

ATTACHMENT F – Fact Sheet

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ATTACHMENT F – FACT SHEET

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

I. PERMIT INFORMATION

A. Background. The State Water Resources Control Board (State Water Board) has been authorized by the USEPA, pursuant to Section 402 of the CWA, to administer the NPDES program in California since 1973. The procedures for the State Water Board and the Regional Water Board to issue NPDES permits pursuant to NPDES regulations at section 122 & 123, title 40 of the Code of Federal Regulations¹, were established through the NPDES Memorandum of Agreement between the USEPA and the State Water Board on September 22, 1989.

Section 122.28 provides for issuance of General NPDES 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. General NPDES permits enable Regional Water 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.

On April 5, 2007, this Regional Water Board adopted the General NPDES Permit and WDRs for Discharges of Volatile Organic Compound Contaminated Groundwater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (NPDES No. CAG914001, Order No. R4-2007-0022). The General NPDES Permit covered discharges of groundwater to surface waters resulting from the cleanup of VOCs contaminated-groundwater and similar discharges. Approximately 12 dischargers are currently enrolled under the General NPDES Permit.

In accordance with Title 40, Code of Federal Regulations (CFR), the Regional Water Board must meet general program requirements prior to the re-issuance and adoption of a general NPDES permit. General program requirements include preparing a draft General NPDES Permit, public noticing, allowing a public comment period, and conducting a public hearing. To meet these requirements, the Regional Water Board prepared a draft General NPDES Permit. The draft General NPDES Permit was sent to interested parties on December 21, 2012 for comments. A public hearing to receive testimony from interested parties was scheduled for March 7, 2013. The Notice of Public Hearing was sent to the interested party list at the same time the draft General NPDES Permit was sent. A public hearing notice was also posted in major newspapers in the counties of Los Angeles and Ventura.

Major conditions in the expiring Order No. R4-2007-0022 General NPDES Permit CAG914001 remain in this Order, including Effluent Limitations and Discharge Provisions. TMDL requirements approved so far in the jurisdiction of the Region Water Board are considered and corresponding limits are applied. This Order is formatted consistent with the State Water Board NPDES permit template. In addition, this Order requires filing of Notice of Intent for all dischargers under this General NPDES Permit to streamline the permit application process.

¹ All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

B. General Criteria for Coverage. This General NPDES Permit is intended to cover new or existing discharges of treated groundwater to surface waters, resulting from cleanup activities of VOCs contaminated sites. To be covered by this General NPDES Permit, discharges must meet the following criteria:

The discharge is a minor discharge as classified by the U.S. EPA and the Regional Water Board;

The discharge from the treatment facility shall contain no pollutants exceeding the discharge limits;

The discharge shall not adversely affect the beneficial uses of the receiving water;

The discharge is necessary because a polluted groundwater cleanup operation is required;

The discharge is necessary because no feasible alternative to the discharge (re injection, reclamation, evaporation, discharge to a community wastewater treatment and disposal system, etc.) is available; and

The discharge is in the public interest.

This General NPDES Permit does **not** cover discharges of treated groundwater impacted by heavy metals (excluding lead, chromium III and chromium VI) or other toxic pollutants not limited in this permit, although discharge limits on heavy metals and other toxic pollutants required by TMDL are imposed on all dischargers.

II. NOTIFICATION REQUIREMENTS

The purpose of this General NPDES Permit is to facilitate regulation of discharges from the new or existing discharges of treated groundwater to surface waters, resulting from cleanup activities for VOCs. To obtain coverage under this General NPDES Permit, the Discharger must submit a Notice of Intent (NOI) Form and pay a filing fee. An NOI Form must be signed to be valid. Signing the certification on the NOI Form signifies that the Discharger intends to comply with the provisions of this General NPDES Permit.

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 level², otherwise, a written

² 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.

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.

2. Deadline for Submission

- a. 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 sample 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.
- b. New Dischargers shall file a complete NOI Form at least 45 days before commencement of the discharge.

3. Failure to Submit a NOI FORM

Existing Dischargers who fail to submit a complete NOI Form 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 discharges, the discharge shall not commence until receipt of the Executive Officer's written determination of eligibility for coverage under this General NPDES Permit. 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 Form to be covered by the General NPDES Permit, as specified in Section II. A. d. of this Order.

Renewal of permits for existing Dischargers covered under individual permits that meet the eligibility requirement and that have submitted a Report of Waste Discharge (ROWD) or an NOI Form will consist of a letter of determination from the Executive Officer of coverage under this Order.

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 Requirement

1. Eligibility

- a.** This Order covers discharges to surface waters of treated groundwater and other wastewaters from the investigation, cleanup, or construction dewatering of VOCs (or VOCs commingled with petroleum fuel hydrocarbons) contaminated groundwater.
- 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 V.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

Groundwater containing priority toxic pollutants not limited in this permit are not eligible for coverage under this General NPDES Permit.

C. Exclusion of Coverage

a. 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 that lists the Waste Discharge Identification Number (WDID) or the Compliance Inspection Number (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.

b. 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.

c. 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.

III. DISCHARGE DESCRIPTION

The presence of VOCs in the groundwater at various sites throughout the region causes, or threatens to cause, adverse impacts to existing and potential beneficial uses of the groundwater. Remediation of these sites includes similar groundwater treatment and monitoring requirements, and waste discharges from these sites will be more efficiently regulated with a general permit rather than individual permits. This Order establishes requirements to regulate discharges of wastewaters generated from the investigation or cleanup of VOCs in the groundwater to surface waters under the jurisdiction of this Regional Water Board.

Waste waters discharged from the investigation and/or cleanup of the groundwater involving VOCs contamination include, but are not limited to, the following:

- Treated groundwater from the cleanup and/or from construction dewatering activities at a site impacted by VOCs only, or by VOCs commingled with petroleum fuel hydrocarbons at an underground storage tank (UST) site. Such UST sites may have storm water collected in fuel storage secondary containment tanks and fuel spill washwater that contains similar contaminants as those from the investigation/cleanup of VOCs contaminated groundwater;
- Groundwater pumped as an aid in the containment and extraction of VOCs-contaminated groundwater;
- Groundwater extracted during short-term and long-term pumping test/aquifer testing;
- Groundwater generated from well development and purging of wells prior to sampling;
- Sampling equipment decontamination water; and
- Subterranean seepage dewatering.

A. Description of Wastewater and Biosolids Treatment or Controls (Not Applicable)

B. Discharge Points and Receiving Waters

Under the General NPDES Permit, there may be multiple discharge points. Information regarding the receiving waters and discharge location(s) will be incorporated in the Fact Sheet and Monitoring and Reporting Program that will be transmitted with the enrollment authorization letter.

C. Summary of Existing Requirements

1. Effluent Limitations

- a. Effluent limitations/Discharge Specifications contained in the existing Order R4-2007-0022 for discharges from the discharge point of the treatment facility are as follows:

Table 1. Historic Effluent Limitations

Parameters	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Total Suspended Solids	mg/L	50	150
Turbidity	NTU	50	150
BODs 20 °C	mg/L	20	30
Oil and Grease	mg/L	10	15
Settleable Solids	ml/L	0.1	0.3
Sulfides	mg/L		1.0
Phenols	mg/L		1.0
Residual Chlorine	mg/L		0.1
Acetone	µg/L		700

Parameters	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Acrolein	µg/L		100
Acrylonitrile	µg/L		0.059
Benzene	µg/L		1.0
Bromoform	µg/L		4.3
Carbon tetrachloride	µg/L		0.25*
Chlorobenzene	µg/L		30
Chlorodibromomethane	µg/L		0.401*
Chloroethane	µg/L		100
Chloroform	µg/L		100
Dichlorobromomethane	µg/L		0.56
1, 1-Dichloroethane	µg/L		5
1 ,2-Dichloroethane	µg/L		0.38*
1, 1-Dichloroethylene	µg/L		0.057*
1 ,2-Dichloropropane	µg/L		0.52
1 ,3-Dichloropropylene	µg/L		0.5
Di-isopropyl ether (DIPE)	µg/L		0.8
1,4-Dioxane	µg/L		3
Ethylbenzene	µg/L		700
Ethylene dibromide	µg/L		0.05*
Lead, Total Recoverable	µg/L	2.6	5.2
Chromium III, Total Recoverable	µg/L	50	50
Chromium VI, Total Recoverable	µg/L	8	16
Methyl bromide	µg/L		10
Methyl chloride	µg/L		3
Methylene chloride	µg/L		4.7
Methyl ethyl ketone (MEK)	µg/L		700
Methyl tertiary butyl ether (MTBE)	µg/L		5
Naphthalene	µg/L		21
N-Nitrosodimethyl amine (NDMA)	µg/L		0.00069*
Perchlorate	µg/L		4
Tertiary butyl alcohol (TBA)	µg/L		12
1,1,2,2- Tetrachloroethane	µg/L		0.17*
Tetrachloroethylene	µg/L		0.8
Toluene	µg/L		150
Total petroleum hydrocarbons*	µg/L		100

Parameters	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
1,2- Trans-trichloroethylene	µg/L		10
1,1,1- Trichloroethane	µg/L		200
1,1,2- Trichloroethane	µg/L		0.60
Trichloroethylene	µg/L		2.7
Vinyl chloride	µg/L		0.5
Xylenes	µg/L		1750
<p>NOTE: *. If reported detection level is greater than effluent limit, then a non-detect result using 0.5 µg/L detection level is deemed to be in compliance. **. Toxicity of this chemical increases with decreasing hardness concentration. The figure in the table is determined based on effluent CaCO₃ concentration of 100 mg/L.</p>			

- b. The pH of the discharge shall at all times be within the range of 6.5 and 8.5.
- c. The temperature of the discharge shall not exceed 86°F.
- d. 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.
- e. 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.
- f. 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.
- g. 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.

2. Monitoring Requirements

Order No. R4-2007-0022 requires the effluent monitoring in accordance with the following schedule.

Table 2. Existing Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	gal/day	totalizer	continuously	1
pH	pH units	grab	monthly	1
Temperature	°F	grab	monthly	1
Total Dissolved Solids	mg/L	grab	monthly	1
Sulfate	mg/L	grab	monthly	1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Chloride	mg/L	grab	monthly	1
Nitrogen ²	mg/L	grab	monthly	1
Total Suspended Solids	mg/L	grab	monthly	1
Turbidity	NTU	grab	monthly	1
BOD ₅ 20°C	mg/L	grab	monthly	1
Oil and Grease	mg/L	grab	monthly	1
Settleable Solids	ml/L	grab	monthly	1
Sulfides	mg/L	grab	monthly	1
Phenols	mg/L	grab	monthly	1
Total petroleum hydrocarbons	µg/L	grab	monthly	1
Benzene	µg/L	grab	monthly	1
Toluene	µg/L	grab	monthly	1
Ethylbenzene	µg/L	grab	monthly	1
Xylenes	µg/L	grab	monthly	1
Ethylene dibromide	µg/L	grab	monthly	1
Chromium III	µg/L	grab	monthly	1
Chromium VI	µg/L	grab	monthly	1
Lead	µg/L	grab	monthly	1
Methyl tertiary butyl ether (MTBE)	µg/L	grab	monthly	1
Tertiary butyl alcohol (TBA)	µg/L	grab	monthly	1
Residual Chlorine	mg/L	grab	monthly	1
Bromoform	µg/L	grab	monthly	1
Chlorobenzene	µg/L	grab	monthly	1
Chlorodibromomethane	µg/L	grab	monthly	1
Chloroethane	µg/L	grab	monthly	1
Chloroform	µg/L	grab	monthly	1
Dichlorobromomethane	µg/L	grab	monthly	1
Perchlorate	µg/L	grab	monthly ³	1
1,1-Dichloroethane	µg/L	grab	monthly ³	1
1,2-Dichloroethane	µg/L	grab	monthly ³	1
1,1-Dichloroethylene	µg/L	grab	monthly ³	1
Carbon tetrachloride	µg/L	grab	monthly ³	1
1,1,2,2-Tetrachloroethane	µg/L	grab	monthly ³	1

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Tetrachloroethylene	µg/L	grab	monthly ³	1
1,2-Trans-dichloroethylene	µg/L	grab	monthly ³	1
1,1,1-Trichloroethane	µg/L	grab	monthly ³	1
1,1,2-Trichloroethane	µg/L	grab	monthly ³	1
Trichloroethylene	µg/L	grab	monthly ³	1
Vinyl Chloride	µg/L	grab	monthly ³	1
1,2-Dichloropropane	µg/L	grab	monthly	1
1,3-Dichloropropylene	µg/L	grab	monthly	1
Methyl bromide	µg/L	grab	monthly	1
Methyl chloride	µg/L	grab	monthly	1
Methylene chloride	µg/L	grab	monthly	1
Methyl ethyl ketone (MEK)	µg/L	grab	monthly	1
Acetone	µg/L	grab	annually	1
Acrolein	µg/L	grab	annually	1
Acrylonitrile	µg/L	grab	annually	1
Naphthalene	µg/L	grab	annually	1
Di-isopropyl ether (DIPE)	µg/L	grab	annually	1
1,4-Dioxane	µg/L	grab	annually	1
N-Nitrosodimethyl amine (NDMA)	µg/L	grab	annually	1
Acute Toxicity	% survival	grab	annually	1

Notes: 1: Pollutants shall be analyzed using the analytical methods described in 40 CFR Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP (and included as Attachment H of this Order), where no methods are specified for a given pollutant, by methods approved by this Regional Water Board or the State Water Board.
2: Nitrate-nitrogen plus nitrite-nitrogen.
3: Weekly for the first month, monthly thereafter, if no exceedance is observed.

3. Compliance Summary (Not Applicable)

4. Planned Changes (Not Applicable)

IV. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order is issued pursuant to section 402 of the CWA and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the California Water Code (CWC) (commencing

with section 13370). It shall serve as a National Pollutant Discharge Elimination System (NPDES) permit for point source discharges of wastewaters generated from the investigation or cleanup of volatile organic compounds (VOCs) contaminated groundwater 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 of the CWC (commencing with section 13260).

States may request authority to issue general NPDES permits pursuant to 40 CFR 122.28. The State Water Board has been authorized by the USEPA to administer the NPDES program in California since 1973. The procedures for the State Board and the Regional Water Board to issue NPDES permits pursuant to 40 CFR 122 & 123 were established through the NPDES Memorandum of Agreement between the USEPA and the State Board on September 22, 1989.

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

C. State and Federal Regulations, Policies, and Plans

1. 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.

2. 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.

- 3. 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.
- 4. 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:
 - 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.
 - 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.

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.

5. **Thermal Plan** The State Water 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. This plan contains temperature objectives for surface waters.
6. **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.
7. **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.
8. **Compliance Schedules and Interim Requirements** The discharges covered under this Order applies exclusively to discharges from VOC-contaminated sites and as such the discharges from these sites are not expected to have issues in complying with the TMDLs prescribed effluent limitations in this Order. If a discharger cannot comply with the final TMDL limitations in this permit, then the discharger will be covered under an individual permit where compliance schedule is more appropriate. Therefore, this Order does not include either compliance schedule or Interim TMDLs and only appropriate final TMDLs have been prescribed.
9. **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.

- 10. 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.
- 11. 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.
- 12. 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.
- 13. Anti-Backsliding Requirements** Sections 402(o) and 303(d)(4) of the CWA and 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 the tentative Order are at least as stringent as the effluent limitations in the existing Order. Section 303(d)(4) of the CWA allow 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.
- 14. 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.

15. 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.

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

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. The USEPA has approved the State's 303(d) list of impaired water bodies on July 25, 2003. Certain receiving waters in Los Angeles County watersheds do not fully support beneficial uses and therefore, have been classified as impaired on the 2002 303(d) list. For all 303(d)-listed water bodies and pollutants, the Regional Water Board plans to develop and adopt TMDLs that will specify waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources, as appropriate.

The Regional Water Board has developed and adopted a number of TMDLs for impaired waterbodies in the Los Angeles Region to reduce pollutants which are identified in CWA section 303(d) list. The pollutants that these TMDLs target are categorized as bacteria, chloride, coliforms, metals, toxics, and trash TMDLs. Those applicable TMDL requirements are considered in this Order. Regional Board adopted TMDLs that have been approved by the State Water Resource Control Board Office of Administrative Law and by the USEPA have been incorporated in the Order for appropriate receiving water.

E. Other Plans, Polices and Regulations (Not Applicable)

V. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Pollutants of Concern

The CWA requires that any discharge by a point source must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.

The following compounds are typically found in the VOCs contaminated groundwater and are considered Pollutants of Concern under this General NPDES Permit.

Table 3. List of Pollutants of Concern

1,1,1-trichloroethane	carbon tetrachloride	methyl tertiary butyl ether
1,1,2,2-tetrachloroethane	chlorobenzene	methylene chloride
1,1,2-trichloroethane	chlorodibromomethane	naphthalene
1,1-dichloroethane	chloroethane	n-nitrosodimethyl amine
1,1-dichloroethylene	chloroform	perchlorate
1,2-dichloroethane	chromium III	residual chlorine
1,2-dichloropropane	chromium VI	tertiary butyl alcohol
1,2-trans-dichloroethylene	dichlorobromomethane	tetrachloroethylene
1,3-dichloropropylene	di-isopropyl ether	toluene
1,4-dioxane	ethylbenzene	total petroleum hydrocarbons
acetone	ethylene dibromide	trichloroethylene
acrolein	lead	vinyl chloride
acrylonitrile	methyl bromide	Xylenes
benzene	methyl chloride	
bromoform	methyl ethyl ketone	
Only those constituents that show reasonable potential will be limited in the discharge as specified in the Fact Sheet of the enrollment letter.		

B. Discharge Prohibitions

Discharges under this Order are required to be nontoxic. Toxicity is the adverse response of organisms to chemicals or physical agents. This prohibition is based on the Regional Water Boards' Basin Plans, which require that all waters be maintained free of toxic substances in concentrations that are lethal or produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species. Basin Plans also require waters to be free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, or animal life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances.

C. Technology-Based Effluent Limitations

1. Scope and Authority

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- Best Practicable Treatment Control Technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.
- Best Available Technology Economically Achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional

pollutants.

- Best Conventional Pollutant Control Technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPI.
- New Source Performance Standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop Effluent Limitations, Guidelines and Standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 125.3 of the NPDES regulations authorize the use of Best Professional Judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR 125.3.

NPDES permits for discharges to surface waters must meet all applicable provisions of sections 301 and 402 of the CWA. These provisions require controls of pollutant discharges that utilize BAT and BCT to reduce pollutant and any more stringent controls necessary to meet water quality standards.

2. Applicable Technology-Based Effluent Limitations

Section 301(b) of the CWA and implementing USEPA permit regulations at Section 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 Section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet.

USEPA classifies industrial types into different categories and established Effluent Limitation Guidelines (ELGs) based on those industry categories. ELGs specifically developed for the VOCs treatment process are not available, because the VOCs removal operations under this General NPDES Permit treat contaminated groundwater from different industry categories. The technology-Based Effluent Limitations in this General NPDES Permit for non-VOCs are established based on the use of BPJ and in accordance with the Anti-Backsliding Requirements in Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR 122.44(l).

The pollutants of concern in this Order are primarily organic compounds in nature excluding lead, chromium III and chromium VI. Either aeration processes or adsorption processes (or combination of the two) are the treatment processes typically used to remove these pollutants of concern in the groundwater. Based on the observation of the treatment technologies, treatment systems using aeration or adsorption processes such as activated carbon can lower the concentration of VOCs and petroleum pollutants to below the detection limits, when designed and operated properly. Effluent limitations for VOCs in this permit are based on the CTR and Basin Plan. Limits established in the Order for VOCs and

the petroleum pollutants can be met consistently if these treatment systems (or enhancements thereto) treatment systems are properly operated and maintained.

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.

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.

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.

D. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and

NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

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.
- 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.

The Regional Water Board has developed a number of TMDLs for impaired waterbodies in the Los Angeles Region to reduce pollutants which are identified in CWA section 303(d) list. This Order implements effective TMDLs that have Regional Water Board, State Water Board, and USEPA approvals. The TMDLs cover pollutants including bacteria, chloride, coliforms, metals, toxics, and trash. Some TMDLs are applicable to this General NPDES permit, while some TMDLs are applicable but no need to change the discharge limit in the existing permit is necessary.

3. Determining the Need for WQBELs

Priority pollutants in the organic nature that are found in the contaminated wastewater regulated under the General NPDES Permit can be reduced by the typical treatment technologies for the VOCs pollutants to non-detectable levels. Therefore, limitations based on water quality-based criteria under the most stringent conditions are used for those organic priority pollutants under the permit. Lead, Chromium III, and Chromium VI are sometimes found in the VOCs contaminated groundwater beneath industrial facilities and are pollutants of concern under this General NPDES Permit. Aeration processes or adsorption processes (or combination of the two) that are typically used to treat VOCs contaminated groundwater may not be able to reduce the heavy metal effectively. Therefore, enhanced treatment technologies may be necessary to treat for lead and chromiums.

The Regional Water Board developed WQBELs for chloride, nitrate and nitrite based on TMDL. The effluent limitations for these pollutants were established regardless of whether or not there is reasonable potential for the pollutants to be present in the discharge at levels that would cause or contribute to a violation of water quality standards. The Regional Water Board developed water quality-based effluent limitations for these pollutants pursuant to section 122.44(d)(1)(vii), which does not require or contemplate a reasonable potential analysis. Similarly, the SIP at Section 1.3 recognizes that reasonable potential analysis is not appropriate if a TMDL has been developed.

a. WQBEL Calculations

The specific procedures for calculating WQBELs are contained in the USEPA's *Technical Support Document for Water Quality-Based Toxics Control (TSD) of 1991* (USEPA/505 /2-90-001) and the SIP, and they were used to calculate the WQBELs in this Order. Because the effluent limitations pursuant to this Order are established to protect the most protective water quality objective for the surface water beneficial uses in the Los Angeles Region, the most stringent criteria for lead, chromium III, and chromium VI in the CTR become their wasteload allocations.

WQBELs Calculation Example

Using lead as an example, the following demonstrates how WQBELs were established for the Order.

Step 1: For each constituent requiring an effluent limitation, identify the applicable water quality criteria or objective. For each criterion, determine the effluent concentration allowance (ECA) using the following steady state equation:

$$ECA = C + D(C-B) \text{ when } C > B, \text{ and}$$

$$ECA = C \text{ when } C \# B,$$

Where: C = The priority pollutant criterion/objective, adjusted if necessary for hardness, pH and translators.

D = The dilution credit, and

B = The ambient background concentration

The criteria for lead as in CTR are shown in Table 4.

Table 4. Summary of Lead Criteria as in CTR

CTR No.	Parameters	CTR/NTR Water Quality Criteria					
		Freshwater		Saltwater		Human Health for Consumption of:	
		Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms only
		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
7	Lead	65	2.5	210	8.1	Narrative	Narrative

"- ." = Water quality criteria not applicable

The CTR metal criteria for lead need to be adjusted for hardness and translators. A hardness value of 100 mg/L as CaCO₃ is used to satisfy the most stringent criteria requirement. According to 40 CFR Water Quality Standards, section 131.38 (b)(2), Factors for Calculating Metals Criteria, Conversion Factor for lead at 100 mg/L hardness is 0.791, for both freshwater acute criteria and freshwater chronic criteria. Therefore,

$$65 / 0.791 = 81.65$$

$$2.5 / 0.791 = 3.18$$

The criteria adjusted values are shown in Table 5.

Table 5. Summary of Lead Criteria Adjusted for Hardness

CTR No.	Parameters *	Selected Criteria	CTR/NTR Water Quality Criteria					
			Freshwater		Saltwater		Human Health for Consumption of:	
			Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms only
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
7	Lead Total Recoverable	3.18	81.65	3.18	220.82	8.52	Narrative	Narrative

"- -" = Water quality criteria not applicable

As discussed above, for the Order, dilution was not allowed; therefore:

$$ECA = C$$

For lead,

$$ECA_{acute} = 81.65 \mu\text{g/L}$$

$$ECA_{chronic} = 3.18 \mu\text{g/L}$$

Step 2: For each ECA based on aquatic life criterion/objective, determine the long-term average discharge condition (LTA) by multiplying the ECA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the ECA to account for effluent variability. The value of the multiplier varies depending on the coefficient of variation (CV) of the data set and whether it is an acute or chronic criterion/objective. Table 1 of the SIP provides pre-calculated values for the multipliers based on the value of the CV. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 3 of the SIP and will not be repeated here.

$$LTA_{acute} = ECA_{acute} \times \text{Multiplier}_{acute 99}$$

$$LTA_{chronic} = ECA_{chronic} \times \text{Multiplier}_{chronic 99}$$

The CV for the data set must be determined before the multipliers can be selected and will vary depending on the number of samples and the standard deviation of a data set. If the data set is less than 10 samples, or at least 80 percent of the samples in the data set are reported as non-detect, the CV shall be set equal to 0.6.

In the General NPDES Permit, there is no sample data available. Therefore, the USEPA default CV value of 0.6 is used to develop the acute and chronic LTA using equations provided in Section 1.4, Step 3 of the SIP (Table 1 of the SIP also provides this data up to three decimals):

CV	ECA Multiplier _{acute 99}	ECA Multiplier _{chronic 99}
0.6	0.32108	0.52743

$$LTA_{acute} = 81.65 \mu\text{g/L} \times 0.32108 = 26.22 \mu\text{g/L}$$

$$LTA_{chronic} = 3.18 \mu\text{g/L} \times 0.52743 = 1.68 \mu\text{g/L}$$

Step 3: Select the most limiting (lowest) of the LTA.

$$LTA = \text{most limiting of } LTA_{acute} \text{ or } LTA_{chronic}$$

For lead, the most limiting LTA was the LTA_{acute}

$$LTA = 1.68 \mu\text{g/L}$$

Step 4: Calculate the WQBELs by multiplying the LTA by a factor (multiplier). The multiplier is a statistically based factor that adjusts the LTA for the averaging periods and exceedance frequencies of the criteria/objectives and the effluent limitations. The value of the multiplier varies depending on the probability basis, the coefficient of variation (CV) of the data set, the number of samples (for AMEL) and whether it is a monthly or daily limit. Table 2 of the SIP provides pre-calculated values for the multipliers based on the value of the CV and the number of samples. Equations to develop the multipliers in place of using values in the tables are provided in Section 1.4, Step 5 of the SIP and will not be repeated here.

$$MDEL_{aquatic\ life} = LTA \times MDEL_{multiplier\ 99}$$

$$AMEL_{aquatic\ life} = LTA \times AMEL_{multiplier\ 99}$$

For lead, the following data was used to develop the MDEL for aquatic life using equations provided in Section 1.4, Step 5 of the SIP (Table 2 of the SIP also provides this data up to two decimals):

Sample No.	Month	CV	Multiplier _{MDEL 99}	Multiplier _{MDEL 99}
4	0.6	3.11	1.55	

$$MDEL_{aquatic\ life} = 1.68 \mu\text{g/L} \times 3.11 = 5.22 \mu\text{g/L}$$

$$AMEL_{aquatic\ life} = 1.68 \mu\text{g/L} \times 1.55 = 2.60 \mu\text{g/L}$$

The WQBELs for chromium III, chromium VI, and other CTR based limitations are similarly calculated and summarized on Table 6, Summaries of Limitations and Rationales.

b. Whole Effluent Toxicity

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative “no toxics in toxic amounts” criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental responses by aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. The previous Order contains acute toxicity limitations and monitoring requirements in accordance with the Basin Plan, in which the acute toxicity objective for discharges dictates that the average survival in undiluted effluent for any three consecutive 96-hour static or

continuous flow bioassay tests shall be at least 90 percent, with no single test having less than 70 percent survival. The WET requirements from the previous Orders remain unchanged.

E. Final Effluent Limitations and Discharge Specifications

1. Final Effluent Limitations

- a. Effluent limitations for the pollutants of concern including acute toxicity under this General NPDES Permit are being carried over from the existing Order (Order No. R4-2007-0022). A summary of the effluent limitations based on technology-based discharge limitations and water quality-based discharge limitations and their rationales are shown in the following table.

1) General Effluent Limitations

Table 6. Summaries of Limitations and Rationales

Constituents	Units	Discharge Limitations		Rationales
		Monthly Average	Daily Maximum	
Total Suspended Solids	mg/L	50	75	Best Available Technology
Turbidity	NTU	50	150	Existing permit
BOD5 20oC	mg/L	20	30	Existing permit
Oil and Grease	mg/L	10	15	Existing permit
Settleable Solids	ml/L	0.1	0.3	Existing permit
Sulfides	mg/L		1.0	Existing permit
Phenols	mg/L		1.0	Existing permit
Residual Chlorine	mg/L		0.1	Basin Plan
Acetone	µg/L		700	Existing permit
Acrolein	µg/L		100	Existing permit
Acrylonitrile	µg/L		0.059	CTR
Benzene	µg/L		1.0	Existing permit, PMCL *
Bromoform	µg/L		4.3	CTR
Carbon tetrachloride	µg/L		0.25	CTR
Chlorobenzene	µg/L		30	Existing permit
Chlorodibromomethane	µg/L		0.401	CTR
Chloroethane	µg/L		100	Existing permit
Chloroform	µg/L		100	Existing permit, PMCL
Dichlorobromomethane	µg/L		0.56	CTR
1,1-dichloroethane	µg/L		5	Existing permit, PMCL
1,2-dichloroethane	µg/L		0.38	CTR
1,1-dichloroethylene	µg/L		0.057	CTR

Constituents	Units	Discharge Limitations		Rationales
		Monthly Average	Daily Maximum	
1,2-dichloropropane	µg/L		0.52	CTR
1,3-dichloropropylene	µg/L		0.5	Existing permit, PMCL
Di-isopropyl ether (DIPE)	µg/L		0.8	Taste and Odor
1,4-Dioxane	µg/L		3	Action Level **
Ethylbenzene	µg/L		700	Existing permit, PMCL
Ethylene dibromide	µg/L		0.05	Existing permit, PMCL
Chromium III, Total Recoverable	µg/L		50	PCML
Chromium VI, Total Recoverable	µg/L	8	16	Other existing permit
Lead, Total Recoverable	µg/L	2.6	5.2	Existing permit
Methylbromide	µg/L		10	Existing permit
Methylchloride	µg/L		3	Existing permit
Methylene chloride	µg/L		4.7	CTR
Methyl ethyl ketone (MEK)	µg/L		700	Existing permit
Methyl tertiary butyl ether (MTBE)	µg/L		5	SMCL ***
Naphthalene	µg/L		21	Taste and Odor
N-Nitrosodimethyl amine (NOMA)	µg/L		0.00069	CTR
Perchlorate	µg/L		6	MCL
1,1,2,2-tetrachloroethane	µg/L		0.17	CTR
Tetrachloroethylene	µg/L		0.8	CTR
Tertiary Butyl Alcohol (TBA)	µg/L		12	Action Level
Toluene	µg/L		150	Existing permit, PMCL
Total petroleum hydrocarbons	µg/L		100	Existing permit
1,2-trans-dichloroethylene	µg/L		10	Existing permit, PMCL
1,1,1-trichloroethane	µg/L		200	Existing permit, PMCL
1, 1 ,2-trichloroethane	µg/L		0.60	CTR
Trichloroethylene	µg/L		2.7	CTR
Vinyl chloride	µg/L		0.5	Existing permit, PMCL
Xylenes	µg/L		1750	Existing permit, PMCL
Notes:				
* PMCL - Primary Maximum Contaminant Level, Department of Health Service, Title 22 California Code of Regulations				
** Action Level - Department of Health Service, Title 22 California Code of Regulations				
*** SMCL - Secondary Maximum Contaminant Level, Department of Health Service, Title 22 California Code of Regulations				

2) WQBELs based on TMDL WLAs

Table 7. WQBELs based on Basin Plan section 7-13 - Los Angeles River and Tributaries Metals TMDL WLAs, Dry Weather³

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 8. WQBELs based on Basin Plan section 7-13 - Los Angeles River and Tributaries Metals TMDL WLAs, Wet Weather⁴

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

³ For purposes of this general permit, discharges occurring from April 15th through November 15th are considered dry weather discharges.

⁴ For purposes of this general permit, discharges occurring from November 14th through April 14th are considered wet weather discharges.

Table 9. 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 10. 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 11. 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 12. WQBELs based on Basin Plan section 7-40 – Dominguez Channel and Greater Los Angeles and Long Beach Harbor Waters Toxic Pollutants TMDL WLAs, WET Weather⁵

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

⁵ 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 13. 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 14. WQBELs based on Basin Plan section 7-20 - San Gabriel River and Impaired Tributaries Metals and Selenium TMDL WLAs, Dry Weather⁶

Reaches	Units	Copper, TR		Selenium, TR	
		Maximum Daily	Average Monthly	Maximum Daily	Average Monthly
SJC R-1, 2 ¹	µg/L			8.2	4.1
SGR R-1 ²	µg/L	30	15		
SGR R 2 ³	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

⁶ Defined in the Footnote 3.

Table 15. WQBELs based on Basin Plan section 7-20 - San Gabriel River and Impaired Tributaries Metals and Selenium TMDL WLAs, Wet-Weather⁷

Reaches	Units	Copper, TR		Lead, TR		Zinc, TR	
		Maximum Daily	Average Monthly	Maximum Daily	Average Monthly	Maximum Daily	Average Monthly
SJC R-1, 2 ¹	µg/L						
SGR R-1 ²	µg/L						
SGR R 2 ³	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 16. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed Metals and Selenium TMDL WLAs – Dry Weather

Reaches	Units	Copper ^{1,2}		Nickel ³		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.

⁷ Defined in the Footnote 4.

Table 17. WQBELs based on Basin Plan section 7-19 - Calleguas Creek Watershed Metals and Selenium TMDL WLAs –Wet Weather

Reaches	Units	Copper ^{1,2}		Nickel ³		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 18. 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 19. 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 20. Calleguas Creek, Its Tributaries, and Maqu Lagoon Toxicity TMDL

Pollutant	Units	Effluent Limitations
Toxicity	Toxicity Unit (TUc)	1

Table 21. Calleguas Creek, Its Tributaries, and Maqu 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 22. 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 23. QBELs 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 VII. C. for compliance determination.

Table 24. QBELs 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 VII. C. for compliance determination.

Table 25. QBELs 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 VII. C. for compliance determination.

- b. The pH of the discharge shall at all times be within the range of 6.5 and 8.5. temperature of the discharge shall not exceed 86°F.
- c. The temperature of the discharge shall not exceed 86°F.
- d. 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.
- e. 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.
- f. 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.
- g. 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.

2. Satisfaction of Anti-Backsliding Requirements

All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, unless where newly adopted TMDLs have been implemented.

3. Satisfaction of Antidegradation 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. The permitted discharge under this General NPDES Permit is consistent with the antidegradation provision of Section 131.12 and State Water Board Resolution No. 68-16.

4. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. These limitations are not more stringent than required by the CWA.

This Order contains pollutant restrictions that are more stringent than applicable federal requirements and standards. Specifically, this Order includes effluent limitations for chromium III that are more stringent than applicable federal standards, but are consistent with the Basin Plan objectives.

F. Interim Effluent Limitations (Not Applicable)

G. Land Discharge Specifications (Not Applicable)

H. Reclamation Specifications (Not Applicable)

VI. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving Water Limitations are based upon water quality objectives contained in the Basin Plan, statewide Water Quality Control Plan, or criteria promulgated by USEPA pursuant to CWA section 303.

B. Groundwater (Not Applicable)

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Water Board to require technical and monitoring reports. The MRP (see sample MRP) establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this Order.

A. Influent Monitoring (Not applicable)

B. Effluent Monitoring

Monitoring for pollutants expected to be present in the discharge will be required as established in the MRP. To demonstrate compliance with effluent limitations established in the Order, the Order carries over existing monitoring requirements for all parameters and those toxic pollutants that show reasonable potential. Monitoring will be required monthly for these parameters to ensure compliance with the effluent limitations. Acute toxicity monitoring is carried over and is required annually, at a minimum.

C. 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.

D. Whole Effluent Toxicity Testing Requirements

WET protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth. This Order includes limitations for acute toxicity, and therefore, monitoring requirements are included in the MRP to determine compliance with the effluent limitations established in Section V. A. of this Order.

A WET Limit is required if a discharge causes, has a reasonable potential to cause, or contributes to an exceedance of applicable water quality standards, including numeric and narrative.

E. Receiving Water Monitoring (Not Applicable)

F. Other Monitoring Requirements (Not Applicable)

VIII. RATIONALE FOR PROVISIONS

A. Standard Provisions

1. Federal standard 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.

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

2. Regional Water Board Standard Provisions

The dischargers must comply with all Regional Water Board Provisions. Regional Water Provisions are based on the CWA, USEPA Regulations and the CWC.

B. Special Provisions

1. Reopener Provisions

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 and Additional Monitoring Requirements (Not Applicable)

3. Best Management Practices and Pollution Prevention

All dischargers are encouraged to implement Best Management Practices.

4. Compliance Schedules (Not Applicable)

5. Construction, Operation, and Maintenance Specifications (Not Applicable)

6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)

7. Other Special Provisions (Not Applicable)

IX. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of waste discharge requirements (WDRs) that will serve as a General NPDES permit for Discharges of Volatile Organic Compound Contaminated Groundwater to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. 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. Notification was provided in the Los Angeles Times and Ventura County Star.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover

page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on January 22, 2013.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: March 7, 2013
Time: 9 AM
Location: Metropolitan Water Districts of Southern California
700 North Alameda Street
Los Angeles, California

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our Web address is <http://www.waterboards.ca.gov/losangeles/> where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

Order-related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (213) 576-6651.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the General NPDES Permit was invited to contact the Regional Water Board, reference this General NPDES Permit, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this General NPDES Permit were directed to Gensen Kai at (213) 576-6651.