

Los Angeles Regional Water Quality Control Board

ORDER NO. R4-2013-0042  
GENERAL NPDES PERMIT NO. CAG834001

WASTE DISCHARGE REQUIREMENTS  
FOR  
DISCHARGES OF 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

This Order was adopted by the Regional Water Board on:	<b>March 7, 2013</b>
This Order shall become effective on:	<b>April 7, 2013</b>
This Order shall expire on:	<b>March 7, 2018</b>
The U.S. Environmental Protection Agency and the Regional Water Quality Control Board have classified discharges covered under this General NPDES Permit as a minor discharge.	

IT IS HEREBY ORDERED, that Order No. R4-2007-0021 is rescinded upon the effective date of this Order except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water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 and regulations adopted thereunder, and the provisions of the federal Clean Water Act, and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

I, Samuel Unger, 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 March 7, 2013.

  
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Samuel Unger, P.E.  
Executive Officer

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## I. 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 fuel 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. General Permit Application

To be authorized to discharge under this Order, the Discharger must apply for enrollment under the General National Pollutant Discharge Elimination System (NPDES) permit by submitting to the Regional Water Board a Notice of Intent (NOI).

#### 1. Notice of Intent

- a. Both Existing and New Dischargers eligible to seek coverage under the General NPDES Permit shall submit to the Executive Officer a complete NOI, including all information required by the NOI. The NOI is incorporated as Attachment C to this Order.
- b. The Discharger must obtain and analyze (using appropriate sampling and laboratory methods) a representative sample(s) of the untreated groundwater to be treated and discharged under this Order. The analytical method(s) used shall be capable of achieving a detection limit at or below the minimum level<sup>1</sup>, otherwise, a written explanation shall be provided. The analytical results shall be submitted with the NOI. The data shall be tabulated and shall include the results for every constituent listed on Attachment E.
- c. Pursuant to section 2, Article X of the California Constitution, and section 275 of the California Water Code on preventing waste and unreasonable use of waters of the state, this Regional Water Board encourages, wherever practical, water conservation and/or reuse of wastewater. To obtain coverage under this Order, the Discharger shall first investigate the feasibility of conservation, reuse, injection of the groundwater, and/or alternative disposal methods of the wastewater. The Discharger shall include this feasibility study with the NOI.
- d. The NOI for a New Discharger shall be accompanied by an enrollment fee in accordance with the Section 2200 *Annual Fee Schedules* of California Code of Regulations Title 23, Division 3, Chapter 9. The check or money order shall be made payable to the "State Water Resources Control Board".
- e. Upon request, the Discharger shall submit any additional information that the Executive Officer deems necessary to determine whether the discharge meets the criteria for coverage under this Order, or to prescribe an appropriate monitoring and reporting program, or both.

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<sup>1</sup> The minimum levels are those published by the State Water Quality Control Board in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, 2005. See attached Appendix A.

## **2. Deadline for Submission**

- a. Renewal of NPDES permits for Existing Dischargers currently covered under individual permits, that meet the eligibility requirement for coverage under the General NPDES Permit and that have submitted a Report of Waste Discharge (ROWD) or an NOI will consist of a letter of determination from the Executive Officer of coverage under this Order.
- b. Existing Dischargers that were authorized to discharge under Order R4-2007-0022 will be sent an NOI form that must be completed and returned to the Regional Water Board within 60 days of receipt; otherwise, permit coverage may be revoked. Existing Dischargers enrolling under this Order are required to collect representative untreated groundwater sample(s) and analyze the samples for all the constituents listed on Attachment E. Dischargers shall conduct this analysis and submit the result with the NOI; otherwise, the existing authorization may be terminated. The discharge will be considered ineligible for enrollment, if the analytical test results of any constituent other than the pollutants with effluent limitations in Section V.A. exceeds the screening criteria in Attachment E. The discharger will be enrolled under other appropriate General NPDES Permit or an individual permit and the existing enrollment will be terminated.
- c. New Dischargers shall file a complete NOI at least 45 days before commencement of the discharge.

## **3. Failure to Submit a NOI**

Existing Dischargers who fail to submit a complete NOI by the deadline established herein will be deemed out of compliance with the General NPDES Permit and subject to all penalties allowable pursuant to applicable provisions of the Clean Water Act and the California Water Code including Section 13261 thereof.

## **4. Authorization of Coverage**

Upon receipt of the complete NOI, 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 Dischargers, the discharge shall not commence until receipt of the Executive Officer's written determination of eligibility for coverage under this General NPDES Permit. If necessary, for existing Discharger the Executive Officer may require a Discharger to comply with the conditions of this General NPDES Permit even if the Discharger has not submitted an NOI to be covered by the General NPDES Permit.

## **5. Notice of Start-Up**

New Dischargers shall notify the Regional Water Board staff of the time and date for commencement of the discharge(s) authorized under the General NPDES Permit at least seven days prior to initiating a discharge.

## **B. Eligibility Requirements**

### **1. Eligibility**

- a. This Order covers discharges to surface waters of treated groundwater and other wastewaters from the investigation, cleanup, or dewatering of petroleum fuel related contamination arising from current and former leaking underground storage tanks sites or similar operations.
- b. To be covered under this Order, a Discharger must demonstrate that:
  - 1) Pollutant concentrations in the treated discharge do not cause a violation of any applicable water quality standard for the receiving water, including discharge prohibitions;
  - 2) The treated discharge does not exceed applicable water quality objectives and criteria for the pollutants listed in Section V.A (including Attachment B). of this Order, and there will be no reasonable potential to cause or contribute to an excursion above the applicable water quality objectives or criteria.
  - 3) Pollutant concentrations in a representative sample of the contaminated groundwater to be treated and discharged do not exceed the screening criteria in Attachment E, other than those constituents for which effluent limitations are established in Section II.A.
  - 4) The discharge does not cause acute or chronic toxicity in receiving waters;
  - 5) The discharge will be routed through a treatment system designed and operated to reduce the concentration of pollutants to meet the effluent limitations in this Order; and
  - 6) The Discharger is able to comply with the terms and conditions of this General NPDES Permit.

## 2. Ineligibility

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

## **C. Exclusion of Coverage**

### **1. Termination of Discharge**

Dischargers shall submit a Notice of Termination (NOT) when coverage under this General NPDES Permit is no longer needed. An NOT is a letter or form that lists the Waste Discharge Identification Number (WDID), the Compliance Inspection # (CI #) the name and address of the owner of the facility, and is signed and dated by the owner certifying that the discharge associated with the General NPDES Permit has been eliminated. Upon submission, the Discharger is no longer authorized to discharge wastewater associated with this General NPDES Permit.

### **2. Change from Authorization Under General Permit to Individual Permit**

Dischargers already covered under the NPDES program, whether by general or individual permit, may elect to continue coverage under the existing permit or may submit a complete NOI for coverage under this General NPDES Permit. Dischargers who submit a complete NOI under this General NPDES Permit are not required to submit an individual permit application. The Regional Water Board may request additional information and may determine that a Discharger is not eligible for coverage under this General NPDES Permit and should be regulated under an individual or other general NPDES permit or, for discharges to land, under waste discharge requirements (WDRs). If the Regional Water Board issues such NPDES permit or WDRs, then the applicability of this General NPDES Permit to the discharge is immediately terminated on the effective date of such NPDES permit or WDRs.

### **3. Transferring Ownership**

Coverage under this Order may be transferred in case of change of ownership of land or discharge facility provided the current owner/operator notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the current and new owner/operator containing a specific date of transfer of coverage, responsibility for compliance with this Order, and liability between them.

## **D. Basis for Fee**

Title 23 of the California Code of Regulations (CCR), Division 3, Chapter 9, Article 1, section 2200, *Annual Fee Schedule*, requires that all discharges subject to a specific general permit shall pay an annual fee.

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

## **E. 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 of this Order.

### III. FINDINGS

#### 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 California Water Code (CWC, commencing with section 13370). It shall serve as an NPDES permit for point source discharges of wastewaters generated from the investigation or cleanup of petroleum fuel contaminated sites to surface waters under the jurisdiction of the California Water Quality Control Board-Los Angeles Regional (Regional Water Board). This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).

#### B. Background

1. On April 5, 2007, the Regional Board adopted Order No. R4-2007-0021 General NPDES Permit No. CAG834001 Waste Discharge Requirements for Discharge of Treated Petroleum Fuel Contaminated Groundwater to surface waters. This General Permit expired on April 5, 2012 and has been automatically extended administratively. Approximately 8 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.

#### C. Pollutants of Concern

The pollutants covered by this Order include, but not limited to only those pollutants listed in Table 1 of this Order

#### D. Incorporation of Attachments



The Regional Water Board developed the requirements in this Order based on information submitted as part of the permit application, through monitoring and reporting reports, and other available information. The background information and rationale for the Order requirements are contained in Attachment F, Fact Sheet and constitutes part of the Findings for this Order, which is hereby incorporated into this Order. Attachments A through E 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 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. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet.

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 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. 40 CFR 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 or criteria within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric objective or criterion 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 40 CFR 122.44(d)(1)(vi).

The effluent limitations from groundwater cleanup projects regulated under this permit are

calculated assuming no dilution. For most practical purposes, discharges from groundwater cleanups do not flow directly into receiving waters with enough 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 ground waters protected as drinking waters.

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 or criterion for the designated surface water beneficial uses in the Los Angeles Region.

#### **H. Watershed Management Approach and Total Maximum Daily Loads (TMDLs)**

The Regional Water Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Water Board's many diverse programs, particularly NPDES with TMDLs, to better assess cumulative impacts of pollutants from all point and nonpoint sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental and economic impacts within the watershed. The TMDLs will establish waste load allocations (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.

Certain receiving waters in the Los Angeles watershed do not fully support beneficial uses and therefore have been classified as impaired on the 2010 303(d) list and have been scheduled for TMDL development. The USEPA partially approved the State's 2010 303(d) list of impaired water bodies on November 12, 2010. The approved portion of the 2010 State Water Resources Control Board (State Water Board) California 303(d) List includes the classification of the San Gabriel River Estuary, to which Los Alamitos Channel is tributary, as impaired due to copper, dioxin, nickel, and dissolved oxygen. For dioxin, nickel, and dissolved oxygen, TMDL development is scheduled for 2021.

#### **I. Water Quality Control Plans**

The Regional Water Board has adopted a revised basin plan, *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) 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. The Basin Plan on Page 2-4 states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. In addition, the Basin Plan implements State Water Resources Control Board (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 municipal or domestic supply.

#### **J. Receiving Water Beneficial Uses**

The Basin Plan lists the designated beneficial uses of specific water bodies (receiving waters) in the Los Angeles Region. Typical beneficial uses covered by this Order include the following:

1. 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.
2. 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.
3. 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.

There are currently 60 USEPA-approved Total Maximum Daily Loads (TMDLs) for impaired waterbodies in the Los Angeles Region to reduce pollutants which are identified on California's 2010 303(d) list. These pollutants are classified into the categories of algae, bacteria, chloride, debris, metals, nutrients, salts, toxicity, toxics, and trash. All applicable TMDL requirements are implemented in this Order as effluent limitations and permit conditions.

#### **K. 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.

#### **L. 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.

#### **M. Compliance Schedules and Interim Requirements (Not Applicable)**

The discharges covered under this Order applies exclusively to discharges from petroleum fuel contaminated sites and as such the discharges from these sites are not expected to have issues in complying with the effluent limitations prescribed in this Order based on TMDLs. Therefore, this Order does not include either compliance schedule or Interim TMDLs and only appropriate final TMDLs have been prescribed. If a discharger cannot comply with the final TMDL effluent limitations in this permit, then the Discharger will be required to obtain coverage under an individual permit where compliance schedule is more appropriate.

#### **N. 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.

#### **O. 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.

#### **P. 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. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual water quality-based effluent limitations for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000.

#### **Q. Antidegradation Policy**

Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal

law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of Section 131.12 and State Water Board Resolution No. 68-16.

#### **R. Anti-Backsliding Requirements**

Sections 402(o) 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. Section 303(d)(4) of the CWA allows for backsliding if the less stringent limitations are based on a TMDL with the cumulative effect being that the limitations assure attainment of water quality standards in the receiving water for those specific parameters. Also, under 40 CFR 122.44(l)(2)(i)(B)(2) less stringent limitations are allowable when correcting technical mistakes or mistaken interpretations of law. This permit incorporates WQBELs based on TMDL WLAs for toxics and other pollutants adopted by the Regional Water Board and approved by USEPA under CWA section 303(d); these WQBELs supercede some effluent limits specified in the existing permit..

#### **S. Monitoring and Reporting**

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. A monitoring and reporting program (MRP) is tailored to each Discharger's individual situation and is provided with the General NPDES Permit coverage authorization letter signed by the Executive Officer of the Regional Water Board.

#### **T. 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.

#### **U. 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 of this Order.

#### **V. 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 of this Order.

#### **IV. DISCHARGE PROHIBITIONS**

1. Discharges of any waste at a location different from that described in this Order are prohibited.
2. Discharges of any waste, other than those which meet eligibility requirements in Section II.B of this Order are prohibited, unless the Discharger is regulated for such discharges by another NPDES permit or discharges into a permitted facility.
3. Discharges of extracted and/or treated groundwater in excess of the flow rates authorized by the Executive Officer of the Regional Water Board are prohibited.
4. Discharges that contain any substances in concentrations toxic to human, animal, plant, or aquatic life are prohibited.
5. Discharges causing a violation of any applicable water quality standards for receiving waters as required by the CWA and regulations adopted thereunder are prohibited.
6. Pollution, contamination, or nuisance as defined by Section 13050 of the CWC, which are created by the treatment or the discharge of pollutants authorized under this Order, are prohibited.
7. Discharges of any radiological, chemical, or biological warfare agent or high level radiological waste are prohibited.
8. 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.

#### **V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS**

##### **A. Effluent Limitations**

1. Discharge of an effluent from the outfall location(s) listed in the enrollment authorization factsheet in excess of the following limitations is prohibited. In the authorization letter, when a Discharger is enrolled under this permit, the Executive Officer shall list in the factsheet each constituent from the appropriate effluent limitation table(s) below which is applicable to the Discharger's effluent.

**a. General Effluent Limitations**

**Table 1. Effluent Limitations Applicable to All Discharges**

Constituents	Units	Discharge Limitations	
		Monthly Average	Daily Maximum
Total Suspended Solids	mg/L	50	75
Turbidity	NTU	50	75
BOD <sub>5</sub> 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*
Lead	µg/L	2.6**	5.2**
Methyl Tertiary Butyl Ether (MTBE)	µg/L	---	5
Naphthalene	µg/L	---	21
Di-isopropyl Ether (DIPE)	µg/L	---	0.8
Tertiary Butyl Alcohol (TBA)	µg/L	---	12

\* If the reported MDL is greater than the effluent limitation, then a non-detect result using an MDL of 0.5 µg/L is deemed to be in compliance.  
 \*\* Total recoverable metals (based on a hardness of 100 mg/L). This limitation applies to receiving waters with no approved final lead TMDL.

**b. *WQBEL based on TMDL Waste Load Allocations:***

Discharge of an effluent from the outfall location(s) listed in the enrollment authorization factsheet based on the following TMDL WLAs in excess of the following limitations is prohibited.

(In the authorization letter, when a discharger is enrolled under this permit, the Executive Officer shall list in the factsheet each constituent(s) from the appropriate limitations table(s) below based on TMDL WLAs that are applicable to the specific discharge).

**Table 2. WQBELs based on Basin Plan section 7-13 - Los Angeles River and Tributaries Metals TMDL WLAs, Dry Weather<sup>2</sup>**

Reach	Units	Copper, TR		Lead, TR		Zinc, TR		Selenium, TR	
		Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly
Reach 5 and 6 and Bell Creek	µg/L	49	25	31	16			8.2	4.1
Reach 4	µg/L	43	21	16	8.2				
Reach 3 above LA-Glendale WRP and Verdugo	µg/L	38	19	20	9.8	---	---	---	---
Reach 3 below LA-Glendale WRP	µg/L	43	21	20	9.8	---	---	---	---
Burbank Western Channel (above Burbank WRP)	µg/L	43	21	23	11	---	---	---	---
Burbank Western Channel (below Burbank WRP)	µg/L	31	16	15	7.4	---	---	---	---
Reach 2 and Arroyo Seco	µg/L	36	18	18	9	---	---	---	---
Reach 1	µg/L	38	19	20	9.8	---	---	---	---
Compton Creek	µg/L	31	16	15	7.3	---	---	---	---
Rio Hondo Rch. 1	µg/L	21	11	8.2	4.1	210	110	---	---

**Table 3. WQBELs based on Basin Plan section 7-13 - Los Angeles River and Tributaries Metals TMDL WLAs, Wet Weather<sup>3</sup>**

Constituents	Units	Effluent Limitations	
		Maximum Daily	Average Monthly
Cadmium, TR	µg/L	3.1	1.5
Copper, TR	µg/L	17	8.5
Lead, TR	µg/L	62	31
Zinc, TR	µg/L	160	79

<sup>2</sup> For purposes of this general permit, discharges occurring from April 15th through November 15th are considered dry weather discharges.

<sup>3</sup> For purposes of this general permit, discharges occurring from November 14<sup>th</sup> through April 14<sup>th</sup> are considered wet weather discharges.



**Table 4. WQBELs based on Basin Plan section 7-39 - Los Angeles River Watershed Bacteria TMDL WLAs**

Constituents	Units	Effluent Limitations	
		Geometric Mean Monthly	Maximum Daily
<i>E.coli</i> density	MPN/100 mL	126	235

**Table 5. WQBELs based on Basin Plan section 7-12 - Ballona Creek Metals TMDL WLAs**

Constituents	Units	Dry Weather Effluent Limitations		Wet Weather Effluent Limitations	
		Maximum Daily	Average Monthly	Maximum Daily	Average Monthly
Copper, TR	µg/L	39	20	18	9
Lead, TR	µg/L	21	11	59	29
Selenium, TR	µg/L	8.2	4.1	5	2.5
Zinc, TR	µg/L	304	151	119	59

**Table 6. WQBELs based on USEPA's Los Cerritos Channel Metal TMDL**

Constituents	Units	Dry Weather Effluent Limitations		Wet Weather Effluent Limitations	
		Maximum Daily	Average Monthly	Maximum Daily	Average Monthly
Copper, TR	µg/L	31	16	9.8	4.8
Lead, TR	µg/L			59	28
Zinc, TR	µg/L			96	48

**Table 7. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs, WET Weather<sup>4</sup>**

Constituent	Units	Effluent Limitations	
		Maximum Daily	Average Monthly
Copper, TR	µg/L (water, unfiltered)	9.7	4.8
Lead, TR	µg/L (water, unfiltered)	43	21
Zinc, TR	µg/L	70	35

<sup>4</sup> Exceedances of California Toxic Rule (CTR) criteria for metals were only observed in freshwaters of Dominguez Channel during wet weather; therefore, WQBELs are set for wet weather only.

**Table 8. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs**

Constituent	Units	Dominguez Channel Estuary		Greater Harbor Waters	
		Maximum Daily	Average Monthly	Maximum Daily	Average Monthly
Copper, TR	µg/L	6.1	3	6.1	3
Lead, TR	µg/L	14	7	14	7
Zinc, TR	µg/L	140	70	140	70
PAHs	µg/L	0.098	0.049		
Chlordane	µg/L	0.0012	0.00059	---	---
4,4'-DDT	µg/L	0.0012	0.00059	0.0012	0.00059
Dieldrin	µg/L	0.00028	0.00014	----	---
Total PCBs	µg/L	0.00034	0.00017	0.00034	0.00017

**Table 9. WQBELs based on Basin Plan section 7-20 - San Gabriel River and Impaired Tributaries Metals and Selenium TMDL WLAs, Dry Weather<sup>5</sup>**

Reaches	Units	Copper, TR		Selenium, TR	
		Maximum Daily	Average Monthly	Maximum Daily	Average Monthly
SJC R-1, 2 <sup>1</sup>	µg/L			8.2	4.1
SGR R-1 <sup>2</sup>	µg/L	30	15		
SGR R 2 <sup>3</sup>	µg/L				
Coyote Creek	µg/L	33	16		
Estuary	µg/L	5.1	2.5		

1. San Jose Creek Reach 1 (Confluence to Temple Street) and San Jose Reach 2 (Temple Street to I-10 Freeway at White Avenue)
2. San Gabriel River Reach 1 (Firestone Avenue to Estuary).
3. San Gabriel River Reach 2 (Whittier Narrows to Firestone Avenue), and upstream reaches and tributaries

<sup>5</sup> Defined in the Footnote 2.

**Table 10. WQBELs based on Basin Plan section 7-20 - San Gabriel River and Impaired Tributaries Metals and Selenium TMDL WLAs, Wet-Weather<sup>6</sup>**

Reaches	Units	Copper, TR		Lead, TR		Zinc, TR	
		Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly
SJC R-1, 2 <sup>1</sup>	µg/L						
SGR R-1 <sup>2</sup>	µg/L						
SGR R 2 <sup>3</sup>	µg/L			166	83		
Coyote Creek	µg/L	15	7.5	87	43	125	62
Estuary	µg/L						

1. San Jose Creek Reach 1 (Confluence to Temple Street) and San Jose Reach 2 (Temple Street to I-10 Freeway at White Avenue)
2. San Gabriel River Reach 1 (Firestone Avenue to Estuary).
3. San Gabriel River Reach 2 (Whittier Narrows to Firestone Avenue), and upstream reaches and tributaries

**Table 11. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed Metals and Selenium TMDL WLAs – Dry Weather**

Reaches	Units	Copper <sup>1,2</sup>		Nickel <sup>3</sup>		Selenium	
		Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly
1-Mabu Lagoon	µg/L	6.1	3.0	13.5	6.7	----	----
2-Calleguas Creek South	µg/L	6.1	3.0	13.5	6.7	----	----
3-Revolon Slough	µg/L	44	22	244	122	----	----
4-Calleguas Creek North	µg/L	6.1	3.0	13.6	6.8	8.2	4.1
5-Beardsley Channel	µg/L	6.1	3.0	13.6	6.8	8.2	4.1
9-Conejo Creek	µg/L	48	24	262	131	----	----
10-Hill Canyon reach of Conejo Creek	µg/L	48	24	262	131	----	----
11-Arroyo Santa Rosa	µg/L	48	24	262	131	----	----
12-North Fork Conejo Creek	µg/L	48	24	262	131	----	----
13-Arroyo Conejo (S.Fork Conejo Cr)	µg/L	48	24	262	131	----	----

Notes:

1. Site Specific Water-Effect Ratios (WER) for copper have been developed by Regional Board for Reach1 (WER = 1.51) and Reach 2 (WER = 3.69). The effluent limitations for copper for these two reaches have been recalculated based on WERs.
2. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.96 for freshwater reaches and 0.83 for salt water reaches.
3. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.997 for freshwater reaches and 0.99 for salt water reaches.

<sup>6</sup> Defined in the Footnote 3.

**Table 12. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed Metals and Selenium TMDL WLAs –Wet Weather**

Reaches	Units	Copper <sup>1,2</sup>		Nickel <sup>3</sup>		Selenium	
		Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly
1-Mabu Lagoon	µg/L	5.8	2.9	74	37	----	-----
2-Calleguas Creek South	µg/L	5.8	2.9	74	37	----	-----
3-Revolon Slough	µg/L	27.4	13.7	858	427	----	-----
4-Calleguas Creek North	µg/L	5.8	2.9	75	37	289	144
5-Beardsley Channel	µg/L	5.8	2.9	75	37	289	144
9-Conejo Creek	µg/L	31	15	956	477	----	-----
10-Hill Canyon reach of Conejo Creek	µg/L	31	15	956	477	----	-----
11-Arroyo Santa Rosa	µg/L	31	15	956	477	----	-----
12-North Fork Conejo Creek	µg/L	43	21	1294	645	----	-----
13-Arroyo Conejo (S.Fork Conejo Cr)	µg/L	43	21	1294	645	----	-----

Notes:

1. Site Specific Water-Effect Ratios (WER) for copper have been developed by Regional Board for Reach1 (WER = 1.51) and Reach 2 (WER = 3.69). The effluent limitations for copper for these two reaches have been recalculated based on WERs.
2. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.96 for freshwater reaches and 0.83 for salt water reaches.
3. Concentration based targets have been converted to total recoverable allocations using the CTR default translator of 0.997 for freshwater reaches and 0.99 for salt water reaches.

**Table 13. WQBELs based on Basin Plan section 7-17 - Calleguas Creek Organochlorine Pesticides, Polychlorinated Biphenyls, and Siltation TMDL WLAs**

Constituents	Units	Effluent Limitations	
		Maximum Daily	Average Monthly
Chlordane	ng/L	1.2	0.59
4,4-DDD	ng/L	1.7	0.84
4,4-DDE	ng/L	1.2	0.59
4,4-DDT	ng/L	1.2	0.59
Dieldrin	ng/L	0.28	0.14
PCBs	ng/L	0.34	0.17
Toxaphene	ng/L	0.33	0.16

**Table 14. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed Metals and Selenium TMDL WLAs –Dry and Wet Weather**

Constituents	Units	Effluent Limitations	
		Maximum Daily	Average Monthly
Mercury	µg/L	0.1	0.051

**Table 15. Calleguas Creek, Its Tributaries, and Magu Lagoon Toxicity TMDL**

Pollutant	Units	Effluent Limitations
Toxicity	Toxicity Unit (TUc)	1

**Table 16. Calleguas Creek, Its Tributaries, and Magu Lagoon TMDL for organophosphate pesticides (Chlorpyrifos and Diazinon)**

Parameters	Units	Effluent Limitations		
		4 Day Average	Acute	Chronic
Chlorpyrifos	µg/L	0.014	----	----
Diazinon	µg/L	----	0.10	0.10

**Table 17. WQBELs based on Basin Plan section 7-10 Malibu Creek and Lagoon, section 7-11 Los Angeles Harbor (Inner Cabrillo Beach and Main Ship Channel), section 7-5 Marina del Rey Harbor Mothers' Beach and Back Basin, section 7-28 Harbor Beaches of Ventura County (Kiddie Beach and Hobie Beach), section 7-36 Santa Clara River Estuary and Reaches 3,5,6, and 7, and USEPA's Long Beach City Beaches and Los Angeles River Estuary Bacteria TMDL WLAs**

Parameters	Units	Effluent Limitations	
		Geometric Mean Monthly	Maximum Daily
Total Coliform (T)	MPL/100 mL	1,000	10,000
Fecal Coliform (F)	MPL/100 mL	200	400
Enterococcus	MPL/100 mL	35	104
If ratio of F/T > 0.1	MPL/100 mL	---	1,000

**Table 18. WQBELs based on Basin Plan section 7-14 - Ballona Creek Estuary Toxic Pollutants TMDL WLAs in Sediment**

Constituents	Units	Effluent Limitations*
Cadmium	mg/kg dry	1.2
Copper	mg/kg dry	34
Lead	mg/kg dry	46.7
Silver	mg/kg dry	1.0
Zinc	mg/kg dry	150
Chlordane	µg/kg dry	0.5
DDTs	µg/kg dry	1.58
Total PCBs	µg/kg dry	22.7
Total PAHs	µg/kg dry	4,022

\*: See Section VIII. H. for compliance determination.

**Table 19. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs in Sediment**

Waterbody	Effluent Limitations (mg/kg)*		
	Lead	Zinc	PAHs
Long Beach Outer Harbor (inside breakwater)	46.7	150	4.022
Los Angeles Outer Harbor (inside breakwater)	46.7	150	4.022
Los Angeles River Estuary	46.7		4.022
Los Angeles Harbor–Inner Cabrillo Beach Area	46.7		4.022

\*: See Section VIII. H. for compliance determination.

**Table 20. WQBELs based on Basin Plan section 7-18 - Marina del Rey Harbor Toxic Pollutants TMDLWLAs in Sediment**

Constituent	Units	Effluent Limitations*
Copper	mg/kg	34
Lead	mg/kg	46.7
Zinc	mg/kg	150
Chlordane	µg/kg	0.5
Total PCBs	µg/kg	22.7

\*: See Section VIII. H. for compliance determination.

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 WQBELs in Attachment B for watershed/stream

reach mineral objectives 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 monthly 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 CWA, and amendments thereto.

**a. Land Discharge Specifications (Not Applicable)**

**b. Reclamation Specifications (Not Applicable)**

**VI. RECEIVING WATER LIMITATIONS**

**A. Surface Water Limitations**

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the receiving waterbody.

1. The normal ambient pH to fall below 6.5 nor exceed 8.5 units nor vary from normal ambient pH levels by more than 0.2 units.
2. Surface water temperature to rise greater than 5° F above the natural temperature of the receiving waters at any time or place. At no time shall the temperature be raised above 80° F as a result of waste discharged.
3. The waste discharged shall not cause the log mean limits of bacteria to be exceeded in Table 21 for freshwater receiving water and in Table 22 for saltwater receiving water with REC-1 designated beneficial use.

**Table 21. Freshwater Bacteria Limitations**

Parameters	Units	Receiving Water Limitations	
		Geometric Mean	Single Sample
E. coli	MPN/100 mL	126	235
E. coli* (Ballona Creek only)	MPN/100 mL	126	576

\*: E. coli limitations for Ballona Creek with designated beneficial use of Limited Contact Recreation (LREC-1).

**Table 22. Saltwater Water Bacteria Limitations**

Parameters	Units	Receiving Water Limitations	
		Geometric Mean	Single Sample
Total Coliform	MPN/100 mL	1,000	10,000
Fecal Coliform	MPN/100 mL	200	400
Enterococcus	MPN/100 mL	35	104
If Fecal/Total Coliform > 0.1	MPN/100 mL	- - -	1,000

4. Depress the concentration of dissolved oxygen to fall below 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
5. Exceed total ammonia (as N) concentrations specified in the Regional Water Board Resolution No. 2004-022. Resolution No. 2004-022 revised the ammonia water quality objectives for inland surface waters not characteristic of freshwater in the 1994 Basin Plan, to be consistent with USEPA's "Ambient Water Quality Criteria for Ammonia (Saltwater) - 1989". Adopted on March 4, 2004, Resolution No. 2004-022 was approved by State Water Board, OAL and USEPA on July 22, 2004, September 14, 2004, and May 19, 2005, respectively and is now in effect.
6. The presence of visible, floating, suspended or deposited macroscopic particulate matter or foam.
7. 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.
8. Suspended or settleable materials, chemical substances or pesticides in amounts that cause nuisance or adversely affect any designated beneficial use.
9. Toxic or other deleterious substances in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
10. Accumulation of bottom deposits or aquatic growths.
11. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses.
12. The presence of substances that result in increases of BOD that adversely affect beneficial uses.
13. 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.
14. Alteration of turbidity, or apparent color beyond present natural background levels.
15. Damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload the design capacity.
16. Degrade surface water communities and populations including vertebrate, invertebrate, and plant species.



17. Problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.
18. Create nuisance, or adversely affect beneficial uses of the receiving water.
19. Violation of any applicable water quality standards for receiving waters adopted by the Regional Water Board or State Water Board. If more stringent applicable water quality standards are promulgated or approved pursuant to section 303 of the CWA, or amendments thereto, the Regional Water Board will revise or modify this Order in accordance with such standards.

**c. Groundwater Limitations (Not Applicable)**

**VII. PROVISIONS**

Standard Provisions, which apply to all NPDES permits in accordance with Section 122.41 & 122.42, are included in this Order. 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 provided 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.

**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.
- g. Any discharge authorized under this Order may request to be excluded from the coverage of this Order by applying for an individual permit.
- h. 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.

**d. Monitoring and Reporting Program Requirements**

The Executive Officer is hereby authorized to prescribe a Monitoring and Reporting Program for each authorized discharger. 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.

**e. Special Provisions**

**1. Reopener Provisions**

- 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 a 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.

**f. Special Studies, Technical Reports and Additional Monitoring Requirements (Not Applicable)**

**g. Best Management Practices of Pollution Prevention**

All Dischargers are encouraged to implement Best Management Practices and Pollution Prevention Plans to minimize pollutant concentrations in the discharge.

**h. 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 (pollutants concentrations above water quality criteria and goals). 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.

**i. Engineering Design Report**

For all new dischargers and existing dischargers where significant changes have made since prior submittals to the Regional Water Board, the NOI shall be accompanied by treatment flow schematic diagram and a certification, which demonstrates 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.

**j. Special Provisions for Municipal Facilities (POTWs Only)**

Not Applicable

## **k. Other Special Provisions**

### **1. Expiration and Continuation of this Order**

This Order expires on March 7, 2018; 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 L (Expiration Date and Continuation of this Order) of Order No. R4-2007-0022, discharges regulated under Order No. R4-2007-0022 on or before sixtieth day of notification of adoption of this Order, that has submitted a completed NOI may continue under Order No. R4-2007-0022 until enrolled under this General Permit.

### **2. 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 60 days of notification by the Executive Officer.

### **3. Rescission**

Except for enforcement purposes, Order No. R4-2007-0022, adopted by this Regional Board on April 5, 2007, is rescinded effective March 7, 2013.

## **I. Compliance Schedules**

Not Applicable

## **VIII. COMPLIANCE DETERMINATION**

Compliance with the effluent limitations contained in section IV 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 Appendix 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 or MDEL 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 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).

#### **H. Limitations Based on Sediment TMDLs.**

Where sediment based effluent limitations is applicable discharger are allowed to demonstrate compliance with sediment TMDL limitations by complying with the TSS effluent limitation and CTR based toxic effluent limitation for the sediment based TMDL toxics of concern.

If the effluent analysis satisfies Condition A or B as listed below, the Discharger has demonstrated compliance with the sediment limitations. Therefore, no further sediment monitoring is required.

Condition A: Does not exceed TSS effluent limits and the CTR values of the sediment TMDL priority pollutants (Sediment-CTR Values). Table showing the CTR values of the priority pollutants targeted in the TMDLs covered in this Order is in the Appendix B of the Order;

Condition B: Exceeds TSS effluent limits, but does not exceed the Sediment-CTR Values.

When both TSS and the Sediment-CTR Values are exceeded, an accelerated monitoring program for TSS and the exceeded priority pollutant(s) shall be implemented in the following week when the exceedances are observed.

If two consecutive effluent sampling events show exceedance for both TSS and the Sediment-CTR value(s), the discharger is determined to be non-compliance with sediment based effluent limitation. Thereafter, sediment based effluent monitoring shall be implemented as prescribed in the Monitoring and Reporting Program for the rest of the permitting cycle.

However, if two successive sampling events show compliance with TSS and the sediment-CTR value(s), the discharge shall continue with regular effluent monitoring in accordance with the MRP.

**APPENDIX A**

**SWRCB Minimum Levels in ppb (µg/L)**

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of the State Implementation Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the SWRCB and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides and PCBs.

Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Bromomethane	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethene	0.5	2
Toluene	0.5	2
Trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

\*The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
1,2 Benzanthracene	10	5		
1,2 Dichlorobenzene (semivolatile)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatile)	2	1		
1,4 Dichlorobenzene (semivolatile)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
3,4 Benzofluoranthene		10	10	
4 Chloro-3-methylphenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene(3,4 Benzopyrene)		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	



Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Hexachloro-cyclopentadiene	5	5		
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

\* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1,000; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1,000.

\*\* Phenol by colorimetric technique has a factor of 1.

Table 2c – INORGANICS*	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1,000
Arsenic		2	10	2	2	1		20	1,000
Beryllium	20	0.5	2	0.5	1				1,000
Cadmium	10	0.5	10	0.25	0.5				1,000
Chromium (total)	50	2	10	0.5	1				1,000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1,000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1,000
Selenium		5	10	2	5	1			1,000
Silver	10	1	10	0.25	2				1,000
Thallium	10	2	10	1	5				1,000
Zinc	20		20	1	10				1,000

\* The normal method-specific factor for these substances is 1; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2d – PESTICIDES – PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
a-Hexachloro-cyclohexane	0.01
Aldrin	0.005
b-Endosulfan	0.01
b-Hexachloro-cyclohexane	0.005
Chlordane	0.1
d-Hexachloro-cyclohexane	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Lindane(g-Hexachloro-cyclohexane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

\* The normal method-specific factor for these substances is 100; therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

**Techniques:**

- GC - Gas Chromatography
- GCMS - Gas Chromatography/Mass Spectrometry
- HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)
- LC - High Pressure Liquid Chromatography
- FAA - Flame Atomic Absorption
- GFAA - Graphite Furnace Atomic Absorption
- HYDRIDE - Gaseous Hydride Atomic Absorption
- CVAA - Cold Vapor Atomic Absorption
- ICP - Inductively Coupled Plasma
- ICPMS - Inductively Coupled Plasma/Mass Spectrometry
- SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)
- DCP - Direct Current Plasma
- COLOR – Colorimetric

**APPENDIX- B**

**Effluent Limitations based on CTR and SIP procedures for the those Metals and Organics Listed in TMDLs; Ballona Creek Estuary Toxics TMDLS, Dominguez Channel Estuary, Los Angeles and Long Beach Harbors TMDLs and Marina Dely Rey Harbor Toxics TMDLs that Requires sediment analysis<sup>7</sup>**

Constituents	Units	Effluent Limitations	
		Daily Max.	Monthly Avg.
Cadmium	µg/L	5	---
Copper	µg/L	5.8	2.9
Lead	µg/L	14	7
Silver	µg/L	2.2	1.1
Zinc	µg/L	95	47
Chlordane	µg/L	0.00126	0.00059
4,4'-DDT	µg/L	0.00126	0.00059
4,4'-DDT	µg/L	0.00126	0.00059
4,4'-DDD	µg/L	0.0017	0.00084
Total PCBs	µg/L	0.00034	0.00017
Total PAHs	µg/L	NA	NA

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<sup>7</sup> Compliance for TSS and the toxics pollutants in the effluent must be demonstrated to satisfy the compliance requirements for sediment Waste Load allocations for toxic pollutants listed in the respective TMDLs.

## ATTACHMENT A – DEFINITIONS, ACRONYMS & ABBREVIATIONS

**Arithmetic Mean ( $\mu$ )**, 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:  $\Sigma x$  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** pollutants are 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 are substances that are known to cause cancer in living organisms.

**Coefficient of Variation (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)** 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 ( $\sigma$ )** 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;
$\mu$	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

AMEL	Average Monthly Effluent Limitation
B	Background Concentration
BAT	Best Available Technology Economically Achievable
Basin Plan	Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BMPP	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 <sub>15</sub>	Concentration at which the organism is 15% inhibited
IC <sub>25</sub>	Concentration at which the organism is 25% inhibited
IC <sub>40</sub>	Concentration at which the organism is 40% inhibited
IC <sub>50</sub>	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
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 (Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California)
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