



California Regional Water Quality Control Board

Los Angeles Region



Linda S. Adams
Secretary for
Environmental Protection

Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful
320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

ORDER NO. R4-2007-0021

**WASTE DISCHARGE REQUIREMENTS
FOR
TREATED GROUNDWATER AND OTHER WASTEWATERS FROM INVESTIGATION AND/OR
CLEANUP OF PETROLEUM FUEL-CONTAMINATED SITES TO SURFACE WATERS
IN
COASTAL WATERSHEDS OF LOS ANGELES AND VENTURA COUNTIES
(GENERAL NPDES PERMIT NO. CAG834001)**

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| This Order was adopted by the Regional Water Board on: | April 5, 2007 |
| This Order shall become effective on: | June 5, 2007 |
| This Order shall expire on: | April 5, 2012 |
| The U.S. Environmental Protection Agency (USEPA) and the Regional Water Board have classified this discharge as a minor discharge. | |

IT IS HEREBY ORDERED, that Order No. R4-2002-0125 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Jonathan Bishop, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on April 5, 2007.


Jonathan S. Bishop, Executive Officer

California Environmental Protection Agency

Recycled Paper

Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

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I. FACILITY/DISCHARGE INFORMATION

This Order (hereafter, General Permit) is intended to authorize similar discharges from groundwater treatment facilities (Facilities) at sites that have been impacted by release of petroleum related organic compounds. Discharges from Facilities to waters of the United States that do not cause, have the reasonable potential to cause, or contribute to an in-stream excursion above any applicable State or federal Water quality objectives/criteria or cause acute or chronic toxicity in the receiving water are authorized discharge in accordance with the conditions set forth in this Order.

II. NOTIFICATION REQUIREMENTS

A. Eligibility Criteria

1. This Order covers discharges to surface waters of treated groundwater and other wastewaters from the investigation, dewatering, or cleanup of petroleum contamination arising from current and former leaking underground storage tank site or similar petroleum contamination.
2. To be covered under this Order, a discharger must demonstrate that:
 - a. Pollutant concentrations in the discharge shall not cause violation of any applicable water quality objective for the receiving waters, including discharge prohibitions.
 - b. The discharge shall not exceed the water quality criteria for pollutants in Attachment B and Part V of this Order, and there shall be no reasonable potential to cause or contribute to an excursion above the criteria.
 - c. A representative sample of the contaminated groundwater to be treated and discharged does not exceed the water quality screening criteria for any constituent listed on Attachment A, other than those for which limitations are established in Part V.
 - d. The discharge shall not cause acute nor chronic toxicity in receiving waters;
 - e. The discharge shall pass through a treatment system designed and operated to reduce the concentration of contaminants to meet the requirements of this Order.
 - f. The discharger shall be able to comply with the terms or provisions of this Order.
3. For the purpose of renewal of existing individual NPDES permits with this general permit, provided that all the conditions of this general permit are met, renewal is effective upon issuance of a notification by the Executive Officer and issuance of a new monitoring and reporting program.
4. When an individual NPDES permit with more specific requirements is issued to a discharger, the applicability of this Order to that discharger is automatically terminated on the effective date of the individual permit.

B. Ineligibility

The discharge of groundwater contaminated with petroleum mixed with other toxic pollutants with no effluent limitations in this permit are not eligible for enrollment under this General Permit.

C. Authorization

To be authorized to discharge under this Order, the discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part D of this Order. Upon receipt of the application, the Executive Officer shall determine the applicability of this Order to such a discharge. If the discharge is eligible, the Executive Officer shall notify the discharger that the discharge is authorized under the terms and conditions of this Order and prescribe an appropriate monitoring and reporting program. For new discharges, the discharge shall not commence until receipt of the Executive Officer's written determination of eligibility for coverage under this general permit or until an individual NPDES permit is issued by the Regional Board.

D. Notice of Intent

1. Deadline for Submission

- a. Renewal of permits of existing dischargers covered under individual permits that meet the eligibility criteria and have submitted a NOI will consist of a letter of determination from the Executive Officer of coverage under this Order.
- b. Existing dischargers covered under Order No. R4-2002-0125 will be sent a NOI form that must be completed and returned to the Regional Board within 45 days of receipt; otherwise permit coverage may be revoked. Existing dischargers enrolling under this Order are required to collect a representative groundwater sample and analyze it for all the constituents listed on Attachment A. Dischargers shall conduct this analysis and submit the result with a NOI, otherwise the existing authorization may be terminated. If the analytical sample result of any constituent other than those listed in Item IV.A. of this Order exceeds the water quality screening criteria listed on Attachment A, the discharge will be considered ineligible for enrollment under this permit. However, the discharge will be enrolled under other appropriate general permit, and then, the existing coverage under this general permit will be terminated.
- c. New dischargers shall file a complete application at least 45 days before commencement of the discharge.

2. Forms for Report of Waste Discharge

- a. Dischargers shall use the NOI Form or appropriate USEPA Forms.
- b. The discharger, upon request, shall submit any additional information that the Executive Officer deems necessary to determine whether the discharge meets the criteria for coverage under this Order, to prescribe an appropriate monitoring and reporting program, or both.

- c. The discharger must obtain and analyze (using appropriate methods) a representative sample of the groundwater to be treated and discharged under this Order. The analytical method used shall be capable of achieving a detection limit at or below the minimum level, otherwise, a written explanation shall be provided. The analytical result shall be submitted with the NPDES application. The data shall be tabulated and shall include the results for every constituent listed on Attachment A.
- d. The following should be included with the NOI Form:
 - i. The feasibility study on reuse and/or alternative disposal methods of the groundwater;
 - ii. Description of the treatment system;
 - iii. The type of chemicals that will be used (if any) during the operation and maintenance of the treatment system;
 - iv. Flow diagram of the influent to the discharge point; and
 - v. Preventive maintenance procedures and schedule for the treatment system.
- e. Title 23 of the California Code of Regulations (CCR), Division 3, Chapter 9, Article (1)(A), section 2200, *Annual Fee Schedule*, requires that all discharges subject to a specific general permit shall pay the same annual fee.

Discharges covered under this General NPDES Permit have a Threat to Water Quality rating of Category 1.A. the discharges require treatment systems to meet priority toxic pollutant limits that could impair the designated beneficial uses of the receiving water if limits are violated.

1. Notice of Termination

Dischargers shall submit a Notice of Termination or Transfer (NOTT) when coverage under this General Permit is no longer needed. An NOTT contains the Waste Discharge Identification Number (WDID), the name and address of the owner of the facility, and is signed and dated by the owner certifying that the Dischargers associated with Permit No. CAG834001 have been eliminated or that there has been a change in ownership. Upon submission, the Discharger is no longer authorized to discharge wastewater associated with this General Permit.

2. Change of Ownership

Coverage under this Order may be transferred in case of change of ownership of land or discharge facility provided the existing

discharger notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the existing and new dischargers containing a specific date of transfer of coverage, responsibility for compliance with this Order, and liability between them.

III. FINDINGS

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

A. Background

1. On July 11, 2002, the Regional Board adopted Order No. R4-2002-0125 General NPDES Permit No. CAG834001-Waste Discharge Requirements for Discharge of Treated Petroleum Fuel Contaminated Groundwater to surface waters. This General Permit expires on July 11, 2007. Approximately 41 dischargers are enrolled under this General Permit. This Order now renews the requirements of this General Permit.
2. On September 22, 1989, the United States Environmental Protection Agency (USEPA) granted the State of California, through the State Water Resources Control Board (State Board) and the Regional Boards, the authority to issue general National Pollutant Discharge Elimination System (NPDES) permits pursuant to 40 Code of Federal Regulations (40 CFR) parts 122 and 123.
3. 40 CFR section 122.28 provides for issuance of general permits to regulate a category of point sources if the sources:
 - a. Involve the same or substantially similar types of operations;
 - b. Discharge the same type of waste;
 - c. Require the same type of effluent limitations or operating conditions;
 - d. Require similar monitoring; and
 - e. Are more appropriately regulated under a general permit rather than individual permits.
4. General waste discharge requirements and NPDES permits enable Regional Board staff to expedite the processing of requirements, simplify the application process for dischargers, better utilize limited staff resources, and avoid the expense and time involved in repetitive public noticing, hearings, and permit adoptions.

B. Facility and Discharge Description

1. Petroleum fuel contamination of soil and groundwater at various sites throughout the region causes or threatens to cause adverse impacts to existing and potential beneficial uses of the region's groundwater resources. Leaking underground storage tanks and surface spills from gasoline service station and similar sites pollutes the groundwater. Investigation and cleanup of these sites generate the following wastewaters:

- a. Treated groundwater from cleanup and/or construction dewatering activity at a petroleum-impacted site;
 - b. Groundwater pumped as an aid in the containment and extraction of petroleum fuel-contaminated groundwater and/or free product;
 - c. Groundwater extracted during short- and long-term pumping test/aquifer testing;
 - d. Groundwater generated from developing and purging wells prior to sampling;
 - e. Sampling equipment's decontamination water; and,
 - f. Subterranean seepage dewatering.
 - g. Storm water collected in fuel storage secondary containment tanks and fuel spill washwater contains similar contaminants as those from the investigation/cleanup of petroleum contaminated groundwater may also be regulated under this Order.
2. The waste streams identified in the foregoing paragraph and permitted under this order could contain petroleum hydrocarbons at levels that may be considered toxic. Usually, the treatments applied for the removal of constituents regulated by this order are activated carbon adsorption and air stripping. These treatment techniques are considered best available technology for controlling and removing hydrocarbon contamination from water.
 3. This permit does not cover discharges from a treatment system that draws contaminated groundwater that contains volatile organic compounds that do not have effluent limitations in this Order, metals (other than lead), and other toxic pollutants.
 4. To enroll under this general permit, a discharger must certify that there is no reasonable potential for pollutants other than those regulated by this permit to be in the discharge. Existing and new dischargers enrolling under this permit are required to collect a representative groundwater sample and analyze it for all the constituents listed on Attachment A. Existing dischargers shall conduct this analysis and submit the result with a Notice of Intent Form, otherwise the existing authorization will be terminated. If the analytical sample result of any constituent other than those listed in Part F and other constituents limited in this permit exceed the water quality screening criteria listed on Attachment A, the discharge will be considered ineligible for enrollment.
 5. Pursuant to section 2, Article X, California Constitution, and section 275 of the California Water Code on preventing waste and unreasonable use of waters of the state, this Regional Board encourages, wherever practical, water conservation and/or re-use of wastewater. To obtain coverage under this Order, the discharger shall first investigate the feasibility of conservation, land disposal and/or reuse of the wastewater.

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 California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility 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).

D. Background and Rationale for Requirements

The Regional Water Board developed the requirements of this Order based on information submitted as part of the applications for several like facilities, through monitoring and reporting programs, and through special studies and the following information.

1. The effluent limitations from groundwater cleanup projects are calculated assuming no dilution. For most practical purposes, discharges from groundwater cleanup do not flow directly into receiving water with significant flow volume to consider dilution credit or to allocate a mixing zone. Most discharges of treated groundwater regulated under this general permit are to storm drain systems that discharge to creeks and streams. Many of these creeks and streams are dry during the summer months. Therefore, for many months of the year, these discharges may represent all or nearly all of the flow in some portions of the receiving creeks or streams. These discharges therefore have the potential to recharge groundwaters protected as drinking waters.

An exception to this policy may be applied based on approved mixing zone study and based on demonstration of compliance with water quality objectives in the receiving water as prescribed in the Basin Plan. This exception process is more appropriate for an individual permit, and would not be appropriate for a general permit, that should be protective of most stringent water quality objectives and beneficial uses. If discharger requests that a dilution credit be included in the computation of effluent limit or that a mixing zone be allowed, an individual permit will be required. However, if no mixing zone is proposed, this general permit provides coverage for all discharges to receiving water bodies in Coastal Watersheds of Los Angeles and Ventura Counties.

2. Order No. R4-2002-0125 contains, in part, an effluent limitation for methyl tertiary butyl ether (MTBE) of 35 µg/L. On October 8, 1997, the state of California then Governor Pete Wilson signed Assembly Bill 592. Assembly Bill 592 requires the State of California, Department of Health Services (DHS) to adopt primary and secondary drinking water standards for MTBE. In January 1999, the DHS adopted 5 µg/L as the secondary standard for MTBE based on taste and odor threshold. This order includes a revised effluent limitation for MTBE of 5 µg/L.
3. Tertiary Butyl Alcohol (TBA) is a gasoline constituent, an impurity in commercial-grade MTBE, and/or a breakdown product of MTBE. In 1999, California's Office of Environmental Health Hazard Assessment (OEHHA) conducted an interim assessment based on preliminary calculations of the carcinogenicity of TBA, concluding that exposures to TBA via oral route represent a one in a million excess cancer risk of 12 µg/L. Based on this assessment, OEHHA has set an Action Level of TBA to 12 µg/L. This order includes effluent limitation for TBA of 12 µg/L.

Attachments F the Fact Sheet, which contain background information and rationale for Order requirements, are hereby incorporated into this Order and constitute part of the Findings for this Order.

4. Because this Order is intended to serve as a general NPDES permit and covers discharges to all surface waters in the Los Angeles Region, the effluent limitations established pursuant to this general order are established to protect the most protective water quality objective for the surface water beneficial uses in the Los Angeles Region.

E. California Environmental Quality Act (CEQA)

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

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 Regulations⁵, 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. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3 of CWA.

Either aeration processes or adsorption processes (or combination of the two) are the treatment processes typically used to remove the organic compounds in the groundwater. Other treatment technology enhancements such as bioaugmentation of granular activated carbon (BioGAC), air stripping with biofilm, bioreactors, advanced oxidation processes, and resin can be employed to remove petroleum compounds and gasoline additives from impacted groundwater. When designed properly and operated, most aeration and/or GAC systems can lower the concentration of petroleum pollutants and volatile organic compounds (VOCs) to below the detection limits. Limits established in the tentative order for the petroleum pollutants and VOCs can be met consistently if GAC/air stripper (or enhancements thereto) treatment systems are properly operated and maintained.

G. Water Quality-Based Effluent Limitations

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

⁵ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi). The WQBELs are based on the Basin Plan, other State plans and policies, or USEPA water quality criteria which are taken from the California Toxics Rule (CTR). These requirements, as they are met, will protect and maintain existing beneficial uses of the receiving water. The attached fact sheet for this Order includes specific bases for the effluent limitations.

H. Water Quality Control Plans.

The Regional Water Board adopted a Water Quality Control Plan for the Los Angeles Region (hereinafter Basin Plan) on June 13, 1994, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board Resolution No. 88-63, which established state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply.

1. Basin Plan. The Basin Plan contains water quality objectives for, and lists the beneficial uses of, specific water bodies (receiving waters) in the Los Angeles Region. Typical beneficial uses covered by this Order include the following:
 - a. Inland surface waters above an estuary - municipal and domestic supply, industrial service and process supply, agricultural supply, groundwater recharge, freshwater replenishment, aquaculture, warm and cold freshwater habitats, inland saline water and wildlife habitats, water contact and noncontact recreation, fish migration, and fish spawning, preservation of rare and endangered species, preservation of biological habitats, and shellfish harvesting.
 - b. Inland surface waters within and below an estuary - industrial service supply, marine and wetland habitats, estuarine and wildlife habitats, water contact and noncontact recreation, commercial and sport fishing, aquaculture, migration of aquatic organisms, fish migration, fish spawning, preservation of rare and endangered species, preservation of biological habitats, and shellfish harvesting.
 - c. Coastal Zones (both nearshore and offshore) - industrial service supply, navigation, water contact and noncontact recreation, commercial and sport fishing, marine habitat, wildlife habitat, fish migration and spawning, shellfish harvesting, and rare, threatened, or endangered species habitat.

Requirements of this Order implement the Basin Plan.

Total Maximum Daily Loads: 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. Los Angeles Region has been developing TMDLs for nutrients. This Order implements approved and relevant TMDLs. Attachment B prescribes the limits for the pollutants that are waterbody specific. Detailed discussion on TMDLs is provided in the Attachment F.

2. The State Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975.
3. The State Board adopted a *Water Quality Control Policy for the Enclosed Bays and Estuaries of California* in May 1974 (Policy). The Policy contains narrative and numerical water quality objectives that are designed to prevent water quality degradation and protect beneficial uses in enclosed bays and estuaries.

The Policy also lists principles of management that include the State Board's goal to phase out all discharges (excluding cooling waters), particularly industrial process water, to enclosed bays and estuaries as soon as practicable. The waste described above is not considered an industrial process wastewater.

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 forty 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 *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 Regional 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 (Not Applicable)

L. Alaska Rule.

On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards become effective for CWA purposes (40 CFR §131.21, 65 FR 24641, April 27, 2000). Under USEPA's new regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved 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 and water quality-based effluent limitations for individual pollutants that are no more stringent than required by CWA. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. Water quality-based effluent limitations have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards.

N. Antidegradation Policy

Section 131.12 of 40 CFR requires that 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, which incorporates the requirements of the federal antidegradation policy. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. As discussed in detail in the Fact Sheet (Attachment F), 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(o)(2) and 303(d)(4) of the CWA and federal regulations at 40 CFR §122.44(l) 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 the previous Order.

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 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

Q. Monitoring and Reporting

Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Boards to require technical and monitoring reports. The Monitoring and Reporting Program (hereinafter 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 section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

S. Provisions and Requirements Implementing State Law (Not Applicable)

T. Notification of Interested Parties.

The Regional 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. Details of notification are provided in the Fact Sheet (Attachment F) of this Order.

U. Consideration of Public Comment.

The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet (Attachment F) of this Order.

IV. DISCHARGE PROHIBITIONS

- A.** The discharge of wastes other than those which meet eligibility requirements of this Order is prohibited unless the discharger obtains coverage under another general permit or an individual permit that regulates the discharge of such wastes.
- B.** Bypass or overflow of untreated or partially treated contaminated groundwater to waters of the State either at the treatment system or from any of the collection or transport systems or pump stations tributary to the treatment system is prohibited.
- C.** The discharge shall not cause, have a reasonable potential to cause, or contribute to an in-stream excursion above any applicable criterion promulgated by USEPA pursuant to section 303 of the CWA, or water quality objective adopted by the State or Regional Board.
- D.** The discharge of any radiological, chemical, or biological warfare agent or high level radiological waste is prohibited.
- E.** The purposeful or knowing discharge of polychlorinated biphenols (PCBs) is prohibited.

V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations:

1. Discharge of an effluent from the outfall location listed in the enrollment Fact-Sheet in excess of the following limitations is prohibited:

| Constituents | Units | Discharge Limitations | |
|--|-------|-----------------------|-------------------|
| | | Monthly Average | Daily Maximum |
| Total Suspended Solids | mg/L | 50 | 150 |
| Turbidity | NTU | 50 | 150 |
| BOD ₅ 20°C | mg/L | 20 | 30 |
| Settleable Solids | ml/L | 0.1 | 0.3 |
| Sulfides | mg/L | --- | 1.0 |
| Total Petroleum Hydrocarbons | µg/L | --- | 100 |
| Benzene | µg/L | --- | 1.0 |
| Toluene | µg/L | --- | 150 |
| Ethylbenzene | µg/L | --- | 700 |
| Xylenes | µg/L | --- | 1750 |
| Ethylene Dibromide | µg/L | --- | 0.05 ¹ |
| Lead | µg/L | 2.6 ² | 5.2 ² |
| Methyl Tertiary Butyl Ether(MTBE) | µg/L | --- | 5 |
| Naphthalene | µg/L | --- | 21 |
| Di-isopropyl Ether (DIPE) | µg/L | --- | 0.8 ² |
| Tertiary Butyl Alcohol (TBA) | µg/L | --- | 12 |
| ¹ If the reported detection level is greater than the effluent limit, then a non-detect using ML detection is deemed to be in compliance. | | | |
| ² Total recoverable metals (based on a hardness of 100 mg/L). | | | |

2. The pH of the discharge shall at all times be within the range of 6.5 and 8.5.
3. The temperature of the discharge shall not exceed 86°F.
4. The discharge of an effluent with mineral and nitrogen constituents in excess of applicable limits given in Attachment B is prohibited. In the letter of determination, the Executive Officer shall indicate the watershed/stream reach limitations in Attachment B applicable to the particular discharge.
5. Pass-through or uncontrollable discharges of PCBs shall not exceed daily average concentrations of 14 ng/L into fresh waters or 30 ng/L into estuarine waters.
6. The acute toxicity of the effluent shall be such that the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test less than 70% survival.

7. The discharge shall meet effluent limitations and toxic and effluent standards established pursuant to sections 301, 302, 304, 306, and 307 of the Clean Water Act, and amendments thereto.

B. Land Discharge Specifications

Not Applicable.

C. Reclamation Specifications

Not Applicable.

VI. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

The discharge shall not cause the following to be present in receiving waters:

- a. Toxic pollutants at concentrations that will bioaccumulate in aquatic life to levels that are harmful to aquatic life or human health.
- b. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
- c. Chemical substances in amounts that adversely affect any designated beneficial use.
- d. Visible floating materials, including solids, liquids, foams, and scum.
- e. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water.
- f. Suspended or settleable materials in concentrations that cause nuisance or adversely affect beneficial uses.
- g. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses.

- h. Substances that result in increases of BOD₅20°C that adversely affect beneficial uses.
 - i. Fecal coliform concentration which exceed a log mean of 200 per 100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10% of total samples during any 30-day period exceed 400 per 100 ml.
 - j. Concentrations of toxic substances that are toxic to, or cause detrimental physiological responses in, human, animal, or aquatic life.
2. The discharge shall not cause the following to occur in the receiving waters:
- a. The dissolved oxygen to be depressed below:

| | |
|--|--------|
| WARM ¹ designated waters | 5 mg/L |
| COLD ¹ designated waters | 6 mg/L |
| COLD and SPWN ¹ Designated waters | 7 mg/L |

¹ Beneficial Uses: WARM - Warm Freshwater Habitat; COLD - Cold Freshwater Habitat; SPWN - Spawning, Reproduction, and/or Early Development.
 - b. The pH to be depressed below 6.5 or raised above 8.5, and the ambient pH levels to be changed from natural conditions in inland waters more than 0.5 units or in estuaries more than 0.2 units.
 - c. The temperature at any time or place and within any given 24-hour period to be altered by more than 5°F above natural temperature; but at no time be raised above 80°F for waters with a beneficial use of WARM (Warm Freshwater Habitat).
 - d. The turbidity to increase to the extent that such an increase causes nuisance or adversely affects beneficial uses; such increase shall not exceed 20% when the natural turbidity is over 50 NTU or 10% when the natural turbidity is 50 NTU or less.
 - e. Residual chlorine in concentrations that persist and impairs beneficial uses.
 - f. Any individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses or increase pesticide concentration in bottom sediments or aquatic life.

3. The discharge shall not alter the color, create a visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters.
4. The discharge shall not degrade surface water communities and population including vertebrate, invertebrate, and plant species.
5. The discharge shall not damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload their design capacity.
6. The discharge shall not cause problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.

B. Groundwater Limitations

Not Applicable.

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. The Executive Officer may require any discharger authorized under this Order to apply for and obtain an individual NPDES permit with more specific requirements. The Executive Officer may require any discharger authorized to discharge under this permit to apply for an individual permit only if the discharger has been notified in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that on the effective date of the individual permit, the authority to discharge under this general permit is no longer applicable.
 - b. The discharger shall comply with all the applicable items of the *Standard Provisions and Reporting for Waste Discharge Requirements* (Standard Provisions), which are part of this general permit (Attachment D). If there is any conflict between provisions stated herein and the Standard Provisions, those provisions stated herein prevail.

- c. Prior to application, the discharger shall submit for Executive Officer's approval the list of chemicals and proprietary additives that may affect the discharge, including rates/quantities of application, compositions, characteristics, and material safety data sheets, if any.
- d. Oil or oily materials, chemicals, refuse, or other materials that may cause pollution in storm water and/or urban runoff shall not be stored or deposited in areas where they may be picked up by rainfall/urban runoff and discharged to surface waters. Any spill of such materials shall be contained, removed and cleaned immediately.
- e. This Order neither exempts the discharger from compliance with any other laws, regulations, or ordinances that may be applicable, nor legalizes the waste disposal facility.
- f. The discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.
- h. Any discharge authorized under this Order may request to be excluded from the coverage of this Order by applying for an individual permit.
- i. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from treatment facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

B. Monitoring and Reporting Program Requirements

The Discharger shall comply with the MRP accompanying the transmittal for enrollment under this General NPDES permit, and future revisions thereto. If there is any conflict between provisions stated in the MRP and the Regional Water Board Standard Provisions, those provisions stated in the MRP shall prevail.

C. Special Provisions

1. Reopener Provision

- a. This Order may be modified, revoked and reissued, or terminated for cause. Reasons for modification may include

new information on the impact of discharges regulated under this Order become available, promulgation of new effluent standards and/or regulations, adoption of new policies and/or water quality objectives, and/or new judicial decisions affecting requirements of this Order.

- b. Pursuant to 40 CFR sections 122.62 and 122.63, this Order may be modified, revoked and reissued, or terminated for cause. Reasons for modification may include new information on the impact of discharges regulated under this Order become available, promulgation of new effluent standards and/or regulations, adoption of new policies and/or water quality objectives, and/or new judicial decisions affecting requirements of this Order. In addition, if receiving water quality is threatened due to discharges covered under this permit, this permit will be reopened to incorporate more stringent effluent limitations for the constituents creating the threat. TMDLs have not been developed for all the parameters and receiving waters on the 303(d) list. When TMDLs are developed this permit may be reopened to incorporate appropriate limits. In addition, if TMDL identifies that a particular discharge covered under this permit is a load that needs to be reduced; this permit will be reopened to incorporate appropriate TMDL based limit and/or to remove any applicable exemptions.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

Not Applicable

3. Best Management Practices and Pollution Prevention

Pollution Minimization Program

The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this Order, presence of whole effluent toxicity, health advisories for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

- i. A sample result is reported as DNQ and the effluent limitation is less than the RL; or
- ii. A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described

in Attachment A and reporting protocols described in MRP section X.B.4.

The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Water Board:

- i. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;
- ii. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;
- iii. Submittal of a control strategy designed to proceed toward the goal of maintaining concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
- iv. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and
- v. An annual status report that shall be sent to the Regional Water Board including:
 1. All PMP monitoring results for the previous year.
 2. A list of potential sources of the reportable priority pollutant(s).
 3. A summary of all actions undertaken pursuant to the control strategy.
 4. A description of actions to be taken in the following year.

4. Construction, Operation and Maintenance Specifications

All owners or operators authorized discharge under the General Permit shall maintain and update, as necessary, a Groundwater Treatment System Operation and Maintenance (O&M) Manual to assure efficient and effective treatment of contaminated groundwater. The O&M Manual shall address, but not limited to, the following.

The O&M manual shall specify both normal operating and critical maximum or minimum values for treatment process variables

including influent concentrations, flow rates, water levels, temperatures, time intervals, and chemical feed rates.

The O&M manual shall specify an inspection and maintenance schedule for active and reserve system and shall provide a log sheet format to document inspection observations and record completion of maintenance tasks.

The O&M manual shall include a Contingency and Notification Plan. The plan shall include procedures for reporting personnel to assure compliance with this General Permit, as well as authorization letters from the Executive Officer.

The O&M manual shall specify safeguards to prevent noncompliance with limitations and requirements of the General Permit resulting from equipment failure, power loss, vandalism, or ten-year return frequency rainfall.

5. Engineering Design Report

For all new dischargers and existing dischargers with significant changes made since prior submittals to the Regional Water Board, the NOI shall be accompanied by an Engineering Design Report that certifies the adequacy of each major component of the proposed treatment facility. The certification shall include an analysis, based on accepted engineering practice, which demonstrate that the treatment process and the physical design of the treatment components will ensure compliance with the prohibitions, effluent limitations, and other conditions of the General Permit. The report shall also certify that:

Adequate maintenance and testing schedule are included in the Groundwater Treatment System Treatment O&M Manual.

Sampling points are located where representative monitoring samples of process and discharge streams can be obtained. The design engineer shall affix her/his signature and engineering license number to this Engineering Design Reports.

6. Granular Activated Carbon Quality Assurance / Quality Control

The Discharger shall implement a Quality Assurance / Quality Control (QA/QC) Program to assure that newly replenished granular activated carbon (GAC) in the treatment system is providing high quality effluent with respect to pH and inorganic constituents. Activities conducted as part of the GAC QA/QC program shall be documented in routine Discharge Monitoring Reports submitted for the facility.

7. Special Provisions for Municipal Facilities (POTWs Only)

Not Applicable

8. Other Special Provisions

a. Expiration and Continuation of this Order and Prior Order

This Order expires on April 5, 2012; however, for those dischargers authorized to discharge under this Order, it shall continue in full force and effect until a new order is adopted. Notwithstanding Provision K (Expiration and Continuation of this Order) of Order No. R4-2002-0125, discharges regulated under Order No. R4-2002-0125 on or before July 11, 2007, that has submitted and a completed NOI may continue under Order No. R4-2002-0125 until enrolled under this General Permit.

b. Reauthorization

Upon reissuance of a new general permit order, dischargers authorized under this Order shall file a Notice of Intent or a new Report of Waste Discharge within 45 days of notification by the Executive Officer.

c. Rescission

Except for enforcement purposes, Order No. R4-2002-0125, adopted by this Regional Board on July 11, 2003, is rescinded effective June 5, 2007.

9. Compliance Schedules

Not Applicable

VIII. COMPLIANCE DETERMINATION

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

A. General.

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 Regional and State Water Boards, 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 AMEL for priority pollutants 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 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 subsection B above for 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. Average Weekly Effluent Limitation (AWEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar week exceeds the AWEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in 7 days of non-compliance. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. The Discharger will only be considered out of compliance for days when the discharge occurs. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

E. Maximum Daily Effluent Limitation (MDEL).

If a daily discharge <(or when applicable, the median determined by subsection B above for multiple sample data of a daily discharge)> 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 day.

F. 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).

G. 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).

DEFINITIONS, ACRONYMS & ABBREVIATIONS

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:

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

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.

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

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) 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 U.S. EPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

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 is the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

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 are 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) means 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 is 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) 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) 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 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) are those sample results less than the laboratory's MDL.

Ocean Waters are 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 are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (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 Regional 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 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 State or Regional Water Board.

Reporting Level (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 Regional 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 is 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 is any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

Standard Deviation (σ) 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) 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.)

ACRONYMS & ABBREVIATIONS

| | |
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| AMEL | Average Monthly Effluent Limitation |
| B | Background Concentration |
| BAT | Best Available Technology Economically Achievable |
| Basin Plan | <i>Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties</i> |
| BCT | Best Conventional Pollutant Control Technology |
| BMP | Best Management Practices |
| BMPPP | Best Management Practices Plan |
| BPJ | Best Professional Judgment |
| BOD | Biochemical Oxygen Demand |
| BPT | Best practicable treatment control technology |
| C | Water Quality Objective |
| CCR | California Code of Regulations |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| CTR | California Toxics Rule |
| CV | Coefficient of Variation |
| CWA | Clean Water Act |
| CWC | California Water Code |
| DMR | Discharge Monitoring Report |
| DNQ | Detected But Not Quantified |
| ECA | Effluent Concentration Allowance |
| ELAP | California Department of Health Services Environmental Laboratory Accreditation Program |
| ELG | Effluent Limitations, Guidelines and Standards |
| gpd | gallons per day |
| IC | Inhibition Coefficient |
| IC ₁₅ | Concentration at which the organism is 15% inhibited |
| IC ₂₅ | Concentration at which the organism is 25% inhibited |
| IC ₄₀ | Concentration at which the organism is 40% inhibited |
| IC ₅₀ | Concentration at which the organism is 50% inhibited |
| LA | Load Allocations |
| LOEC | Lowest Observed Effect Concentration |
| LTA | Long-Term Average |
| MDEL | Maximum Daily Effluent Limitation |
| MDL | Method Detection Limit |
| MEC | Maximum Effluent Concentration |
| MGD | Million Gallons Per Day |
| mg/L | Milligrams per Liter |
| ML | Minimum Level |
| MRP | Monitoring and Reporting Program |
| ND | Not Detected |
| NOEC | No Observable Effect Concentration |
| NPDES | National Pollutant Discharge Elimination System |
| NSPS | New Source Performance Standards |
| NTR | National Toxics Rule |
| OAL | Office of Administrative Law |

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|-------|--|
| POTW | Publicly-Owned Treatment Works |
| PMP | Pollutant Minimization Plan |
| QA | Quality Assurance |
| QA/QC | Quality Assurance/Quality Control |
| RPA | Reasonable Potential Analysis |
| RWQCB | Regional Water Quality Control Board |
| SCP | Spill Contingency Plan |
| SIP | State Implementation Policy (<i>Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California</i>) |
| SMR | Self Monitoring Reports |
| SWPPP | Storm Water Pollution Prevention Plan |
| SWRCB | State Water Resources Control Board |
| TAC | Test Acceptability Criteria |
| TDS | Total Dissolved Solids |
| TIE | Toxicity Identification Evaluation |
| TMDL | Total Maximum Daily Load |
| TOC | Total Organic Carbon |
| TRE | Toxicity Reduction Evaluation |
| TSD | Technical Support Document |
| TSS | Total Suspended Solid |
| TU | Toxicity Unit |
| USEPA | United States Environmental Protection Agency |
| WDR | Waste Discharge Requirements |
| WET | Whole Effluent Toxicity |
| WLA | Waste Load Allocations |
| WQBEL | Water Quality-Based Effluent Limitation |
| µg/L | Micrograms per Liter |