxicity monitoring requirements below.

3. Toxicity Monitoring

   Dischargers operating in batch treatment mode shall perform toxicity testing in accordance with the following:

   a. Dischargers shall initiate acute toxicity testing on effluent samples representing effluent from each batch prior to discharge.[8] All bioassays shall be sent to a laboratory certified by the State Water Board Division of Drinking Water Environmental Laboratory Accreditation Program (ELAP). The required field of testing number for Whole Effluent Toxicity (WET) testing is E113.

   b. Acute toxicity tests shall be conducted with the following species and protocols. The methods to be used in the acute toxicity testing shall be those outlined for a 96-hour acute test in "Methods for Measuring the Acute Toxicity

[8] This requirement only requires that the test be initiated prior to discharge.

of Effluents and Receiving Water to Freshwater and Marine Organisms, USEPA-841-R-02-012" for Fathead minnow, *Pimephales promelas or* Rainbow trout, *Oncorhynchus mykiss* may be used as a substitute for fathead minnow.

c. All toxicity tests shall meet quality assurance criteria and test acceptability criteria in the most recent versions of the USEPA test method for WET testing.

4. Reporting and Recordkeeping

At a minimum, every 30 days a LRP representing the Discharger shall access the State Water Boards Storm Water Mulit-Application and Report Tracking system (SMARTS) and electronically upload field data from the ATS. Records must be kept for three years after the project is completed .

5. Non-compliance Reporting

a. Any indications of toxicity or other violations of water quality objectives shall be reported to the appropriate regulatory agency as required by this General Permit.

b. Upon any measurements that exceed water quality standards, the system operator shall immediately notify his supervisor or other responsible parties, who shall notify the Lahontan Water Board.

c. If any monitoring data exceeds any applicable NEL in this General Permit, Dischargers shall electronically submit a NEL Violation Report to the State Water Board within 24 hours after the NEL exceedance has been identified.

i. ATS dischargers shall certify each NEL Violation Report in accordance with the Special Provisions for Construction Activity in this General Permit.

ii. ATS dischargers shall retain an electronic or paper copy of each NEL Violation Report for a minimum of three years after the date the annual report is filed.

iii. ATS dischargers shall include in the NEL Violation Report:

(1) The analytical method(s), method reporting unit(s), and method detection limit(s) of each analytical parameter (analytical results that are less than the method detection limit shall be reported as "less than the method detection limit");

(2) The date, place, time of sampling, visual observation (inspections), and/or measurements, including precipitation; and

(3) A description of the current onsite BMPs, and the proposed corrective actions taken to manage the NEL exceedance.

iv. Compliance Storm Event - In the event that an applicable NEL has been exceeded during a storm event equal to or larger than the Compliance Storm Event, ATS dischargers shall report the onsite rain gauge reading and nearby governmental rain gauge readings for verification.

ATTACHMENT F

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ATTACHMENT F - WASTE DISCHARGE PROHIBITION INFORMATION FOR ACTIVITIES IN STREAM ENVIRONMENT ZONES AND FLOODPLAINS OF THE LAKE TAHOE HYDROLOGIC UNIT

To protect beneficial uses and achieve water quality objectives, the *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains prohibitions against waste discharges to surface waters and lands within 100-year floodplains and Stream Environment Zones (SEZs) in the Lake Tahoe Hydrologic Unit (HU). These prohibitions may apply to certain construction activities conducted in these areas.

I. Waste Discharge Prohibitions and Exemptions

A. Region-Wide Waste Discharge Prohibitions

Chapter 4, section 4.1 of the Basin Plan specifies the following region-wide waste discharge prohibitions:

1. The discharge of waste that causes violation of any narrative or numeric water quality objective contained in this Plan is prohibited.

2. Where any numeric or narrative water quality objective contained in this Plan is already being violated, the discharge of waste that causes further degradation or pollution is prohibited.

3. The discharge of waste that could affect the quality of waters of the state that is not authorized by the State or Regional Board through waste discharge requirements, waiver of waste discharge requirements, NPDES permit, cease and desist order, certification of water quality compliance pursuant to Clean Water Act section 401, or other appropriate regulatory mechanism is prohibited.

4. The discharge of untreated sewage, garbage, or other solid wastes into surface waters of the Region is prohibited. (For the purposes of this prohibition, “untreated sewage” is that which exceeds secondary treatment standards of the Federal Water Pollution Control Act, which are incorporated in this plan in section 4.4 under “Surface Water Disposal of Sewage Effluent.”)

5. The discharge of pesticides to surface or ground waters is prohibited.

B. Exemptions to Region-Wide Waste Discharge Prohibitions

The Basin Plan allows exemptions to certain waste discharge prohibitions if the applicable criteria are met, as described further, below. Exemptions are generally provided on a case-by-case basis, although the Lahontan Water Board may find that certain types of discharges are exempt from certain or all applicable

waste discharge prohibitions. Chapter 4, section 4.1 includes exemption criteria for Prohibitions 1 and 2, above, which may be applicable to construction activities within the Lahontan Region. The Basin Plan also includes exemption criteria for Prohibition 5, above; see Chapter 4.1 of the Basin Plan for more information.

An exemption to Prohibition 1 or 2, above, may be granted whenever the Lahontan Water Board finds all of the following:

1. The discharge of waste will not, individually or collectively, directly or indirectly, adversely affect beneficial uses, *and*

2. There is no reasonable alternative to the waste discharge, *and*

3. All applicable and practicable control and mitigation measures have been incorporated to minimize potential adverse impacts to water quality and beneficial uses.

C. <u>Exemptions for Emergency Projects</u>

The Lahontan Water Board recognizes that emergency projects may require the discharge of waste to water as part of actions to address the emergency. Due to the exigencies of the emergency situation, normal public noticing and Lahontan Water Board action on granting prohibition exemptions may not be possible. For waste discharged as a result of emergency projects, exemptions to all prohibitions contained in the Basin Plan may be granted by the Lahontan Water Board's Executive Officer for the following projects:

1. Projects to maintain, repair, restore, demolish, or replace property or facilities damaged or destroyed as a result of a disaster in a disaster stricken area in which a state of emergency has been proclaimed by the Governor pursuant to the California Emergency Services Act, commencing with section 8550 of the Government Code.

2. Emergency repairs to publicly or privately owned service facilities necessary to maintain service essential to the public health, safety or welfare.

3. Specific actions necessary to prevent or mitigate an emergency. *This does not include long-term projects undertaken for the purpose of preventing or mitigating a situation that has a low probability of occurrence in the short-term.*

Exemptions to all waste discharge prohibitions for emergency projects meeting the above qualifications may be granted whenever the Lahontan Water Board Executive Officer finds that a specific project meets all of the following criteria:

1. There is no feasible alternative to the project that would comply with the Basin Plan prohibitions, *and*

2. All applicable control and mitigation measures that are practicable have been incorporated to

D. Exempted Low Threat Discharges

The Lahontan Water Board has determined that the discharges listed in Table 4.1-1 are exempt from applicable region-wide and hydrologic unit/area waste discharge prohibitions subject to all the conditions set forth below and the discharge-specific conditions in Basin Plan Table 4.1-1.

1. For proposed discharges to surface water, the applicant must provide information supporting why discharge to land is not practicable.

2. The discharge must not adversely affect the beneficial uses of the receiving water.

3. The discharge must comply with all applicable water quality objectives.

4. Best practicable treatment or control of the discharge shall be implemented to ensure that pollution or nuisance will not occur.

Table 4.1-1.
Low Threat Discharges Conditionally Exempt From
Waste Discharge Prohibitions

Specific Conditions for Exemption:

Discharge Category	Conditions for Exemption
Atmospheric condensate from refrigeration and air conditioning systems	Must not contain chemicals or materials that would adversely affect water quality.
Groundwater from foundation drains, crawl-space pumps, and footing drains	Must not contain chemicals or materials that would adversely affect water quality.
Water main, storage tank, fire hydrant flushing	Water discharged must consist of potable water. Must use best management practices to reduce soil erosion from discharged water to a level of insignificance.
Incidental runoff from landscape irrigation	Must not contain fertilizers or pesticides. For recycled water used for irrigation, must discharge to land.

Specific Conditions for Exemption Continued:

Non-contact cooling water	Must not contain biocides, anti-scalants or other additives.
Aquifer or pump testing water	Must not be in an area of known groundwater contamination. If discharged to surface water, the quality of the discharge must be substantially similar to the quality of the receiving water.
Construction dewatering	Must not be in an area of known soil or groundwater contamination where that contamination could adversely affect the discharge and/or the receiving water.
Utility vault and conduit flushing and draining	Must not contain chemicals or materials that would adversely affect water quality.
Hydrostatic testing, maintenance, repair and disinfection of potable water supply pipelines	Water discharged must consist of potable water. Must use best management practices to reduce soil erosion from discharged water to an insignificant level.
Hydrostatic testing of newly constructed pipelines, tanks, reservoirs, etc., used for purposes other than potable water supply (e.g., gas, oil, reclaimed water, etc.)	Potable water must be used in the hydrostatic test. Must not contain chemicals or materials that would adversely affect water quality. Must use best management practices to reduce soil erosion from discharged water to an insignificant level.
Disposal of treated groundwater	Treatment must remove contaminants of concern to non-detectable levels.
Pier pilings (driven), **except** for piers in Lake Tahoe in significant fish spawning habitat or in areas immediately offshore of stream inlets	Piles must be driven. Where the lakebed contains clayey or silty substrate, caissons, turbidity curtains, or other best management practices must be used to limit generated turbidity to smallest area practicable.
Buoys and aids to navigation	Must not contain chemicals or materials that would adversely affect water quality.
Scientific instrumentation for water quality or resources study	Must meet the general conditions for exemption.

E. Restoration Projects Discharge Exemptions

The Lahontan Water Board encourages restoration projects that are intended to reduce or mitigate existing sources of soil erosion, water pollution, or impairment of beneficial uses. For waste earthen materials discharged as a result of restoration projects, exemptions to the above prohibitions, and all other prohibitions contained in the Basin Plan, may be granted by the Lahontan Water

Board's Executive Officer whenever a specific project meets all of the following criteria:

1. The project will eliminate, reduce or mitigate existing sources of soil erosion, water pollution, and/or impairment of beneficial uses of water, *and*

2. There is no feasible alternative to the project that would comply with the Basin Plan prohibitions, *and*

3. All applicable and practicable control and mitigation measures have been incorporated into the project to minimize land disturbance, soil erosion, discharges of turbid water, and other potential adverse impacts to water quality and beneficial uses to the minimum necessary to complete the project.

F. Lake Tahoe HU Discharge Prohibitions

Chapter 5, section 5.2 of the Basin Plan specifies the following discharge prohibitions for construction activities within the Lake Tahoe HU:

1. The discharge attributable to human activities of any waste or deleterious material to surface waters of the Lake Tahoe HU is prohibited.

2. The discharge attributable to human activities of any waste or deleterious material to land below the highwater rim of Lake Tahoe or within the 100-year floodplain of any tributary to Lake Tahoe is prohibited.

3. The discharge attributable to human activities of any waste or deleterious material to Stream Environment Zones (SEZs) in the Lake Tahoe HU is prohibited.

4. The discharge or threatened discharge attributable to new pier construction of wastes to significant spawning habitats or to areas immediately offshore of stream inlets in Lake Tahoe is prohibited.

5. The discharge of garbage or other solid waste to lands within the Lake Tahoe Basin is prohibited.

6. The discharge of industrial waste within the Lake Tahoe Basin is prohibited. Industrial waste is defined as any waste resulting from any process or activity of manufacturing or construction. Stormwater discharges from industrial facilities are not prohibited when wastes in the discharge are controlled through the application of management practices or other means and the discharge does not cause a violation of water quality objectives.

G. Exemptions to Lake Tahoe HU Prohibitions

The following criteria for prohibition exemptions for the Lake Tahoe HU are set forth in Chapter 5, section 5.2 of the Basin Plan.

1. An exemption to Prohibition 1 may be granted whenever the Lahontan Water Board finds all of the following:

   a. The discharge of waste will not, individually or collectively, directly or indirectly, adversely affect beneficial uses, *and*

   b. There is no reasonable alternative to the waste discharge, *and*

   c. All applicable and practicable control and mitigation measures have been incorporated to minimize potential adverse impacts to water quality and beneficial uses.

2. The Lahontan Water Board may grant exemptions to Prohibitions 2, 3 and 4, above, for projects relocating existing structures below the highwater rim of Lake Tahoe, within the 100-year floodplain, within an SEZ, in spawning habitat or offshore of stream inlets to Lake Tahoe where the area of the structure is relocated on the same parcel or within a defined project area and where the following finding can be made (a "project area" may include multiple adjacent or non-adjacent parcels):

   The relocation must result in net or equal water quality benefit. Net or equal benefit is defined as an improvement in or maintenance of function of the associated area below the highwater rim of Lake Tahoe, 100-year floodplain, SEZ, spawning habitat, or stream inlet. Net or equal benefit may include, but is not limited to, one or more of the following:

   a. Relocation of structure to an area further away from the stream channel or wetlands;

   b. Protection of restored 100-year floodplain or SEZ or an equivalent area (at a 1:1 ratio for floodplain or 1.5:1 for SEZ) of offsite 100-year floodplain or SEZ through deed restriction or conveyance to a mitigation bank or land conservancy or similar. For projects involving disturbance of wetlands, offsite mitigation may involve larger mitigation ratios;

   c. For projects involving the relocation of more than 1000 square feet of impervious coverage within a 100-year floodplain or SEZ, a finding, based on a report prepared by a qualified professional, that the relocation will improve the functioning of the floodplain or SEZ and will not negatively affect the quality of existing habitats.

d. For pier relocation projects in spawning habitat, a finding that equivalent or greater area of spawning habitat is restored or created.

3. The Regional Board may also grant exemptions to Prohibitions 2 and 3, above, under the following circumstances:

   a. For erosion control projects, habitat restoration projects, wetland rehabilitation projects, SEZ restoration projects, and similar projects, programs, and facilities, if all of the following findings can be made:

      i. There is no reasonable alternative, including relocation, that avoids or reduces the extent of encroachment below the highwater rim of Lake Tahoe, within the 100-year floodplain, or within the SEZ; and

      ii. Impacts are fully mitigated.

   b. For public outdoor recreation facilities or private piers if all of the following findings can be made:

      i. The project by its nature must be sited below the high water rim of Lake Tahoe, within the 100-year floodplain, or within the SEZ;

      ii. There is no feasible alternative that would reduce the extent of encroachment below the highwater rim of Lake Tahoe, within the 100-year floodplain, or within the SEZ;

      iii. Impacts are fully mitigated;

      iv. SEZs are restored in an amount 1.5 times the area of SEZ disturbed or developed for the project; and

      v. Wetlands are restored in an amount at least 1.5 times the area of wetland disturbed or developed. Certain wetland areas may require restoration of greater than 1.5 times the area disturbed or developed.

   c. For public service facilities if all of the following findings can be made:

      i. The project is necessary for public health, safety or environmental protection;

      ii. There is no reasonable alternative, including spans, that avoids or reduces the extent of encroachment;

      iii. The impacts are fully mitigated;

iv. SEZ lands are restored in an amount 1.5 times the area of SEZ developed or disturbed by the project; and

v. Wetlands are restored in an amount at least 1.5 times the area of wetland disturbed or developed. Certain wetlands may require restoration of greater than 1.5 times the area disturbed or developed.

d. For projects that require access across SEZs or 100-year floodplains to otherwise buildable sites if all of the following findings can be made:

i. There is no reasonable alternative that avoids or reduces the extent of encroachment within the SEZ or 100-year floodplain;

ii. Impacts are fully mitigated;

iii. SEZ lands are restored in an amount 1.5 times the area of SEZ disturbed or developed by the project; and

iv. Wetlands are restored in an amount at least 1.5 times the area of wetland disturbed or developed by the project. Certain wetland areas may require restoration of greater than 1.5 times the area disturbed or developed.

e. For repair or replacement of existing structures, provided that the repair or replacement does not involve the loss of additional lake habitat, or SEZ or floodplain function. Prior to granting any such exemption, the Regional Board shall require that all applicable and practicable control and mitigation measures have been incorporated into the project to minimize any discharges of wastes to surface waters during or following construction.

f. Projects for monitoring or scientific research related to natural resources and environmental quality. This category includes equipment or structure installation for basic data collection, research, experimental management and resource evaluation activities that do not result in a significant adverse effect on water quality or beneficial uses. Prior to granting any such exemption, the Regional Board shall require that all applicable and practicable control and mitigation measures have been incorporated into the project to minimize any discharges of wastes to surface waters during or following construction.

II. Exemption Process

Dischargers seeking an exemption from a waste discharge prohibition must file project information sufficient to demonstrate that they meet the applicable criteria. Discharges subject to a prohibition cannot commence until such time as the

Lahontan Board has provided written concurrence that the applicable criteria are met. In addition to the exemption, Dischargers must obtain all other relevant and appropriate Lahontan Water Board permits or authorizations for the project or activity (e.g., water quality certification under section 401 of the Clean Water Act). Except in emergency situations, the Lahontan Water Board Executive Officer will notify the Lahontan Water Board and interested members of the public 10 days in advance of the intent to grant an exemption to allow for public comment on whether the exemption proposal meets the applicable criteria. Such notification may be provided by electronic notification, including Internet posting.

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ATTACHMENT G

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ATTACHMENT G – WATER QUALITY OBJECTIVES FOR CERTAIN WATER BODIES IN THE LAKE TAHOE HYDROLOGIC UNIT

Table G-1. WQOs for Water Bodies in the 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 I-2 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/ -	--	--	0.1/6 -	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/ -
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)

Table G-2. WQOs for Fallen Leaf Lake

Constituent	Objective
pH[1]	6.5 - 7.9
Temperature[2]	Hypolimnion -15 °C Bottom (105m) - 7.5 °C at no time shall water be increased by more than 2.8 C (5 °F).
Dissolved oxygen[3]	% saturation above 80% and DO >7 mg/L except if saturation exceeds 80% DO at bottom (105m) > 6mg/L
Total nitrogen[4]	0.087[5]/0.114[6]/0.210[7]
Dissolved inorganic – N[8]	0.007 / 0.010 / 0.023
Total phosphorus	0.008 / 0.010 / 0.018
Soluble reactive -P	0.001 / 0.002 / 0.009
Soluble reactive iron	0.004 / 0.005 / 0.012
Total reactive iron	0.005 / 0.007 / 0.030
Chlorophyll-a[9,10]	0.6 / 0.9 / 1.5
Clarity - Secchi depth[11] - Vertical extinction coefficient	18.5 / 16.0[12] / 13.6[13] 0.146 / 0.154 / 0.177[14]
Phytoplankton cell counts[15]	219 / 280 / 450

1 0.5 units above and 0.5 units below 1991 maximum and minimum values. Also reflects stability of this constituent throughout the year.

2 Based on 1991 data. Indicates that if temperature in the hypolimnion during the summer exceeds 15 °C or if the water at 105m exceeds 7.5 °C this would constitute a significant change from existing conditions. Unless there is a anthropogenic source of thermal effluent, which does not currently exist, changes in water temperature in Fallen Leaf Lake are natural. Objectives apply at any time during the defining period.

3 Based on coldwater habitat protection and 1991 data base. The need for an objective for the bottom (105m) results from the desire to control primary productivity and deposition of organic matter on the bottom. A decline in bottom DO to below 6 mg/L would indicate a fundamental shift in the trophic state of Fallen Leaf Lake.

4 Because of the similarity between the mid-lake and nearshore sites, Fallen Leaf Lake objectives for N, P and Fe are based on the combined mid-lake 8 m and 45 m, and nearshore 8 m concentrations. Units are mg N/L, mg P/L and mg Fe/L.

5 Mean annual concentration (May - October) unless otherwise noted.

6 90th percentile value unless otherwise noted.

7 Maximum allowable value; 1.5 times the maximum 1991 value. No single measurement should exceed this value unless otherwise noted.

8 DIN = NO3+NO2+NH4

9 Corrected for phaeophytin degradation pigments.

10 Units are ⌠g chl-a/L.

11 Units are meters.

12 10th percentile since clarity increases with increasing Secchi depth.

13 Represents 15% loss of clarity from 10th or 90th percentile value.

14 Calculated in the photic zone between 1 m below surface to 35 m. Units are per meter.

15 Units are cells per milliliter.

ATTACHMENT H

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ATTACHMENT H - STORM WATER POLLUTION PREVENTION PLAN (SWPPP) CHECKLIST

I. Introduction and Certifications

- **A.** SWPPP Objectives
- **B.** Permit Registration Documents
- **C.** Certification and Training Requirements
- **D.** QSP Management and Weekly Training Plan
- **E.** Contractor List
- **F.** Emergency Contact Person and 24-Hour Phone Number
- **G.** SWPPP Availability and Public Records Access
- **H.** Required Changes (Include SWPPP amendment log form in Appendices)

II. Project Information

- **A.** Project Description, site address and driving directions
- **B.** WDID
- **C.** Construction and BMP Schedule
- **D.** Potential Construction Site Pollutants of Concern and Sources
- **E.** Site Location Map(s)

III. Best Management Practices

- **A.** Site Management Narrative (include specs in Appendices)
- **B.** Sediment and Erosion/Stabilization Control Narrative (include specs in Appendices)
- **C.** Non-Stormwater and Material Management Narrative (include specs in Appendices)
- **D.** Spill Prevention and Response Plan
- **E.** Dewatering and Diversions Plan Narrative (include specs in Appendices)
- **F.** Active Treatment System Plan Narrative (include ATS Plan in Appendices)
- **G.** Post-Construction Stormwater Management Measures Narrative (include specs in Appendices)
- **H.** BMP and Disturbed Soil Area (DSA) Maps

IV. BMP Inspection, Maintenance, and Rain Event Action Plans

A. BMP Inspection and Maintenance Narrative (include forms and checklists in Appendices)

B. Rain Event Action Plan Narrative (Include REAP template in Appendices)

V. Construction Site Monitoring and Reporting Plan (CSMRP)

A. Purpose

B. Visual Monitoring (Inspections)

C. Water Quality Sampling and Analysis

D. Watershed Monitoring Option

E. Quality Assurance and Quality Control

F. Reporting Requirements and Records Retention

G. Non-Compliance Reporting

H. Annual Report

I. Final Report

Appendices

A. SWPPP Amendment Log Form

B. BMP Standard Specifications

C. Dewatering and Diversion Specifications (if applicable)

D. ATS Plan (if applicable)

E. Visual Monitoring/BMP Inspection Forms and Checklist Templates

F. Rain Event Action Plan Template

ATTACHMENT I

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

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http://www.waterboards.ca.gov/lahontan

ORDER NO. R6T-2016-XXXX
NPDES NO. CAG616002

FACT SHEET FOR

GENERAL WASTE DISCHARGE REQUIREMENTS AND NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY IN THE LAKE TAHOE HYDROLOGIC UNIT, COUNTIES OF ALPINE, EL DORADO, AND PLACER

ATTACHMENT I - FACT SHEET

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Table 1. Comparison of Lake Tahoe and Statewide Construction General Permits
Table 2. Key Changes to Lake Tahoe Construction General Permit
Table 3. QSP/QSD Certification Criteria

I. PERMIT INFORMATION

A. Regulatory 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 National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. On November 16, 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that established storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES permit. Regulations (Phase II Rule) that became final on December 8, 1999, lowered the permitting threshold from five acres to one acre. Further, the NPDES permit must require implementation of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate pollutants in storm water runoff. The NPDES permit must also include additional requirements necessary to implement applicable water quality standards and general waste discharge requirements pursuant to the California Water Code (Water Code).

On April 14, 2011, the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board) adopted Order No. R6T-2011-0019 as the most recent general NPDES Construction Activity Storm Water General Permit for the Discharge of Storm Water Associated with Construction and Land Disturbing Activities in the Lake Tahoe Hydrologic Unit. This General Permit, except for enforcement purposes, supersedes Order No. R6T-2011-0019 and authorizes discharges of storm water associated with construction activity for Dischargers that agree to comply with all requirements, provisions, limitations and prohibitions in the General Permit. This General Permit regulates discharges of pollutants in storm water associated with construction activity (storm water discharges) to waters of the United States from construction sites that disturb one or more acres of land surface, or that are part of a common plan of development or sale that disturb one or more acres of land surface.

Discharges of non-storm water may be necessary for the completion of certain construction projects. Such discharges include, but are not limited to, irrigation of vegetation erosion control measures, pipe flushing and testing, and construction dewatering. Such discharges are authorized by this General Permit as long as they (a) comply with the prohibitions established within the General Permit, (b) do not cause or contribute to a violation of any water quality standard, (c) do not

violate any other provision of this General Permit, and (d) do not require a non-storm water General Permit as issued by the Lahontan Water Board.

This General Permit does not preempt or supersede the authority of local storm water management agencies to prohibit, restrict, or control storm water discharges to municipal separate storm sewer systems (MS4s) or other watercourses within their jurisdiction. The terms and conditions of the Order No. R6T-2011-0019 have been automatically continued and remain in effect until the new waste discharge requirements (WDRs) and NPDES permit are adopted and become effective pursuant to this General Permit.

B. Need for Lake Tahoe Hydrologic Unit Permit

Although the California State Water Resources Control Board (State Water Board) regulates discharges of storm water from construction sites under a general permit applicable to the rest of the state, the Lahontan Water Board regulates construction-related storm water discharges in the Lake Tahoe Hydrologic Unit under a separate General Permit due to the sensitivity of the watershed and the characteristics of its high elevation climate. As such, some of the requirements of the Lake Tahoe permit differ from those for the rest of the state (see Table 1).

Lake Tahoe is listed as impaired for transparency (clarity) due to inputs of sediment, nitrogen, and phosphorus. A total maximum daily load (TMDL) was adopted by the Lahontan Water Board and received final approval from the USEPA in August 2011. The TMDL includes a pollutant load reduction program designed to achieve the transparency objectives set for Lake Tahoe in the Water Quality Control Plan for the Lahontan Region (Basin Plan). The TMDL has identified storm water runoff from the urbanized areas as the main contributor of fine sediment that is adversely impacting Lake Tahoe transparency. Therefore, the program is partly implemented by a municipal NPDES storm water permit issued to Placer County, El Dorado County, the City of South Lake Tahoe (Board Order R6T-2011-0101), and the California Department of Transportation (Water Quality Order 2012-0011-DWQ).

Construction activity in the Lake Tahoe Basin typically involves natural resource restoration, infill, and redevelopment projects. Most infill and redevelopment projects have a relatively small footprint. Development projects are tightly regulated by the Tahoe Regional Planning Agency compact and no new regional housing developments are allowed to be constructed. Construction activity has the potential to discharge sediment and other pollutants to surface waters, which impair Lake Tahoe transparency. A Lake Tahoe-specific construction general permit is needed to implement the requirements of the TMDL pollutant load reduction program and address the characteristics of the high elevation climate. This General Permit is a reissuance of the previous permit (Board Order No.

R6T-2011-0019) and includes the following area-specific requirements that help implement the TMDL program:

- Unless issued a variance, prohibits land disturbing activities from October 16 through April 30 the following year.
- Requires storm water discharges that enter surface waters to meet a numeric effluent limitation of 20 nephelometric turbidity units (NTUs).
- Requires post construction storm water controls to infiltrate the 20-year, 1-hour storm; meet numeric effluent limitations for sediment and nutrients contained in the Basin Plan; or meet applicable requirements set for El Dorado County, Placer County, the City of South Lake Tahoe, or the Department of Transportation to achieve pollutant load reductions established under the NPDES municipal storm water permit for these jurisdictions.

C. Permit Comparison

This General Permit differs in certain respects from the statewide permit established by the State Water Board to account for the sensitivity of the watershed, the high elevation climate, and the need to implement the Lake Tahoe TMDL. Differences between the statewide permit and this General Permit are summarized in Table 1. Compliance with the former Lake Tahoe permit has generally been good such that only minor changes have been made this General Permit. The most significant changes are those reflecting Basin Plan amendments for discharge prohibitions that were adopted and approved in 2014. Key changes from the previous permit are summarized in Table 2.

Most Dischargers have been able to prevent runoff from leaving the project limits through the use of basins and other collection structures that are hydraulically disconnected from surface waters. Other discharges have been in areas where the runoff did not reach surface waters (e.g., infiltrated into upland forested areas). Most of the projects for which runoff samples have been collected have been related to road retrofit projects and other storm water drainage system improvements. These projects typically include replacing or reconfiguring inadequate or deteriorated drainage features that, by their nature, are hydraulically connected to surface waters. Many times these erosion features are upstream from the project areas as storm water controls are installed in a phased manner. For these projects, discharge monitoring results are similar, and at times, better than storm water flow coming on to the sites. Sites that are consistently in compliance with the visual monitoring and Best Management Practices (BMPs) maintenance requirements tend to be in compliance with the numeric effluent limitations.

Based on this experience, requirements for discharge sampling during non-working days (e.g., weekends and holidays) have been eliminated while still maintaining off-day visual monitoring requirements to ensure proper

implementation of BMPs at all times. Sampling during non-working days was determined to be ineffective as it provided little benefit, and more importantly, diverted limited resources away from ensuring BMPs were properly functioning.

Experience under the previous permit identified an issue where some Qualified SWPPP Practitioners (QSPs) were working from a remote location without being present at the site to actively manage the SWPPP activities. Water Board inspections at these sites showed deficient implementation and maintenance of required BMPs. This General Permit includes new requirements to provide a written plan of how the QSP will coordinate SWPPP activities, including training and supervision of on-site personnel.

II. CONDITIONS FOR PERMIT COVERAGE AND NOTIFICATION REQUIREMENTS

A. Legally Responsible Person (LRP)

The application requirements of the General Permit establish a mechanism to clearly identify the responsible parties, locations, and scope of operations of Dischargers covered by the General Permit and to document the Discharger's knowledge of the General Permit's requirements. To obtain coverage, the legally responsible person (LRP) or the LRP's Approved Signatory must certify and file Permit Registration Documents (PRDs) prior to the commencement of construction activity. A detailed explanation of the LRP and Approved Signatory is provided in Attachment B (Glossary) of this General Permit

B. Permit Effective Date

This General Permit is effective January 1, 2017. This date was chosen because it is during the period when construction activity is dormant in the Lake Tahoe Basin. It allows Dischargers to terminate their existing projects if complete or time to re-enroll in the new permit before the start of the next construction season if the project is ongoing. All Dischargers requiring coverage under this General Permit on or after January 1, 2017, must file the required PRDs and filing fee, and prior to commencing land disturbing activities, must receive an approved notice of coverage from the State Water Board indicating the date that the permit coverage begins under the General Permit and the Waste Discharge Identification (WDID) number issued for the project (see section C. below).

Unless coverage is terminated sooner, Dischargers subject to Order No. R6T-2011-0019 will continue coverage until January 1, 2017, and must comply with Order No. R6T-2011-0019 until a notice of termination for the project is processed or January 1, 2017, whichever comes first. Dischargers covered under Order No. R6T-2011-0019 that plan to continue land disturbing construction activities and permit coverage beyond December 31, 2016, must file the required PRDs and applicable filing fee to re-register in accordance with this General Permit. After December 31, 2016, Order No R6T-2011-0019 is rescinded and all coverage under Order No. R6T-2011-0019 is terminated.

Dischargers failing to file PRDs or other information required to complete an application to renew coverage under this General Permit will lose permit coverage on January 1, 2017.

C. Registration Process

To obtain coverage, the LRP or Approved Signatory must file PRDs and receive notification from the State Water Board's Storm Water Multi-Application and Report Tracking System (SMARTS) that a WDID number has been issued for the project prior to the commencement of construction activity. Discharging pollutants in storm water to waters of the United States prior to obtaining coverage under this General Permit is a violation of the CWA and the Water Code. The LRP must electronically submit the PRDs, which include a Notice of Intent (NOI), Storm Water Pollution Prevention Plan (SWPPP), and other documents required by this General Permit, if applicable, and mail the appropriate filing fee to the State Water Board before starting construction activities. PRDs must be filed through SMARTS.

Upon receipt of the appropriate PRDs, Lahontan Water Board staff has up to 30 days to review the documents for completeness; although, applications are typically reviewed in one to two weeks. If determined to be incomplete, a notice will be provided to the applicant with the reasons why the determination was made. Upon approval, a WDID number will be generated from SMARTS and an email notification will be sent to the applicant.

D. General Permit Coverage

This General Permit serves as a general NPDES permit for discharges of storm water and authorized non-storm water to surface waters associated with construction activity that results in land disturbances equal to or greater than one acre in the Lake Tahoe Hydrologic Unit, and other discharges, as follows.

1. Activities covered under this General Permit include:

a. Any construction or demolition activity, including, but not limited to clearing, grading, grubbing, or excavation, or any other activity that results in land disturbance of equal to or greater than one acre.

b. Construction activity that results in land surface disturbances of less than one acre if the construction activity is part of a larger common plan of development or sale that disturbs one or more acres.

c. Construction activity that results in land disturbance of one or more acres related to residential, commercial, or industrial development on lands currently used for agriculture including, but not limited to, the construction of buildings related to agriculture that are considered industrial pursuant to USEPA regulations, such as dairy barns or food processing facilities.

d. Construction activity that results in land disturbance of one or more acres associated with linear underground/overhead utility projects including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

e. Storm water and authorized non-storm water discharges from construction activities that results in land disturbance of one or more acres associated with oil and gas exploration, production, processing, or treatment operations or transmission facilities.

2. Activities specifically not covered under this General Permit include:

a. Disturbance to land of municipal facilities under an approved Storm Water Management Program for routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of the facility.

b. Disturbances to land surfaces solely related to agricultural operations such as disking, harrowing, terracing and leveling, and soil preparation.

c. Discharges of storm water from areas on tribal lands; construction on tribal lands is regulated by a federal permit.

d. Construction activity that disturbs less than one acre of land surface, and that is not part of a larger common plan of development or the sale of one or more acres of disturbed land surface.

e. Construction activity covered by an individual NPDES permit for storm water discharges.

f. Discharges of storm water identified in section 402(I)(2) of the CWA, 33 USC section 1342(I)(2).

E. Permit Termination Requirements

To terminate coverage, Dischargers must file a Notice of Termination (NOT) request, and site photographs through SMARTS when construction is complete and final stabilization has been reached or when ownership has been transferred. The Discharger must demonstrate that the site is stabilized and does not pose any additional sediment discharge risk than the pre-construction conditions. This may be accomplished using the Revised Universal Soil Loss

Equation (RUSLE) or RUSLE2 or other custom methods that account for the physical characteristics (soil and cover conditions) of the site. A final report describing the RUSLE modeling or custom method results and site photographs must be uploaded to SMARTS along with the NOT request. The custom method may be satisfied by providing a final report that includes a narrative of how the site was stabilized, site photographs, and a maintenance plan, if applicable, for ensuring the site remains stable after construction. The maintenance plan may include, but is not limited to, a separate ongoing maintenance contract or assignment to a maintenance division of a municipality.

Dischargers must certify that all state and local requirements have been met in accordance with this General Permit and demonstrate compliance with the stabilization and post-construction standards set forth in this General Permit. Dischargers are responsible for all compliance issues including all annual fees until the NOT has been filed and approved by the Lahontan Water Board.

Upon approval, a written termination notice will be transmitted to the Discharger. If revocation of coverage under the General Permit is denied, Lahontan Water Board staff shall describe the reasons for denial in a written notification.

III. DISCHARGE PROHIBITIONS

This General Permit implements the waste discharge prohibitions contained in the Basin Plan. Unless granted an exemption in accordance with the Basin Plan, all discharges to surface waters other than storm water and authorized non-storm water are prohibited. The Lahontan Water Board recognizes that certain non-storm water discharges may be necessary for the completion of construction projects. Authorized non-storm water discharges may include the exempted low threat discharges listed in Table 4.1-1 of Attachment F. Prior the discharging dewatering waste, the Discharger must provide a plan that ensures the activity will meet the conditions of a low threat discharge.

Other exemptions to the discharge prohibitions included in the Basin Plan may be granted if the project meets the criteria specified in Attachment F of this General Permit (such as exemptions for 100-year floodplains and stream environment zones). Exemptions to these waste discharge prohibitions must be granted in writing.

Non-storm water discharges may include a wide variety of sources, including improper dumping, spills, or leakage from storage tanks or transfer areas. Non-storm water discharges may contribute significant pollutant loads to receiving waters. Measures to control spills, leakage, and dumping, and to prevent illicit connections during construction must be addressed through structural and non-structural BMPs.

IV. EFFLUENT LIMITATIONS

The CWA requires point source Dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 CFR 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR 122.44(d) requires that permits include water quality-based effluent limitations (WQBELs) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR section 122.44 require that industrial non-municipal discharges that contain non-conventional and/or toxic pollutants regulated under the NPDES permit program comply with technology-based effluent limits. Both technology-based and WQBELs must be considered, and more stringent WQBELs must be developed if the technology-based effluent limits are not sufficient to meet water quality objectives. WQBELs for discharges authorized by this General Permit were developed to ensure protection of the beneficial uses of receiving waters in the Basin Plan.

A. Technology-Based Effluent Limitations

The CWA requires technology-based effluent limitations to be established based on several levels of controls:

- Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

- Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

- New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS

guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and section 125.3 of the Code of Federal Regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in section 125.3.

The USEPA published final rules with revised regulations establishing CWA technology-based effluent limitations guidelines (ELGs) and New Source Performance Standards (NSPS) for the Construction and Development (C&D) point source category; the final C&D rule became effective on May 4, 2015. 40 CFR part 450 establishes technology-based effluent limitations based on best practicable technology (BPT), best available technology (BAT), best conventional pollutant control technology (BCT), and NSPS reflecting the best available demonstrated control technology. For each of BPT, BAT, BCT, and NSPS, the ELGs establish requirements for erosion and sediment controls, soil stabilization, dewatering activities, pollution prevention measures, prohibited discharges, and outlet requirements. Additionally, a BAT numeric effluent limitation for turbidity of 280 NTUs (as a daily maximum value) was set for sites that disturb 10 acres or more of land at one time, unless storm water discharges occur as a result of a storm event in that at same day that is larger than the local 2-year, 24-hour storm.

Table 5.6-1 of the Basin Plan establishes numeric effluent limitations for discharges of storm water to surface waters and municipal separate storm sewer systems, or MS4s, which are termed “collection” systems in the Basin Plan. The numeric effluent limitations contained in Table 5.6-1 are more stringent than are established in the federal ELGs. Thus, numeric effluent limitations based on Table 5.6-1 of the Basin Plan were set in Order No. R6T-2011-0019 and are continued in this General Permit as summarized below:

Numeric Effluent Limitations

Parameter	Units	Maximum Daily Effluent Limitations For Discharge To Surface Waters
Total Nitrogen (as N)	mg/L	0.5
Total Phosphorus (as P)	mg/L	0.1
Total Iron	mg/L	0.5
Turbidity	NTU	20
Grease and Oil	mg/L	2

Additionally, numeric benchmark levels for pH have been established because construction activities often involve materials, such as concrete, grout, and etching acids, which can affect the pH of runoff. The benchmark action level applies to pH levels not within the range between 6.0 and 9.0. Based on previous data collected and other anecdotal evidence, the Lahontan Water Board recognizes that pH levels in storm water runoff may fluctuate naturally depending on site characteristics. Therefore, Dischargers are required to sample for pH when site conditions have the potential to affect pH. If the results do not meet the benchmark range levels, Dischargers are required to investigate the cause of the pH excursion and implement corrective actions as needed. This action level is expected to protect receiving waters from changes in pH by more than 0.5, which is the receiving water objective for pH in the Lake Tahoe Hydrologic Unit.

1. Compliance Storm Event

This General Permit contains "compliance storm event" exceptions from the technology-based turbidity NEL similar to the Statewide Construction General Permit, Order No. 2009-0009-DWQ. The rationale is that technology-based requirements are developed assuming a certain design storm (defined as the storm producing a rainfall amount for a specified BMPs capacity). Compliance thresholds are needed for storm events above and beyond the design storms assumed to determine the technology-based NELs. This General Permit establishes a compliance storm event as the equivalent rainfall in a 20-year, 1-hour storm, which is 1 inch of rainfall in a 1-hour period. This compliance storm event was chosen because it is consistent with the Basin Plan and other policies for pre- and post-construction BMP requirements.

2. Best Management Practices (BMPs)

Construction activity may result in the discharge of pollutants to receiving waters through storm water runoff and additional dry weather flows. These discharges can be minimized through use of BMPs and other pollution prevention measures that reduce dry weather discharges, reduce erosion, retain sediment, and minimize contact of materials with storm water. Consistent with 40 CFR 122.44(k)(4), Order No. R6T-2011-0019 established BMPs and the requirement to develop and implement a SWPPP. This General Permit carries over the requirements to implement BMPs and a SWPPP.

This General Permit also establishes requirements for a Rain Event Action Plan (REAP) to protect all exposed portions of sites with active construction activities within 24 hours prior to any likely precipitation event. The trigger for preparing a REAP is set as a 30 percent chance of 0.1 inch or more of precipitation based on the NOAA weather forecast table interface. The weather table interface may be found under the links for "Additional Forecasts and Information" for each local area forecast. The objective of the REAP

requirement is to ensure that BMPs are properly planned, evaluated, and implemented prior to significant rain events, particularly in context of potential summer thunderstorm activity in this high elevation watershed. REAP requirements do not apply to sites where land-disturbing construction activity is suspended during the period October 16 to April 30 of the following year, under the requirement that sites must be fully winterized in accordance with the General Permit.

B. Water Quality-Based Effluent Limitations (WQBELs)

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies.

1. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Beneficial uses of surface waters within the Lake Tahoe Hydrologic Unit include MUN, AGR, GWR, FRSH, REC-1, REC-2, COLD, SPWN, COMM, WILD, WQE, FLD, NAV, BIOL, RARE, and MIGR.

The Basin Plan includes both narrative and numeric water quality objectives applicable to receiving waters in the Lake Tahoe Hydrologic Unit. In addition, priority pollutant water quality criteria in the California Toxic Rule (CTR) are applicable to receiving waters in the Lake Tahoe Hydrologic Unit.

2. Determining the Need for WQBELs

Typical pollutants expected in discharges of storm water runoff from construction activities include nutrients, sediments, and petroleum products. As discussed above, Chapter 5.6 of the Basin Plan establishes effluent

limitations to be implemented in storm water permits for total nitrogen, total phosphate (as total phosphorus), total iron, turbidity, and grease and oil. These parameters serve as indicator parameters to ensure water quality standards for biostimulatory substances, clarity, oil and grease, sediment, settleable materials, suspended materials, suspended sediment, transparency, and turbidity are not exceeded in the receiving water. Order No. R6T-2011-0019 established effluent limitations for total nitrogen, total phosphate (as total phosphorus), total iron, turbidity, and grease and oil based on the requirements of Chapter 5.6 of the Basin Plan. These effluent limitations have been carried over and serve as both water quality-based effluent limitations as well as technology-based effluent limitations.

Table 5.1-3 (summarized in Attachment G) of the Basin Plan establishes water quality objectives for total nitrogen, total phosphorus, and total iron for some water bodies that may be more stringent than the effluent limitations established in Section 5.6 of the Basin Plan. In addition, Table 5.1-3 establishes effluent limitations for boron, chloride, sulfate, and total dissolved solids that are applicable to certain water bodies in the Lake Tahoe Hydrologic Unit. Order No. R6T-2011-0019 established the water quality objectives in Table 5.1-3 as receiving water limitations. The Lahontan Water Board found that the effluent limitations established in Section 5.6 of the Basin Plan, and receiving water limitations based on the water quality objectives established on Table 5.1-3 of the Basin Plan were protective of water quality. As such, this General Permit carries over these receiving water limitations.

Due to the presence of portable sanitation devices (porta-potties), the synergistic effects of unknown pollutants in storm water runoff, and the potential presence of toxic materials at construction sites, both bacteria and toxicity are pollutants of concern. Consistent with the water quality standards established in Section 5.1 of the Basin Plan for toxicity and coliform, Order No. R6T-2011-0019 established the narrative effluent limitation:

"All surface flows generated within the project area, or as a results of the development of the project, which are discharged to surface waters or municipal storm water collection systems shall not contain the following:

i. Substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, or animal life; and

ii. Coliform organisms attributable to human wastes."

The narrative effluent limitation for toxicity and coliform organisms has been carried over.

Section 5.6 of the Basin Plan requires storm water permits issued by the Lahontan Water Board to take into consideration the quality of run-on from offsite areas. Order No. R6T-2011-0019 required that, if pollutant concentrations of waters entering the project area exceed the numerical limitations specified above, there shall be no increase in the constituent concentrations in the waters that are discharged from the project area. Consistent with section 5.6 of the Basin Plan, this requirement has been carried over.

C. Satisfaction of Anti-Backsliding Requirements

Sections 402(0)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR 122.44(1) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. The effluent limitations in this General Permit are at least as stringent as the effluent limitations in Order No. R6T-2011-0019.

D. Satisfaction of Antidegradation Policy

40 CFR section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where, the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Lahontan Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies.

This General Permit is no less stringent than Order No. R6T-2011-0019 and does not extend the coverage of the General Permit beyond the types of Dischargers previously authorized to discharge under Order No. R6T-2011-0019. The Lahontan Water Board has considered antidegradation pursuant to 40 CFR 131.12 and State Water Board Resolution No. 68-16 and finds that the subject discharges are consistent with the provisions of these policies. An antidegradation analysis is not necessary for this General Permit. Discharges not consistent with the provisions of these policies and regulations are not eligible for coverage by this General Permit.

E. Stringency of Requirements for Individual Pollutants

This General Permit contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on total nitrogen, total phosphorus, total iron, turbidity, and grease and oil. This General Permit’s technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

1. All surface flows generated within the project site that discharge to surface waters or municipal storm sewer collection systems shall not contain constituents in excess of the following concentrations:

Effluent Limitations

Parameter	Units	Maximum Daily Effluent Limitations for Discharge to Surface Waters
Total Nitrogen (as N)	mg/L	0.5
Total Phosphorus (as P)	mg/L	0.1
Total Iron	mg/L	0.5
Turbidity	NTU	20*
Grease and Oil	mg/L	2

Note* - For ATS: 10 NTU for daily flow-weighted average and 20 NTU for any single sample.

2. If constituent concentrations of waters entering the project area exceed the numerical limitations specified above, there shall be no increase in the constituent concentrations in the waters that are discharged from the project area.

3. All surface flows generated within the project area, or as a result of the development of the project that are discharged to surface waters or municipal storm water collection systems shall not contain the following:

   a. Substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, or animal life; and

   b. Coliform organisms attributable to human wastes.

V. RECEIVING WATER LIMITATIONS

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Lahontan Region as well as site-specific objectives for certain waters within the Lake Tahoe Hydrologic Unit. The Basin Plan also includes an objective to maintain the high quality waters pursuant to federal regulations (40 CFR 131.12) and State Water Board Resolution No. 68-16 (Anti-Degradation Policy). Surface water limitations in this General Permit are included to ensure protection of background water quality and beneficial uses of the receiving water.

VI. TRAINING QUALIFICATIONS AND CERTIFICATION

USEPA suggests that qualified personnel prepare SWPPPs and points to numerous states that require certified professionals to be on construction sites at all times. States that currently have certification programs are California, Washington, Georgia, Florida, Delaware, Maryland, and New Jersey.

This General Permit requires that all SWPPPs be written, amended, and certified by a Qualified SWPPP Developer (QSD) and that a Qualified SWPPP Practitioner (QSP) is responsible for implementing the SWPPP. A QSD and/or QSP must possess one of the certifications and or registrations specified in this General Permit. Table 3 provides an overview of the criteria used in determining qualified certification titles for a QSD and QSP.

VII. BEST MANAGEMENT PRACTICES

Consistent with 40 CFR 122.44(k)(4), Dischargers are required to implement specific BMPs to control or abate the discharge of pollutants that are likely to be present in storm water runoff from construction sites. In addition, 40 CFR 122.45 establishes BMP requirements for erosion and sediment controls, soil stabilization, dewatering, pollution prevention measures, prohibited discharges, and surface outlets as BPT and BCT. This General Permit establishes minimum BMPs to be implemented by Dischargers, based on Order No. R6T-2011-0019, the Statewide Construction General Permit, and the requirements of 40 CFR 122.45.

A. Site Management

Proper handling and managing of construction materials and controlling the limits of land disturbing activities can help minimize threats to water quality. Dischargers must consider appropriate site management measures for construction materials and other potential pollutant sources, waste management, vehicle storage and maintenance, landscape materials, vehicle access routes, and construction limits.

B. Sediment and Erosion Control

Sediment control BMPs should be used in combination with erosion controls as a means of preventing storm water contamination. Dischargers are required to consider perimeter control measures such as installing silt fences or placing straw wattles below slopes, installing drain inlet protection, installing temporary check dams in flow lines, and constructing sediment basins to capture and treat runoff.

The best way to minimize the risk of creating pollution problems during construction is to prevent erosion at the source. Dischargers are required to implement effective erosion control measures in combination with appropriate sediment control measures such as preserving existing vegetation where feasible, limiting disturbance, and stabilizing and re-vegetating disturbed areas as soon as possible after grading or construction activities. Particular attention must be paid to large, mass-graded sites where the potential for soil exposure to the erosive effects of rainfall and wind is great and where there is potential for significant sediment discharge from the site to surface waters. Until permanent vegetation is established, temporary soil stabilization is the most cost-effective

and expeditious method to protect soil particles from detachment and transport by rainfall. Dischargers are required to consider measures such as covering disturbed areas with mulch, applying temporary seeding, and using soil stabilizers, binders, or blankets. These erosion control measures are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed.

Inappropriate management of run-on and runoff can increase erosion and result in excessive physical impacts to receiving waters from sediment and increased flows. Dischargers are required to manage all run-on and runoff from a project site. Examples include installing berms, gravel bags, or other temporary run-on and runoff diversions, and providing outlet protection at discharge points.

C. Non-Storm Water Management

Non-storm water discharges directly connected to receiving waters or the storm drain system have the potential to negatively impact water quality and are prohibited unless a prohibition exemption is granted in writing. Dischargers must implement measures to control all non-storm water discharges to land during construction that are conditionally allowed under the terms of this General Permit. Examples include; properly washing vehicles in contained areas, controlling water applications when cleaning streets, and minimizing irrigation runoff. Control measures must be described in the SWPPP.

D. Dewatering

The discharge of dewatering waste to surface waters is allowed only when alternative options have been considered and deemed infeasible. When dewatering waste must be discharged to surface waters, a site-specific dewatering plan shall be prepared and accepted by Lahontan Water Board staff before the discharge may commence. The plan shall be incorporated into the project SWPPP and provided with the NOI whenever possible. The General Permit is intended to cover situations where dewatering waste may be diverted from drainages or sumps onto a portion of the project site for conveyance, treatment, retention, and/or disposal. For work or discharges in certain areas such as SEZs, a Basin Plan prohibition exemption may be required.

E. Inspection, Maintenance, and Repair

All management measures must be periodically inspected, maintained and repaired to ensure that receiving water quality is protected. Frequent inspections coupled with thorough documentation and timely repair are required by the General Permit.

F. Rain Event Action Plan

A Rain Event Action Plan (REAP) is a written document, specific for each rain event, that when implemented, protects all exposed portions of the site. The REAP requirement is designed to ensure that Dischargers have adequate materials, staff, and time to implement erosion and sediment control measures before the storm event occurs. A REAP shall be developed at least 24 hours before the day a forecast of 30 percent or greater probability of 0.1 inch or more of precipitation is predicted in the project area. This requirement differs from the requirements established in the Statewide Construction General Permit due to the nature of summer thunderstorms that typically occur in the Lake Tahoe Basin.

Dischargers shall consult the National Oceanic and Atmospheric Administration (NOAA) website to determine the probability of predicted rain events in the project area. The website link is: http://www.srh.noaa.gov/forecast. Dischargers should be prepared to respond rapidly during periods when thunderstorm activity is predicted and monitor weather conditions for impending thunderstorms that may be localized in the project area.

G. Active Treatment System (ATS[1]) Requirements

Requirements in this General Permit for the use of an ATS is identical to the requirements established in the Statewide Construction General Permit. There are instances on construction sites where traditional erosion and sediment controls do not effectively control accelerated erosion. Under such circumstances, or under circumstances where storm water discharges leaving the site may cause or contribute to an exceedance of a water quality standard, the use of an ATS may be necessary. Additionally, it may be appropriate to use an ATS when site constraints inhibit the ability to construct a correctly sized sediment basin, when clay and/or highly erosive soils are present, or when the site has very steep or long slope lengths.[2]

The ATS requirements set forth in this General Permit are based on those in place for small wastewater treatment systems, ATS regulations from the Central Valley Regional Water Quality Control Board (September 2005 memorandum "2005/2006 Rainy Season – Monitoring Requirements for Storm Water Treatment Systems that Utilize Chemical Additives to Enhance Sedimentation"), the Construction Storm Water Program at the State of Washington's Department of Ecology, as well as recent advances in technology and knowledge of coagulant performance and aquatic safety. The effective design of an ATS

[1] An ATS is a treatment system that employs chemical coagulation, chemical flocculation, or electrocoagulation in order to reduce turbidity caused by fine suspended sediment

[2] Pitt, R., S. Clark, and D. Lake. 2006. Construction Site Erosion and Sediment Controls: Planning, Design, and Performance. DEStech Publications. Lancaster, PA. 370pp.

requires a detailed survey and analysis of site conditions. With proper planning, ATS performance can provide exceptional water quality discharge and prevent significant impacts to surface water quality, even under extreme environmental conditions.

These systems can be very effective in reducing the sediment in storm water runoff, but the systems that use additives/polymers to enhance sedimentation also pose a potential risk to water quality (e.g., operational failure, equipment failure, additive/polymer release, etc.). The State and Lahontan Water Boards are concerned about the potential acute and chronic impacts that the polymers and other chemical additives may have on fish and aquatic organisms if released in sufficient quantities or concentrations. In addition to anecdotal evidence of polymer releases causing aquatic toxicity in California, the literature supports this concern.[3] For example, cationic polymers have been shown to bind with the negatively charged gills of fish, resulting in mechanical suffocation.[4] Due to the potential toxicity impacts, which may be caused by the release of additives/polymers into receiving waters, this General Permit establishes residual polymer monitoring and toxicity testing requirements for discharges from construction sites that utilize an ATS.

The primary treatment process in an ATS is coagulation/flocculation. ATSs operate on the principle that the added coagulant is bound to suspended sediment, forming floc, which is gravitationally settled in tanks or a basin, or removed by sand filters. A typical installation utilizes an injection pump upstream from the clarifier tank, basin, or sand filters, which is electronically metered to both flow rate and suspended solids level of the influent, assuring a constant dose. The coagulant mixes and reacts with the influent, forming a dense floc. The floc may be removed by gravitational setting in a clarifier tank or basin, or by filtration. Water from the clarifier tank, basin, or sand filters may be routed through cartridge(s) and/or bag filters for final polishing. Vendor-specific systems use various methods of dose control, sediment/floc removal, filtration, etc., that are detailed in project-specific documentation. The particular coagulant/flocculant to be used for a given project is determined based on the water chemistry of the site because the coagulants are specific in their reactions with various types of sediments. Appropriate selection of dosage must be carefully matched to the characteristics of each site.

ATSs are operated in two differing modes, either Batch or Flow-Through. Batch treatment can be defined as Pump-Treat-Hold-Test-Release. In Batch treatment, water is held in a basin or tank, and is not discharged until treatment is complete.

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[3] RomØen, K., B. Thu, and Ø. Evensen. 2002. Immersion delivery of plasmid DNA II. A study of the potentials of a chitosan based delivery system in rainbow trout (*Oncorhynchus mykiss*) fry. *Journal of Controlled Release* **85**: 215-225.

[4] Bullock, G., V. Blazer, S. Tsukuda, and S. Summerfelt. 2000. Toxicity of acidified chitosan for cultured rainbow trout (*Oncorhynchus mykiss*). *Aquaculture* **185**:273-280.

Batch treatment involves holding or recirculating the treated water in a holding basin or tank(s) until treatment is complete or the basin or storage tank(s) is full. In Flow-Through treatment, water is pumped into the ATS directly from the runoff collection system or storm water holding pond, where it is treated and filtered as it flows through the system, and is then directly discharged. "Flow-Through Treatment" is also referred to as Continuous treatment."

1. Effluent Standards

This General Permit establishes NELs for discharges from construction sites that utilize an ATS. These systems lend themselves to NELs for turbidity and pH because of their known reliable treatment. Advanced systems have been in use in some form since the mid-1990s. ATSs are considered reliable, can consistently produce a discharge of less than 10 NTU, and have been used successfully at many sites in several states since 1995 to reduce turbidity to very low levels.[5]

This General Permit contains "compliance storm event" exceptions from the technology-based NELs for ATS discharges. The rationale is that technology-based requirements are developed assuming a certain design storm. For consistency with the compliance storm event for BMP performance in this General Permit, the compliance storm event for ATS use is 1 inch of rain in a 1-hour period (20-year, 1-hour storm).

2. Training

Operator training is critical to the safe and efficient operation and maintenance of the ATS, and to ensure that all State Water Board monitoring and sampling requirements are met. The General Permit requires that all ATS operators have training specific to using ATS liquid coagulants.

H. Post-Construction Standards

Post-construction standards in this General Permit are focused on reducing fine sediment and nutrient loading to Lake Tahoe and are consistent with requirements developed under the Lake Tahoe Total Maximum Daily Load (TMDL) program. For municipal and public roadway storm water treatment facilities, each municipal jurisdiction and state highway departments must meet the requirements set forth in its respective municipal NPDES storm water permit.

For new development, re-development, and existing development BMP retrofit projects, Dischargers shall consider opportunities to infiltrate stormwater runoff from impervious surfaces. At a minimum, permanent stormwater infiltration

[5] Currier, B., G. Minton, R. Pitt, L. Roesner, K. Schiff, M. Stenstrom, E. Strassler, and E. Strecker. 2006. The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities.

facilities must be designed and constructed to infiltrate runoff generated by the 20 year, 1-hour storm, which equates to approximately one inch of runoff over all impervious surfaces during a 1-hour period; or must meet the requirements of applicable municipal storm water permits; or must meet the alternative requirements described below. Where conditions permit, project proponents should consider designing infiltration facilities to accommodate runoff volumes in excess of the 20 year, 1-hour storm to provide additional stormwater treatment.

Infiltrating runoff volumes generated by the 20-year, 1-hour storm may not be possible in some locations due to shallow depth to seasonal groundwater levels, unfavorable soil conditions, or other site constraints such as existing infrastructure or rock outcroppings. In the event that site conditions do not provide opportunities to infiltrate the runoff volume generated by a 20 year, 1-hour storm, project proponents must either (1) provide information showing how treatment facilities are expected to meet the numeric effluent limits in the Basin Plan, or (2) document written acceptance by the local municipality or state highway department that shared stormwater treatment facilities treating private property discharges and public right-of-way stormwater are sufficient to meet the municipality's average annual fine sediment and nutrient load reduction requirements.

Runoff from parking lots, retail and commercial fueling stations, and other similar land uses may contain oil, grease, and other hydrocarbon pollutants. Project proponents designing treatment facilities for these areas must include pre-treatment devices to remove hydrocarbon pollutants prior to infiltration or discharge and contingency plans to prevent spills from polluting groundwater.

VIII. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

This General Permit establishes requirements for the development and implementation of a SWPPP to identify the sources of sediment and other pollutants that affect the quality of storm water discharges; and to describe and ensure the implementation of BMPs to minimize or eliminate sediment and other pollutants in storm water and non-storm water discharges. The conditions of SWPPP are based on previous requirements in Order No. R6T-2011-0019 and the Statewide Construction General Permit.

This General Permit provides more detailed requirements for the content and organization of SWPPPs to be developed. A suggested checklist for the SWPPP is also presented in Attachment H.

IX. MONITORING AND REPORTING PROGRAM REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Lahontan Water Board to require technical and monitoring reports. The Construction Site Monitoring and Reporting Program (CSMRP),

Attachment C of this General Permit, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the CSMRP for this facility.

A. Visual Inspections

To ensure the proper implementation of BMPs and the SWPPP, and record site conditions for use in compliance determination, visual inspections of the site are required each work day during active construction periods, and at least once a month during long periods of inactivity such as the winter shut-down period. Visual inspection are also required pre-, post-, and during precipitation events. Results of inspections must be documented and maintained with the project SWPPP.

B. Storm Water Discharge Monitoring

Pursuant to the requirements of 40 CFR 122.44(i)(2), effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations and to assess the impacts of the discharge on the receiving water. Sampling shall be conducted at all identified discharge points in accordance with the requirements of the CSMRP. The CSMRP requires daily sampling and analysis of storm water discharge events for turbidity using calibrated portable field meters to evaluate potential impacts from land-disturbing activities.

This General Permit also requires that all Dischargers develop a sampling and analysis strategy for monitoring pollutants that are not visually detectable in storm water. The sampling strategy shall be developed based on the potential pollutants to be present considering the construction materials, soil amendments, soil treatments, and historic contamination at the site. Monitoring for non-visible pollutants is required at any construction site when the exposure of construction materials occurs and where a discharge can cause or contribute to an exceedance of a water quality objective. Examples of non-visible pollutants include glyphosate (herbicides), diazinon and chlorpyrifos (pesticides), nutrients (fertilizers), and molybdenum (lubricants). The use of diazinon and chlorpyrifos is a common practice among landscaping professionals and may trigger sampling and analysis requirements if these materials come into contact with storm water. High pH values from cement and gypsum, high pH and suspended sediment concentrations from wash waters, and chemical/fecal contamination from portable toilets are also potential pollutants from construction projects.

The pH of effluent should be between 6.0 and 9.0 to ensure protection of water quality objectives set for receiving waters. This pH range is set as a numeric benchmark level that requires Dischargers to investigate the cause of any excursion outside of the 6.0-9.0 pH range. The Lahontan Water Board recognizes that, in some cases, pH levels in storm water runoff may occur at

levels outside of the range due to natural conditions. In these cases, Dischargers must provide data to demonstrate that an excursion is due to natural conditions.

The most effective way to avoid the sampling and analysis requirements, and to ensure permit compliance, is to avoid the exposure of construction materials to precipitation and storm water runoff by implementing appropriate BMPs. However, preventing or eliminating the exposure of pollutants at construction sites is not always possible. Some materials, such as soil amendments, are designed to be used in a manner that will result in exposure to storm water. In these cases, it is important to make sure that these materials are applied according to the manufacturer's instructions and at a time when they are unlikely to be washed away.

Other construction materials can be exposed when storage, waste disposal or the application of the material is done in a manner not protective of water quality. For these situations, sampling is required unless there is capture and containment of all storm water that has been exposed. In cases where construction materials may be exposed to storm water, but the storm water is contained and is not allowed to run off the site, sampling will only be required when inspections show that the containment failed or is breached, resulting in potential exposure or discharge to receiving waters.

C. Receiving Water Monitoring

1. Surface Water

The storm water discharge sampling requirements and NELs in this General Permit are sufficiently stringent such that surface water (also called receiving water) monitoring is not necessary in most situations. The storm water monitoring requirements specified above provide the most direct opportunity for Dischargers to assess site conditions and take corrective actions as necessary. The stringency of the NELs also provides a sufficient enforcement mechanism to ensure that water quality is protected. Additionally, most storm water discharges are commingled with effluent from a variety of sources before discharging to surface waters. These conditions complicate analysis of the results and make it difficult to determine the cause of any potential effects on surface water quality. Therefore, this General Permit requires surface water sampling only in certain cases when stormwater discharge sampling is infeasible and there is a direct discharge to surface waters from overland flow, or during upsets that discharge to surface waters. These conditions are most often encountered on stream restoration projects where grading activities are located immediately adjacent to the surface water. In these cases, Dischargers are required to collect surface water samples up and downstream of the project site.

2. Bioassessments

This General Permit requires a bioassessment of receiving waters for Dischargers with construction projects equal to or larger than 30 acres with direct discharges into wadeable streams. Benthic macroinvertebrate samples shall be taken upstream and downstream of the site's discharge points in the receiving water. Bioassessments measure the quality of the stream by analyzing the aquatic life present. Higher levels of appropriate aquatic species tend to indicate a healthy stream; whereas low levels of organisms can indicate stream degradation.

Active construction sites have the potential to discharge large amounts of sediment and pollutants into receiving waters. Requiring a bioassessment for large project sites, with the most potential to impact water quality, provides data regarding the health of the receiving water prior to the initiation of construction activities. Pre- and post-construction data can be used to compare the effects of the construction activity on the receiving water.

Specific requirements of bioassessments are established in Attachment C-1 and have been developed to be consistent with the requirements of the Statewide Construction General Permit. Each ecoregion (biologically and geographically related area) in the state has a specific yearly peak time where stream biota is in a stable and abundant state. This time of year is called an Index Period and is from July 1 through August 15 in the Lake Tahoe Hydrologic Unit. The bioassessment requirements specify that benthic macroinvertebrate sampling be conducted within this index period. If pre-construction bioassessment cannot be completed within the index period, the discharger shall pay into the Surface Water Ambient Monitoring Program (SWAMP) bank account in accordance with Appendix 3 of Order No. 2009-0009-DWQ. Bioassessment methods are required to be in accordance with the SWAMP in order to provide data consistency within the state as well as generate useable biological stream data.

D. Reporting Requirements

1. 24-Hour Reporting

Pursuant to the requirements of 40 CFR 122.41(l)(6), this General Permit requires Dischargers to orally report to Lahontan Water Board staff within 24 hours whenever an adverse condition occurs as a result of this discharge. An adverse condition includes, but is not limited to, a violation or threatened violation of the conditions of this General Permit, significant spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance pursuant to section 13267(b) of the California Water Code, a written notification of the adverse condition shall be submitted to the Lahontan Water Board within five (5) business days of occurrence. The written notification shall identify the adverse conditions, describe the actions

necessary to remedy the condition and/or the actions implemented to abate the problem from continuing, and specify a timetable, subject to the modifications of the Lahontan Water Board, for remedial actions.

In the event that sampling results exceed any applicable NEL, Dischargers shall orally notify the Lahontan Water Board within 24 hours after the NEL exeedance has been identified and electronically submit all storm event sampling results through the SMARTS within five (5) business days after the NEL exceedance has been identified

2. Annual Report

Dischargers must prepare and electronically submit an Annual Report no later than November 30 of each year using the module provided in SMARTS. The report shall cover the period from October 16 of the previous year through October 15 of the current year. The Annual Report must include a summary and evaluation of all sampling and analysis results, original laboratory reports, chain-of-custody forms, corrective actions taken during the compliance year, and identification of any compliance activities or corrective actions that were not implemented.

3. Final Report

Dischargers shall prepare a final report following completion of project construction to demonstrate that the project is completed as planned and water quality impacts have been mitigated. Dischargers shall electronically submit the report through SMARTS. Photos of the site must be included along with a description of how the site was stabilized. The report must also describe as applicable: 1) whether the project was completed as planned in the NOI and/or any modification of the construction plans for the proposed storm water collection treatment, or disposal facilities or restoration work; 2) details of any change in the amount of impervious coverage for the project site beyond what was authorized; and 3) any significant problem(s) which occurred during project construction and remedial measures planned or implemented.

4. Restoration Monitoring and Reporting

Restoration projects are often executed to improve existing water quality conditions; therefore, it is necessary to monitor restoration project effectiveness until it is self-sustaining. Monitoring information can also identify project and/or construction method strengths and weaknesses. This knowledge can provide feedback into the maintenance of the existing system and also be applied to future water quality improvement projects.

This General Permit requires Dischargers to submit a detailed effectiveness monitoring plan as part of the Construction Site Monitoring and Reporting

Program (CSMRP) that includes annual performance criteria for the review and acceptance by the Lahontan Water Board staff. A contingency plan must also be submitted for actions to be taken if performance criteria are not met.

Ideally, pre- and post-construction monitoring is required to best evaluate the success of the restoration project. Monitoring should include, but not be limited to, assessments of vegetative cover and water quality and quantity measurements. Where appropriate, monitoring should also include up-gradient and down-gradient sampling of water entering a treatment method (sediment can, sand and oil trap).

X. COMPLIANCE DETERMINATION

This General Permit includes the following criteria on how compliance will be determined as discussed below.

A. Compliance with Effluent Limitations

As previously discussed under section IV – Effluent Limitations, the technology-based turbidity NEL in this General Permit is based on the performance of a BMP assuming a certain design storm (defined as the storm producing a rainfall amount). Compliance with the NELs will not be required for storm events that exceed the equivalent rainfall in a 20-year, 1-hour storm (1 inch of rainfall in a 1-hour period). Dischargers are required to provide supporting documentation (i.e., evidence of actually rainfall amount for the area, such as an on-site rain gauge and rainfall data provided by NOAA) to the Lahontan Water Board for any claims that an effluent limit exceedance occurred during a storm event exceeding a 20-year, 1-hour storm.

Additionally, NELs may not apply when run-on conditions are causing an exceedance of an NEL or when discharges do not reach surface waters. Dischargers must provide data and information to support any claim that the NELs do not apply due to these circumstances.

B. Multiple Sample Data

The NELs in this General Permit are evaluated as a maximum daily effluent limitation (MDEL). Pursuant to NPDES regulations (40 CFR part 122.2), *maximum daily discharge* limitation means the highest allowable "daily discharge." *Daily* discharge means the "discharge or a pollutant" measured during a calendar day or any 24-hour period that reasonable represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of measurement other than mass, the daily discharge is calculated as the average measurement of the pollutant over the day. For purposes of this General Permit, the daily average effluent value is defined as the arithmetic mean of the daily effluent data. When determining compliance when more than one sample result is available due to collection at multiple discharge points

and/or multiple times during the calendar day, Dischargers shall compute the arithmetic mean concentration for each day of discharge.

Samples must be representative of the volume and quality of runoff from the site. Sample collection must not be manipulated in such a way as to skew the maximum daily effluent value. However, Dischargers may indicate the proportional area or flow from the site that each discharge point represents and factor this into the daily average for the entire site when reporting the data.

C. Maximum Daily Effluent Limitation

The NELs in this General Permit are evaluated as a maximum daily effluent limitation (MDEL). If a daily average concentration (or when applicable, the daily median) exceeds the MDEL for a given parameter, Dischargers will be considered out of compliance for that parameter for that one day only within the reporting period.

D. Sampling by Other Parties

Sampling may be conducted by persons other than the Discharger. Lahontan Water Board staff, operators of municipal separate storm sewer systems, or others may analyze storm samples. Samples collected by others may be used with other data to determine MDELs and to conduct compliance determinations, as provided above.

XI. PUBLIC PARTICIPATION

The Lahontan Water Board is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for discharges of storm water from construction-related activities. This proposed General Permit has been developed for review and comment by the public. As a step in the WDR adoption process, the Lahontan Water Board staff has developed tentative WDRs. The Lahontan Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

On December 18, 2015, the Lahontan Water Board notified Dischargers, interested agencies, and other interested parties of its intent to prescribe waste discharge requirements for construction-related activities in the Lake Tahoe Hydrologic Unit, and provided them with an opportunity to submit their written comments and recommendations on the draft tentative permit by January 18, 2016. Notification was provided through electronic mailing and posting on the Lahontan Water Board website. Lahontan Water Board staff revised the permit based on comments received on the tentative draft, and on February 8, 2016, the Lahontan Water Board notified Dischargers, interested agencies, and other interested parties that a proposed permit was available for public review. Notification was provided through electronic mailing and posting on the Lahontan

Water Board website. A public notice announcing the availability of the draft General Permit for review and comment was also published in Lake Tahoe area newspapers on February 5, 2016.

B. Written Comments

The staff determinations are proposed. Interested persons are invited to submit written comments concerning these proposed WDRs. Written comments must be submitted electronically to: Lahontan@waterboards.ca.gov with "Comments-Lake Tahoe CGP" in the subject line.

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

C. Public Workshop

The Lahontan Water Board conducted a public workshop January 12, 2016, to inform and discuss issues relating to the tentative WDRs with interested parties.

D. Public Hearing

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

Date: March 9-10, 2016
Time: TBD
Location: 971 Silver Dollar Avenue
South Lake Tahoe

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

Please be aware that dates and venues may change. Our Web address is http://www.waterboards.ca.gov/lahontan/ where the public can access the current agenda for changes in dates and locations.

E. Waste Discharge Requirements Petitions

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

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

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

F. Register of Interested Persons

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

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Bud Amorfini, Engineering Geologist, at 530-542-5463 or by email at Bud.amorfini@waterboards.ca.gov.

Table 1
Comparison of Lake Tahoe CGP Requirements
with State-wide CGP Requirements

Requirement	Description
Eligible Projects	State-Wide CGP includes two sets of requirements, one for conventional construction and one for linear underground/overhead (LUP) projects. The Tahoe CGP has one set of requirements for both conventional and LUP projects. There is no risk level in the Tahoe CGP. All projects are considered the same risk. Additionally, there is no option for an erosivity waiver in the Tahoe CGP.
Discharge Types Covered	Both the State-Wide and Lake Tahoe CGPs cover storm water and certain authorized non-storm water discharges to surface waters. Except for certain "low threat" discharges, the Lake Tahoe CGP prohibits all non-storm water waste discharges to floodplains and stream environment zones (SEZs). Exemptions may be granted for certain discharges to Stream Environment Zones (SEZs) and 100-year floodplains in accordance with Basin Plan policies presented in Attachment F of the Tahoe CGP.
Permit Registration Documents (PRDs)	Registration is the same for both permits. Separate module for the Tahoe CGP is established in the SMARTS (*Region 6 South Lake Tahoe Permit*).
Legally Responsible Person (LRP)	LRP requirements are the same for both permits.
QSD/QSP Qualifications	QSD/QSP qualifications and certifications are the same for both permits.
QSD/QSP Training and Testing Requirements	QSD/QSP training requirement is geared to the State-Wide CGP. State Board-sponsored training generally does not address requirements of the Tahoe CGP unless specifically added by the Trainer of Record. QSD/QSP test does not include elements of the Tahoe CGP.
Numeric Effluent Limitations (NELs)	Discharge compliance points are the same for both permits. However, in accordance with the Basin Plan, Tahoe CGP includes NELs for iron, nitrogen, phosphorus, oil and grease, and turbidity. Samples are required to be sampled for turbidity using portable field meters. Other constituents must be sampled in accordance with non-visible pollutant sampling requirements. The NEL for turbidity is 20 NTU and there is no numeric action level (NAL) compared with the State-Wide CGP. A daily average turbidity level must be determined in the same manner as that required in the State Board CGP. A benchmark or action level for pH is set at 6.0 to 9.0.

Compliance Storm Event	The compliance storm event for the Tahoe CGP is different than that set in the State-Wide CGP. Compliance with NELs is not required for pollutant concentrations that result from a 20-year, 1-hour storm event (1 inch of rain in a 1-hour period) or greater. This is geared toward the occurrence of summer thunderstorms, which can cause significant erosion in a short time frame during the active construction season. Supporting data including the time of sampling and the rain fall record from an on-site rain gauge or other nearby governmental agency is required for any claim of relief from the NELs.
Best Management Practices (BMPs)	The BMP requirements are essentially the same for both permits. The permit requires dischargers to implement appropriate BMPs from each of the following categories: 1) site management measures; 2) sediment and erosion controls; 3) dewatering controls (if applicable); 4) inspection, maintenance and repair, and 5) post-construction/LID measures. For the Tahoe CGP, land disturbing activities must cease by October 15 of each year, unless granted a variance. All projects must be winterized to prevent erosion during the period of October 16 through April 30 of the following year. For non-municipal projects, dischargers must demonstrate that post-construction controls will either infiltrate the 20-year, one-hour storm, meet numeric effluent limits in the Basin Plan, or be in compliance with municipal load reduction goals. Municipal construction projects must meet load reduction requirements set in the respective municipal NPDES permits in accordance with the Lake Tahoe TMDL.
Storm Water Pollution Prevention Plan (SWPPP)	SWPPP requirements are the same for both permits. A suggested outline for developing a SWPPP is provided in the Tahoe CGP.
Rain Event Action Plan (REAP)	The REAP trigger for the Tahoe CGP is a 30 percent chance of 0.1 inch of precipitation or more compared with a 50 percent chance in the State Board CGP. Additionally the REAP must be prepared at least 24 hours prior to predicted rain rather than 48 hours in the State Board CGP. The requirements are geared more toward thunderstorm activity in the Tahoe Basin.
Construction Site Monitoring and Reporting Program (CSMRP)	Monitoring requirements in the Tahoe CGP include daily inspections rather than weekly in the State Board CGP. Non-storm water discharge inspections are included in the daily routine; therefore, there are no non-storm water–specific inspections. During the winter inactive period (October 16 through April 30), monthly inspections are required. Pre-rain storm, post rain storm, and during rain storm (for extended events) are also required. Snow events do not trigger visual inspections.

	The Tahoe CGP does not include a qualifying storm event. Sampling is required whenever there is a discharge off the project boundaries. Otherwise, the scheme is the same (i.e., all discharge points must be sampled and a minimum of three samples must be collected per day). Sample analyses (turbidity and non-visibles) are the same for both permits. There is no receiving water sampling requirement in the Tahoe CGP unless specifically set for an individual site (typically for environmental restoration projects).
Reporting	The Tahoe CGP requires an annual report to be submitted by November 30 each year for the period of October 16 through October 15 the following year. The requirements include: 1) 24-hour reporting of an adverse condition resulting from a discharge (e.g., oil spill, unauthorized non-storm water discharge to surface waters, breach of perimeter controls, NEL violation); 2) reporting through SMARTS of all field data within 5 days (laboratory analyses within 5 days of receipt of the results; 3) annual reporting; and 4) final reporting upon project completion for NOT requests.
Other Potential Requirements	**Biosassessment** - Requirements are the same for both permits. Index period in Tahoe is July 1 through August 15. **ATS** – Requirements are the same for both permits, except the compliance storm event is the 20-year, 1-hour storm for the Tahoe CGP. **Stream Environment Zones (SEZs)/Floodplains** – The Lahontan Basin Plan contains certain prohibitions on waste discharges to SEZs and floodplains. Dischargers must identify whether their project includes non-storm water waste discharges or land disturbance to SEZs and/or floodplains in their NOI. Limited exemptions to the prohibitions may be applicable as detailed in Attachment F to the Tahoe CGP.

Table 2
Key Changes to Lake Tahoe Construction General Permit

Item	Description
Over winter sampling	Eliminated the over winter requirement to sample two rain events. Focus is on completing visual monitoring and BMP maintenance.
Sampling outside of active work days	Eliminated the requirement to collect samples outside of active working/business days (e.g., holidays, weekends). The requirement to visually inspect during daylight hours on any day is still included. Visual monitoring is more effective to respond to any problems. The sampling requirement during this time diverts limited resources away from ensuring the BMPs are properly functioning.
Basin Plan Prohibitions	Updated Basin Plan prohibitions and exemptions in the CGP and Attachment F. Basin Plan amendments were approved in 2014.
QSP management plan	Added language to require a written Qualified Storm Water Practitioner (QSP) management plan to achieve better onsite management by the QSP – can't operate remotely without a communication plan that ensures active QSP oversight.
Training documentation	Strengthened language to require documentation of weekly training of site personnel.
Receiving water sampling requirements	Added language to clarify when receiving water sampling is required. No change to existing requirements except to clarify language that some stakeholders found unclear.
Notice of Termination	Updated the Notice of Termination (NOT) requirements to be consistent with the options included in SMARTS. This reconciles the NOT requirements with what is provided in SMARTS.
Use of non-photo/biodegradable materials	Added language to prohibit use of non-photo/biodegradable materials (such as plastic netting) in permanent Best Management Practices (BMPs).

Table 3
Qualified SWPPP Developer/ Qualified SWPPP Practitioner Certification Criteria

Certification/ Title	Registered By	QSD/QSP	Certification Criteria
Professional Civil Engineer	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Professional Geologist or Engineering Geologist	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Landscape Architect	California	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Professional Hydrologist	American Institute of Hydrology	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites
Certified Professional in Erosion and Sediment Control™ (CPESC)	Enviro Cert International Inc.	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Inspector of Sediment and Erosion Control™ (CISEC)	Certified Inspector of Sediment and Erosion Control, Inc.	QSP	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Erosion, Sediment and Storm Water Inspector™ (CESSWI)	Enviro Cert International Inc.	QSP	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Certified Professional in Storm Water Quality™ (CPSWQ)	Enviro Cert International Inc.	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites 5. Continuing Education
Professional in Erosion and Sediment Control	National Institute for Certification in Engineering Technologies (NICET)	Both	1. Approval Process 2. Code of Ethics 3. Accountability 4. Pre-requisites

ENCLOSURE 2

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TO: G. Scott McGowen, P.E., Chief Environmental Engineer
California Department of Transportation
Division of Environmental Analysis
Via email at: (scott.mcgowen@dot.ca.gov)

FROM: Bud Amorfini, Engineering Geologist
Lahontan Water Board

DATE: February 5, 2016

SUBJECT: Response to January 15, 2016 Comments on Tentative Lake Tahoe Construction General Permit

Please find the Water Board's response to your January 15, 2016 comments on the reissuance of the Lake Tahoe Construction General Permit (TCGP). Responses are referenced by the numbering provided in your comment letter (enclosed). For comments provided in Attachment A to your letter, comments are referenced by the section identified in the attachment.

January 15, 2016, Comment Letter

Response to Comment 1: The discharge prohibition is set in the Water Quality Control Plan for the Lahontan Region (Basin Plan). We note that Caltrans operations in the Lake Tahoe Basin do not include the use of pesticides.

Response to Comment 2: Comments refer to the absence of numeric effluent limits in the statewide Construction General Permit compared to their presence in the tentative TCGP. The effluent limitations have been in the Basin Plan for decades and have been carried forward from the prior-issued TCGP. The TCGP is a National Pollutant Discharge Elimination System (NPDES) Permit and must comply with USEPA anti-backsliding requirements. Therefore, the effluent limitations cannot be relaxed at this time. We understand that the limitations are difficult to meet. They are necessary as part of implementing the Lake Tahoe Total Maximum Daily Load (TMDL). Experience with the permit over the last five years indicates that dischargers have been able to comply with the effluent limits by retaining storm water runoff onsite or infiltrating runoff in upland areas in most cases. Additionally, the potential for storm water discharges is limited during the active construction season since it does not coincide with the area's wet season and sampling during the inactive wet season is not required.

Response to Comment 3: The comments will help to improve the QSP requirements and the suggested language will be incorporated into the proposed TCGP.

Response to Comment 4: In the context of the TCGP and Notice of Termination (NOT) requests, the meaning of "cannot discharge storm water" means: the discharge of pollutants associated with *construction* in storm water. The text is not intended to require that each of the four criteria must be met for NOT approval. The text will be revised to clearly indicate that for NOT approval, the discharger need only select one of the four options that may apply to a particular site.

Response to Comment 5: We agree with the comment. The TCGP acknowledges that the California Department of Transportation (Department) must comply with the requirements set forth in its municipal storm permit (WQO 2012-0011-DWQ). The requirements are detailed in section VIII.G. (Post-Construction Storm Water Control Requirements) for Municipal and Public Roadway Storm Water Treatment Requirements.

Response to Comment 6: Text will be revised and rescind Order No. R6T-2012-0019 on December 31, 2016.

Response to Comment 7: The TCGP already provides for routine monthly inspections during the inactive period. However, the text will be revised as suggested to only require post-storm inspections during the inactive period.

Response to Comment 8: The text will be revised as suggested.

Attachment A Comments

Table of Contents: Text will be revised as suggested

Table of Contents: Text will be revised to use "floodplain" as one word throughout the TCGP.

Section I.A: Text will be revised as suggested. Text will be revised to include reference to authorized non-storm water discharges.

Section I.A., page 2: No change required. Attachment F relates to prohibitions and exemptions on discharges of waste to both state waters and waters of the U.S. It does not deal with discharges to land.

Section I.G., page 3: Text will be revised as suggested.

Section II.E.1., Page 12: Text will be revised as suggested.

Section II.E.3., page 13: The options were retained and the text will be revised to clearly identify the options.

Section VI.B., page 22: Bullet numbering will be corrected.

Section VII.B.1., page 24: Text will be corrected to include a registered landscape architect.

Section VIII.B.2., page 26: Text will be revised to include reference to authorized non-storm water discharges.

We appreciate you taking the time to review and comment on the tentative permit. If you have questions, please contact me at 530-542-5463 or by email at bud.amorfini@waterboards.ca.gov.

Enclosure: Caltrans January 15, 2016 Comments on Tentative Lake Tahoe Construction General Permit

Cc (w/enclosure): Gilbert Ogaz, Office Chief, Program Implementation/California Department of Transportation

BA/dk/T: TCGP-Response to Caltrans Comments

DEPARTMENT OF TRANSPORTATION
OFFICE OF ENVIRONMENTAL ANALYSIS
P.O. BOX 942874, MS–27
SACRAMENTO, CA 94273–0001
PHONE (916) 653-4446
FAX (916) 653-1128
TTY 711
www.dot.ca.gov

Serious Drought.
Help save water!

January 15, 2016

Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA, 96150
Attn: Bud Amorfini

bud.amorfini@waterboards.ca.gov

RE: **Comments on the Updated National Pollutant Discharge Elimination System General Permit For Stormwater Discharges Associated With Construction Activity In The Lake Tahoe Hydrologic Unit , Counties of Alpine, El Dorado, And Placer, Order No. R6T-2016-TENT**

Dear Mr. Amorfini:

The California Department of Transportation (Caltrans) appreciates the opportunity to provide comments on the General Waste Discharge Requirements/NPDES Permit (General Permit) for construction activities in the Lake Tahoe Hydrologic Unit Tentative Order no. R6T-2016-TENT and attachments.

Following are our comments:

1. **Page 13, Order, Section III.E.** *"The discharge of pesticides to surface waters or ground waters is prohibited."*

   Comment: Trace amounts of pesticides are present in nearly all surface waters in the Tahoe region. Studies performed by Caltrans in 2007 and 2008 in the Tahoe region indicated minimum amounts of pesticides in stormwater run-off. Caltrans operations in the Lake Tahoe Basin do not include use of pesticides.

2. **Page 14, Order, Section IV. Effluent Limitations.**

   Comment: These stormwater limitations for single day maximums are infeasible to meet at most sites. The Construction General Permit no longer has effluent limitations. 20 NTU for turbidity is not feasible in a roadway project. Iron NELs are lower than background levels for some areas within the watershed, where soil naturally contains high levels of iron. Phosphorus NELs are lower than observed natural background levels within the watershed.

   Recommendation: Caltrans suggests removing the Effluent Limitations from the permit.

3. **Page 25, Order, Section VII.B.5 QSP Responsibilities**

   Comment: According to the 2010 Caltrans specifications the WPCM must oversee "Inspections of Water Pollution Control Practices identified in the SWPPP or WPCP, Inspections and reports for visual monitoring, Preparation and implementation of REAP's, etc…."

   Recommendation: Caltrans would like to request the following language to be implemented into the new "QSP Management Plan". Please add the additional language in red underline to the Reissuance of the LTGP.

   QSP Responsibilities: The project QSP is responsible for assisting the Discharger to comply with the General Permit through the proper implementation, management, and monitoring of the SWPPP elements and other General Permit requirements. The QSP must directly manage these activities by being present at the site and/or through a communication plan that allows the QSP to actively and effectively manage trained personnel conducting the SWPPP activities. The SWPPP must include a written plan describing how the QSP will oversee and manage all SWPPP activities and the Discharger must maintain written records documenting the QSP's plan implementation and effectiveness. ***The QSP Management Plan must show how the QSP plans to inspect and report all of the required visual inspections and monitoring requirements, prepare and implement REAP's, prepare and submit NAL excedance reports and NEL violation reports, ensure that all employees have current water pollution control training, amend the SWPPP if required, and how the QSP plans to correct any construction activities damaging water pollution control practices or causing water pollution.***

4. **Page 12, Order, SectionII.E.1.b,** *The site cannot discharge storm water to waters of the United States – For NOT approval, the Discharger must certify that all storm water is either retained on site or all storm water is discharged to off-site evaporation or percolation ponds.*

   Comment: It is not ***physically possible to prevent stormwater discharges. Also it is not possible to separate off-site and on-site run off. It is possible to treat first flush only from comingled run off.***

   Recommendation: The site discharges only treated (NEAT, MEAT and, TREAT) stormwater to the waters of the United States.

5. **Page 10 Order , Section II.d.3.c:** The text "*to infiltrate and /or treat stormwater runoff from existing and proposed impervious surfaces on the site as required in this General Permit*" seems to imply that all or the total impervious surface area needs to be infiltrated or treated; according the Attachment I, Section VII.H, Paragraph 2 on Page 20.

   Comment: Per Order no. 2012-0011-DWQ, Attachment V, Part 3, Item 1, the infiltration or treatment of all impervious surfaces generated by the 20-year , one-hour design storm only applies where storm water runoff is determined to have direct connectivity to surface waters and/or not adequately infiltrated or treated by the natural environment. For areas where there is no direct connectivity to surface waters, the requirements of Provision E.2.d of Order 2012-0011-DWQ seem to apply.

6. **Page 24 Order, Section VI.C.7-***Order No.R6T-2011-0019 is rescinded on November 30, 2016 except for enforcement purposes.*

   ***Recommendation*:** Order No. R6T-2011-0019 is rescinded on December 30, 2016, except for enforcement purposes.

7. **Attachment C, Section III.B –** *During both active and inactive periods, a construction site inspection shall also be performed within 24 hours prior to an anticipated precipitation event (chance of*

precipitation is forecasted at 30 percent or greater), daily during extended storm events, and within 24 hours after actual storm events. This requirement does not apply during snow events. If Dischargers cannot complete an inspection within the specified time frames, the reason for the delay shall be recorded in writing and maintained with the next inspection report.

Comment: Pre- and during storm inspections during the Inactive Period, if construction is on hold, is excessive. Post-storm inspections will be able to identify any BMP maintenance items and improve the site before the next rain event.

Recommendation: Caltrans suggests monthly inspections during the Inactive Period as this will ensure that winterization BMPs are maintained and ready for rain events.

8. Attachment D, 24-Hour Reporting.

Recommendation Please add the additional language in red underline to the Reissuance of the LTGP. *The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5)* ***business*** *days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 CFR 122.41(l)(6)(i).)*

In addition some comments are also provided in Attachment A. If you have any questions, please contact Gilbert Ogaz of my staff at (916) 653-2512 or through email Gilbert.ogaz@dot.ca.gov.

Sincerely,

Gilbert Ogaz for

G. SCOTT McGOWEN, P.E.
Chief Environmental Engineer
Division of Environmental Analysis

cc:

- Gilbert Ogaz, Office Chief, Program Implementation
- Doug Coleman, North Region Environmental Engineering
- Env. File – SW, Read File

Enclosure: Attachment A

Attachment A
Additional Comments
Order No. R6T-2016-TENT Review

Plan Sheet/ SSP-Para.	Comments	Resolved Initials
Table Of Content	Attachment C should be revised to "Construction Site Monitoring and Reporting Program", per the title heading for Attachment C. The acronym CSMRP is used interchangeably throughout the General Permit and Attachment C for Construction Site Monitoring and Reporting Plan, and Construction Site Monitoring and Reporting Program.	
Table Of Content	"Flood Plain" can be used as one or two words. In Attachment F, floodplain is used as a single word. Be consistent with the use.	
Section I.A	Third paragraph, third sentence: Is it appropriate to say "Dischargers of storm water runoff and authorized non-storm water discharges to surface waters and to land in the Lake Tahoe Hydrologic Unit, must obtain authorization under this reissued General Permit for construction-related discharges to water of the United States.", per section II.D?	
Section I.A, Page 2	First paragraph, second sentence: Would it be appropriate to say "Discharges of non-storm water discharges to surface waters and land may be necessary for the completion of certain construction projects", per section II.D and Attachment F, Table 4.1-1? The proposed General Permit and Basin Plan permit the discharge to "land".	
Section I.G, Page 3	Could "construction dewatering" be used to capture a broader term for dewatering? Dewatering is not limited to excavations but, may take place during natural stream/clear water diversion activities.	
Section II.E.1, Page 12	*Permit coverage may be terminated based on the following:* Recommend: Permit coverage may be terminated based upon one of the following conditions.	
Section II.E.3, Page 13	Attachment I, Fact Sheet, Section II.E on Page 7 permits the use of the Revised Universal Soil Loss Equation (RUSLE) or RUSLE2 or, the custom method, as well as the current Order. What was the Water Board's rational to eliminate this option, for final stabilization?	
Section VI.B, Page 22	Bullet numbering "B" has been duplicated.	
Section VII.B.1, Page 24	Was "A California registered landscape architect" inadvertently omitted, for one of the certification requirements?	
Section VII.B, Page 24	Was "A California registered landscape architect" inadvertently omitted?	
Section VIII.B.2, Page 26	*Install temporary sediment controls for the down-gradient perimeter of the project site, and/or any location where storm water may discharge from the project site, prior to the initiation of any construction-related activities.*	

	Consider: Install temporary sediment controls for the down-gradient perimeter of the project site, and/or any location where storm water or authorized non-storm water may discharge from the project site, prior to the initiation of any construction-related activities.	

ENCLOSURE 3

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Amorfini, Bud@Waterboards

From: Amorfini, Bud@Waterboards
Sent: Thursday, January 21, 2016 11:40 AM
To: 'Jason Burke'
Cc: Mark Frisina
Subject: RE: CSLT Tahoe CGP comments

Jason,

Thank you for the comments on the reissuance of the Tahoe Construction General Permit (TCGP). We understand you were concerned that the requirements for coverage and the effective dates of the permit may leave a gap in coverage for those working on active projects after April 13, 2016. The previous permit (order No. R6T-2011-0019) includes a provision for administrative continuance, which is provided in the Provisions section VI.B. This will span the gap between April 13, 2016 and January 1, 2017 when the reissued permit will become effective. Additionally, the reissued permit includes the requirements for coverage under the old and new permits during this time, which is detailed in the section "Conditions for Permit Coverage and Notification Requirements" (section II.B.2.). We believe this will address your comments. If you have any questions, please contact me by phone (542-5463) or by email.

Thanks, Bud

Bud Amorfini
Engineering Geologist, QSD
Lahontan Water Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, 96150
Ph# - 530-542-5463
Bud.Amorfini@waterboards.ca.gov

From: Jason Burke [mailto:jburke@cityofslt.us]
Sent: Friday, January 15, 2016 1:33 PM
To: Amorfini, Bud@Waterboards
Cc: Mark Frisina
Subject: CSLT Tahoe CGP comments

Hi Bud:
Minor comments on the new 2016 Construction General Permit attached, along with the Word version.

Have a good weekend,

Jason Burke
Stormwater Program Coordinator
City of South Lake Tahoe
1052 Tata Lane
South Lake Tahoe, CA 96150
(530) 542-6038
jburke@cityofslt.us

City of South Lake Tahoe

"making a positive difference now"

January 15, 2016

Bud Amorfini
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd
South Lake Tahoe, CA 96150

Via email only

RE: City of South Lake Tahoe Comment Letter – Updated Tahoe Construction General Permit

Dear Mr. Amorfini,
The City of South Lake Tahoe (City) values the opportunity to provide comments on the draft 2016 Tahoe Construction General Permit effective January 1, 2017. The City appreciates and supports many of the key changes to promote better onsite management by the Qualified Stormwater Practioner (QSP), and improved weekly training documentation to ensure the QSP is providing adequate training to all personal in accordance with the Stormwater Pollution Prevention Plan (SWPPP).

Order No R6T-2011-0019 (NPDES NO. CAG616002) notes the 2011 permit **expires on April 13, 2016** on the first page (in Table 2). Page 7 notes that the:

> *"terms and conditions of the Order No. R6T-2005-0007 have been automatically continued and remain in effect until new waste discharge requirements (WDRs) and NPDES permit are adopted pursuant to this Order."*

However, there does not appear to be any continuation text in the 2011 Order and there seems to be a gap for dischargers seeking to apply for coverage between April 13, 2016 and January 1, 2017. The City suggests that clarifying language be included in the 2016 Order to note that dischargers seeking coverage between April 13, 2016 and January 1, 2017 are subject to the terms and conditions of the previous 2011 Order for the interim 2016 construction season.

Please feel free to contact Mark Frisina, Senior Public Works Inspector at 530-542-7415 (or by email at mfrisina@cityofslt.us) or myself with any further questions at 530-542-6038 (or by email at jburke@cityofslt.us).

Sincerely,

Jason Burke
Stormwater Program Coordinator
City of South Lake Tahoe

cc: Mark Frisina, Sr. Public Works Inspector, City of South Lake Tahoe