

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

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**ORDER NO. R6T-2010-0024
NPDES NO. CAG916001**

**WASTE DISCHARGE REQUIREMENTS
FOR SURFACE WATER DISPOSAL OF TREATED GROUNDWATER**

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

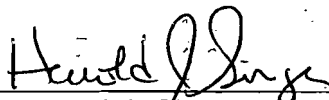
Table 1. Discharger Information

Dischargers	Individuals, public agencies, private businesses, and other legal entities discharging or proposing to discharge groundwater from an active pump-and-treat system that has been treated to remove detectable pollutants and toxins to surface waters of the Lahontan Region.
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Table 2. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	June 9, 2010
This Order shall become effective on:	June 9, 2010
This Order shall expire on:	June 9, 2015
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	180 days prior to the Order expiration date (December 11, 2014)

I, Harold J. Singer, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on June 9, 2010.



Harold J. Singer, Executive Officer

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I. DISCHARGE INFORMATION

Individuals, public agencies, private businesses, and other legal entities (hereafter Discharger) often need to discharge groundwater that has been treated from an active pump-and-treat system to remove detectable pollutants and toxins. This Region-wide General National Pollutant Discharge Elimination System (NPDES) Permit (hereafter this Order) regulates these types of treated groundwater discharges to surface waters of the United States. The entity or entities responsible for the discharge of waste from the groundwater treatment system and the property owner are considered as "Discharger" for the purposes of this Order.

II. NOTIFICATION REQUIREMENTS

A. General Order Application

To obtain authorization for discharges under this Order, all entities considered as the Discharger must sign and collectively submit a Notice of Intent (NOI) form (Attachment B) with an appropriate filing fee. Information necessary to support the application is listed in the Information to Support the Discharge of Treated Groundwater to Surface Water (Attachment C). The Discharger is required to conduct monitoring and report any available data relevant to the proposed discharge and the receiving water with the NOI.

B. General Order Coverage

1. The Discharger shall be subject to the requirements of this Order only after a Notice of Applicability (NOA) has been issued by the Executive Officer or his or her designee.
2. This Order does not pre-empt or supersede the authority of other agencies to prohibit, restrict, or control the discharge of treated groundwater.
3. Supplemental information proposing new discharges or discharge locations similar to the discharges and locations authorized in the NOA must be supplied in writing to the Lahontan Regional Water Quality Control Board (Water Board) 30 days prior to discharge. If the new discharges or locations are determined not to be a material change to the NOA, the Discharger will be notified to proceed. If the new proposed discharges or locations are determined to be a material change, or otherwise not within the original scope of the NOA, the Executive Officer may re-issue a modified NOA or the Discharger may be requested to submit a new NOI for this Order or an application for a different general or individual permit.

C. Eligibility Criteria

1. All discharges covered by this Order shall be limited to treated water from the investigation and remediation of identified or potential groundwater pollution. This Order shall apply only to discharges that meet both of the following conditions:
 - a. The identified pollutants have effluent limitations prescribed in this Order.

- b. The general water quality of the treated discharge is of equal or better water quality than that of the receiving water. General water quality is to be determined as part of the permit application process.
2. Dischargers are eligible for coverage under this Order provided that:
 - a. The Discharger submits to the following address a complete and accurate NOI (Attachment B), project map, and first annual fee to cover the treated groundwater discharges to surface waters by the Discharger within the boundaries of the Lahontan Region. The NOI must be signed in accordance with the signatory requirements of the Standard Provisions (Attachment D, Section V.B). The NOI shall be submitted to the appropriate Water Board office regulating the groundwater cleanup:

Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150

Or

Lahontan Regional Water Quality Control Board
14440 Civic Drive, Suite 200
Victorville, CA 92392
 - b. The Discharger submits as part of the NOI information necessary to ascertain whether the discharge meets the criteria for coverage under this Order, including, but not limited to, information pertaining to California Toxics Rule (CTR) and *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) requirements (see Section II.C.3).
 - c. No discharge under this Order is authorized until a written NOA is received from the Water Board Executive Officer or the permit application is deemed complete pursuant to Section 65956 of the California Government Code.
 3. Dischargers applying for coverage under this Order are required, as part of the NOI, to submit data on the effluent and the receiving water sufficient to determine if any water quality-based effluent limitations (WQBELs) are required in a discharge permit pursuant to the CTR. It is the Discharger's responsibility to provide information requested by the Water Board for use in the analysis prior to NOA issuance. Attachment G, Water Quality Objectives for Priority Pollutants, lists 126 priority pollutants and their applicable water quality objectives. Attachment H, Priority Pollutants to be Monitored, lists all 126 priority pollutants and also lists each pollutant's criterion concentration and basis, suggested analytical testing method, and minimum laboratory reporting level. Attachment I lists the dioxin and furan sampling requirements. Dioxin and furan sampling is not required for Dischargers previously enrolled under Order No. R6T-2004-0025.

If the data shows concentrations in the discharge greater than the CTR water quality criteria of one or more of the 126 priority pollutants, a separate individual permit may be required to establish WQBELs. The Discharger is in compliance with the monitoring requirements of this Order if they have been fully responsive to a prior request for CTR information.

D. Termination of Coverage

1. When individual waste discharge requirements (WDRs) are issued to a Discharger otherwise subject to this Order, the applicability of this Order to the Discharger is automatically terminated on the effective date of the individual permit.
2. The Discharger shall notify the Water Board within 30 days when the cleanup activities are complete or the discharge will no longer occur. At that time, the Executive Officer will consider revocation of the NOA. Once the NOA is revoked, the discharge will no longer be covered by this Order and no discharge may occur prior to compliance with provisions of the Water Code.

III. FINDINGS

The Water Board finds:

A. Background. Dischargers of treated groundwater to surface waters from the investigation and remediation of identified and potential groundwater pollution are currently discharging pursuant to Order No. R6T-2004-0025, NPDES Permit No. CAG916001. Order No. R6T-2004-0025 expired on June 9, 2009, but continued in force and is effective until this updated Order was issued. Dischargers of treated groundwater from the investigation and remediation of identified and potential groundwater pollution to surface waters must obtain authorization under this Order to continue discharge to waters of the United States. To obtain authorization for continued and future discharges to waters of the United States, Dischargers must submit a complete application, as described in Section II, above. Dischargers seeking continued coverage must comply with Provision VII. C.

This Order becomes effective upon adoption. This Order expires on June 9, 2015.

B. Discharge Description. Numerous unauthorized releases of petroleum products and chlorinated hydrocarbon pollutants have impacted groundwaters of the Lahontan Region. Releases occur from leaking underground and aboveground fuel tanks and other unauthorized discharges. Several treatment technologies currently employed for remediation include the extraction and aboveground treatment of groundwater. Such methods may include disposal to nearby surface waters.

The discharge of water from a groundwater treatment unit to surface waters is a discharge of waste that could affect the quality of the waters of the United States. This Order covers the discharge of treated groundwater from cleanups of pollution, other than to a community wastewater collection and treatment facility, to surface waters of the United States.

The primary pollutants contained in discharges covered by this Order are petroleum hydrocarbon and chlorinated hydrocarbon constituents. Petroleum hydrocarbon constituents include total petroleum hydrocarbons measured as gasoline, diesel, kerosene, fuel oil, and heavier carbon ranges; benzene, toluene, ethylbenzene, xylenes; methyl tertiary butyl ether; tetraethyl lead; and ethylene dibromide. Chlorinated hydrocarbon constituents include trichloroethene and tetrachloroethene and their secondary degradation products. Other constituents may be present in the groundwater to be treated. Effluent limitations for constituents covered by this Order are included in Section V.A.

Wastewater remediated by the treatment system may typically be generated from the following sources during the investigation and/or remediation of identified or potential groundwater pollution:

1. Groundwater extracted from the underlying aquifer as part of the groundwater remediation process;
2. Potentially polluted groundwater generated during aquifer pump tests;
3. Potentially polluted well development water or purge water generated during groundwater monitoring; and
4. Other wastewater generated during site investigations or cleanups.

C. Legal Authorities. This Order is issued pursuant to Section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges of treated groundwater from the investigation and remediation of identified and potential groundwater pollution to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

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 Regional Water Boards, the authority to issue general NPDES permits pursuant to 40 CFR Parts 122 and 123.

- D. Background and Rationale for Requirements.** The Water Board developed the requirements in this Order based on readily available information for several similar discharges and the requirements contained in Order No. R6T-2004-0025. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through I are also incorporated into this Order.
- E. California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21100-21177.
- 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. A discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).
- G. Water Quality-Based Effluent Limitations.** Section 301(b) of the CWA and 40 CFR 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 40 CFR 122.44(d)(1)(vi).

- H. Water Quality Control Plans.** The Water Board adopted the *Water Quality Control Plan for the Lahontan Region* (hereinafter Basin Plan), which became effective on March 31, 1995 and has been subsequently amended. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. Designated beneficial uses of many surface waters within the Lahontan Region 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 industrial service supply (IND); industrial process supply (PRO); hydropower generation (POW); navigation (NAV); preservation of biological habitats of special significance (BIOL); aquaculture (AQUA); warm freshwater habitat (WARM); inland saline water habitat (SAL); rare, threatened, or endangered species (RARE); and migration of aquatic organisms (MIGR). Table 2-1 in the Basin Plan may be consulted for the beneficial use designations for any specific 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.

Designated beneficial uses of groundwater for typical locations within named groundwater basins in the Lahontan Region are MUN, AGR, IND, and FRSH. Select named groundwater basins include designations for AQUA and WILD. Unnamed groundwater basins have the MUN designation. Table 2-2 in the Basin Plan may be consulted for the beneficial use designations for any specific groundwater basin.

Requirements of this Order implement the Basin Plan.

- I. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About 40 criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- J. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the SIP. The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- K. Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under Section 5.3 of the SIP, a compliance schedule may not exceed five years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010)

to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds one year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Water Board, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order does not include compliance schedules and interim effluent limitations.

- 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 Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on benzene, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, ethylbenzene, ethylene dibromide, lead, methyl tertiary butyl ether, naphthalene, tertiary butyl alcohol, tetrachloroethene, toluene, total petroleum hydrocarbons (gasoline and diesel ranges), 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride, and xylenes. Restrictions on these parameters are discussed in Section V.B.2 of the Fact Sheet (Attachment F). This Order'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. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. As discussed in Section II. C. 1. b., no degradation is anticipated or authorized in this Order. Therefore, the permitted discharge is consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16.
- O. 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 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 Order are at least as stringent as the effluent limitations in Order No. R6T-2004-0025. Therefore, this Order is in compliance with the anti-backsliding provisions of 40 CFR 122.44.

- P. Endangered Species Act.** This Order 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 2115.5) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits and requires the general water quality of the treated discharge be equal or better than water quality than that of the receiving water to prevent degradation of the quality of the receiving water. 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 Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.
- 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 Water Board has also included in this Order special provisions applicable to authorized Dischargers. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.
- S. Provisions and Requirements Implementing State Law.** The provisions/requirements in Section VII.C.6.a of this Order are included to implement state law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.
- T. Notification of Interested Parties.** The Water Board has notified interested agencies and persons of its intent to prescribe WDRs for discharges of treated groundwater from the investigation and remediation of identified and potential groundwater pollution to surface waters and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.
- U. Consideration of Public Comment.** The 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 Order.

IT IS HEREBY ORDERED that all Dischargers indicating their intention to be regulated under the provisions of this Order, 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:

IV. DISCHARGE PROHIBITIONS

- A.** Section 4.1 of the Basin Plan contains prohibitions against the discharge of wastes to surface waters in various locations throughout the Lahontan Region. Any discharge proposed in an area where a discharge prohibition may apply must be evaluated on an individual basis to determine if the discharge would violate the prohibition. In some instances, exemptions may be granted on a case-by-case basis by resolution of the Water Board, or by the Executive Officer in accordance with Water Board Policy. In addition to the specific prohibitions for various locations in the Lahontan Region, the following general prohibitions apply throughout the Lahontan Region:
- 1.** The discharge of waste¹ that causes violation of any numeric water quality objective contained in the Basin Plan, including the Nondegradation Objective, is prohibited.
 - 2.** The discharge of waste that causes violation of any numeric water quality objective contained in the Basin Plan is prohibited.
 - 3.** Where any numeric or narrative water quality objective contained in the Basin Plan is already being violated, the discharge of waste that causes further degradation or pollution (as defined in Water Code section 13050) is prohibited.
 - 4.** The discharge of untreated sewage, garbage, or other solid wastes, or industrial wastes into surface waters of the Lahontan Region is prohibited.
 - 5.** For municipal² and industrial discharges³:
 - a.** The discharge, bypass, or diversion of raw or partially treated sewage, sludge, grease, or oils to surface waters is prohibited.
 - b.** The discharge of wastewater except to the designated disposal site (as designated in waste discharge requirements) is prohibited.
 - c.** The discharge of industrial process wastes⁴ to surface waters designated for the Municipal and Domestic Supply (MUN) beneficial use is prohibited. The

¹"Waste" is defined to include any waste or deleterious material including, but not limited to, waste earthen materials (such as soil, silt, sand, clay, rock, or other organic or mineral material) and any other waste as defined in the section 13050(d) of the Water Code.

²"Municipal waste" is defined in Section 4.4 of the Basin Plan.

³"Industry" is defined in Section 4.7 of the Basin Plan.

⁴"Industrial process wastes" are wastes produced by industrial activities that result from one or more actions, operations, or treatments which modify raw material(s) and that may (1) add to or create within the effluent, waste, or receiving water a constituent or constituents not present prior to processing, or (2) alter water temperature and/or the concentration(s) of one or more naturally occurring constituents within the effluent,

discharge of industrial process wastes to surface waters not designated for the MUN use may be permitted if such discharges comply with the General Discharge Limitations in Section 4.7 of the Basin Plan and if appropriate findings under State and federal antidegradation regulations can be made.

- B.** There shall be no discharge, bypass, or diversion of polluted or partially treated water, sludge, grease, oils, purge water, development water, or pump test water from the collection, transport, or disposal facilities to adjacent land areas or surface waters.
- C.** The discharge shall not cause pollution as defined in section 13050 of the Water Code, or a threatened pollution.
- D.** Neither the treatment nor the discharge shall cause a nuisance as defined in section 13050 of the Water Code.
- E.** The discharge of treated wastewater except to the disposal point(s) authorized in the NOA is prohibited.
- F.** The discharge shall not cause erosion of sediments.
- G.** The Discharger shall not allow pollutant-free wastewater to be discharged into the collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater may include rainfall, groundwater, surface water, cooling waters, and condensates.

V. EFFLUENT LIMITATIONS

The discharge of an effluent in excess of the following limits is prohibited. All samples of effluent are to be single grab samples.

Table 3. Effluent Limitations

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Benzene	µg/L	0.5	1.0
1,1-Dichloroethane	µg/L	0.5	5
1,2-Dichloroethane	µg/L	0.5	0.50
1,1-Dichloroethene	µg/L	0.5	6
cis-1,2-Dichloroethene	µg/L	0.5	6
trans-1,2-Dichloroethene	µg/L	0.5	10
Ethylbenzene	µg/L	0.5	29
Ethylene Dibromide	µg/L	0.02	0.02
Lead, Total Recoverable ¹	µg/L	0.5	15
Methyl Tertiary Butyl Ether	µg/L	0.5	5

waste or receiving water. Certain non-stormwater discharges may occur at industrial facilities that are not considered to be industrial process wastes for the purposes of Prohibition IV.A.5.c. Examples include: fire hydrant flushing, atmospheric condensates from refrigeration and air conditioning systems, and landscape watering. The Water Board may establish additional monitoring programs and reporting requirements for these and other non-stormwater discharges at industrial facilities.

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Naphthalene	µg/L	0.2	20
Tertiary Butyl Alcohol	µg/L	5.0	50
Tetrachloroethene	µg/L	0.5	5
Toluene	µg/L	0.5	42
Total Petroleum Hydrocarbons, Gasoline Range (C ₆ – C ₁₀)	µg/L	--	50
Total Petroleum Hydrocarbons, Diesel Range (C ₁₀ – C ₂₈)	µg/L	--	50
1,1,1-Trichloroethane	µg/L	0.5	200
1,1,2-Trichloroethane	µg/L	0.5	5
Trichloroethene	µg/L	0.5	5
Vinyl Chloride	µg/L	0.5	0.5
Xylenes, Total	µg/L	0.5	17

¹ If the Discharger can demonstrate in the NPDES NOI that background total lead concentrations in the receiving water are greater than 0.5 µg/L, the effluent limit is equal to the background lead concentration. Any average monthly effluent limitations allowed above 0.5 µg/L will be listed in the NOA. All samples for total lead are to be filtered samples.

The effluent shall not exhibit acute toxicity, defined as:

1. Less than 90 percent survival of *Pimephales promelas* in undiluted effluent in ≥50 percent of the samples in a calendar year; or
2. Less than 70 percent survival of *Pimephales promelas* in undiluted effluent in ≥10 percent of the samples in a calendar year.

VI. RECEIVING WATER LIMITATIONS

Surface Water Limitations

The following numerical and/or narrative water quality objectives apply to all surface waters, including wetlands, in the Lahontan Region. The discharge of waste to surface waters shall not cause, or contribute to, a violation of the following:

1. The discharge shall not cause a violation of any applicable water quality standard for the receiving water adopted by the Water Board or State Water Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Clean Water Act or amendments thereto, the Water Board may revise and modify this Order in accordance with such more stringent standards.
2. **Ammonia.** The neutral, un-ionized ammonia species (NH₃) is highly toxic to freshwater fish. The fraction of toxic NH₃ to total ammonia species (NH₄⁺ + NH₃) is a function of temperature and pH. Basin Plan Tables 3-1 to 3-4 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 in the tables, the most conservative value neighboring the actual value may be used or criteria can be calculated from numerical formulas developed by the USEPA.

- 3. 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 Most Probable Number per 100 milliliters (MPN/100 mL), nor shall more than 10 percent of all samples collected during any 30-day period exceed 40 MPN/100 mL. The USEPA recommends that the log mean should ideally be based on a minimum of not less than five samples collected as evenly spaced as practicable during any 30-day period: [Reference: Ambient Water Quality Criteria for Bacteria – 1986, EPA 440/5-84-002, page 2.] However, a log mean concentration exceeding 20 MPN/100 mL for any 30-day period shall indicate violation of this objective even if fewer than five samples were collected.
- 4. 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.
- 5. Chemical Constituents.** Waters designated as MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant level (MCL) or secondary maximum contaminant level (SMCL) based upon drinking water standards specified by the more restrictive of the California Code of Regulations (CCR), Title 22, Division 4, Chapter 15, or 40 CFR Part 141.
- 6. 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 a 6-month period.
- 7. Color.** Waters shall be free of coloration that causes nuisance or adversely affects the water for beneficial uses.
- 8. 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. The minimum dissolved oxygen concentration shall not be less than that specified in Table 3-6 of the Basin Plan.
- 9. Floating Materials.** Waters shall not contain floating materials, 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 discernible at the 10 percent significance level.

10. 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.

11. Nondegradation of Aquatic Communities and Populations. All waters shall be free of substances attributable to wastewater or other discharges that produce adverse physiological responses in humans, animals, or plants; or that lead to the presence of undesirable or nuisance aquatic life. All waters shall be free from activities that would substantially impair the biological community as it naturally occurs due to physical, chemical and hydrologic processes.

12. Pesticides. For the purposes of the Basin Plan, pesticides are defined to include insecticides, herbicides, rodenticides, fungicides, piscicides and all other economic poisons. An economic poison is any substance intended to prevent, repel, destroy, or mitigate the damage from insects, rodents, predatory animals, bacteria, fungi or weeds capable of infesting or harming vegetation, humans, or animals (CA Agriculture Code 12753).

Pesticide concentrations, individually or collectively, shall not exceed the lowest detectable levels, using the most recent detection procedures available. There shall not be an increase in pesticide concentrations found in bottom sediments. There shall be no detectable increase in bioaccumulation of pesticides in aquatic life.

Waters designated as MUN shall not contain concentrations of pesticides in excess of the limiting concentrations set forth in CCR, Title 22, Division 4, Chapter 15.

13. pH. In fresh waters with designated beneficial uses of COLD or WARM, changes in normal ambient pH levels shall not exceed 0.5 pH units. For all other waters of the Lahontan Region, the pH shall not be depressed below 6.5 nor raised above 8.5. The Regional Water Board recognizes that some waters of the Lahontan 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.

14. Radioactivity. Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

Waters shall not contain concentrations of radionuclides in excess of the limits specified by the more restrictive of the CCR, Title 22, Division 4, Chapter 15, or 40 CFR Part 141.

15. 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.

- 16. 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 ml/L.
- 17. Suspended Materials.** Waters shall not contain suspended materials in concentrations that cause nuisance or that adversely affect 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.
- 18. 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.
- 19. Temperature.** The natural receiving water temperature of all waters shall not be altered unless it can be demonstrated to the satisfaction of the Water Board that such an alteration in temperature does not adversely affect the water for beneficial uses. For waters designated WARM, water temperature shall not be altered by more than 5 degrees Fahrenheit (5°F) above or below the natural temperature. 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 Chapter 6 (Plans and Policies) of the Basin Plan and is included as Attachment B of the Basin Plan.

- 20. 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 Regional 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)*.

- 21. 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.

VII. PROVISIONS

A. Standard Provisions

- 1.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.
- 2.** The Discharger shall comply with the following provisions:
 - a.** Surface waters as used in this Order include, but are not limited to, wetlands and live streams, either perennial or ephemeral, which flow in natural or artificial watercourses, and natural lakes and artificial impoundments of waters within the State of California.
 - b.** Groundwaters as used in this Order include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.
 - c.** The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the Discharger from liabilities under federal, state, or local laws, nor guarantee the Discharger a capacity right in the receiving waters.
 - d.** All discharges authorized by this Order shall be consistent with the terms and conditions of this Order. The discharge of any pollutant more frequently than or at a level in excess of that identified and authorized by this Order shall constitute a violation of the terms and conditions of this Order.
 - e.** 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.
 - f.** The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.
 - g.** 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.
 - h.** A copy of the NPDES permit shall be kept and maintained by the Discharger and be available at all times to operating personnel.
 - i.** Provisions of the permit are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.
 - j.** 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.

- k.** In the event the Discharger is unable to comply with any of the conditions of this Order due to:
- i.** breakdown or serious malfunction of water treatment equipment;
 - ii.** accidents caused by human error or negligence;
 - iii.** overflows from the system; or
 - iv.** other causes such as acts of nature, then

the Discharger shall notify the Water Board Executive Officer as soon as the Discharger or the Discharger's agents have knowledge of any discharge in violation of this permit, or any emergency discharge or other discharge of water to the receiving water, in accordance with the notification requirements in the Standard Provisions for NPDES Permits, included in this Order as Attachment D.

- l.** Pursuant to Water Code section 13267(b), the Discharger shall notify the Water Board of any material change in the volume or character of pollutants introduced into the treatment system from the conditions existing at the time of adoption of this NPDES permit.
- m.** Adequate notice shall include information on the quality and quantity of effluent discharged into the receiving waters for the treatment facility, as well as any anticipated impact of the change on the quantity or quality of the effluent to be discharged from the treatment facility. A substantial change in volume is considered an increase in excess of 10 percent of the mean daily flow rate. The Discharger shall forward a copy of such notice directly to the USEPA Regional Administrator.
- n.** Pursuant to Water Code section 13260(c), any change in the ownership and/or operation of property subject to the NPDES permit shall be reported to the Water Board. Notification of applicable NPDES 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 Regional Water Board.
- o.** If a Discharger becomes aware that any information submitted to the Water Board is incorrect, the Discharger shall immediately notify the Water Board, in writing, and correct that information.
- p.** If the Discharger becomes aware that their NPDES permit is no longer needed (because the discharge will cease) the Discharger shall notify the Water Board in writing and request that the NOA be terminated.

B. Monitoring and Reporting Program (MRP) Requirements

Pursuant to Water Code section 13267 and/or section 13383, the Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order, and any additional monitoring requirements as specified by the Water Board Executive Officer.

C. Expiration Date and Continued Coverage

This Order (i.e., General Permit) expires on June 9, 2015. However, the General Permit shall continue in force and effective until a new or updated General Permit is issued. Dischargers regulated under previous Permit (Order No. R6T-2004-0025, NPDES No. CAG 916001) may continue to discharge under that Permit until September 9, 2010. Those Dischargers seeking to continue to discharge must submit an NOI by August 9, 2010 for continuing coverage under this General Permit. Continuing discharges after September 9, 2010 are only authorized for those covered by an NOA under this General Permit.

D. Special Provisions

1. Reopener Provisions

- a. 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 Water Board may revise and modify this Order in accordance with such more stringent standards.
- b. The Water Board may reopen this Order to establish new conditions or effluent limitations should monitoring data, toxicity-testing data, or other new information indicate that a constituent is discharged at a level that will do any of the following:
 - i. Cause, have reasonable potential to cause, or contribute to an in-stream excursion above any water quality criteria or objective, or
 - ii. Cause, have reasonable potential to cause, or contribute to a violation of any narrative water quality objective from the Basin Plan.
- c. The Water Board may reopen this Order to reflect any site-specific objectives established for the waterbody or changes to beneficial uses for the waterbody resulting from a use attainability analysis.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. Toxicity Identification Evaluations or Toxicity Reduction Evaluations

If acute or chronic toxicity is detected upon startup of the treatment facility, as described in Section V.B of the MRP (Attachment E), the Discharger shall submit to the Water Board an initial investigation Toxicity Reduction Evaluation (TRE) work plan within **45** days of receipt of the laboratory results showing toxicity.

Dischargers that were enrolled under Order No. R6T-2004-0025 are not required to perform acute or chronic WET testing or submit a TRE work plan. This plan shall generally describe the steps the Discharger intends to follow if acute or chronic toxicity is detected during accelerated acute WET testing or chronic WET testing as specified in the MRP (Attachment E). The plan should include at least a description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency and, if a Toxicity Identification Evaluation (TIE) is necessary, an indication of the person who would conduct the TIE.

If acute or chronic toxicity is detected during accelerated acute WET testing or chronic WET testing as specified in the MRP (Attachment E), the Discharger shall, in accordance with its initial investigation TRE work plan, initiate a TRE within 15 days of receipt of the final acute or chronic toxicity test results in order to reduce the cause(s) of toxicity. At a minimum, the Discharger shall use the USEPA manual EPA/833B-99/002 as guidance. The Discharger shall expeditiously develop and implement a more detailed TRE work plan that includes:

- i. Further actions to investigate and identify the cause(s) of toxicity;
- ii. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
- iii. A schedule for these actions.

The Discharger may initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the USEPA acute and chronic manuals EPA/600/6-91/005F (Phase I), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) as guidance.

Results of a TRE/TIE shall be submitted to the Water Board **within 2 months of study completion** when such a study is required based on the conditions stated above.

The Water Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of chronic toxicity may not be successful in all cases. Consideration of enforcement action by the Water Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.

3. Other Special Provisions

- a. Collected screenings and other solids removed from liquid wastes shall be disposed of in a manner that is consistent with Chapter 15, Division 3, Title 23 of the California Code of Regulations.

Any proposed change in solids use or disposal practice shall be reported to the Executive Officer and USEPA Regional Administrator at least 90 days in advance of the change.

- b. Individuals and companies that apply for coverage and that are responsible for site operations retain primary responsibility for compliance with these requirements, including day-to-day operations and monitoring.
- c. The Discharger shall immediately stop any discharge authorized by these requirements in the event there is a violation, or threatened violation, of this Order or if the Executive Officer so orders. The Discharger shall notify the Water Board as soon as reasonably possible by telephone, with a written confirmation within 1 week, when a violation of this Order is known to exist. The discharge may not be resumed until authorized in writing by the Executive Officer.

VIII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in Section V of this Order will be determined as specified below:

A. General

1. Compliance with Priority Pollutant Limitations

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data

When determining compliance with an annual average effluent limitation, average monthly effluent limitation, average weekly effluent limitation, or maximum daily effluent limitation and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations the lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values

around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL)

If the average (or when applicable, the median determined by Section VIII.B above for the multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

D. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge (or when applicable, the median determined by Section VIII.B above for multiple sample data) exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that calendar day.

E. Instantaneous Minimum Effluent Limitation

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

F. Instantaneous Maximum Effluent Limitation

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

ATTACHMENT A – DEFINITIONS

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.

Average Monthly Effluent Limitation (AMEL)

The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)

The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative

Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Carcinogenic Pollutants

Substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV)

CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge

Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

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.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)

DNQ are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

Dilution Credit

Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effluent Concentration Allowance (ECA)

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays

Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake's Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration

The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the minimum level value.

Estuaries

Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code Section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Inland Surface Waters

All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation

The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation

The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

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.

Mixing Zone

Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Not Detected (ND)

Sample results which are less than the laboratory's MDL.

Ocean Waters

The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board's California Ocean Plan.

Persistent Pollutants

Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention

Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the Water Board or State Water Board.

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 Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the 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.

Satellite Collection System

The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Source of Drinking Water

Any water designated as municipal or domestic supply (MUN) in the Water Board Basin Plan.

Standard Deviation (σ)

Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:
x is the observed value;

μ is the arithmetic mean of the observed values; and
 n is the number of samples.

Toxicity Reduction Evaluation (TRE)

TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

ATTACHMENT B – NOTICE OF INTENT

LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD

NOTICE OF INTENT

TO COMPLY WITH THE TERMS OF GENERAL ORDER NO. R6T-2010-0024
FOR
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
FOR SURFACE WATER DISPOSAL OF TREATED GROUNDWATER

This Notice of Intent (NOI), together with the Site Workplan, is equivalent to a Report of Waste Discharge (ROWD). The Site Workplan is to include all the requirements of "Information to Support Discharge of Treated Groundwater to Surface Water" (Attachment C) at a minimum.

I. CONSULTANT/OPERATOR¹

Name:			
Mailing Address:			
City:	State:	Zip:	Phone:
Contact Person:		Consultant___ Operator___ Consultant/Operator___	
UST No.		WDID No.	

II. PROPERTY OWNER¹

Name:			
Mailing Address:			
City:	State:	Zip:	Phone:
Contact Person:			

III. BILLING ADDRESS

Name:			
Mailing Address:			
City:	State:	Zip:	Phone:
Contact Person:			

¹ If additional owners/operators are involved, provide the information in a supplemental letter.

IV. DISCHARGE LOCATION²

Street (including address, if any):
City/County:
Nearest Cross Street(s):
Township/Range/Section: T____, R____, Section____, MDB&M
Attach a map of at least 1:2400 (1" = 2000') showing the discharge site (e.g., USGS 7.5' topographical map). A map shall also be provided that shows the treatment system, discharge point and surface waters. Wells and residences within 1,500 feet of the discharge site shall also be identified.

V. DISCHARGE INFORMATION

Please identify type of discharge: <input type="checkbox"/> Treated Groundwater <input type="checkbox"/> Other (specify) _____		
Start Date:	Stop Date (estimate):	Discharge Rate (gallons per day [GPD]):
Is the discharge short-term, intermittent, or seasonal?		
Please provide a time schedule below:		

VI. TREATMENT SYSTEM(S)

Please identify:	
<input type="checkbox"/> Granular activated carbon	<input type="checkbox"/> Air stripping
<input type="checkbox"/> Vapor extraction	<input type="checkbox"/> Air sparging
<input type="checkbox"/> Chemical oxidation (describe) _____	<input type="checkbox"/> Bioreactor
<input type="checkbox"/> None (describe why a treatment system is not necessary)	
<input type="checkbox"/> Other (describe)	
Provide a schematic drawing of the proposed treatment system and process, and describe pollutant removal mechanisms, and estimated effluent concentrations. Provide a residual disposal plan if residual will be generated.	

² If more than one discharge is proposed, provide the information in a supplemental letter.

VII. RECEIVING WATER INFORMATION

Name of closest receiving water:
Receiving water is tributary to (name major downstream water body):
Quality of receiving water (include most recent analyses and include required California Toxics Rule data):
Estimated flow of stream or estimated volume of lake or pond:

VIII. PRIMARY POLLUTANTS/PARAMETERS LIKELY TO BE IN THE DISCHARGE

Please identify constituents of concern:

___ One or more of the 126 CTR Priority Pollutants (please specify pollutant(s) and concentrations)

___ Benzene	___ Tertiary Butyl Alcohol
___ Toluene	___ Tetrachloroethene/Trichloroethene/ Dichloroethene/Vinyl Chloride
___ Ethylbenzene	___ Naphthalene
___ Xylenes	___ Total Petroleum Hydrocarbons (Gasoline Range)
___ Methyl tertiary butyl ether	___ Total Petroleum Hydrocarbons (Diesel Range)
___ Tertiary Amyl Methyl Ether	___ Other (please describe)

Have samples been collected? ___ Yes (attach results) ___ No

Are additives in the discharge? ___ Yes (describe and quantify) ___ No

If yes, please specify the additive and/or sample results:

IX. ABILITY TO COMPLY

Do you believe the discharge may have acute or chronic toxicity, chemical or organic constituents, bacteria, pesticides, oil and grease, radioactivity, salinity or temperature that may violate receiving water objectives of this permit or adversely impact beneficial uses of the receiving water? ___ Yes ___ No

If your answer is no, please provide an explanation of ability to comply considering the receiving water quality, discharge water quality, and the pollutant loading to the receiving water.

If your answer is yes, you must contact a Professional Engineer. A specific individual permit may be required from the Water Board rather than this Order.

X. PROFESSIONAL ENGINEER OR REGISTERED GEOLOGIST

If a Professional Engineer or Registered Geologist has helped you evaluate the proposed discharge for compliance with this Order, please identify.

Name:			
Mailing Address:			
City:	State:	Zip:	Phone:
Signature:	License No.:	Date:	

XI. SITE WORKPLAN

Is the Site Workplan attached? Yes No

XII. FEES

A check payable to the State Water Resources Control Board in the amount of \$8,769 (\$8,008 plus 9.5% ambient water monitoring surcharge or appropriate current fee for Threat to Water Quality 2 and Complexity A) must be submitted to the Water Board.

XIII. CERTIFICATION

I hereby certify under penalty of perjury that the information provided in this application and in any attachments is true and accurate to the best of my knowledge. By signing this NOI, I agree to comply with the monitoring and reporting program and stop the discharge if there is any violation, or threatened violation, of the Order.

Signature of Contractor/Operator:		Signature of Property Owner:	
Print or Type Name:		Print or Type Name:	
Title:	Date:	Title:	Date:

ATTACHMENT C – INFORMATION TO SUPPORT THE DISCHARGE OF TREATED GROUNDWATER TO SURFACE WATER

This guidance document outlines the minimum information required by the California Regional Water Quality Board, Lahontan Region (Water Board), prior to considering issuance of a Notice of Applicability (NOA) for general waste discharge requirements for the discharge of treated groundwater to surface water. In addition to the information outlined in this document, a completed Notice of Intent (NOI) form (Attachment B) and filing fee must also be submitted.

Discharges to surface water regulated by the Order include discharges to all bodies defined as surface waters in Title 40 of the Code of Federal Regulations, Section 122.2 (40 CFR 122.2).

A. Background Information

A basic description of the proposed discharge must be provided to allow Water Board staff to determine if the Order is applicable to the proposed discharge. This information generally includes:

1. Identification of the source of pollutants (source areas), the potential seasonal variations in the concentrations of pollutants and flow rates, and a general description of the proposed treatment and disposal systems;
2. Identification of the surface drainages controls, drainage courses and surface water bodies, including rivers, streams, lakes and ponds within 1 mile of the treatment facility;
3. Property boundaries;
4. Buildings, dwellings, and other significant structures;
5. Map(s) of the site that depicts the locations of all surface features identified above, including the process and source areas, the points of discharge and the extraction, treatment and disposal facilities; and
6. Documentation of compliance with all necessary local and state permits.

B. Chemical and Physical Wastewater Characteristics

A chemical and physical evaluation of the wastewater is needed to allow staff to assess the need for discharge standards and monitoring, and to evaluate the potential for impacts on water quality. The specifics of the characterization vary with the type of wastes being discharged. The following are minimum requirements for groundwater cleanup discharges:

1. General Analyses

A minimum of one of each of the following analyses of the wastewater:

- a. Chlorinated volatile hydrocarbons (EPA Method 8260B or equivalent);

- b. Aromatic volatile hydrocarbons (EPA Method 8260B or equivalent);
- c. Total petroleum hydrocarbons (TPH) in the gasoline and diesel ranges (EPA Method 8015 Modified or equivalent). Additional or alternative TPH analyses may be required if the suspected pollutants contain hydrocarbon fractions outside the range of these tests;
- d. General or standard minerals analyses, including but not limited to, total dissolved solid (TDS), chloride, sulfate, nitrate, electrical conductivity (EC), pH and temperature; and
- e. Other analyses associated with specific types of waste streams; for example, dissolved oxygen (DO) and suspended solids (SS).

2. California Toxics Rule (CTR) Requirements

As part of a complete NOI submittal, include data sufficient to determine if any water quality-based effluent limitation (WQBEL) is required in a discharge permit pursuant to the CTR. The CTR data is needed to assess 126 priority pollutants. If CTR data is not available, please refer to the Attachments G and H for information on how to collect the CTR data:

- a. Groundwater samples must comply with the general monitoring provisions of the Monitoring and Reporting Program (Attachment E, Section I) and the Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping. A representative grab or composite sample of the upstream receiving water shall also be obtained if applicable. These samples shall be analyzed for all constituents listed in Attachment H.
- b. **Priority Pollutants to be Monitored (Attachment H).** Attachment H identifies the constituents to be monitored, the controlling water quality criteria, and suggested analytical procedures. It is organized into groupings (Inorganics, Volatile Organics, Semi-Volatile Organics, Pesticides/Polychlorinated Biphenyls (PCBs), Other Constituents, and Discharge & Receiving Water Flows). Minimum quantitation levels for the analysis of the listed constituents must be equal to or less than the Minimum Levels (ML) listed in Appendix 4 of the *Policy for implementation of Toxics Standards for Inland Surface Waters, Enclosed, Bays, and Estuaries of California* (State Implementation Plan or SIP) or the Detection Limits for Reporting Purposes (DRLs) published by the Department of Public Health that are below the controlling water quality criteria concentrations listed in Attachment H of this Order. In cases where the controlling water quality criteria concentration are below the detection limits of all approved analytical methods, the best available procedure must be utilized that meets the lowest of the ML and DRL. You are not required to use these specified procedures as long as the procedure you select achieves the desired minimum detection level. All analyses must be performed by a California certified environmental analytical laboratory.

- c. Dioxin and Furan Sampling (Attachment I).** Section 3 of the SIP has specific requirements for collecting samples for analysis of dioxin and furan congeners. Briefly, for dischargers classified as minor (as would be typical for this Order based on USEPA specific ratings criteria), one sample from upstream in the receiving water and one sample from the treatment system discharge must be collected and analyzed. Dioxin and furan sampling is not required for Dischargers previously enrolled under Order No. R6T-2004-0025.

C. Wastewater Treatment System

A description of the treatment facility is needed to assure that all waste streams are accounted for, and to aid in design of the monitoring program.

1. A detailed narrative description and schematic presentation of the proposed treatment system, including all processes.
2. Descriptions of the nature and concentration of any chemical additive used for treatment must be included. If the proposed treatment system uses activated carbon, submit an estimate of the breakthrough time for each carbon treatment unit. If the operations and maintenance included backflushing, or other required treatment for maintenance, then a full description of any discharges associated with these procedures must be included.
3. An estimate of the average, maximum and any variation in flows, as well as the design flows (hydraulic and treatment) for the treatment system. All necessary sizing calculations to accommodate the treatment volume must be included.
4. An operation plan describing general operations, maintenance procedures and process controls. Information on the provisions for stand-by power must be provided.
5. A description of the proposed performance-monitoring system utilized to determine that the treatment and disposal system is in compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements.
6. A spill plan including the preventive and contingency measures for controlling accidental discharges and for minimizing the effect of such an event.
7. Information required to assess protection of the treatment facility from floods and frost.
8. A narrative and schematic description of the proposed extraction system. A discussion of the number, location and pumping rates of the extraction wells.

D. Receiving Water

1. Provide information on the water quality of the receiving water. Analytical results should be provided for all constituents found in the waste stream as listed under B.1 and B.2 above. Additional analysis may be requested by Water Board staff.
2. Descriptions of the direction and magnitude of flows. Sources and seasonal flow variations for surface water and irrigation supply must be provided.

- 3.** Conduct an analysis of the impact of the wastewater discharge on the receiving water quality. Calculations should be performed for the range of dilution conditions expected to be found in the receiving waters. All assumptions should be stated and a sample calculation should be included, demonstrating requirements with receiving water quality objectives.

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 Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the 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 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 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) that 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 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
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i).)
 - b. "Severe property damage" means substantial physical damage to property or damage to the treatment facilities that 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 that 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 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));

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 Water Board Executive Officer at any time. (40 CFR 122.41(j)(2).)

B. 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).)

C. 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 Water Board, State Water Board, or USEPA within a reasonable time, any information that the 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 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 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 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 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 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).)

C. 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 Water Board or State Water Board. (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 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 form specified by the 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).)

D. 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).)

E. Twenty-Four 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) 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 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).)

F. Planned Changes

The Discharger shall give notice to the 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).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the 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).)

H. 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).)

I. 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 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 Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, Sections 13385, 13386, and 13387.

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 CFR 122.42(a)):

- 1.** That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR 122.42(a)(1)):
 - a.** 100 micrograms per liter ($\mu\text{g/L}$) (40 CFR 122.42(a)(1)(i));
 - b.** 200 $\mu\text{g/L}$ for acrolein and acrylonitrile; 500 $\mu\text{g/L}$ for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 CFR 122.42(a)(1)(ii));
 - c.** Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge or Notice of Intent (40 CFR 122.42(a)(1)(iii)); or
 - d.** The level established by the Water Board in accordance with Section 122.44(f). (40 CFR 122.42(a)(1)(iv).)
- 2.** That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR 122.42(a)(2)):
 - a.** 500 micrograms per liter ($\mu\text{g/L}$) (40 CFR 122.42(a)(2)(i));
 - b.** 1 milligram per liter (mg/L) for antimony (40 CFR 122.42(a)(2)(ii));

- c.** Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge or Notice of Intent (40 CFR 122.42(a)(2)(iii)); or
- d.** The level established by the Water Board in accordance with Section 122.44(f). (40 CFR 122.42(a)(2)(iv).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Title 40 of the Code of Federal Regulations at Section 122.48 (40 CFR 122.48) requires that all National Pollutant Discharge Elimination System (NPDES) permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Water Board to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

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 or in the Notice of Applicability (NOA) 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 not be changed without notification to and the approval of the Water Board.
- B.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- C.** Laboratories analyzing monitoring samples shall be certified by the Department of Public Health (DPH; formerly the Department of Health Services), in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports.
- D.** All monitoring instruments and devices used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
- E.** Monitoring results, including non-compliance, shall be reported at intervals and in a manner specified in this Monitoring and Reporting Program.

II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description (Include Latitude and Longitude when available)
--	INF-001	Shall be located after the last connection and before the wastes enter the treatment system.
001	EFF-001	Shall be located immediately downstream of the last connection through which wastes can be admitted into the outfall.
--	RSW-001	Upstream from the discharge point at a location specified in the NOA.
--	RSW-002	No greater than 100 feet downstream of the discharge point at a location specified in the NOA.

III. INFLUENT MONITORING REQUIREMENTS**Monitoring Location INF-001**

The Discharger shall monitor the influent to the treatment system as follows. Specific constituents to be monitored will be identified in the NOA.

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Benzene	µg/L	Grab ¹	2,3	EPA Method 8260B
1,1-Dichloroethane	µg/L	Grab ¹	2,3	EPA Method 8260B
1,2-Dichloroethane	µg/L	Grab ¹	2,3	EPA Method 8260B
1,1-Dichloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
cis-1,2-Dichloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
trans-1,2-Dichloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
Ethylbenzene	µg/L	Grab ¹	2,3	EPA Method 8260B
Ethylene Dibromide	µg/L	Grab ¹	2,3	EPA Method 8011
Lead, Total Recoverable	µg/L	Grab ¹	2,3	EPA Method 7000
Methyl Tertiary Butyl Alcohol	µg/L	Grab ¹	2,3	EPA Method 8260B
Naphthalene	µg/L	Grab ¹	2,3	EPA Method 8271
Tertiary Butyl Alcohol	µg/L	Grab ¹	2,3	EPA Method 8260B
Tetrachloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
Toluene	µg/L	Grab ¹	2,3	EPA Method 8260B
Total Petroleum Hydrocarbons, Gasoline Range (C ₆ – C ₁₀)	µg/L	Grab ¹	2,3	EPA Method 8015 Modified
Total Petroleum Hydrocarbons, Diesel Range (C ₁₀ – C ₂₈)	µg/L	Grab ¹	2,3	EPA Method 8015 Modified
1,1,1-Trichloroethane	µg/L	Grab ¹	2,3	EPA Method 8260B
1,1,2-Trichloroethane	µg/L	Grab ¹	2,3	EPA Method 8260B
Trichloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
Vinyl Chloride	µg/L	Grab ¹	2,3	EPA Method 8260B
Xylenes, Total	µg/L	Grab ¹	2,3	EPA Method 8260B

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
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- ¹ Time of collection for grab samples must be discretely recorded.
- ² Specific constituents to be monitored shall be identified in the NOA. The minimum sampling frequency for constituents identified in the NOA shall be as follows:
- a. During the first 2 months of treatment system operation, influent samples shall be collected on the 1st, 4th, 14th, 28th, and 56th days of operation.
 - b. During the third to sixth month, influent sampling shall be conducted every 30 days.
 - c. Thereafter, influent sampling shall be conducted every 90 days.

Sampling shall be conducted at a minimum according to the above schedule, and frequently enough to ensure that the effluent is in compliance with the discharge specifications of the permit. Site-specific conditions, such as monitoring for potential breakthrough of the treatment system, may require more frequent monitoring.

- ³ Under certain adverse conditions, more frequent sampling is required if it is appropriate. An adverse condition is defined as any problem that does or could affect treatment facility compliance or efficiency. If at any time the system is shut down for a continuous time period greater than 60 days, the influent monitoring schedule described in Footnote 2 above must be reinitiated unless otherwise specifically approved by the Executive Officer.

IV. EFFLUENT MONITORING REQUIREMENTS

Monitoring Location EFF-001

The Discharger shall monitor the effluent from the treatment system as follows. Specific constituents to be monitored will be identified in the NOA.

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Average Daily Flow Rate	GPD	Estimate	1/Day	--
Total Volume of Wastewater	gallons	Estimate	1/Day	--
Benzene	µg/L	Grab ¹	2,3	EPA Method 8260B
1,1-Dichloroethane	µg/L	Grab ¹	2,3	EPA Method 8260B
1,2-Dichloroethane	µg/L	Grab ¹	2,3	EPA Method 8260B
1,1-Dichloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
cis-1,2-Dichloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
trans-1,2-Dichloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
Ethylbenzene	µg/L	Grab ¹	2,3	EPA Method 8260B
Ethylene Dibromide	µg/L	Grab ¹	2,3	EPA Method 8011
Lead, Total Recoverable	µg/L	Grab ¹	2,3	EPA Method 7000
Methyl Tertiary Butyl Alcohol	µg/L	Grab ¹	2,3	EPA Method 8260B
Naphthalene	µg/L	Grab ¹	2,3	EPA Method 8271
Tertiary Butyl Alcohol	µg/L	Grab ¹	2,3	EPA Method 8260B
Tetrachloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
Toluene	µg/L	Grab ¹	2,3	EPA Method 8260B
Total Petroleum Hydrocarbons, Gasoline Range (C ₆ – C ₁₀)	µg/L	Grab ¹	2,3	EPA Method 8015 Modified

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total Petroleum Hydrocarbons, Diesel Range (C ₁₀ – C ₂₈)	µg/L	Grab ¹	2,3	EPA Method 8015 Modified
1,1,1-Trichloroethane	µg/L	Grab ¹	2,3	EPA Method 8260B
1,1,2-Trichloroethane	µg/L	Grab ¹	2,3	EPA Method 8260B
Trichloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
Vinyl Chloride	µg/L	Grab ¹	2,3	EPA Method 8260B
Xylenes, Total	µg/L	Grab ¹	2,3	EPA Method 8260B

¹ Time of collection for grab samples must be discretely recorded.

² Specific constituents to be monitored shall be identified in the NOA. The minimum sampling frequency for constituents identified in the NOA shall be as follows:

- a. During the first 2 months of treatment unit operation, effluent samples shall be collected on the 1st, 4th, 14th, 28th, and 56th days of operation.
- b. During the third to sixth month, effluent sampling shall be conducted every 30 days.
- c. Thereafter, effluent sampling shall be conducted every 90 days.

Sampling shall be conducted at a minimum according to the above schedule, and frequently enough to ensure that the effluent is in compliance with the discharge specifications of the permit. Site-specific conditions, such as monitoring for potential breakthrough of the treatment system, may require more frequent monitoring.

³ Under certain adverse conditions, more frequent sampling is required if it is appropriate. An adverse condition is defined as any problem that does or could affect treatment facility compliance or efficiency. If at any time the system is shut down for a continuous time period greater than 60 days, the effluent monitoring schedule described in Footnote 2 above must be reinitiated unless otherwise specifically approved by the Executive Officer.

V. WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

A. Acute WET Testing

1. The presence of acute toxicity shall be determined as specified in the U.S. Environmental Protection Agency's (USEPA) acute toxicity test methods in 40 CFR Part 136 for the *Pimephales promelas* survival test.
2. Dischargers that were not enrolled under Order No. R6T-2004-0025 shall conduct WET tests on grab samples of undiluted effluent and an appropriate control water, as specified in the test method, upon startup of the treatment facility.
3. Where possible, the Discharger shall perform both acute WET testing and chemical-specific testing for parameters limited by this Order for which a grab sample is required using a split sample.
4. Acute WET results shall be reported in percent survival.
5. Concurrent testing with reference toxicants shall be conducted using the same test conditions as the effluent toxicity test (i.e., same test duration, etc.).

6. If either the reference toxicant tests or the effluent tests do not meet all test acceptability criteria as specified in the test methods manual, the Discharger must re-sample and re-test within 14 days of receiving the results of the failed test.
7. The Discharger shall submit a full report of acute WET testing as soon as the laboratory results are available that includes: (1) the toxicity test results; (2) the dates of sample collection and initiation of each toxicity test; and (3) the flow rate at the time of sample collection.
8. If survival is less than 90 percent in the initial sample, the Discharger shall conduct acute WET testing one time per month. When three consecutive monthly tests demonstrate a survival rate of greater than 90 percent of the test organisms, the Discharger may discontinue acute WET testing.
9. If any of the accelerated (monthly) tests demonstrate a survival rate of less than 70 percent, the Discharger shall initiate a Toxicity Reduction Evaluation in accordance with the requirements of Section VII.C.2.a of the Order.

B. Chronic WET Testing

1. The presence of chronic toxicity shall be determined as specified in USEPA's short-term chronic toxicity test methods in 40 CFR Part 136 for *Ceriodaphnia dubia* survival and reproduction and *Pimephales promelas* larval survival and growth.
2. Dischargers that were not enrolled under Order No. R6T-2004-0025 shall conduct chronic WET tests on undiluted (100% effluent) grab samples and shall use an appropriate control water, as specified in the test method, upon startup of the treatment facility.
3. Where possible, the Discharger shall perform both chronic WET testing and chemical-specific testing for parameters limited by this Order for which a grab sample is required using a split sample.
4. For routine testing, Analysis of Variance (ANOVA) with $\alpha = 0.05$ shall be used to determine whether differences between control and effluent data are significant.
5. If a chronic toxicity test indicates a statistically significant difference between a sample of 100% effluent and a control, the Discharger shall initiate accelerated chronic WET testing at a frequency of one time per month.
6. Accelerated chronic WET results shall be reported in TUC where:

$$TUC = 100 / NOEC$$

NOEC = No Observed Effect Concentration: the highest concentration of effluent to which organisms are exposed in a chronic test that causes no observable adverse effect on the test organisms (e.g., the highest concentration of effluent to which the values for the observed response show no statistically significant difference from a control).

Accelerated chronic WET testing shall use a series of five dilutions and a control. The dilutions shall be 12.5, 25, 50, 75, and 100 percent effluent, along with the control (0 percent effluent). Concurrent testing with reference toxicants shall be conducted using the same test conditions as the effluent toxicity test (i.e., same test duration, etc.).

7. When three consecutive accelerated monthly tests demonstrate no chronic toxicity, which is defined as WET test results not exceeding 1.0 TUC, the Discharger may discontinue chronic WET testing.
8. If either the reference toxicant tests or the effluent tests do not meet all test acceptability criteria as specified in the test methods manual, the Discharger must re-sample and re-test within 14 days of receiving the results of the failed test.
9. The Discharger shall submit a full report of chronic WET testing as soon as the laboratory results are available that includes: (1) the toxicity test results; (2) the dates of sample collection and initiation of each toxicity test; and (3) the flow rate at the time of sample collection.
10. If any of the accelerated (monthly) tests demonstrate chronic toxicity ($TUC > 1.0$), the Discharger shall initiate a Toxicity Reduction Evaluation in accordance with the requirements of Section VII.C.2.a of the Order.

VI. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

Monitoring Locations RSW-001 and RSW-002

The Discharger shall monitor the receiving water at RSW-001 and RSW-002 as follows. Specific constituents to be monitored shall be identified in the NOA.

Table E-4. Receiving Water Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Benzene	µg/L	Grab ¹	^{2,3}	EPA Method 8260B
1,1-Dichloroethane	µg/L	Grab ¹	^{2,3}	EPA Method 8260B
1,2-Dichloroethane	µg/L	Grab ¹	^{2,3}	EPA Method 8260B
1,1-Dichloroethene	µg/L	Grab ¹	^{2,3}	EPA Method 8260B
cis-1,2-Dichloroethene	µg/L	Grab ¹	^{2,3}	EPA Method 8260B
trans-1,2-Dichloroethene	µg/L	Grab ¹	^{2,3}	EPA Method 8260B
Ethylbenzene	µg/L	Grab ¹	^{2,3}	EPA Method 8260B
Ethylene Dibromide	µg/L	Grab ¹	^{2,3}	EPA Method 8011
Lead, Total Recoverable	µg/L	Grab ¹	^{2,3}	EPA Method 7000
Methyl Tertiary Butyl Alcohol	µg/L	Grab ¹	^{2,3}	EPA Method 8260B
Naphthalene	µg/L	Grab ¹	^{2,3}	EPA Method 8271
Tertiary Butyl Alcohol	µg/L	Grab ¹	^{2,3}	EPA Method 8260B
Tetrachloroethene	µg/L	Grab ¹	^{2,3}	EPA Method 8260B
Toluene	µg/L	Grab ¹	^{2,3}	EPA Method 8260B

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Total Petroleum Hydrocarbons, Gasoline Range (C ₆ – C ₁₀)	µg/L	Grab ¹	2,3	EPA Method 8015 Modified
Total Petroleum Hydrocarbons, Diesel Range (C ₁₀ – C ₂₈)	µg/L	Grab ¹	2,3	EPA Method 8015 Modified
1,1,1-Trichloroethane	µg/L	Grab ¹	2,3	EPA Method 8260B
1,1,2-Trichloroethane	µg/L	Grab ¹	2,3	EPA Method 8260B
Trichloroethene	µg/L	Grab ¹	2,3	EPA Method 8260B
Vinyl Chloride	µg/L	Grab ¹	2,3	EPA Method 8260B
Xylenes, Total	µg/L	Grab ¹	2,3	EPA Method 8260B

¹ Time of collection for grab samples must be discretely recorded.

² Specific constituents to be monitored shall be identified in the NOA. The minimum sampling frequency for constituents identified in the NOA shall be as follows:

- a. During the first 2 months of treatment unit operation, receiving water samples shall be collected on the 1st, 4th, 14th, 28th, and 56th days of operation.
- b. During the third to sixth month, influent sampling shall be conducted every 30 days.
- c. Thereafter, influent sampling shall be conducted every 90 days.

Sampling shall be conducted at a minimum according to the above schedule, and frequently enough to ensure that the effluent is in compliance with the discharge specifications of the permit. Site-specific conditions, such as monitoring for potential breakthrough of the treatment system, may require more frequent monitoring.

³ Under certain adverse conditions, more frequent sampling is required if it is appropriate. An adverse condition is defined as any problem that does or could affect treatment facility compliance or efficiency. If at any time the system is shut down for a continuous time period greater than 60 days, the receiving water monitoring schedule described in Footnote 2 above must be reinitiated unless otherwise specifically approved by the Executive Officer.

In conducting any receiving water sampling in accordance with the required sampling frequency, a log shall be kept of the receiving water conditions throughout the reach bounded by RSW-001 and RSW-002. Attention shall be given to the presence or absence of:

- a. Floating or suspended matter;
- b. Discoloration;
- c. Bottom deposits;
- d. Aquatic life;
- e. Erosion and/or sediment deposition.

Notes on receiving water conditions shall be maintained in a permanent logbook and summarized in the monitoring report.

VII. OTHER MONITORING REQUIREMENTS

Treatment Facility Startup Monitoring

After issuance of an NOA from the Executive Officer and prior to disposal of any treatment effluent, the Discharger shall conduct startup monitoring to confirm that the

treatment unit will produce effluent that complies with standards prescribed in the Order. During startup monitoring, the Discharger shall direct the treatment unit discharge to a temporary, impervious storage container. Startup monitoring shall be conducted until two consistent, consecutive sample results indicate that the treatment system effluent has stabilized and is in compliance with the Order. Samples shall be collected a minimum of 12 hours and a maximum of 72 hours apart. Only treatment unit effluent is required to be analyzed during startup monitoring for the constituents listed in Table E-3. Any treatment system discharge that does not meet discharge specifications for effluent (Table 3 - Effluent Limitations) shall not be discharged to surface waters.

VIII. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the Water Board or State Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board’s California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under Sections III through IX. The Discharger shall submit **quarterly** SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-5. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
All	NOA effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	April 15 July 15 October 15 January 15

4. **Reporting Protocols.** The Discharger 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.

The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

- a. 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).
- b. Sample results less than the 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.

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.

- c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.
 - d. 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 is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.
- 5. Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above. For purposes of reporting and administrative enforcement by the Water Board and State Water Board, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).
- 6.** The Discharger shall submit SMRs in accordance with the following requirements:
- a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the treatment facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

- b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions.
- c. SMRs must be submitted to the Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

C. Other Reports

Annual Report. Upon written request, the Discharger shall submit an annual report to the Water Board by January 30th of the following year. The report shall contain tabular, graphic, and narrative descriptions of the monitoring data obtained during the previous year. Additionally, the report shall clearly document the status of compliance with the Order. If any corrective actions were necessary during the year to maintain or retain compliance, this annual report shall discuss these actions in detail.

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ATTACHMENT F – FACT SHEET

As described in Section III of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. Only those sections or subsections of this Order that are specifically identified as “not applicable” have been determined not to apply to the Discharger. Sections or subsections of this Order not specifically identified as “not applicable” are fully applicable to the Discharger.

I. PERMIT INFORMATION

A. Background

Dischargers of treated groundwater to surface waters of the United States from cleanups of identified or potential pollution are currently regulated by Order No. R6T-2004-0025 which was adopted on June 9, 2004 and expired on June 9, 2009. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.

B. General Criteria

1. This Order serves as a general NPDES Permit for discharges to surface waters of treated groundwater from cleanups of identified or potential pollution. Wastewater remediated by the treatment unit may typically be generated from the following sources during the investigation and/or remediation of identified or potential groundwater pollution:
 - a. Groundwater extracted from the underlying aquifer as part of the groundwater remediation process;
 - b. Potentially polluted groundwater generated during aquifer pump tests;
 - c. Potentially polluted well development water or purge water generated during groundwater monitoring; and
 - d. Other wastewater generated during site investigations or cleanups.
2. This Order does not cover the following:
 - a. Treated wastewaters discharged (with permission of the owner of the municipal system) to a municipal wastewater collection, treatment, and disposal system that is already covered by WDRs from the Water Board; or

- b.** Discharges to ponds, infiltration basins, spray disposal areas, subsurface infiltration, or other methods not involving discharge to surface waters or surface water drainage courses (which are covered by individual WDRs or by general WDRs for land disposal adopted by the Water Board).

II. NOTIFICATION REQUIREMENTS

- A.** To obtain authorization for discharges under this Order, the Discharger for the project must submit a Notice of Intent (NOI) form (Attachment B) with an appropriate filing fee. Information necessary to support the application is listed in Information to Support the Discharge of Treated Groundwater to Surface Water (Attachment C). The Discharger shall be required to conduct monitoring and reporting and should submit any available data relevant to the proposed discharge and the receiving water with the NOI. The Discharger shall be authorized to discharge under the terms and conditions of this Order only after receiving a written Notice of Applicability (NOA) from the Water Board Executive Officer, or his or her designee.
- B.** As discussed further in Section V.C.3 of this Fact Sheet, Dischargers applying for coverage under this Order are required to submit data on the effluent and the receiving water sufficient to determine if any water quality-based effluent limitations (WQBELs) are required in a discharge permit pursuant to the California Toxics Rule (CTR). If the data shows concentrations greater than the CTR water quality criteria of one or more of the 126 priority pollutants, a separate individual permit may be required to establish WQBELs, if necessary.
- C.** Dischargers applying for coverage under this Order are required to provide the current State Water Board adopted permit fee, plus applicable surcharge(s). The current fee for discharges with a Threat/Complexity rating of 2B (i.e., those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance and that has physical, chemical, or biological treatment systems) is \$8,769 (\$8,008 plus 9.5% ambient water monitoring surcharge or appropriate current fee for Threat to Water Quality 2 and Complexity A).

III. DISCHARGE DESCRIPTION

A. Discharge Description

Numerous unauthorized releases of petroleum products and chlorinated hydrocarbon pollutants have impacted groundwaters of the Lahontan Region. Releases occur from leaking underground and aboveground fuel tanks and other unauthorized discharges. Several treatment technologies currently employed for remediation include the extraction and aboveground treatment of groundwater. Such methods may include disposal to nearby surface waters.

The discharge of water from a groundwater treatment unit to surface waters is a discharge of waste that could affect the quality of the waters of the United States. This Order covers the discharge of treated groundwater from cleanups of identified or

potential pollution, other than through a community wastewater collection and treatment facility, to surface waters of the United States.

The primary pollutants contained in discharges covered by this Order are petroleum hydrocarbon and chlorinated hydrocarbon constituents. Petroleum hydrocarbon constituents include total petroleum hydrocarbons measured as gasoline, diesel, kerosene, fuel oil, and heavier carbon ranges; benzene, toluene, ethylbenzene, xylenes; methyl tertiary butyl ether; tetraethyl lead; and ethylene dibromide. Chlorinated hydrocarbon constituents include trichloroethene and tetrachloroethene and their secondary degradation products. However, other constituents may be present in the groundwater to be treated.

B. Summary of Existing Requirements

Effluent limitations contained in Order No. R6T-2004-0025 for discharges of treated groundwater from cleanups of pollution to surface waters are as follows:

Table F-1. Historic Effluent Limitations

Parameter	Units	Effluent Limitation	
		30-Day Median	Maximum Daily
Total Petroleum Hydrocarbons (C ₂ -C ₄₆)	µg/L	<50	100
Benzene	µg/L	<0.50	1.0
Toluene	µg/L	<0.50	42.0
Ethylbenzene	µg/L	<0.50	29.0
Total Xylenes	µg/L	<0.50	17.0
Total Lead	µg/L	<1.0 ¹	15.0
Naphthalene	µg/L	<0.5	20
Methyl Tertiary Butyl Ether	µg/L	<0.5	5
Tertiary Butyl Alcohol	µg/L	<5.0	50
Ethylene Dibromide	µg/L	<0.02	0.02
1,2-Dichloroethane	µg/L	<0.50	0.50
1,1,1-Trichloroethane	µg/L	<0.50	200
Tetrachloroethene	µg/L	<0.50	5.0
Trichloroethene	µg/L	<0.50	5.0
trans-1,2-Dichloroethene	µg/L	<0.50	10
cis-1,2-Dichloroethene	µg/L	<0.50	6
1,1-Dichloroethene	µg/L	<0.50	6
1,1-Dichloroethane	µg/L	<0.50	5
1,1,2-Trichloroethane	µg/L	<0.50	32
Vinyl Chloride	µg/L	<0.50	0.50

¹ This 30-day median limit could be set above 1.0 µg/L if the Discharger can demonstrate in the NPDES Permit Application that background total lead concentrations in the receiving water are greater than 1.0 µg/L. Any 30-day median limit allowed above 1.0 µg/L will be listed in the NOA. All samples for total lead are to be filtered samples.

IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to Section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the Water Code (commencing with Section 13370). It shall serve as a NPDES permit for point source discharges of treated groundwater from the investigation and remediation of identified and potential groundwater pollution to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with Section 13260).

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act) was amended to provide that the discharge of pollutants to waters of the United States from any point source is effectively prohibited unless the discharge is in compliance with an NPDES Permit.

On 22 September 1989, USEPA granted the State of California, through the State Water Resources Control Board (State Water Board) and Regional Water Boards, the authority to issue general NPDES permits pursuant to 40 Code of Federal Regulations (CFR) Parts 122 and 123.

40 CFR 122.28 provides for issuance of general permits to regulate a category of point sources if the sources involve the same or substantially similar types of operations; discharge the same type of waste; require the same type of effluent limitations or operating conditions; require similar monitoring; and are more appropriately regulated under a general order rather than individual orders.

B. California Environmental Quality Act (CEQA)

Under Water Code Section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code Sections 21000 through 21177.

C. State and Federal Regulations, Policies, and Plans

1. Water Quality Control Plans. The Water Board adopted the *Water Quality Control Plan for the Lahontan Region* (hereinafter Basin Plan) on March 31, 1995 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. Requirements of this Order implement the Basin Plan.

Designated beneficial uses of many surface waters within the Lahontan Region 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 industrial service supply (IND); industrial process supply (PRO); hydropower generation (POW); navigation (NAV); preservation of biological habitats of special significance (BIOL); aquaculture (AQUA); warm freshwater habitat (WARM); inland saline water habitat (SAL); rare, threatened, or endangered species (RARE); and migration of aquatic organisms (MIGR). Table 2-1 in the Basin Plan may be consulted for the beneficial use designations for any specific 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.

Designated beneficial uses of groundwater for typical locations within named groundwater basins in the Lahontan Region are MUN, AGR, IND, and FRSH. Select named groundwater basins include designations for AQUA and WILD. Unnamed groundwater basins have the MUN designation. Table 2-2 in the Basin Plan may be consulted for the beneficial use designations for any specific groundwater basin.

- 2. National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- 3. State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.
- 4. 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.

- 5. 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. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of 40 CFR 131.12 and State Water Board Resolution No. 68-16. No change is proposed from the existing permitted discharge and thus no degradation is anticipated or authorized.
- 6. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR Section 122.44(l) 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. All effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R6T-2004-0025. Therefore, this Order is in compliance with the anti-backsliding provisions of 40 CFR 122.44.

D. Impaired Water Bodies on CWA 303(d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Water Board plans to develop and adopt total maximum daily loads (TMDLs) that will specify Waste Load Allocations (WLAs) for point sources, and load allocations (LAs) for non-point sources, as appropriate. On June 28, 2007 USEPA gave final approval to California's 2006 Section 303(d) List of Water Quality Limited Segments. Enrollees under this Order that discharge to these impaired water bodies may be required to collect discharge monitoring data applicable to developing appropriate future WLAs for the discharge.

V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

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 CFR: 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 WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

The discharge prohibitions are based on the requirements of the Basin Plan, State Water Board plans and policies, the Water Code, and provisions previously established in Order No. R6T-2004-0025, which are consistent with the requirements set for other discharges in the Lahontan Region.

The proposed discharges covered by this Order are waters that are treated by methods to achieve non-detectable constituent concentrations. The discharge specifications of this Order contain an average monthly effluent limitation (AMEL) of less than laboratory detection limits and a maximum daily effluent limitation (MDEL) that is protective of water quality objectives. The discharge allowed by this Order will not individually or collectively, directly or indirectly, affect water quality or result in a pollution or nuisance. Therefore, the proposed discharges may be granted an exception to certain waste discharge prohibitions.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR 122.44 requires 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 effluent limitations 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 Order were developed to ensure protection of the beneficial uses of receiving waters in the Lahontan Region (see Section V.C below).

The CWA requires that technology-based effluent limitations 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.

2. Applicable Technology-Based Effluent Limitations

As described in Section III.A of this Fact Sheet, the primary pollutants contained in discharges covered by this Order are petroleum hydrocarbon and chlorinated hydrocarbon constituents. Petroleum hydrocarbon constituents include total petroleum hydrocarbons measured as gasoline, diesel, kerosene, fuel oil, and heavier carbon ranges; benzene; toluene; ethylbenzene; xylenes; MTBE; tetraethyl lead; and ethylene dibromide. Chlorinated hydrocarbon constituents include trichloroethene and tetrachloroethene and their secondary degradation products. Existing wastewater treatment technology is capable of dependably removing these constituents to concentrations that are generally non-detectable by current analytical technology.

Appendix 4 of the SIP identifies Minimum Levels (MLs) for priority pollutants for use in reporting and compliance determination purposes. Pollutants of concern with applicable MLs in the SIP include 1,2-dichloroethane, benzene, toluene, ethylbenzene, naphthalene, lead, tetrachloroethene, trichloroethene, 1,1,1-trichloroethane, trans-1,2-dichloroethene, 1,1-dichloroethene, 1,1-dichloroethane, 1,1,2-trichloroethane, and vinyl chloride. Except for naphthalene and lead, the technology-based effluent limitations established in Order No. R6T-2004-0025 are consistent with the lowest MLs contained in the SIP. Therefore, the technology-based effluent limitations for those parameters will be retained in this Order. For naphthalene and lead, the lowest MLs in the SIP are lower than the technology-based effluent limitations established in Order No. R6T-2004-0025. Therefore, this Order revises the technology-based effluent limitations for naphthalene and lead to be consistent with the lowest MLs in the SIP.

Some pollutants of concern, including ethylene dibromide, xylenes, MTBE, tertiary butyl alcohol, and cis-1,2-dichloroethene, do not have MLs in the SIP. For these pollutants, Order No. R6T-2004-0025 established technology-based effluent limitations based on the commonly achieved reporting levels at that time. Because these levels have not changed during the term of Order No. R6T-2004-0025, this Order retains the technology-based effluent limitations for these parameters.

Order No. R6T-2004-0025 established a technology-based effluent limitation for total petroleum hydrocarbons (C₂ – C₄₆) based on the commonly achieved reporting level at that time (50 µg/L). This Order revises the effluent limitations for total petroleum hydrocarbons to differentiate between the gasoline range (C₆ – C₁₀) and the diesel range (C₁₀ – C₂₈). The current, commonly achieved reporting level for diesel range of total petroleum hydrocarbons is 50 µg/L. Therefore, this Order establishes technology-based effluent limitations for the diesel range of total petroleum hydrocarbons of 50 µg/L, consistent with the current, commonly achieved reporting level of analytical laboratories. For the gasoline range of total petroleum hydrocarbons, the Regional Water Board finds that available technology can consistently remove total petroleum hydrocarbons in the gasoline range to 50 µg/L on a daily basis. Therefore, this Order revises the technology-based effluent limitation for total petroleum hydrocarbons in the gasoline range to an MDEL.

Order R6T-2004-0025 established technology-based effluent limitations for these constituents as 30-day median effluent limitations. Consistent with 40 CFR 122.45(d) and recently adopted Orders by the Water Board, 30-day median effluent limitations will be revised to AMELs and the less than value (i.e., <) will be removed. Technology-based effluent limitations, based on the lowest MLs in the SIP and current, commonly achieved reporting levels and established as AMELs, are summarized in the table below along with suggested analytical methods. Alternative analytical methods that provide equivalent reporting levels may be proposed in the NOI or site-specific sampling and analysis program.

Constituents to be monitored shall be identified in the NOA issued to the Discharger. Analytical methods have not been developed for all of the pollutants of concern in discharges of treated groundwater from cleanup of identified or potential groundwater pollution. However, compliance with the effluent limitations for the pollutants listed in Table F-2 is expected to effectively control the discharge of all pollutants of concern in discharges of treated groundwater from cleanup of identified or potential groundwater pollution.

Table F-2. Summary of Technology-based Effluent Limitations

Parameter	Units	Effluent Limitations		Suggested Analytical Method
		Average Monthly	Maximum Daily	
Benzene	µg/L	0.5	--	EPA Method 8260B
1,1-Dichloroethane	µg/L	0.5	--	EPA Method 8260B
1,2-Dichloroethane	µg/L	0.5	--	EPA Method 8260B
1,1-Dichloroethene	µg/L	0.5	--	EPA Method 8260B
cis-1,2-Dichloroethene	µg/L	0.5	--	EPA Method 8260B
trans-1,2-Dichloroethene	µg/L	0.5	--	EPA Method 8260B
Ethylbenzene	µg/L	0.5	--	EPA Method 8260B
Ethylene Dibromide	µg/L	0.02	--	EPA Method 8011
Lead, Total Recoverable	µg/L	0.5	--	EPA Method 7000
Methyl Tertiary Butyl Ether	µg/L	0.5	--	EPA Method 8260B

Parameter	Units	Effluent Limitations		Suggested Analytical Method
		Average Monthly	Maximum Daily	
Naphthalene	µg/L	0.2	--	EPA Method 8271
Tertiary Butyl Alcohol	µg/L	5.0	--	EPA Method 8260B
Tetrachloroethene	µg/L	0.5	--	EPA Method 8260B
Toluene	µg/L	0.5	--	EPA Method 8260B
Total Petroleum Hydrocarbons, Gasoline Range (C ₆ – C ₁₀)	µg/L	--	50	EPA Method 8015 Modified
Total Petroleum Hydrocarbons, Diesel Range (C ₁₀ – C ₂₈)	µg/L	--	50	EPA Method 8015 Modified
1,1,1-Trichloroethane	µg/L	0.5	--	EPA Method 8260B
1,1,2-Trichloroethane	µg/L	0.5	--	EPA Method 8260B
Trichloroethene	µg/L	0.5	--	EPA Method 8260B
Vinyl Chloride	µg/L	0.5	--	EPA Method 8260B
Xylenes, Total	µg/L	0.5	--	EPA Method 8260B

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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, 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).

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, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

As noted in Section IV.C.1 of this Fact Sheet, beneficial uses of surface waters within the Lahontan Region include MUN, AGR, GWR, FRSH, REC-1, REC-2, COLD, SPWN, COMM, WILD, WQE, FLD, IND, PRO, POW, NAV, BIOL, AQUA, WARM, SAL, RARE, and MIGR.

The Basin Plan includes both narrative and numeric water quality objectives applicable to receiving waters in the Lahontan Region. In addition, priority pollutant water quality criteria in the CTR are applicable to receiving waters in the Lahontan Region.

3. Determining the Need for WQBELs

CTR Parameters (Priority Pollutants)

Dischargers applying for coverage under this Order are required to submit data on the effluent and the receiving water sufficient to determine if any WQBELs are required in a discharge permit pursuant to the CTR. It is the Discharger's responsibility to provide information requested by the Water Board for use in the analysis prior to NOA issuance. Attachment G, Water Quality Objectives for Priority Pollutants, lists 126 priority pollutants and their applicable water quality objectives. Attachment H, Priority Pollutants to be Monitored, lists all 126 priority pollutants but also lists each pollutant's criterion concentration and basis, suggested analytical testing method, and minimum laboratory reporting level. Attachment I lists the dioxin and furan sampling requirements. Dioxin and furan sampling is not required for Dischargers previously enrolled under Order No. R6T-2004-0025.

If the data shows concentrations effluent greater than the CTR water quality objectives of one or more of the 126 priority pollutants, a separate individual permit may be required to establish WQBELs, if necessary. The Discharger is in compliance with the monitoring requirements of the updated Order if they have been subject to, and fully compliant with, the requirements in previous Order No. R6T-2004-0025.

Pollutants of Concern

Order No. R6T-2004-0025 established WQBELs for the pollutants of concern based on water quality objectives necessary to protect water quality in receiving waters throughout the Lahontan Region, which were applied as MDELs.

MDELs established in Order No. R6T-2004-0025 for 1,2-dichloroethane, benzene, methyl tertiary butyl ether, lead, tetrachloroethene, trichloroethene, 1,1,1-trichloroethane, trans-1,2-dichloroethene, cis-1,2-dichloroethene, 1,1-dichloroethene, 1,1-dichloroethane, 1,1,2-trichloroethane, and vinyl chloride were based on primary and secondary drinking water standards established by the State of California as Maximum Contaminant Levels (MCLs) in Title 22 of the California Code of Regulations. Except for 1,1,2-trichloroethane, these MDELs have been

retained in this Order. The MDEL established for 1,1,2-trichloroethane is not consistent with the current Primary MCLs established in Title 22 of the CCR. Therefore, this Order revises the MDEL for 1,1,2-trichloroethane to be consistent with the current Primary MCLs.

USEPA has proposed drinking water standards for a select group of constituents, including toluene, xylenes, and ethylbenzene based on the three threshold odor unit (TOU) concentration (Federal Register, Vol. 54, No. 97, pp. 22138, 22139) that are more stringent than the applicable MCLs. Additionally, USEPA has developed a Suggested No Adverse Effect Level (SNARL) for the one-in-a-million incremental cancer risk estimates for drinking water for ethylene dibromide that is more stringent than the applicable MCL. Because these concentrations are more stringent than applicable MCLs, Order No. R6T-2004-0025 established MDELs based on these levels. These MDELs are retained in this Order.

MCLs have not been developed for naphthalene. Therefore, Order No. R6T-2004-0025 established an MDEL for naphthalene based on USEPA's lifetime Health Advisory Level of 20 µg/L. This MDEL is retained in this Order.

Applicable water quality objectives are not available for tertiary butyl alcohol. In the absence of an applicable water quality objective, Order No. R6T-2004-0025 established an MDEL of 50 µg/L for tertiary butyl alcohol. This MDEL is retained in this Order.

Applicable water quality objectives are not available for total petroleum hydrocarbons. In the absence of an applicable water quality objective, Order No. R6T-2004-0025 established an MDEL of 100 µg/L for total petroleum hydrocarbons (C₂ – C₄₆). This Order revises the effluent limitations for total petroleum hydrocarbons to differentiate between the gasoline range (C₆ – C₁₀) and the diesel range (C₁₀ – C₂₈). This Order establishes an MDEL for the diesel ranges of total petroleum hydrocarbons of 50 µg/L. Because the performance-based MDEL for the gasoline range of total petroleum hydrocarbons of 50 µg/L is more stringent than the MDEL of 100 µg/L established in Order No. R6T-2004-0025, the performance-based effluent limitation of 50 µg/L is established in this Order for the gasoline range of total petroleum hydrocarbons.

4. WQBEL Calculations

As described in Section V.C.3 above, WQBELs for pollutants of concern in discharges authorized by this Order were based on applicable water quality objectives and were established directly as MDELs. Numeric water quality objectives have not been developed for all of the pollutants of concern in discharges of treated groundwater from cleanup of pollution. However, compliance with the effluent limitations for the pollutants listed in Table F-3 is expected to effectively control the discharge of all pollutants of concern in discharges of treated groundwater from cleanup of identified or potential groundwater pollution.

Table F-3. Summary of Water Quality-based Effluent Limitations

Parameter	Units	Maximum Daily Effluent Limitation
Benzene	µg/L	1.0
1,1-Dichloroethane	µg/L	5
1,2-Dichloroethane	µg/L	0.50
1,1-Dichloroethene	µg/L	6
cis-1,2-Dichloroethene	µg/L	6
trans-1,2-Dichloroethene	µg/L	10
Ethylbenzene	µg/L	29
Ethylene Dibromide	µg/L	0.02
Lead, Total Recoverable	µg/L	15
Methyl Tertiary Butyl Ether	µg/L	5
Naphthalene	µg/L	20
Tertiary Butyl Alcohol	µg/L	50
Tetrachloroethene	µg/L	5
Toluene	µg/L	42
Total Petroleum Hydrocarbons, Gasoline Range (C ₆ – C ₁₀)	µg/L	100 ¹
Total Petroleum Hydrocarbons, Diesel Range (C ₁₀ – C ₂₈)	µg/L	100 ¹
1,1,1-Trichloroethane	µg/L	200
1,1,2-Trichloroethane	µg/L	5
Trichloroethene	µg/L	5
Vinyl Chloride	µg/L	0.5
Xylenes, Total	µg/L	17

¹ Although the applicable WQBEL for total petroleum hydrocarbons in the gasoline and diesel ranges is 100 µg/L as an MDEL, this Order establishes a more stringent final MDEL of 50 µg/L based on the performance of available treatment technology.

5. Whole Effluent Toxicity (WET)

WET tests measure the degree of response of exposed aquatic test organisms to an effluent to determine the aggregate toxic effect of a mixture of pollutants in the effluent. The WET approach allows for protection of narrative toxicity objectives or implementation of numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test generally is conducted over a longer period of time or during a critical life phase and may measure mortality, reproduction, growth, or other sub-lethal responses.

The Basin Plan specifies a narrative objective for toxicity, requiring that: *“All waters shall be maintained free of toxic substances in concentrations that are toxic to, or 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 Regional Board. The survival of aquatic life in surface waters subject 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..."

In addition, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters.

Based on the pollutants of concern present in discharges from cleanups of identified or potential groundwater pollution to surface waters, the discharges covered by this Order exhibit reasonable potential to cause or contribute to acute and chronic toxicity in the receiving water. Therefore, this Order includes effluent limitations for acute toxicity which specify that the effluent shall not exhibit acute toxicity, defined as less than 90 percent survival of *Pimephales promelas* in undiluted effluent in greater than or equal to 50 percent of the samples in a calendar year or less than 70 percent survival of *Pimephales promelas* in undiluted effluent in greater than or equal to 10 percent of the samples in a calendar year. For Dischargers that were not covered by Order No. R6T-2004-0025, this Order requires acute and chronic WET testing upon startup of the treatment facility. For discharges that exhibit acute or chronic toxicity, this Order requires accelerated monitoring until the discharge does not cause toxicity. Additional toxicity requirements are included in this Order that are expressed as Provisions and serve as triggers for accelerated testing and initiation of a toxicity reduction evaluation (TRE). Dischargers that were enrolled under Order No. R6T-2004-0025 were required to complete toxicity testing by Order No. R6T-2004-0025 and demonstrate that their discharges do not cause toxicity. Therefore, Dischargers that were enrolled under Order No. R6T-2004-0025 are not required to perform additional toxicity testing.

D. Final Effluent Limitations

1. 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 Order are at least as stringent as the effluent limitations in Order No. R6T-2004-0025.

2. Satisfaction of Antidegradation Policy

Section 131.12 of 40 CFR 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 Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

The 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 Order. Discharges not consistent with the provisions of these policies and regulations are not covered by this Order.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of restrictions on benzene, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, trans-1,2-dichloroethene, ethylbenzene, ethylene dibromide, lead, methyl tertiary butyl ether, naphthalene, tertiary butyl alcohol, tetrachloroethene, toluene, total petroleum hydrocarbons (gasoline and diesel ranges), 1,1,1-trichloroethane, 1,1,2-trichloroethane, trichloroethene, vinyl chloride, and xylenes. Restrictions on these parameters are discussed in Section V.B.2 of this Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

Table F-4. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitations			
		Average Monthly	Basis ¹	Maximum Daily	Basis ¹
Benzene	µg/L	0.5	ML	1.0	MCL
1,1-Dichloroethane	µg/L	0.5	ML	5	MCL
1,2-Dichloroethane	µg/L	0.5	ML	0.50	MCL
1,1-Dichloroethene	µg/L	0.5	ML	6	MCL
cis-1,2-Dichloroethene	µg/L	0.5	PO, RL	6	MCL
trans-1,2-Dichloroethene	µg/L	0.5	ML	10	MCL
Ethylbenzene	µg/L	0.5	ML	29	TO
Ethylene dibromide	µg/L	0.02	PO, RL	0.02	SNARL
Lead, Total Recoverable ³	µg/L	0.5	ML	15	MCL
Methyl tertiary butyl ether	µg/L	0.5	PO, RL	5	SEC MCL
Naphthalene	µg/L	0.2	ML	20	HAL
Tertiary butyl alcohol	µg/L	5.0	PO, RL	50	PO
Tetrachloroethene	µg/L	0.5	ML	5	MCL
Toluene	µg/L	0.5	ML	42	TO
Total petroleum hydrocarbons, gasoline range (C ₂ – C ₁₅)	µg/L	--	--	50	PB
Total petroleum hydrocarbons, diesel range (C ₁₆ – C ₄₆)	µg/L	--	--	50	PB
1,1,1-Trichloroethane	µg/L	0.5	ML	200	MCL
1,1,2-Trichloroethane	µg/L	0.5	ML	5	MCL
Trichloroethene	µg/L	0.5	ML	5	MCL
Vinyl chloride	µg/L	0.5	ML	0.5	MCL
Xylenes, Total	µg/L	0.5	ML	17	TO

Parameter	Units	Effluent Limitations			
		Average Monthly	Basis ¹	Maximum Daily	Basis ¹

- ¹ ML – Based on the Minimum Levels established in Appendix 4 of the SIP.
RL – Based on current, commonly achieved reporting levels.
- ² MCL – Based on the Primary Maximum Contaminant Level.
TO – Based on the three threshold odor unit (TOU) concentration (Federal Register, Vol. 54, No. 97, pp. 22138, 22139).
SNARL – Based on the Suggested No Adverse Effect Level (SNARL) for the one-in-a-million incremental cancer risk estimates for drinking water.
SEC MCL – Based on the Secondary Maximum Contaminant Level.
HAL – Based on USEPA’s Health Advisory Level.
- ³ PB – Performance-based effluent limitation that reflects a level consistently achieved by available technology.
This AMEL could be set above 0.5 µg/L if the Discharger can demonstrate in the NPDES Permit Application that background total lead concentrations in the receiving water are greater than 0.5 µg/L. Any AMEL allowed above 0.5 µg/L will be listed in the NOA. All samples for total lead are to be filtered samples.

VI. RATIONALE FOR RECEIVING WATER LIMITATIONS

Surface Water

The Basin Plan contains numeric and narrative water quality objectives applicable to all surface waters within the Lahontan Region. Water quality objectives include an objective to maintain the high quality waters pursuant to federal regulations (40 CFR 131.12) and State Water Board Resolution No. 68-16. Surface water limitations in this Order are included to ensure protection of background water quality and beneficial uses of the receiving water.

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, 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 MRP for discharges covered by this Order.

A. Influent Monitoring

The purpose of the required influent monitoring is to verify the efficiency of the treatment system. Specific constituents to be monitored shall be identified in the NOA. Sampling shall be conducted at a minimum according to the requirements of the MRP. Site-specific conditions, such as monitoring for potential breakthrough of the treatment system, may require more frequent monitoring.

B. Effluent 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. Specific constituents to be monitored shall be identified in the NOA. Sampling shall be conducted at a minimum according to the requirements of the MRP, and frequently enough to ensure that the effluent is in compliance with the discharge specifications of the permit. Site-specific conditions, such as monitoring for potential breakthrough of the treatment system, may require more frequent monitoring.

C. Whole Effluent Toxicity Testing Requirements

- 1. Acute Toxicity.** For Dischargers not covered by Order No. R6T-2004-0025, this Order requires 96-hour bioassay testing upon startup of the treatment facility to demonstrate compliance with the effluent limitation for acute toxicity. For discharges that exhibit acute toxicity, this Order requires accelerated monitoring until the discharge does not cause toxicity.
- 2. Chronic Toxicity.** For Dischargers not covered by Order No. R6T-2004-0025, this Order requires chronic WET testing upon startup of the treatment facility in order to demonstrate compliance with the Basin Plan's narrative toxicity objective. For discharges that exhibit chronic toxicity, this Order requires accelerated monitoring until the discharge does not cause toxicity.

D. Receiving Water Monitoring

Surface Water

Receiving water monitoring is necessary to assess compliance with receiving water limitations and to assess the impacts of the discharge on the receiving stream. Specific constituents to be monitored shall be identified in the NOA. Sampling shall be conducted at a minimum according to the requirements of the MRP.

E. Other Monitoring Requirements

- 1. Treatment Facility Startup Monitoring.** Consistent with the requirements of Order No. R6-2004-0025, this Order requires Dischargers to conduct startup monitoring to confirm that the treatment unit will produce effluent that complies with the requirements of this Order.

VIII. RATIONALE FOR PROVISIONS

A. Standard 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.

40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. 40 CFR 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

Conditions that necessitate a major modification of a permit are described in 40 CFR Part 122.62 and Part 123.25. Causes for modifications include the promulgation of new standards or regulations, treatment facility alterations or changes in operations, or adoption of new regulations by the Water Board or State Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

a. Toxicity Identification Evaluation (TIE) or Toxicity Reduction Evaluations (TRE). Based on the required acute and chronic WET testing specified at Section V of the Monitoring and Reporting Program (Attachment E), Dischargers that exhibit acute or chronic toxicity are required to submit to the Water Board an initial investigative TRE Work Plan within 45 days of receipt of the laboratory results showing toxicity. The TRE Work Plan generally describes the steps the Discharger intends to follow if acute toxicity is observed during accelerated acute WET testing as specified in the MRP (Attachment E). The TRE Work Plan is required in order to ensure continued compliance with WET limitations and requirements in the Order; to ensure attainment of the toxicity objective in the Basin Plan; and to ensure protection of the beneficial uses of the receiving water.

3. Other Special Provisions

These provisions have been retained from Order No. R6-2004-0025.

IX. PUBLIC PARTICIPATION

The Water Board is considering the issuance of WDRs that will serve as a NPDES permit for discharges of treated groundwater from cleanups of pollution to surface waters. As a step in the WDR adoption process, the Water Board staff has developed proposed WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through mail to interested parties and by posting on the Water Board's Internet Web site.

B. Written Comments

The staff determinations are proposed. Interested persons are invited to submit written comments concerning these proposed WDRs. Comments must be submitted either in person or by mail to the Executive Officer at the Water Board at the address above on the cover page of this Order.

To be fully considered by staff and the Water Board, written comments must be received at the Water Board offices by 5:00 p.m. on April 25, 2010.

C. Public Hearing

The Water Board will provide opportunity for a public hearing on the proposed WDRs if so requested by a Discharger or an interested person during its regular Board meeting on the following date and time and at the following location:

Date: June 9, 2010
Time: As specified in the meeting agenda announcement
Location: As specified in the meeting agenda announcement

Interested persons are invited to attend. At the public meeting, the 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 you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must *receive* the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, state holiday, or furlough day, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at

http://www.waterboards.ca.gov/public_notices/petitions/water_quality. Hard copies will be provided upon request by calling (530) 542-5400.

E. Information and Copying

The proposed effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the 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 Water Board, reference this Order, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Richard Booth, Senior Engineering Geologist, at (530) 542-5574.

ATTACHMENT G – WATER QUALITY OBJECTIVES FOR PRIORITY POLLUTANTS

CTR No.	Priority Pollutant	CAS No.	Water Quality Objective (µg/L)
INORGANICS			
1	Antimony	7440360	14
2	Arsenic	7440382	150
15	Asbestos	1332214	7 MFL
3	Beryllium	7440417	None Specified
4	Cadmium	7440439	4.3 (a)
5a	Chromium (III)	7440473	550 (a)
5b	Chromium (VI)	18540299	180
6	Copper	7440508	4.1 (a)
14	Cyanide	57125	5.2
7	Lead	7439921	65 (a)
8	Mercury	7439976	None Specified
9	Nickel	7440020	470 (a)
10	Selenium	7782492	5
11	Silver	7440224	3.4 (a)
12	Thallium	7440280	1.7
13	Zinc	7440666	120 (a)
VOLATILE ORGANICS			
28	1,1-Dichloroethane	75343	None Specified
30	1,1-Dichloroethene	75354	0.057
41	1,1,1-Trichloroethane	71556	None Specified
42	1,1,2-Trichloroethane	79005	0.6
37	1,1,2,2-Tetrachloroethane	79345	0.17
75	1,2-Dichlorobenzene	95501	2,700
29	1,2-Dichloroethane	107062	0.38
31	1,2-Dichloropropane	78875	0.52
101	1,2,4-Trichlorobenzene	120821	None Specified
76	1,3-Dichlorobenzene	541731	400
32	1,3-Dichloropropene	542756	10
77	1,4-Dichlorobenzene	106467	400
17	Acrolein	107028	320
18	Acrylonitrile	107131	0.059
19	Benzene	71432	1.2
20	Bromoform	75252	4.3
34	Bromomethane	74839	48
21	Carbon Tetrachloride	56235	0.25
22	Chlorobenzene (mono chlorobenzene)	108907	680
24	Chloroethane	75003	None Specified
25	2-Chloroethyl vinyl ether	110758	None Specified
26	Chloroform	67663	0.56
35	Chloromethane	74873	None Specified
23	Dibromochloromethane	124481	0.401
27	Dichlorobromomethane	75274	0.56
36	Dichloromethane	75092	4.7
33	Ethylbenzene	100414	3,100
88	Hexachlorobenzene	118741	0.00075
89	Hexachlorobutadiene	87683	0.44
91	Hexachloroethane	67721	1.9
94	Naphthalene	91203	None Specified
38	Tetrachloroethene	127184	0.8
39	Toluene	108883	6,800

CTR No.	Priority Pollutant	CAS No.	Water Quality Objective (µg/L)
40	trans-1,2-Dichloroethylene	156605	700
43	Trichloroethene	79016	2.7
44	Vinyl chloride	75014	2
SEMI-VOLATILE ORGANICS			
60	1,2-Benzanthracene	56553	0.0044
85	1,2-Diphenylhydrazine	122667	0.04
45	2-Chlorophenol	95578	120
46	2,4-Dichlorophenol	120832	93
47	2,4-Dimethylphenol	105679	540
49	2,4-Dinitrophenol	51285	70
82	2,4-Dinitrotoluene	121142	0.11
55	2,4,6-Trichlorophenol	88062	2.1
83	2,6-Dinitrotoluene	606202	None Specified
50	2-Nitrophenol	25154557	None Specified
71	2-Chloronaphthalene	91587	None Specified
78	3,3-Dichlorobenzidine	91941	0.04
62	3,4-Benzofluoranthene	205992	0.0044
52	4-Chloro-3-methylphenol	59507	None Specified
48	4,6-Dinitro-2-methylphenol	534521	13.4
51	4-Nitrophenol	100027	None Specified
69	4-Bromophenyl phenyl ether	101553	None Specified
72	4-Chlorophenyl phenyl ether	7005723	None Specified
56	Acenaphthene	83329	1,200
57	Acenaphthylene	208968	None Specified
58	Anthracene	120127	9,600
59	Benzidine	92875	0.00012
61	Benzo(a)pyrene (3,4-Benzopyrene)	50328	0.0044
63	Benzo(g,h,i)perylene	191242	None Specified
64	Benzo(k)fluoranthene	207089	0.0044
65	Bis(2-chloroethoxy)methane	111911	None Specified
66	Bis(2-chloroethyl)ether	111444	0.031
67	Bis(2-chloroisopropyl) ether	39638329	1,400 (b)
68	Bis(2-ethylhexyl)phthalate	117817	1.8
70	Butyl benzyl phthalate	85687	3,000 (c)
73	Chrysene	218019	0.0044
81	Di-n-butyl phthalate	84742	2,700 (c)
84	Di-n-octyl phthalate	117840	None Specified
74	Dibenzo(a,h)anthracene	53703	0.0044
79	Diethyl phthalate	84662	23,000 (c)
80	Dimethyl phthalate	131113	313,000 (c)
86	Fluoranthene	206440	300
87	Fluorene	86737	1,300
90	Hexachlorocyclopentadiene	77474	240
92	Indeno(1,2,3-c,d)pyrene	193395	0.0044
93	Isophorone	78591	8.4
98	N-nitrosodiphenylamine	86306	5
96	N-nitrosodimethylamine	62759	0.00069
97	N-nitrosodi-n-propylamine	621647	0.005
95	Nitrobenzene	98953	17
53	Pentachlorophenol	87865	0.28
99	Phenanthrene	85018	None Specified
54	Phenol	108952	21,000
100	Pyrene	129000	960
PESTICIDES – PCBs			
110	4,4-DDD	72548	0.00083

CTR No.	Priority Pollutant	CAS No.	Water Quality Objective (µg/L)
109	4,4-DDE	72559	0.00059
108	4,4-DDT	50293	0.00059
112	alpha-Endosulfan	959988	0.056 (d)
103	alpha-Hexachlorocyclohexane (BHC)	319846	0.0039
102	Aldrin	309002	0.00013
113	beta-Endosulfan	33213659	0.056 (d)
104	beta-Hexachlorocyclohexane	319857	0.014
107	Chlordane	57749	0.00057
106	delta-Hexachlorocyclohexane	319868	None Specified
111	Dieldrin	60571	0.00014
114	Endosulfan sulfate	1031078	110
115	Endrin	72208	0.036
116	Endrin Aldehyde	7421934	0.76
117	Heptachlor	76448	0.00021
118	Heptachlor Epoxide	1024573	0.0001
105	Lindane (gamma-Hexachlorocyclohexane)	58899	0.019
119	PCB-1016	12674112	0.00017 (e)
120	PCB-1221	11104282	0.00017 (e)
121	PCB-1232	11141165	0.00017 (e)
122	PCB-1242	53469219	0.00017 (e)
123	PCB-1248	12672296	0.00017 (e)
124	PCB-1254	111097691	0.00017 (e)
125	PCB-1260	111096825	0.00017 (e)
126	Toxaphene	8001352	0.0002
16	2,3,7,8-TCDD (dioxin)	1746016	0.000000013

- (a) Criterion is a function of the total hardness of the water body. Value shown corresponds to hardness of 100 mg/L.
- (b) For haloethers.
- (c) For phthalate esters.
- (d) Sum of alpha- and beta- forms.
- (e) Criteria for sum of all PCBs.

ATTACHMENT H – PRIORITY POLLUTANTS TO BE MONITORED

CTR No.	Priority Pollutant	CAS No.	Controlling Water Quality Criterion for Surface Waters		Minimum Reporting Level (µg/L or noted)	Suggested Test Methods
			Basis	Criterion Concentration (µg/L or noted)		
INORGANICS						
1	Antimony	7440360	Primary MCL	6	5	EPA 6020/200.8
2	Arsenic	7440382	Ambient Water Quality	0.018	1	EPA 6020/Hydride
15	Asbestos	1332214	NTR/Primary MCL	7 MFL	0.2 MFL >10µm	EPA/600/R-93/116(PCM)
3	Beryllium	7440417	Primary MCL	4	1	EPA 6020/200.8
4	Cadmium	7440439	Public Health Goal	0.07	0.25	EPA 1638/200.8
5a	Chromium (total)	7440473	Primary MCL	50	2	EPA 6020/200.8
5b	Chromium (VI)	18540299	Public Health Goal	0.2	5	EPA 7199/1636
6	Copper	7440508	NTR	4.1 (6)	0.5	EPA 6020/200.8
14	Cyanide	57125	NTR	5.2	5	EPA 9012A
7	Lead	7439921	CTR	0.92 (6)	0.5	EPA 1638
8	Mercury	7439976	NTR		0.0005	EPA 1669/1631
9	Nickel	7440020	CTR	24 (6)	5	EPA 6020/200.8
10	Selenium	7782492	CTR	5	5	EPA 6020/200.8
11	Silver	7440224	CTR	0.71 (6)	1	EPA 6020/200.8
12	Thallium	7440280	NTR	1.7	1	EPA 6020/200.8
13	Zinc	7440666	CTR	54/16 (6)	10	EPA 6020/200.8
VOLATILE ORGANICS						
28	1,1-Dichloroethane	75343	Primary MCL	5	1	EPA 8260B
30	1,1-Dichloroethene	75354	NTR	0.057	0.5	EPA 8260B
41	1,1,1-Trichloroethane	71556	Primary MCL	200	2	EPA 8260B
42	1,1,2-Trichloroethane	79005	NTR	0.6	0.5	EPA 8260B
37	1,1,2,2-Tetrachloroethane	79345	NTR	0.17	0.5	EPA 8260B
75	1,2-Dichlorobenzene	95501	Taste and Odor	10	2	EPA 8260B
29	1,2-Dichloroethane	107062	NTR	0.38	0.5	EPA 8260B
31	1,2-Dichloropropane	78875	CTR	0.52	0.5	EPA 8260B
101	1,2,4-Trichlorobenzene	120821	Public Health Goal	5	5	EPA 8260B
76	1,3-Dichlorobenzene	541731	Taste and Odor	10	2	EPA 8260B
32	1,3-Dichloropropene	542756	Primary MCL	0.5	0.5	EPA 8260B
77	1,4-Dichlorobenzene	106467	Primary MCL	5	2	EPA 8260B
17	Acrolein	107028	Aquatic Toxicity	21	5	EPA 8260B

18	Acrylonitrile	107131	NTR	0.059	2	EPA 8260B
19	Benzene	71432	Primary MCL	1	0.5	EPA 8260B
20	Bromoform	75252	CTR	4.3	2	EPA 8260B
34	Bromomethane	74839	CTR	48	2	EPA 8260B
21	Carbon Tetrachloride	56235	NTR	0.25	0.5	EPA 8260B
22	Chlorobenzene (mono chlorobenzene)	108907	Taste and Odor	50	2	EPA 8260B
24	Chloroethane	75003	Taste and Odor	16	2	EPA 8260B
25	2-Chloroethyl vinyl ether	110758	Aquatic Toxicity	122 (2)	1	EPA 8260B
26	Chloroform	67663	OEHHA Cancer Risk	1.1	0.5	EPA 8260B
35	Chloromethane	74873	USEPA Health Advisory	3	2.0	EPA 8260B
23	Dibromochloromethane	124481	CTR	0.41	0.5	EPA 8260B
27	Dichlorobromomethane	75274	CTR	0.56	0.5	EPA 8260B
36	Dichloromethane	75092	CTR	4.7	2	EPA 8260B
33	Ethylbenzene	100414	Taste and Odor	29	2	EPA 8260B
88	Hexachlorobenzene	118741	CTR	0.00075	1	EPA 8260B
89	Hexachlorobutadiene	87683	NTR	0.44	1	EPA 8260B
91	Hexachloroethane	67721	NTR	1.9	1	EPA 8260B
94	Naphthalene	91203	USEPA IRIS	14	10	EPA 8260B
38	Tetrachloroethene	127184	NTR	0.8	0.5	EPA 8260B
39	Toluene	108883	Taste and Odor	42	2	EPA 8260B
40	trans-1,2-Dichloroethylene	156605	Primary MCL	10	1	EPA 8260B
43	Trichloroethene	79016	NTR	2.7	2	EPA 8260B
44	Vinyl chloride	75014	Primary MCL	0.5	0.5	EPA 8260B
SEMI-VOLATILE ORGANICS						
60	1,2-Benzanthracene	56553	CTR	0.0044	5	EPA 8270C
85	1,2-Diphenylhydrazine	122667	NTR	0.04	1	EPA 8270C
45	2-Chlorophenol	95578	Taste and Odor	0.1	2	EPA 8270C
46	2,4-Dichlorophenol	120832	Taste and Odor	0.3	1	EPA 8270C
47	2,4-Dimethylphenol	105679	CTR	540	2	EPA 8270C
49	2,4-Dinitrophenol	51285	NTR	70	5	EPA 8270C
82	2,4-Dinitrotoluene	121142	NTR	0.11	5	EPA 8270C
55	2,4,6-Trichlorophenol	88062	Taste and Odor	2	10	EPA 8270C
83	2,6-Dinitrotoluene	606202	USEPA IRIS	0.05	5	EPA 8270C
50	2-Nitrophenol	25154557	Aquatic Toxicity	150 (3)	10	EPA 8270C
71	2-Chloronaphthalene	91587	Aquatic Toxicity	1,600 (4)	10	EPA 8270C
78	3,3-Dichlorobenzidine	91941	NTR	0.04	5	EPA 8270C
62	3,4-Benzofluoranthene	205992	CTR	0.0044	10	EPA 8270C
52	4-Chloro-3-methylphenol	59507	Aquatic Toxicity	30	5	EPA 8270C
48	4,6-Dinitro-2-methylphenol	534521	NTR	13.4	10	EPA 8270C
51	4-Nitrophenol	100027	USEPA Health Advisory	60	10	EPA 8270C

69	4-Bromophenyl phenyl ether	101553	Aquatic Toxicity	122	10	EPA 8270C
72	4-Chlorophenyl phenyl ether	7005723	Aquatic Toxicity	122 (2)	5	EPA 8270C
56	Acenaphthene	83329	Taste and Odor	20	1	EPA 8270C
57	Acenaphthylene	208968	No Criteria Available		10	EPA 8270C
58	Anthracene	120127	CTR	9,600	10	EPA 8270C
59	Benzidine	92875	NTR	0.00012	5	EPA 8270C
61	Benzo(a)pyrene (3,4-Benzopyrene)	50328	CTR	0.0044	2	EPA 8270C
63	Benzo(g,h,i)perylene	191242	No Criteria Available		5	EPA 8270C
64	Benzo(k)fluoranthene	207089	CTR	0.0044	2	EPA 8270C
65	Bis(2-chloroethoxy)methane	111911	No Criteria Available		5	EPA 8270C
66	Bis(2-chloroethyl)ether	111444	NTR	0.031	1	EPA 8270C
67	Bis(2-chloroisopropyl) ether	39638329	Aquatic Toxicity	122 (2)	10	EPA 8270C
68	Bis(2-ethylhexyl)phthalate	117817	NTR	1.8	5	EPA 8270C
70	Butyl benzyl phthalate	85687	Aquatic Toxicity	3 (5)	10	EPA 8270C
73	Chrysene	218019	CTR	0.0044	5	EPA 8270C
81	Di-n-butyl phthalate	84742	Aquatic Toxicity	3 (5)	10	EPA 8270C
84	Di-n-octyl phthalate	117840	Aquatic Toxicity	3 (5)	10	EPA 8270C
74	Dibenzo(a,h)anthracene	53703	CTR	0.0044	0.1	EPA 8270C
79	Diethyl phthalate	84662	Aquatic Toxicity	3 (5)	2	EPA 8270C
80	Dimethyl phthalate	131113	Aquatic Toxicity	3 (5)	2	EPA 8270C
86	Fluoranthene	206440	CTR	300	10	EPA 8270C
87	Fluorene	86737	CTR	1,300	10	EPA 8270C
90	Hexachlorocyclopentadiene	77474	Taste and Odor	1	5	EPA 8270C
92	Indeno(1,2,3-c,d)pyrene	193395	CTR	0.0044	0.05	EPA 8270C
93	Isophorone	78591	NTR	8.4	1	EPA 8270C
98	N-nitrosodiphenylamine	86306	NTR	5	1	EPA 8270C
96	N-nitrosodimethylamine	62759	NTR	0.00069	5	EPA 8270C
97	N-nitrosodi-n-propylamine	621647	CTR	0.005	5	EPA 8270C
95	Nitrobenzene	98953	NTR	17	10	EPA 8270C
53	Pentachlorophenol	87865	CTR	0.28	1	EPA 8270C
99	Phenanthrene	85018	No Criteria Available		5	EPA 8270C
54	Phenol	108952	Taste and Odor	5	1	EPA 8270C
100	Pyrene	129000	CTR	960	10	EPA 8270C
PESTICIDES – PCBs						
110	4,4-DDD	72548	CTR	0.00083	0.05	EPA 8081A
109	4,4-DDE	72559	CTR	0.00059	0.05	EPA 8081A
108	4,4-DDT	50293	CTR	0.00059	0.01	EPA 8081A
112	alpha-Endosulfan	959988	NTR	0.056 (7)	0.02	EPA 8081A
103	alpha-Hexachlorocyclohexane (BHC)	319846	CTR	0.0039	0.01	EPA 8081A

102	Aldrin	309002	CTR	0.00013	0.005	EPA 8081A
113	beta-Endosulfan	33213659	CTR	0.056 (7)	0.01	EPA 8081A
104	beta-Hexachlorocyclohexane	319857	CTR	0.014	0.005	EPA 8081A
107	Chlordane	57749	CTR	0.00057	0.1	EPA 8081A
106	delta-Hexachlorocyclohexane	319868	No Criteria Available		0.005	EPA 8081A
111	Dieldrin	60571	CTR	0.00014	0.01	EPA 8081A
114	Endosulfan sulfate	1031078	Ambient Water Quality	0.056	0.05	EPA 8081A
115	Endrin	72208	CTR	0.036	0.01	EPA 8081A
116	Endrin Aldehyde	7421934	CTR	0.76	0.01	EPA 8081A
117	Heptachlor	76448	CTR	0.00021	0.01	EPA 8081A
118	Heptachlor Epoxide	1024573	CTR	0.0001	0.01	EPA 8081A
105	Lindane (gamma-Hexachlorocyclohexane)	58899	CTR	0.019	0.02	EPA 8081A
119	PCB-1016	12674112	CTR	0.00017 (8)	0.5	EPA 8082
120	PCB-1221	11104282	CTR	0.00017 (8)	0.5	EPA 8082
121	PCB-1232	11141165	CTR	0.00017 (8)	0.5	EPA 8082
122	PCB-1242	53469219	CTR	0.00017 (8)	0.5	EPA 8082
123	PCB-1248	12672296	CTR	0.00017 (8)	0.5	EPA 8082
124	PCB-1254	111097691	CTR	0.00017 (8)	0.5	EPA 8082
125	PCB-1260	111096825	CTR	0.00017 (8)	0.5	EPA 8082
126	Toxaphene	8001352	CTR	0.0002	0.5	EPA 8081A
16	2,3,7,8-TCDD (dioxin)	1746016	CTR	1.30×10^{-8}	5.00×10^{-6}	EPA 8290 (HRGC) MS

- (1) The criterion concentrations serve only as a point of reference for the selection of the appropriate analytical method. They do not indicate a regulatory decision that the cited concentration is either necessary or sufficient for full protection of beneficial uses. Available technology may require that effluent limitations be set lower than these values.
- (2) For haloethers.
- (3) For nitrophenols.
- (4) For chlorinated naphthalenes.
- (5) For phthalate esters.
- (6) Freshwater aquatic life criteria for metals are expressed as a function of the total hardness of the water body. Values displayed correspond to a total hardness of 40 mg/L.
- (7) Criteria for sum of alpha- and beta- forms.
- (8) Criteria for sum of all PCBs.

ATTACHMENT I – DIOXIN AND FURAN SAMPLING

Section 3 of the State Implementation Plan requires that each NPDES discharger conduct sampling and analysis of dioxin and dibenzofuran congeners. The required number of samples for NPDES Dischargers is one upstream sample from the receiving water and one treatment system discharge sample for a total of two samples. Dischargers that were enrolled under Order No. R6T-2004-0025 are not required to sample for the dioxin or dibenzofuran congeners because the congeners were addressed in Order No. R6T-2004-0025.

Each sample shall be analyzed for the seventeen congeners listed in the table below. High Resolution GCMS Method 8290, or another method capable of individually quantifying the congeners to an equivalent detection level, shall be used for the analyses.

Sampling shall be conducted during startup of the treatment facility and all analyses shall be completed and submitted within 60 days. Sample results shall be submitted along with routine monitoring reports as soon as the laboratory results are available.

For each sample the Discharger shall report:

- The measured or estimated concentration of each of the seventeen congeners;
- The quantifiable limit of the test (as determined by procedures in Section 2.4.3, No. 5 of the SIP);
- The Method Detection Level (MDL) for the test; and
- The TCDD equivalent concentration for each analysis calculated by multiplying the concentration of each congener by the Toxicity Equivalency Factor (TEF) in the following table, and summing the resultant products to determine the equivalent toxicity of the sample expressed as 2,3,7,8-TCDD.

Congener	TEF
2,3,7,8-TetraCDD	1
1,2,3,7,8-PentaCDD	1.0
1,2,3,4,7,8-HexaCDD	0.1
1,2,3,6,7,8-HexaCDD	0.1
1,2,3,7,8,9-HexaCDD	0.1
1,2,3,4,6,7,8-HeptaCDD	0.01
OctaCDD	0.0001
2,3,7,8-TetraCDF	0.1
1,2,3,7,8-PentaCDF	0.05
2,3,4,7,8-PentaCDF	0.5
1,2,3,4,7,8-HexaCDF	0.1
1,2,3,6,7,8-HexaCDF	0.1
1,2,3,7,8,9-HexaCDF	0.1
2,3,4,6,7,8-HexaCDF	0.1
1,2,3,4,6,7,8-HeptaCDF	0.01
1,2,3,4,7,8,9-HeptaCDF	0.01
OctaCDF	0.0001