

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

COLORADO RIVER BASIN REGION

73-720 Fred Waring Drive, Suite 100 Palm Desert, CA 92260
Phone: (760) 346-7491 • Fax: (760) 341-6820
<http://www.waterboards.ca.gov/coloradriver>

**BOARD ORDER R7-2009-0400
NPDES NO. CAG917001**

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR
DISCHARGES OF EXTRACTED AND TREATED GROUNDWATER RESULTING FROM THE
CLEANUP OF GROUNDWATER POLLUTED BY VOLATILE ORGANIC CONSTITUENTS INTO
SURFACE WATERS**

A Discharger, as described in the following table, who has complied with the requirements for coverage under this General Board Order, is authorized to discharge wastes, once permit coverage is effective as described in this General Board Order.

For the purposes of this General Board Order, references to the "Discharger," "Permittee," or "Enrollee" in applicable federal and state laws, regulations, plans, or policies are held to be equivalent to references to the Discharger herein.

Table 1. Discharger Information

Dischargers	Dischargers are those parties deemed responsible by the California Regional Water Quality Control Board, Colorado River Basin Region (hereinafter, Regional Water Board) for remediation of groundwater polluted by volatile organic compounds (VOCs) and discharging, or proposing to discharge, treated groundwater resulting from the cleanup of groundwater polluted by VOCs into surface waters.
--------------------	---

Table 2. Administrative Information

This General Board Order was adopted by the Regional Water Quality Control Board on:	September 17, 2009
This General Board Order shall become effective on:	September 17, 2009
This General Board Order shall expire on:	September 16, 2014

I, Robert Perdue, Executive Officer, do hereby certify that this General Board Order with all attachments is a full, true, and correct copy of a General Board Order adopted by the California Regional Water Quality Control Board, Colorado River Basin Region, on September 17, 2009.



Robert Perdue, Executive Officer

Table of Contents

I.	DISCHARGE Information	4
II.	Notification Requirements.....	4
	A. General Permit Application	4
	B. Eligibility Requirements.....	6
	C. Exclusion of Coverage	7
	D. Termination of Discharges	8
	E. Transferring Ownership	8
III.	Findings	8
IV.	Discharge Prohibitions.....	16
V.	Effluent Limitations and Discharge Specifications	17
	A. Effluent Limitations.....	17
	B. Land Discharge Specifications – Not Applicable.....	19
	C. Reclamation Specifications – Not Applicable.....	19
VI.	Receiving Water Limitations	20
	A. Surface Water Limitations.....	20
	B. Groundwater Limitations – Not Applicable	22
VII.	Provisions	22
	A. Standard Provisions.....	22
	B. Monitoring and Reporting Program (MRP) Requirements	24
	C. Special Provisions.....	24
	1. Reopener Provisions.....	24
	2. Special Studies, Technical Reports and Additional Monitoring Requirements.....	26
	3. Best Management Practices and Pollution Prevention	26
	4. Construction, Operation and Maintenance Specifications.....	27
	5. Special Provisions for Municipal Facilities – Not Applicable	28
	6. Other Special Provisions.....	28
	7. Required Submittals and Reports	29
VIII.	Compliance Determination	29

List of Tables

Table 1.	Discharger Information	1
Table 2.	Administrative Information	1
Table 3.	Effluent Limitations for Discharges to Municipal Designated Waters.....	17
Table 4.	Effluent Limitations for Discharges to Non-Municipal Designated Waters	18
Table 5.	Deliverables and Due Dates.....	29

List of Attachments

Attachment A – Definitions	A-1
Attachment B – Screening Levels for Toxic Pollutants	B-1
Attachment C – Notice of Intent.....	C-1
Attachment D – Standard Provisions.....	D-1
Attachment E – Monitoring and Reporting Program	E-1
Attachment F – Fact Sheet.....	F-1

I. DISCHARGE INFORMATION

There are currently over 180 cases of soil and/or groundwater pollution in the Colorado River Basin Region resulting from leaks at fuel storage and dispensing facilities and unauthorized discharges of volatile organic compounds (VOCs), including purgeable halocarbons and aromatic compounds, into State waters. Pollution of these sites is typically caused by leaky containment vessels for fuel, solvents, and other wastes at service stations and similar operations. More cases are expected. Remedial activities at many of these sites are expected to necessitate discharge of treated groundwater to surface waters within the Colorado River Basin Region. Cleanup of these sites involves similar treatment technologies and results in similar waste discharges. The regulation of these discharges includes similar effluent limitations and monitoring requirements. Consequently, these discharges are more efficiently regulated with a general National Pollutant Discharge Elimination System (NPDES) permit rather than an individual NPDES permit. This General Board Order updates General Board Order R7-2002-1000 and establishes general waste discharge requirements (WDRs) for discharges resulting from the cleanup of groundwater polluted by releases of petroleum-related organic compounds and other volatile organic compounds (VOCs) associated with chemical releases.

The chemical constituents of concern regulated by this General Board Order include petroleum-related organic compounds and other volatile organic compounds associated with petroleum and/or chemical releases, plus naturally occurring inorganic constituents that may be present in groundwater at levels, or may be concentrated by treatment to levels, that exceed the more stringent of either applicable water quality criteria for receiving (downstream) waters or background (upstream) receiving waters. Applicable water quality criteria for receiving waters include those established by the Water Quality Control Plan for the Colorado River Basin Region (the Basin Plan) and the California Toxics Rule (CTR).

II. NOTIFICATION REQUIREMENTS

A. General Permit Application

To obtain coverage under this General Board Order, which also serves as an NPDES permit, dischargers shall submit the following information to the Regional Water Board: (a) a completed Notice of Intent; (b) results of wastewater sampling; (c) an Engineering Plan; and (d) filing fee, plus surcharges.

1. **Notice of Intent.** All applicants must complete and submit an NOI as provided in Attachment C. The NOI requires dischargers seeking coverage under this General Board Order to submit the following information:
 - a. A completed Notice of Intent (NOI);
 - b. A completed Report of Waste Discharge (ROWD) (Form 200);
 - c. A completed NPDES Application Form 1;
 - d. A completed NPDES Application Form 2D; and

- e. The current filing fee, plus applicable surcharges. Presently, the current fee and surcharges are as follows:

Category 1 - Discharges that require treatment systems to meet priority toxic pollutant limits and that could impair beneficial uses if limits are violated: \$5,760.

The applicable surcharge is 21%: \$1,210.

Total fee is \$6,970.

- 2. **Wastewater Sampling.** All dischargers are required to analyze the proposed discharge for the priority pollutants regulated under the CTR and for the constituents specified in the Basin Plan. These parameters are specified in Attachment B. If the discharge will be discharged to a water quality-listed segment (WQLS) pursuant to the latest Clean Water Act (CWA) section 303(d) list (hereinafter 303(d) List), the Discharger shall also analyze for the parameter(s) causing the impairment(s). Finally, applicants proposing to discharge to the New River, Alamo River, Imperial Valley Drains, Coachella Valley Drains, Palo Verde Valley Drains, and to tributaries to the Salton Sea must also sample for several additional parameters specified in the Basin Plan and as contained in Attachment B of this General Board Order. Dischargers are to submit the results of all sampling performed to the Regional Water Board along with the completed NOI.

In addition to listing the parameters to be analyzed, Attachment B also provides screening levels for pollutants. Dischargers who exceed a screening level for pollutants with applicable effluent limitations established in section V.A.1 will be considered ineligible for enrollment under this General Board Order.

- 3. **Engineering Report.** All dischargers are required to submit an engineering report (Report) containing the following information:
 - a. A discussion of how the proposed discharge is consistent with the type of discharge eligible for coverage under this General Board Order;
 - b. An explanation of why a discharge to surface waters is the only feasible method for disposing of the site groundwater or treated effluent, supported by a letter from the local publicly-owned treatment works (POTW) stating that they cannot accept the discharge;
 - c. A general discussion of the proposed cleanup project including descriptions of the extraction method, treatment processes, design parameters, flow rates, and expected treatment performance not to exceed water quality screening criteria and effluent and receiving water limitations;
 - d. A schematic of the treatment process;
 - e. A site map showing the extraction wells, monitoring wells, treatment site, and the storm drain or surface water discharge location; and

- f. A map showing the path from the point of initial discharge to the ultimate location of discharge.
4. Dischargers previously authorized to discharge wastes under General Board Order R7-2002-1000 must submit an NOI within 45 days of the effective date of this General Board Order, and be issued a new authorization to discharge by the Executive Officer. Existing dischargers enrolling under this General Board Order are required to collect a representative sample of the site groundwater or treated effluent and analyze it for all the constituents listed in Attachment B. Dischargers shall conduct this analysis and submit the results with the NOI; otherwise, the existing authorization may be terminated. If the analytical sample results of any constituent other than those constituents listed in Section V.A of this General Board Order exceeds the water quality screening criteria listed in Attachment B, the Discharger will be considered ineligible for enrollment under this General Board Order. Other information may be required by the Executive Officer before authorizing enrollment under this General Board Order (General Board Order R7-2009-0400).
5. Dischargers not previously authorized to discharge wastes under General Board Order R7-2002-1000 shall file a complete application at least 45 days prior to commencement of the discharge. If the proposed discharge meets the requirements of this General Board Order, the Executive Officer will provide the Discharger with a written authorization to discharge wastes in accordance with the requirements specified in this General Board Order.
6. All required submittals shall be submitted to the Regional Water Board, at the following address:

California Regional Water Quality Control Board
Colorado River Basin Region
73-720 Fred Waring Drive, Suite 100
Palm Desert, CA 92260

B. Eligibility Requirements

1. Discharges that are authorized under this General Board Order must meet the following criteria:
 - a. The discharge must be classified as a minor discharge by the United States Environmental Protection Agency (USEPA). Discharges that exceed 1.0 MGD are classified as major discharges and shall not be authorized to discharge under this General Board Order;
 - b. Pollutant concentrations in the discharge will not (a) cause, (b) have the reasonable potential to cause, or (c) contribute to an excursion above any applicable water quality objectives;
 - c. The discharge from the site groundwater or the treated effluent must not exceed the water quality screening criteria for any constituent listed in Attachment B,

other than for those constituents for which limitations are established in Section V.A (Effluent Limitations);

- d. The discharge does not include water added for the purpose of diluting pollutant concentrations; and
- e. Pollutant concentrations in the discharge will not cause or contribute to degradation of water quality or impair beneficial uses of receiving waters.

C. Exclusion of Coverage

For coverage under this General Board Order, the Discharger shall submit a completed NOI together with other information as described in Section II.A.1 above (General Permit Application), and if the Executive Officer determines, based on information submitted in accordance with Section II.A.1, that the proposed discharge is eligible for coverage under this General Board Order, a Notice of Applicability (NOA) will be issued and the proposed discharge becomes an “authorized discharge.” The NOA will specify the maximum discharge flow rate (which also limits the mass loading rate for each constituent) and any other limits or provisions necessary for the individual discharge. The NOA may be terminated or revised by the Executive Officer at any time.

The Executive Officer of the Regional Water Board or the Regional Administrator of the USEPA may require any person authorized to discharge wastes by this General Board Order to subsequently apply for and obtain an individual NPDES permit. Any interested person may petition the Executive Officer or the Regional Administrator to take action in accordance with this finding. Cases where an individual permit may be required include the following:

1. The Discharger is not in compliance with the conditions of this General Board Order or the NOA from the Executive Officer;
2. Changes in technologies or practices that impact the control or abatement of pollutants in the discharge;
3. New or revised effluent limitation guidelines are promulgated for the category of discharges covered by this General Board Order;
4. Changes to the Water Quality Control Plan for the Colorado River Basin (hereinafter Basin Plan) are adopted that contain requirements applicable to the discharges covered by this General Board Order; or
5. The requirements of section 122.28(a), title 40 of the Code of Federal Regulations¹ are not met.

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

D. Termination of Discharges

If the Discharger wishes to terminate authorization under this General Board Order, the Discharger shall submit a completed Notice of Termination (NOT). Termination from coverage will occur on the date specified in the NOT unless the Regional Water Board notifies the Discharger otherwise. All discharges shall cease before the date of termination, and any discharge to surface waters on or after this date shall be considered in violation of the Clean Water Act (CWA) unless that discharge is authorized by another NPDES permit.

E. Transferring Ownership

Coverage under this General Board Order may be transferred in case of change of ownership of land or discharge facility provided the existing discharger notifies the Executive Officer of the proposed transfer date, and the notice includes a written agreement between the existing and new dischargers containing a specific date of transfer of coverage, responsibility for compliance with this General Board Order, and liability between them.

III. FINDINGS

The California Regional Water Quality Control Board, Colorado River Basin Region (hereinafter Regional Water Board), finds:

A. Background

1. On September 22, 1998, USEPA Region IX authorized the State of California to issue general NPDES permits in accordance with section 122.28. Section 122.28 allows for the issuance of general permits to regulate categories of discharges if the sources within each category:
 - a. Involve the same or substantially similar types of operations;
 - b. Discharge the same types of waste;
 - c. Require the same effluent limitations or operating conditions;
 - d. Require the same or similar monitoring; and
 - e. Are more appropriately controlled under a general permit than under individual permits.
2. On June 26, 2002, the Regional Water Board adopted General Board Order R7-2002-1000 (NPDES Permit No. CAG917001) in accordance with section 122.28 to regulate discharges of extracted and treated groundwater resulting from the cleanup of groundwater polluted by VOCs into surface waters. General Board Order R7-2002-1000 rescinded General Board Order 98-400.

B. Discharge Description

1. Wastewater from a groundwater cleanup project can include the following and may be produced and treated on a continuous or batch basis:
 - a. Treated groundwater from the cleanup of VOC contamination;
 - b. Groundwater pumped from beneath a layer of free product in order to establish a cone of depression to aid in the containment and extraction of pollutants;
 - c. Potentially polluted groundwater extracted during short- and long-term pump tests;
 - d. Potentially polluted well development water; and/or
 - e. Potentially polluted water purged prior to well sampling.
2. VOCs of concern include petroleum hydrocarbons (e.g., gasoline, diesel, kerosene, fuel oil, and heavier ranges), purgeable hydrocarbons, aromatic hydrocarbons, and fuel octane enhancers (e.g., methyl tertiary butyl ether (MTBE), methanol, ethanol, tertiary butyl alcohol (TBA), and di-isopropyl ether).

C. Legal Authorities. This General Board Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This General Board Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this General Board Order based on information required by monitoring and reporting programs, and experience gained through administration of General Board Order R7-2002-1000. The Fact Sheet (Attachment F), which contains background information and rationale for General Board Order requirements, is hereby incorporated into this General Board Order and constitutes part of the Findings for this General Board Order. Attachments A through E are also incorporated into this General Board 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 Chapter 3 of CEQA, commencing with section 21100 of the Public Resources Code.

F. 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. Because there are no applicable Effluent Limitation Guidelines (technology-based requirements established by USEPA) for discharges of treated groundwater contaminated by VOCs authorized by this General Board Order, the technology-based

requirements of this General Board Order have been established using Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3. The Regional Water Board has considered the factors listed in Water Code section 13241 in establishing these requirements. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. Water Quality-Based Effluent Limitations. Section 301(b) of the CWA and 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).

H. Water Quality Control Plans. The Regional Water Board adopted a Water Quality Control Plan for the Colorado River Basin (hereinafter Basin Plan) on November 17, 1993, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Resources Control Board (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. Applicable beneficial uses of surface waters for the Colorado River Basin Region are listed below:

- Agricultural supply (AGR)
- Aquaculture (AQUA)
- Cold freshwater habitat (COLD)
- Freshwater replenishment (FRSH)
- Ground water recharge (GWR)
- Hydropower generation (POW)
- Industrial service supply (IND)
- Municipal and domestic supply (MUN)
- Non-contact water recreation (REC-II)
- Preservation of rare, threatened, or endangered species (RARE)
- Warm freshwater habitat (WARM)
- Water contact recreation (REC-I)
- Wildlife habitat (WILD)

The Basin Plan establishes the following beneficial uses for ground waters throughout the Colorado River Basin Region:

- Agricultural supply (AGR)
- Industrial service supply (IND)
- Municipal and domestic supply (MUN)²

Requirements of this General Board Order implement the Basin Plan.

The 2006 303(d) List classifies the Imperial Valley Drains as impaired by dieldrin, DDT, endosulfan, PCBs, toxaphene, and selenium. Further, sedimentation/silt had previously been listed as a pollutant impairing Imperial Valley Drains; a sedimentation/siltation Total Maximum Daily Load (TMDL) for the Imperial Valley Drains has been approved by USEPA. The sedimentation/siltation TMDL does not establish a Waste Load Allocation (WLA) for discharges from groundwater remediation projects. However, monitoring for Total Suspended Solids (TSS) is required during each discharge event. Imperial Valley Drains discharge to two (2) major waterbodies, the New River and the Alamo River.

The New River is listed as impaired by 1,2,4-trimethylbenzene, chlordane, chloroform, chlorpyrifos, DDT, diazinon, dieldrin, mercury, meta-para xylenes, nutrients, dissolved oxygen, o-xylenes, PCBs, p-cymene, p-dichlorobenzene, pesticides, selenium, toluene, toxaphene, toxicity, copper and trash. A pathogen and sedimentation/siltation TMDL have been approved by USEPA for the New River and are implemented in this General Board Order. The pathogen and sedimentation/siltation TMDL's established WLAs for fecal coliform, E. coli, enterococci and sediment. The established fecal coliform, E. coli, enterococci and total suspended solids effluent limitations in this General Board Order comply with the WLAs established in the New River pathogen and sedimentation/siltation TMDLs. A Trash TMDL for the New River has been approved by the Regional Water Board and State Water Board, the Office of Administrative Law and USEPA. The TMDL essentially establishes a prohibition on the discharge of any trash to the New River by point sources. This General Board Order prohibits discharges of trash to the New River

The Alamo River is listed as impaired by chlorpyrifos, DDT, dieldrin, PCBs (polychlorinated biphenyls), selenium and toxaphene. USEPA has approved a sedimentation / siltation TMDL for the Alamo River. The requirements of this General Board Order are consistent with the WLAs contained in the sedimentation / siltation TMDL for the Alamo River.

² At such time as the need arises to know whether a particular aquifer which has no known existing MUN use should be considered a source of drinking water, the Regional Water Board will make that determination based on criteria listed in the "Sources of Drinking Water Policy" in Chapter 2 of the Basin Plan. As stated in footnote 2 to Table 2-5 in the Basin Plan, an "X" placed under the MUN column in Table 2-5 of the Basin Plan for a particular hydrologic unit indicates only that at least one of the aquifers in that unit currently supports a MUN beneficial use. The actual MUN usage of the Imperial hydrologic unit is limited only to a small portion of that ground water unit.

Also, the 2006 303(d) List classifies segments of the Coachella Valley Storm Water Channel as impaired by pathogens and toxaphene. A TMDL has not yet been developed for toxaphene; however, a TMDL is under development for pathogens.

The Colorado River (Imperial Reservoir to California-Mexico border) is listed as impaired for selenium (metal). The Palo Verde Outfall Drain and Lagoon is listed as impaired for pathogens and DDT (pesticide). TMDLs have not yet been developed for these parameters.

Finally, the Salton Sea is impaired by nutrients, salt, and selenium. No TMDLs have been developed to date for the Salton Sea, although a nutrient TMDL is under development. Tributaries to the Salton Sea, including the Coachella Valley Storm Channel and Imperial Valley Drains, may be affected by the nutrient TMDL and any others developed for the Salton Sea. Furthermore, the Basin Plan establishes selenium objectives for tributaries to the Salton Sea.

The State Water Board adopted the *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. The Regional Water Board does not consider the discharges of treated groundwater from the cleanup of VOCs regulated by this General Board Order to contain thermal or elevated temperature wastes. Therefore, requirements of this General Board Order do not implement the Thermal Plan.

- I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants.
- J. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this General Board Order implement the SIP.
- K. **Compliance Schedules and Interim Requirements.** Section 2.1 of the SIP provides that, based on a Discharger's request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived

from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Board Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This General Board Order does **not** include compliance schedules and interim or effluent limitations.

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

M. Stringency of Requirements for Individual Pollutants. This General Board Order contains both technology-based effluent limitations and Water Quality Based Effluent Limitations (WQBELs) for individual pollutants. The technology-based effluent limitations consist of restrictions on di-isopropyl ether, methyl tertiary-butyl ether (MTBE), tertiary-amyl methyl ether (TAME), and total petroleum hydrocarbons (TPH). Restrictions on di-isopropyl ether, ethanol, methanol, total petroleum hydrocarbons (TPH), and trichlorofluoroethane are discussed in Section IV.B of the Fact Sheet. This General Board Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. 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 WQBELs 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. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this General Board Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

N. 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.

- O. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations section 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 General Board Order are at least as stringent as the effluent limitations in the previous General Board Order.
- P. Endangered Species Act.** This General Board 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 General Board Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
- Q. Monitoring and Reporting.** Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes 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. This Monitoring and Reporting Program is provided in Attachment E.
- R. Standard and Special Provisions.** Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this General Board Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this General Board Order is provided in the attached Fact Sheet.
- S. Provisions and Requirements Implementing State Law.** The provisions and requirements in subsections V.B, V.C, VI.B, and VII.C.4. of this General Board Order are included to implement state law only. These provisions and requirements are not required under the federal CWA; consequently, violations of these provisions and requirements are not subject to the enforcement remedies that are available for NPDES violations.

- T. Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this General Board Order.
- U. Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this General Board Order.

THEREFORE, IT IS HEREBY ORDERED, that General Board Order R7-2002-1000 is rescinded upon the effective date of this General Board Order except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with Water Code section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) (33 U.S.C § 1251 et seq.) and regulations adopted thereunder, the Discharger shall comply with the following requirements in this General Board Order.

IV. DISCHARGE PROHIBITIONS

- A.** Bypass, overflow, discharge or spill of untreated or partially treated groundwater is prohibited.
- B.** The discharge of waste to land not owned or controlled by the Discharger is prohibited.
- C.** Discharge of treated wastewater at a location or in a manner different from that described by the Discharger in its NOI application or as authorized by the Executive Officer is prohibited.
- D.** Except as allowed under the Standard Provisions for NPDES permits (hereinafter Standard Provisions), included as Attachment D, the bypass or overflow of untreated wastewater or wastes to the waters of the State is prohibited.
- E.** The Discharger shall not extract groundwater for treatment in excess of the design capacity of the treatment system as specified in the Discharger's NOA from the Executive Officer.
- F.** Discharge of material other than extracted and treated groundwater from the investigation and cleanup of VOC-polluted groundwater and added treatment chemicals not approved by the Executive Officer is prohibited.
- G.** The discharge shall not cause degradation of any water supply unless in compliance with State Water Board Resolution 68-18.
- H.** The treatment or disposal of wastes from the facility shall not cause pollution or nuisance as defined in section 13050, subdivisions (l) and (m), respectively, of the California Water Code.
- I.** The discharge of trash to the New River is prohibited.

V. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. Final Effluent Limitations

- a. **Discharges to Municipal Designated Waters.** The Discharger shall maintain compliance with the following effluent limitations at the discharge point identified in the NOA, with compliance measured at monitoring locations identified in the NOA as described in the attached MRP:

Table 3. Effluent Limitations for Discharges to Municipal Designated Waters

Parameter	Units	Instantaneous Maximum Effluent Limitations
Lead, Total Recoverable	µg/L	15
Acrolein	µg/L	320
Acrylonitrile	µg/L	0.059
Benzene	µg/L	1.0
Bromoform	µg/L	4.3
Carbon Tetrachloride	µg/L	0.25
Chlorobenzene	µg/L	70
Chlorodibromomethane	µg/L	0.41
Chloroethane	µg/L	300
Chloroform	µg/L	100
Dichlorobromomethane	µg/L	0.56
1,1-Dichloroethane	µg/L	5.0
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
Ethylbenzene	µg/L	30
Methyl Bromide	µg/L	48
Methyl Chloride	µg/L	3
Methylene Chloride	µg/L	4.7
1,1,2,2-Tetrachloroethane	µg/L	0.17
Tetrachloroethylene	µg/L	0.8
Toluene	µg/L	40
1,1,1-Trichloroethane	µg/L	200
1,1,2-Trichloroethane	µg/L	0.6
Trichloroethylene	µg/L	2.7
Vinyl Chloride	µg/L	0.5
cis-1,2-Dichloroethylene	µg/L	6
trans-1,2-Dichloroethylene	µg/L	10
Di-isopropyl Ether	µg/L	5
Ethanol	µg/L	760,000

Parameter	Units	Instantaneous Maximum Effluent Limitations
Hydrocarbons, Petroleum (Total)	µg/L	100
Methanol	µg/L	3,500
Methyl tertiary-butyl ether (MTBE)	µg/L	13
Tertiary-amyl methyl ether (TAME)	µg/L	5
Tertiary Butyl Alcohol	µg/L	12
Trichlorofluoroethane	µg/L	1,200
Xylenes, Total	µg/L	20

b. Discharges to Non-Municipal Designated Waters. The Discharger shall maintain compliance with the following effluent limitations at discharge points identified in the NOA, with compliance measured at monitoring locations identified in the NOA as described in the attached MRP:

Table 4. Effluent Limitations for Discharges to Non-Municipal Designated Waters

Parameter	Units	Instantaneous Maximum Effluent Limitations
Lead, Total Recoverable	µg/L	15
Acrolein	µg/L	780
Acrylonitrile	µg/L	0.66
Benzene	µg/L	70
Bromoform	µg/L	360
Carbon Tetrachloride	µg/L	4.4
Chlorobenzene	µg/L	21,000
Chlorodibromomethane	µg/L	34
Chloroethane	µg/L	300
Chloroform	µg/L	100
Dichlorobromomethane	µg/L	46
1,1-Dichloroethane	µg/L	5.0
1,2-Dichloroethane	µg/L	99
1,1-Dichloroethylene	µg/L	3.2
1,2-Dichloropropane	µg/L	39
1,3-Dichloropropylene	µg/L	1,700
Ethylbenzene	µg/L	29,000
Methyl Bromide	µg/L	4,000
Methyl Chloride	µg/L	3
Methylene Chloride	µg/L	1,600
1,1,2,2-Tetrachloroethane	µg/L	11
Tetrachloroethylene	µg/L	8.85
Toluene	µg/L	200,000
1,1,1-Trichloroethane	µg/L	200
1,1,2-Trichloroethane	µg/L	42
Trichloroethylene	µg/L	81
Vinyl Chloride	µg/L	525
cis-1,2-Dichloroethylene	µg/L	10

Parameter	Units	Instantaneous Maximum Effluent Limitations
trans-1,2-Dichloroethylene	µg/L	140,000
Di-isopropyl Ether	µg/L	5
Ethanol	µg/L	760,000
Hydrocarbons, Petroleum (Total)	µg/L	100
Methanol	µg/L	740,000
Methyl tertiary-butyl ether (MTBE)	µg/L	13
Tertiary-amyl methyl ether (TAME)	µg/L	5
Tertiary Butyl Alcohol	µg/L	12
Trichlorofluoroethane	µg/L	4,000
Xylenes, Total	µg/L	1,750

- c. **pH:** The hydrogen ion (pH) of the treated effluent shall be maintained within the limits of 6.0 to 9.0 standard units.
- d. **Toxicity:** There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment plant effluent cause any acute or chronic toxicity in the receiving water, as defined in Section IV.C of the MRP. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Water Board.

B. Land Discharge Specifications – Not Applicable

C. 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 General Board Order. The discharge shall not cause the following in waters of the United States:

- 1.** Result in the concentration of dissolved oxygen in the receiving water to fall below 5.0 mg/L. When dissolved oxygen in the receiving water is already below 5.0 mg/L, the discharge shall not cause any further depression.
- 2.** Result in the presence of oil, grease, floating material (liquids, solids, foam and scum) or suspended material in amounts that create a nuisance or adversely affect beneficial uses.
- 3.** Result in the deposition of pesticides or combination of pesticides detectable in concentrations that adversely affects beneficial uses.
- 4.** Result in discoloration in the receiving water that adversely affects beneficial uses.
- 5.** Result in the discharge of biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
- 6.** Result in an increase turbidity that adversely affects beneficial uses.
- 7.** Result in the normal ambient pH of the receiving water to fall below 6.0 or exceed 9.0 units.
- 8.** Result in the natural receiving water temperature to be altered, unless it can be demonstrated to the satisfaction of the Regional Water Board that such alteration in temperature does not adversely affect beneficial uses.
- 9.** Result in the deposition of material that causes nuisance or adversely affects beneficial uses.
- 10.** Result in the discharge of an individual chemical or combination of chemicals in concentrations that adversely affect beneficial uses.
- 11.** Result in toxic pollutants to be present in the water column, sediments or biota in concentrations that adversely affect beneficial uses or that produce detrimental physiological responses in human, plant, animal, or aquatic life.
- 12.** Result in an increase in taste or odor-producing substances that adversely affect beneficial uses.

13. Result in the violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board as required by the Federal CWA and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA section 303 or amendments thereto, the Regional Water Board will revise and modify this Permit in accordance with such more stringent standards.
14. Result in the bacterial concentrations in receiving waters supporting a REC-I designation that exceed the following concentrations, as measured by the following bacterial indicators:
 - a. ***E. Coli***. The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a Most Probable Number (MPN) of 126, nor shall any sample exceed the maximum allowable bacterial density of 400. If the discharge is to the Colorado River, the geometric mean bacterial density shall not exceed a maximum Most Probable Number (MPN) of 235.
 - b. **Enterococci**. The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a Most Probable Number (MPN) of 33, nor shall any sample exceed the maximum allowable bacterial density of 100. If the discharge is to the Colorado River, the geometric mean bacterial density shall not exceed a maximum Most Probable Number (MPN) of 61.
 - c. **Fecal Coliform**. The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a Most Probable Number (MPN) of 200, nor shall any sample exceed the maximum allowable bacterial density of 400.
15. Result in the bacterial concentrations in receiving waters supporting a REC-II designation that exceed the following concentrations, as measured by the following bacterial indicators:
 - a. ***E. Coli***. The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a Most Probable Number (MPN) of 630, nor shall any sample exceed the maximum allowable bacterial density of 2,000. If the discharge is to the Colorado River, the geometric mean bacterial density shall not exceed a maximum Most Probable Number (MPN) of 1,175.
 - b. **Enterococci**. The geometric mean bacterial density (based on a minimum of not less than five samples equally spaced over a 30-day period) shall not exceed a Most Probable Number (MPN) of 165, nor shall any sample exceed the maximum allowable bacterial density of 500. If the discharge is to the Colorado River, the geometric mean bacterial density shall not exceed a maximum Most Probable Number (MPN) of 305.

16. Result in the concentration of Total Dissolved Solids as shown in the following table.

Name of Water Body	Annual Average TDS (mg/L)	Maximum TDS (mg/L)
New River	4,000	4,500
Alamo River	4,000	4,500
Imperial Valley Drains	4,000	4,500
Coachella Valley Drains	2,000	2,500
Palo Verde Valley Drains	2,000	2,500

B. Groundwater Limitations – Not Applicable

VII. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this General Board Order.
2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions:
 - a. The groundwater treatment facility shall be protected from any washout or erosion of wastes or covering material, and from any inundation, which could occur as a result of floods having a predicted frequency of once in 100 years.
 - b. The Discharger shall comply with all conditions of this General Board Order. Noncompliance constitutes a violation of the Federal Clean Water Act and Porter-Cologne Water Quality Control Act, and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification of waste discharge requirements; or denial of a permit renewal application.
 - c. The Discharger shall ensure that all site-operating personnel are familiar with the content of this General Board Order, and shall maintain a copy of this General Board Order at the site.
 - d. The Discharger shall immediately notify the Regional Water Board by phone at (760) 346-7491, the local health officer or directors of environmental health with jurisdiction over affected water bodies and the Office of Emergency Services by phone at (800) 852-7550 to report any noncompliance that may endanger human health or the environment as soon as: (1) the Discharger has knowledge of the discharge, (2) notification is possible, and (3) notification can be provide without substantially impeding cleanup or other emergency measures.

Although States and Regional Water Boards do not have duties as first responders, it is important to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health

and beneficial uses. To carry out this objective, the following notification requirements are to be implemented:

1. As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the Regional Water Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.
 2. During non-business hours, the Discharger shall leave a voice message on the Regional Water Board's voice recorder. A written report shall also be provided within five (5) business days of the time the Discharger becomes aware of the incident. The written report shall contain a description of the noncompliance and its cause, the period of noncompliance, the anticipated time to achieve full compliance, and the steps taken or planned, to reduce, eliminate, and prevent recurrence of the noncompliance. The Discharger shall report all intentional or unintentional spills in excess of one thousand (1,000) gallons occurring within the facility to the Regional Water Board in accordance with the above time limits.
- e. Prior to any change in ownership or management of this operation, the Discharger shall transmit a copy of this General Board Order to the succeeding owner/operator, and forward a copy of the transmittal letter to the Regional Water Board.
 - f. Prior to any modifications in this facility, which would result in material change in the quality or, quantity of wastewater treated or discharged, or any material change in the location of discharge, the Discharger shall report all pertinent information in writing to the Regional Water Board and obtain revised requirements before any modifications are implemented.
 - g. Adequate measures shall be taken to assure that flood or surface drainage waters do not erode or otherwise render portions of the discharge facilities inoperable.
 - h. This General Board Order does not authorize violation of any federal, state, or local laws or regulations.
 - i. Failure to comply with provisions or requirements of this General Board Order, or violation of other applicable laws or regulations governing discharges from this 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.

- j. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, instantaneous maximum effluent limitation, or receiving water limitation of this General Board Order, the Discharger shall notify the Regional Water Board by telephone (760) 346-7491 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within 5 days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and, prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.
- k. Prior to making any change in the point of discharge, place of use, or purpose of use of treated wastewater that results in a decrease of flow in any portion of a watercourse, the Discharger must file a petition with the State Water Board, Division of Water Rights, and receive approval for such a change. (Wat. Code § 1211.)

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this General Board Order.

C. Special Provisions

1. Reopener Provisions

- a. This General Board Order may be reopened for modification, or revocation and reissuance, as a result of the detection of a reportable priority pollutant generated by special conditions included in this General Board Order. These special conditions may be, but are not limited to, fish tissue sampling, whole effluent toxicity, monitoring requirements on internal waste stream(s), and monitoring for surrogate parameters. Additional requirements may be included in this General Board Order as a result of the special condition monitoring data.
- b. The Discharger shall submit data sufficient to determine if a WQBEL is required in the discharge permit as required under the SIP. It is the Discharger's responsibility to provide all information requested by the Regional Water Board for use in the analysis. The permit shall be reopened to establish WQBELs, if necessary.
- c. This General Board Order may be modified, rescinded and reissued, for cause. The filing of a request by the Discharger for a Board Order modification, rescission and reissuance, or a notification of planned changes or anticipated noncompliance does not stay any Board Order condition. Causes for modification include the promulgation of new regulations, modification of land application plans, or modification in sludge use or disposal practices, or adoption

of new regulations by the State Water Board or the Regional Water Board, including revisions to the Basin Plan.

- d. The CWA requires the Regional Water Board to modify, or terminate and reissue, the NPDES permit if a discharger must implement a pretreatment program. Public notice and a comment period are mandatory for these actions.
- e. This General Board Order may be reopened and the Whole Effluent Toxicity (WET) requirements, contained in Section V of the MRP, may be modified to address changes to USEPA or State Water Board policies or guidance regarding the testing or reporting requirements for WET testing.
- f. Total maximum daily loads (TMDLs) for pathogens, nutrients, salt, dissolved oxygen, VOCs, trash, pesticides, and selenium are to be developed by the Regional Water Board. The permit may be reopened and modified in the future to include appropriate requirements necessary to fully implement the approved TMDL, if needed.

- i. Alamo River: Chlorpyrifos, DDT, Dieldrin, PCBs, Selenium, Toxaphene
- ii. Coachella Valley Storm Water Channel (segments): Pathogens, Toxaphene
- iii. Colorado River (Imperial Reservoir to California-Mexico Border): Selenium
- iv. Imperial Valley Drains: DDT (Barbara Worth Drain, Peach Drain, and Rice Drain), Dieldrin (Barbara Worth Drain and Fig Drain), Endosulfan (Peach Drain), PCBs (Central Drain from Meloland Road to the outlet into the Alamo River), Selenium (Upper Basin Portion of Colorado River), Toxaphene (Barbara Worth Drain, Peach Drain, and Rice Drain)
- v. New River (Imperial County): 1,2,4-Trimethylbenzene, Chlordane, Chloroform, Chlorpyrifos, Copper, DDT, Diazinon, Dieldrin, Mercury, meta-para Xylenes, Nutrients, Organic Enrichment/Low Dissolved Oxygen, o-Xylenes, PCBs, p-Cymene, p-Dichlorobenzene/DCB, Pesticides, Selenium, Toluene, Toxaphene, Toxicity, Trash
- vi. Palo Verde Outfall Drain and Lagoon: DDT, Pathogens
- vii. Salton Sea: Nutrients, Salinity, Selenium

2. Special Studies, Technical Reports and Additional Monitoring Requirements

- a. Whole Effluent Toxicity Testing Requirements.** For compliance with the Basin Plan's narrative toxicity objective, this General Board Order requires the Discharger to conduct acute and chronic whole effluent toxicity (WET) testing, as specified in MRP section V. Furthermore, this Provision requires the Discharger to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity. If the Discharge exceeds the numeric toxicity monitoring triggers specified in section V.D of the MRP, this General Board Order requires the Discharger to initiate accelerated WET testing. If the Discharger exceeds the numeric toxicity monitoring triggers during the accelerated WET testing, the Discharger is required to initiate a Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE) in accordance with an approved TRE Work Plan. A TRE is a site-specific study conducted in a stepwise process to identify the source(s) of toxicity, evaluate effective control measures for effluent toxicity and confirm the reduction in effluent toxicity. This Provision includes requirements for the Discharger to develop and submit a TRE Work Plan and, if necessary, initiate accelerated WET testing and a TRE/TIE.
- i. Toxicity Reduction Evaluation (TRE) Work Plan.** Within 90 days of the effective date of this General Board Order, the Discharger shall submit to the Regional Water Board a TRE Work Plan for approval by the Executive Officer. The TRE Work Plan shall outline the procedures for identifying the source(s) of, and reducing or eliminating effluent toxicity. The TRE Work Plan must be developed in accordance with USEPA guidance (EPA/833B-99/002 Municipal) and be of adequate detail to allow the Discharger to immediately initiate the TRE Work Plan upon notification from the WET testing laboratory of effluent toxicity. This plan shall describe the steps the Discharger intends to follow in the event that toxicity is detected, and should include at a minimum:
- (a)** Specific actions the Discharger will take to investigate and identify the cause(s) of toxicity, including a TRE/TIE WET monitoring schedule;
 - (b)** Specific actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and
 - (c)** A schedule for these actions.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program

The Discharger shall develop and conduct a Pollutant Minimization Program (PMP) as further described below when there is evidence (e.g., sample results reported as DNQ when the effluent limitation is less than the MDL, sample results from analytical methods more sensitive than those methods required by this General Board Order, presence of whole effluent toxicity, health advisories

for fish consumption, results of benthic or aquatic organism tissue sampling) that a priority pollutant is present in the effluent above an effluent limitation and either:

- i. A sample result is reported as DNQ and the effluent limitation is less than the RL; or
- ii. A sample result is reported as ND and the effluent limitation is less than the MDL, using definitions described in Attachment A and reporting protocols described in MRP section X.B.4.

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

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

4. Construction, Operation and Maintenance Specifications

a. Facility and Treatment Operation

- i. The Discharger shall, at all times, properly operate and maintain all systems and components of collection, treatment and control which are installed or used by the Discharger to achieve compliance with the conditions of this General Board Order. Proper operation and maintenance includes effective performance, adequate process controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the

conditions of this General Board Order. All systems both in service and reserved, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Regional Water Board upon demand.

b. Start-Up Phase and Start-Up Reporting

- i. The Discharger shall inform the Regional Water Board in writing of the location of all sampling stations and the expected start-up date at least 10 days prior to beginning operational start-up.
- ii. During the original start-up of the treatment facility, sampling of the system influent and treated effluent must be performed on the first (1st) and fifth (5th) day of operation. On the 1st day of operation, the system shall be allowed to run until at least three (3) extraction well volumes are removed and until three (3) consecutive readings taken at least one (1) hour apart for pH, conductivity, and temperature are within five (5) percent of each other. Once these criteria are met, the system influent and treated effluent shall be sampled and submitted for analysis. During this phase of the start-up, all system effluent shall be discharged into a holding tank or sanitary sewer (not to the receiving water) until the results of the analysis show that the discharge is within the effluent limitations established in General Board Order No. R7-2009-0400 and in the NOA.
- iii. If the analysis of samples collected during the 1st day of operation indicate that the system is in compliance, the system shall be operated for a total of five (5) days with the system effluent being discharged into the receiving water. A second series of samples shall be collected during the fifth day. The effluent may continue to be discharged into the receiving water while the samples are being analyzed if the results are received within 48 hours of sampling. If the samples from the 5th day samples indicate compliance, discharge to the receiving water shall continue.
- iv. If the treatment system is shut down more than 48 hours during the original start-up, the original start-up procedures and sampling must be repeated.
- v. A report on the start-up phase shall be submitted to the Regional Water Board no more than fifteen (15) calendar days after completion of the start-up phase. The report should contain a summary of all monitoring results, copies of laboratory reports, chain of custody forms, flow rates, and a description of any changes or modifications to the treatment system.

5. Special Provisions for Municipal Facilities – Not Applicable

6. Other Special Provisions

- a. The Discharger may be required to submit technical reports as directed by the Regional Water Board's Executive Officer.

- b. The Discharger shall exclude from the groundwater treatment plant any liquid or solid waste that could adversely affect the system operation or effluent quality. The excluded liquid or solid waste shall be disposed of in accordance with applicable regulations.

7. Required Submittals and Reports

- a. **Deliverables and Due Dates.** The Discharger shall comply with the following compliance schedules as summarized in Table 5:

Table 5. Deliverables and Due Dates

Activity	Description	Due Date
TRE Workplan	Description of steps the Discharger will take in the event toxicity is detected. The workplan should describe investigation and evaluation techniques used to identify sources of toxicity; method for maximizing in-house efficiency; and identify the party who will conduct the TIE.	Within 90 days of the effective date of this General Board Order
Start-Up Notification	The Discharger shall inform the Regional Water Board in writing of the location of all sampling stations and the expected start-up date at least 10 days prior to beginning operational start-up.	10 days prior to start-up
Start-Up Report	The Discharger shall submit a report on the start-up phase to the Regional Water Board no more than fifteen (15) calendar days after completion of the start-up phase.	Within 15 days of completion of the start-up phase

VIII. COMPLIANCE DETERMINATION

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

A. General.

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment B of this General Board 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. 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).

C. 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).

D. Effect of Conducting a Pollutant Minimization Program (PMP).

If a sample result for a priority pollutant, or the arithmetic mean or median of multiple sample results is below the RL, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the Discharger conducts a PMP for the priority pollutant (as described in Provision VI.C.3.a.), the Discharger shall not be deemed out of compliance.

E. Water Quality-Based Effluent Limitations.

1. In accordance with Section 2.4.5 of the SIP, compliance with water quality-based effluent limitations shall be determined as follows:
 - a. Dischargers shall be deemed out of compliance with an effluent limitation if the concentration of a priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML).
 - b. When determining compliance with an average monthly effluent limitation and more than one sample result is available in a month, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:
 - i. The data set shall be ranked from low to high, reported ND determinations lowest, DNQ determinations next, and followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.
 - ii. 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 a DNQ.

If a sample result, or the arithmetic mean or median of multiple sample results, is below the reported ML, and there is evidence that the priority pollutant is present in the effluent above an effluent limitation and the Discharger conducts a PMP, the Discharger shall not be deemed out of compliance.

F. Mass and Concentration Limitation.

Compliance with mass and concentration effluent limitations for the same parameter shall be determined separately with their respective limitations. When the concentration of a constituent in an effluent sample is determined to be ND or DNQ, the corresponding mass emission rate (MER) determined from that sample concentration shall also be reported as ND or DNQ.

G. Acute and Chronic Toxicity Narrative Effluent Limitations.

Compliance with WET limitations established in the General Board Order shall be determined in accordance with Section III.B of the State Water Board's Water Quality Enforcement Policy.

A.
ATTACHMENT A – DEFINITIONS

Acutely Toxic Conditions

When used in the context of mixing zones, acutely toxic conditions refers to lethality that occurs to mobile aquatic organisms that move or drift through the mixing zone.

Annual Average Effluent Limitation

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

Arithmetic Mean (μ)

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

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

Average Monthly Effluent Limitation (AMEL)

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

Average Weekly Effluent Limitation (AWEL)

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

Best Management Practices (BMPs)

BMPs are methods, measures, or practices designed and selected to reduce or eliminate the discharge of pollutants to surface waters from point and non-point discharges including storm water. BMPs include structural and non-structural controls, and operation and maintenance procedures, which can be applied before, during, and/or after pollution producing activities.

Best Professional Judgment (BPJ) - Based Limits

Best Professional Judgment-based Limits are technology-based NPDES permits derived on a case-by-case basis using all reasonably available and relevant data for non municipal facilities in the absence of effluent limitations guidelines (ELG).

Bioaccumulative

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

Carcinogenic

Pollutants are substances that are known to cause cancer in living organisms.

Coefficient of Variation (CV)

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

Criteria Continuous Concentration (CCC)

Criteria Continuous Concentration equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects.

Criteria Maximum Concentration (CMC)

Criteria Maximum Concentration equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects.

Daily Discharge

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

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

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

Detected, but Not Quantified (DNQ)

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

Dilution Credit

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

Effluent Concentration Allowance (ECA)

ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as Waste Load Allocation (WLA) as used in USEPA guidance

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

Enclosed Bays

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

Estimated Chemical Concentration

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

Estuaries

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

Existing Discharger

Any Discharger that is not a new Discharger. An existing Discharger includes an "increasing Discharger" (i.e., an existing Facility with treatment systems in place from its current discharge that is or will be expanding, upgrading, or modifying its existing permitted discharge after the effective date of this Policy).

Geometric Mean

Geometric mean is a measure of the central tendency of a data set that minimizes the effects of extreme values. The geometric mean used for determining compliance with bacterial standards is calculated with the following equation:

Geometric Mean = $(C_1 \times C_2 \times \dots \times C_n)^{1/n}$ where n = the number of days samples were collected during the period, and C = the concentration of bacteria (CFU/100 mL) found on each day of sampling.

Incompletely-Mixed Discharge

A discharge that contributes to a condition that does not meet the meaning of a completely-mixed discharge condition.

Infeasible

Infeasible means not capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

Inland Surface Waters

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

Instantaneous Maximum Effluent Limitation

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

Instantaneous Minimum Effluent Limitation

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

Load Allocation (LA)

The portion of a receiving water's total maximum daily load that is allocated to one of its non-point sources of pollution or to natural background sources.

Maximum Daily Effluent Limitation (MDEL)

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

Median

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

Method Detection Limit (MDL)

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)

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

Mixing Zone

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

New Discharger

New Discharger includes any building, structure, facility, or installation from which there is, or may be, a discharge of pollutants, the construction of which commenced after the effective date of this Policy.

Not Detected (ND)

ND are those sample results less than the laboratory's MDL.

Objectionable Bottom Deposits

Objectionable Bottom Deposits are an accumulation of materials or substances on or near the bottom of a water body, which creates conditions that adversely impact aquatic life, human health, beneficial uses, or aesthetics. These conditions include, but are not limited to, the accumulation of pollutants in the sediments and other conditions that result in harm to benthic organisms, production of food chain organisms, or fish egg development. The presence of such deposits shall be determined by Regional Water Board(s) on a case-by-case basis.

Ocean Waters

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

Persistent Pollutants

Substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)

PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The 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

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.

Public Entity

Public Entity includes the Federal government or a state, county, city and county, city, district, public authority, or public agency.

Reporting Level (RL)

RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this General Board Order. The MLs included in this General Board 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

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

Source of Drinking Water

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

Standard Deviation (σ)

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

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

State Implementation Policy (SIP)

The Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California.

Technology Based Effluent Limitation

Technology Based Effluent Limitation is a permit limit for a pollutant that is based on the capability of a treatment method to reduce the pollutant to a certain concentration.

Teratogenic

Teratogenic pollutants are substances that are known to cause structural abnormalities or birth defects in living organisms.

Toxicity Reduction Evaluation (TRE)

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

B.
ATTACHMENT B – SCREENING LEVELS FOR TOXIC POLLUTANTS

I. INSTRUCTIONS

This Attachment contains listings of the parameters Dischargers are to analyze as part of their application for coverage under this General Board Order. The sampling requirements that are applicable to all discharges are presented in section II below, in Tables B-2 and B-3. Additional sampling requirements applicable to discharges to specific waterbodies follow in section III, in Tables B-4 through B-6. The Discharger shall compare the results of all analyses to the corresponding screening levels in Tables B-2 to B-6, where applicable, and submit them with the completed Notice of Intent (NOI). Any analyses performed for parameters without screening levels shall also be submitted to the Regional Water Board with the completed NOI.

The rationale for the screening levels in Tables B-2 through B-6 is provided in section IV.C.3 of the Fact Sheet (Attachment F) of this General Board Order.

Table B-1 below provides an overview of the parameters to be analyzed as part of the application package.

Table B-1. Overview of Sampling Requirements

Attachment B Table	Parameter(s) Covered ¹	Water to be Sampled
Sampling Requirements for All Discharges		
Table B-2	Priority Pollutants	EFF ²
Table B-3	Hardness-Dependent Priority Pollutants ³	EFF
None	Any 303(d) Listed Parameters ⁴	EFF
Additional Sampling Requirements for Discharges to Specific Waterbodies		
Tables B-4 and B-5	Total Dissolved Solids	EFF
Table B-6	Selenium	EFF
<p>1 The sampling requirements in terms of the parameters covered apply to all designated beneficial uses unless otherwise specified. MUN designated waters pertain to those receiving waters designated for municipal and domestic water supply, and Non-MUN designated waters pertain to those receiving waters designated for one or more of the other use categories. Consult section III.H of the Limitations and Discharge Requirements for further information concerning designated use categories.</p> <p>2 EFF = effluent water</p> <p>3 Several of the priority pollutant metals are hardness-dependent and require that a sample of the receiving water be analyzed for hardness.</p> <p>4 If the proposed receiving water is listed as impaired by any parameter on California's latest 303(d) List, then the Discharger shall analyze for the listed parameter(s). Consult the following Web site for the latest 303(d) List: http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml.</p>		

Dischargers shall analyze all applicable pollutants in this Attachment in accordance with the analytical methods and other requirements specified in Part 136 of Title 40 of the Code of Federal Regulations (CFR) and in accordance with section I of the Monitoring and Reporting Program (Attachment E) of this General Board Order.

For priority pollutant constituents with applicable water quality criteria, detection limits shall be below the screening level. If the lowest minimum level (ML) published in Appendix 4 of the SIP

is not below the screening level, the detection limit shall be the lowest ML. For priority pollutant constituents without applicable water quality criteria, the detection limits shall be equal to or less than the lowest ML published in Appendix 4 of the SIP.

Detection, for the purposes of the priority pollutants with applicable water quality criteria, means a sample result that is greater than or equal to the detection limit. Sample results less than the ML, but greater than or equal to the detection limit, shall be reported as “Detected, but Not Quantified,” or DNQ. The estimated chemical concentration of the sample shall also be reported, and shall be used to compare to the applicable screening level for purposes of determining whether effluent limitations are necessary.

Detection, for the purposes of the priority pollutants without applicable water quality criteria, means a sample result that is greater than or equal to the applicable screening level (i.e., the lowest ML specified in the SIP).

II. ANALYSES REQUIRED OF ALL DISCHARGERS

A. Priority Pollutants. All Dischargers seeking authorization to discharge under this General Board Order shall sample and analyze the proposed effluent for the priority pollutants contained in Tables B-2 and B-3. The results of the analyses shall be compared to the corresponding screening levels and shall be submitted as part of the NOI.

Table B-2. Screening Levels for Priority Pollutants

Parameter	Screening Levels ¹		Minimum Levels (MLs) (µg/L)
	Municipal Designated Waters (µg/L) ²	Non-Municipal Designated Waters (µg/L) ²	
<i>Volatile Organics</i>			
1,1-Dichloroethane	5	5	1
1,1-Dichloroethylene	0.057	3.2	0.5
1,1,1-Trichloroethane	200	200	2
1,1,2-Trichloroethane	0.6	42	0.5
1,1,2,2-Tetrachloroethane	0.17	1	0.5
1,2-Dichlorobenzene	600	600	0.5
1,2-Dichloroethane	0.38	99	0.5
1,2-Dichloropropane	0.52	39	0.5
1,2-Cis-Dichloroethylene	6	10	N/A
1,2-Trans-Dichloroethylene	10	10	1
1,3-Dichlorobenzene	400	2,600	2
1,3-Dichloropropylene	0.5	0.5	0.5
1,4-Dichlorobenzene	5	0.5	0.5
2-Chloroethyl-vinyl-ether	1 ³	1 ³	1
Acetone	700	700	N/A
Acrolein	320	780	5
Acrylonitrile	0.059	0.66	2
Benzene	1.0	1.0	0.5
Bromoform	4.3	360	0.5
Carbon Tetrachloride	0.25	0.5	0.5
Chlorobenzene	680	21,000	2
Chlorodibromomethane	0.41	34	0.5
Chloroethane	300	300	2
Chloroform	100	100	2
Dichlorobromomethane	0.56	46	0.5

Parameter	Screening Levels ¹		Minimum Levels (MLs) (µg/L)
	Municipal Designated Waters (µg/L) ²	Non-Municipal Designated Waters (µg/L) ²	
Di-isopropyl Ether	5	5	N/A
Ethanol	760,000	760,000	N/A
Ethylbenzene	700	700	2
Ethylene Dibromide	0.05	0.05	N/A
Hydrocarbons, Total Petroleum	100	100	N/A
Methanol	3,500	740,000	N/A
Methyl Bromide	10	4,000	2
Methyl Chloride	3	3	0.5
Methyl ethyl ketone	700	700	N/A
Methyl tertiary-butyl ether	13	13	N/A
Methylene Chloride	4.7	1,600	0.5
Tertiary-amyl-methyl ether	5	5	N/A
Tertiary Butyl Alcohol	12	12	N/A
Tetrachloroethylene	0.8	8.85	0.5
Toluene	150	150	2
Trichloroethylene	2.7	5	0.5
Trichlorofluoroethane	1,200	4,000	N/A
Vinyl Chloride	0.5	0.5	0.5
Xylenes	20	1,750	N/A
Semi-Volatile Organics			
1,2-Diphenylhydrazine	0.04	0.54	1
1,2,4-Trichlorobenzene	70	--	5
2-Chlorophenol	120	400	5
2,4-Dichlorophenol	93	790	5
2,4-Dimethylphenol	540	2,300	2
2,4-Dinitrophenol	70	14,000	5
2,4-Dinitrotoluene	0.11	9.1	5
2,4,6-Trichlorophenol	2.1	6.5	10
2,6-Dinitrotoluene	5 ³	5 ³	5
2-Nitrophenol	10 ³	10 ³	10
2-Chloronaphthalene	1,700	4,300	10
3,3'-Dichlorobenzene	0.04	0.077	5
3-Methyl-4-Chlorophenol	1 ³	1 ³	1
2-Methyl-4,6-Dinitrophenol	13	765	5
4-Nitrophenol	5 ³	5 ³	5
4-Bromophenyl phenyl ether	5 ³	5 ³	5
4-Chlorophenyl phenyl ether	5 ³	5 ³	5
Acenaphthene	1,200	2,700	1
Acenaphthylene	10 ³	10 ³	10
Anthracene	9,600	110,000	5
Benzidine	0.00012	0.00054	5
Benzo(a)Anthracene	0.0044	0.049	5
Benzo(a)Pyrene	0.0044	0.049	2
Benzo(b)Fluoranthene	0.0044	0.049	10
Benzo(g,h,i)Perylene	5 ³	5 ³	5
Benzo(k)Fluoranthene	0.0044	0.049	2
Bis(2-Chloroethoxy)Methane	5 ³	5 ³	5
Bis(2-Chloroethyl)Ether	0.031	1.4	1
Bis(2-Chloroisopropyl)Ether	1,400	170,000	10
Bis(2-Ethylhexyl)Phthalate	1.8	5.9	5
Butylbenzyl Phthalate	3,000	5,200	10
Chrysene	0.0044	0.049	5
Dibenzo(a,h)Anthracene	0.0044	0.049	1
Diethyl Phthalate	23,000	120,000	10
Dimethyl Phthalate	313,000	2,900,000	10
di-n-Butyl Phthalate	2,700	12,000	10

Parameter	Screening Levels ¹		Minimum Levels (MLs) (µg/L)
	Municipal Designated Waters (µg/L) ²	Non-Municipal Designated Waters (µg/L) ²	
di-n-Octyl Phthalate	10 ⁵	10 ⁵	10
Fluoranthene	300	370	10
Fluorene	1,300	14,000	10
Hexachlorobenzene	0.00075	0.00077	1
Hexachlorobutadiene	0.44	50	1
Hexachlorocyclopentadiene	50	17,000	5
Hexachloroethane	1.9	8.9	1
Indeno(12,3-cd)Pyrene	0.0044	0.049	0.05
Isophorone	8.4	600	1
N-Nitrosodimethyl amine	0.00069	8.1	5
N-Nitroso-di-n-propyl amine	0.005	1.4	5
N-Nitrosodiphenyl amine	5.0	16	1
Naphthalene	10 ³	10 ³	10
Nitrobenzene	17	1,900	10
Pentachlorophenol	0.28	7.9	1
Phenanthrene	5 ³	5 ³	5
Phenol	21,000	4,600,000	50
Pyrene	960	11,000	10
Metals and Other Compounds			
Antimony, Total Recoverable	14	4,300	5
Arsenic, Total Recoverable	50	36	10
Beryllium, Total Recoverable	4	--	0.5
Cadmium, Total Recoverable	Refer to Table B-3		
Chromium (III)	Refer to Table B-3		
Chromium (VI)	11	50	5
Copper, Total Recoverable	Refer to Table B-3		
Cyanide, Free	5.2	--	5
Lead, Total Recoverable	Refer to Table B-3		
Mercury, Total Recoverable	0.050	0.051	0.2
Nickel, Total Recoverable	Refer to Table B-3		
Selenium, Total Recoverable	5.0	71	2
Silver, Total Recoverable	Refer to Table B-3		
Thallium, Total Recoverable	1.7	6.3	1
Zinc, Total Recoverable	Refer to Table B-3		
Asbestos	7 MFL ⁴	7 MFL ⁵	--
2,3,7,8-TCDD	1.3 x 10 ⁻⁸	1.4 x 10 ⁻⁸	--
Pesticides and PCBs			
4,4'-DDD	0.00083	0.00084	0.05
4,4'-DDE	0.00059	0.00059	0.05
4,4'-DDT	0.00059	0.00059	0.01
alpha-Endosulfan	0.056	0.0087	0.02
alpha-BHC	0.0039	0.013	0.01
Aldrin	0.00013	0.00014	0.005
beta-Endosulfan	0.056	0.0087	0.01
beta-BHC	0.014	0.046	0.005
Chlordane	0.00057	0.00059	0.1
delta-BHC	--	--	0.005
Dieldrin	0.00014	0.00014	0.01
Endosulfan Sulfate	110	240	0.05
Endrin	0.036	0.0023	0.01
Endrin Aldehyde	0.76	0.81	0.01
Heptachlor	0.00021	0.00021	0.01
Heptachlor Epoxide	0.0001	0.00011	0.01
gamma-BHC	0.019	0.063	0.02
PCBs, sum of ⁶	0.00017	0.00017	0.5
Toxaphene	0.00073	0.00075	0.5

¹ The screening levels for MUN designated waters were established based on the maximum contaminant level (MCL) and California Toxics

Parameter	Screening Levels ¹		Minimum Levels (MLs) (µg/L)
	Municipal Designated Waters (µg/L) ²	Non-Municipal Designated Waters (µg/L) ²	
Rule (CTR) criteria for the protection of aquatic life or for the protection of human health for consumption of water and organisms, whichever was the more stringent. The screening levels for Non-MUN designated waters were established based on CTR criteria for the protection of aquatic life or human health for the consumption of organisms only, whichever was the more stringent.			
2 µg/L = micrograms per liter			
3 Priority pollutants for which no applicable MCLs or CTR criteria for the protection of human health or aquatic life exist include beryllium, chloroethane, 2-chloroethylvinyl ether, chloroform, 1,1-dichloroethane, methyl chloride, 1,1,1-trichloroethane, 2-nitrophenol, 4-nitrophenol, 3-methyl-4-chlorophenol, acenaphthylene, benzo(ghi)perylene, bis(2-chloroethoxy)methane, 4-bromophenyl phenyl ether, 4-chlorophenyl phenyl ether, 2,6-dinitrotoluene, di-n-octyl phthalate, naphthalene, phenanthrene, 1,2,4-trichlorobenzene, delta-BHC, and asbestos (non-MUN only). The screening level for these parameters is based on the lowest minimum level (ML) contained in the SIP.			
4 MFL = million fibers per liter			
5 There are no applicable MCLs or CTR criteria for the protection of human health (consumption of organisms only) or aquatic life for asbestos for non-MUN designated waters. There is also no applicable ML for asbestos in the SIP. Therefore, the screening level for asbestos for non-MUN designated waters is equivalent to the CTR criterion for the protection of human health (consumption of water and organisms). If the discharge exceeds this screening level, effluent limitations will not be required, but the Discharger will be required to conduct additional monitoring as specified in the NOA from the Executive Officer.			
6 The screening level applies to the sum of Aroclors 1242, 1254, 1221, 1232, 1248, 1280, and 1016.			

Table B-3. Screening Levels for Hardness-Dependent Priority Pollutant Metals

Receiving Water Hardness (mg/L as CaCO ₃)	Most Stringent CTR Water Quality Criterion (µg/L)						
	Cadmium	Chromium (III)	Copper	Lead	Nickel	Silver	Zinc
1 – 10	0.07	4.8	0.18	0.01	1.1	0.01	2.4
11 – 20	0.44	34	1.4	0.19	8.1	0.09	18
21 – 30	0.72	58	2.5	0.44	14	0.28	32
31 – 40	0.98	79	3.4	0.72	19	0.54	44
41 – 50	1.2	100	4.4	1.0	25	0.88	56
51 – 60	1.5	120	5.2	1.4	30	1.3	68
61 – 70	1.7	140	6.1	1.7	34	1.7	79
71 – 80	1.9	160	7.0	2.1	39	2.3	90
81 – 90	2.1	170	7.8	2.4	44	2.8	100
91 – 100	2.3	190	8.6	2.8	48	3.5	110
101 – 110	2.5	210	9.4	3.2	53	4.1	120
111 – 120	2.7	230	10	3.6	57	4.9	130
121 – 130	2.9	240	11	4.1	61	5.6	140
131 – 140	3.0	260	12	4.5	66	6.5	150
141 – 150	3.2	270	13	4.9	70	7.3	160
151 – 160	3.4	290	13	5.4	74	8.2	170
161 – 170	3.6	310	14	5.8	78	9.2	180
171 – 180	3.8	320	15	6.3	82	10	190
181 – 190	3.9	340	15	6.8	86	11	200
191 – 200	4.1	350	16	7.3	90	12	210
201 – 210	4.3	370	17	7.7	94	13	220
211 – 220	4.4	380	18	8.2	98	15	230
221 – 230	4.6	400	18	8.7	100	16	230
231 – 240	4.8	410	19	9.2	110	17	240
241 – 250	4.9	430	20	9.7	110	18	250
251 – 260	5.1	440	20	10	110	20	260
261 – 270	5.2	450	21	11	120	21	270
271 – 280	5.4	470	22	11	120	23	280
281 – 290	5.5	480	23	12	130	24	290
291 – 300	5.7	500	23	12	130	25	300
301 – 310	5.8	510	24	13	130	27	300
311 – 320	6.0	520	25	13	140	29	310
321 – 330	6.2	540	25	14	140	30	320

Receiving Water Hardness (mg/L as CaCO ₃)	Most Stringent CTR Water Quality Criterion (µg/L)						
	Cadmium	Chromium (III)	Copper	Lead	Nickel	Silver	Zinc
331 – 340	6.3	550	26	15	140	32	330
341 – 350	6.5	570	27	15	150	33	340
351 – 360	6.6	580	27	16	150	35	350
361 – 370	6.7	590	28	16	150	37	360
371 – 380	6.9	610	29	17	160	39	360
381 – 390	7.0	620	29	17	160	41	370
391 – 400	7.2	630	30	18	170	42	380
> 400	7.3	650	31	19	170	44	390

B. Hardness – Receiving Water. All Dischargers seeking authorization to discharge under this General Board Order shall sample and analyze the proposed effluent and receiving water for total hardness (measured as CaCO₃). The results of the analyses shall be submitted with the completed NOI.

C. Section 303(d) Parameters. If the proposed receiving water is listed as impaired on the latest 303(d) List, the Discharger shall analyze a representative sample of the discharge for the affected parameter(s) and submit the results with the completed NOI. The latest 303(d) List may be found at:
http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml.

III. Waterbody or Designated Use Specific Analyses Required

The Basin Plan establishes limitations for the discharge of certain pollutants to specific waterbodies. Dischargers proposing to discharge treated groundwater from cleanup of VOCs under this General Board Order to the New River, Alamo River, Imperial Valley Drains, Coachella Valley Drains, Palo Verde Valley Drains, and to tributaries to the Salton Sea shall analyze a representative sample of the discharge for the parameters indicated in Tables B-4 through B-6 below, as applicable, and compare the results to the screening levels noted. The Discharger shall submit the results of all analyses performed with the completed NOI.

Table B-4. Analysis Requirements for Discharges to the New River, Alamo River, and the Imperial Valley Drains

Parameter	Units	Screening Level
Total Dissolved Solids	mg/L	4,000

Table B-5. Analysis Requirements for Discharges to the Coachella Valley Drains and the Palo Verde Valley Drains

Parameter	Units	Screening Level
Total Dissolved Solids	mg/L	2,000

Table B-6. Analysis Requirements for Discharges to the Tributaries to the Salton Sea

Parameter	Units	Screening Level
Selenium	mg/L	0.005

C.
ATTACHMENT C – NOTICE OF INTENT

NOTICE OF INTENT
TO COMPLY WITH THE TERMS OF
GENERAL BOARD ORDER R7-2009-0400
FOR
DISCHARGES OF TREATED GROUNDWATER FROM CLEANUP OF VOCs

I. REASON FOR FILING

New Discharge or New Facility <input type="checkbox"/>	NPDES Permit Reissuance/Renewal <input type="checkbox"/>	Change from Individual Permit to General Permit <input type="checkbox"/>
---	---	---

II. EXISTING PERMITS/REQUIREMENTS (IF APPLICABLE):

List any active Board Orders or Permits adopted by this Regional Water Board for this facility.
1. Board Order No. _____
2. NPDES Permit(s) _____

III. PROJECT/FACILITY NAME AND SITE ADDRESS INFORMATION

Project/Facility Name			
Site Address			
Mailing Address			
City	State	Zip	Phone
1. Assessor's Parcel Numbers: Facility:	2. Latitude: Facility:	3. Longitude: Facility:	
Contact Person			

IV. CONTRACTOR/OPERATOR (If additional contractors/operators are involved, provide information in a supplemental letter)

Name					
Mailing Address					
City	State	Zip	License Number		
Contact Person	Contractor <input type="checkbox"/>		Operator <input type="checkbox"/>		Contractor/Operator <input type="checkbox"/>
Owner Type (check one)	1. Individual <input type="checkbox"/>	2. Corporation <input type="checkbox"/>	3. Government Agency <input type="checkbox"/>	4. Partnership <input type="checkbox"/>	5. Other <input type="checkbox"/>

V. PROPERTY OWNER (If additional property owners are involved, provide information in a supplemental letter)

Name					
Mailing Address					
City	State	Zip	License Number		
Contact Person					
Owner Type	1. Individual	2. Corporation	3. Government	4. Partnership	5. Other

(check one)	<input type="checkbox"/>	<input type="checkbox"/>	Agency <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------	--------------------------	--------------------------	------------------------------------	--------------------------	--------------------------

VI. Address Where Legal Notice May Be Served:

Name			
Mailing Address			
City	State	Zip	Phone
Contact Person			

VII. BILLING ADDRESS (Where Annual Fee Invoices should be sent):

Name			
Mailing Address			
City	State	Zip	Phone
Contact Person			

VIII. DISCHARGE LOCATION (If more than one discharge is proposed, provide information in a supplemental letter):

Street (including address, if any): _____		
City/County: _____		
Nearest Cross Street(s): _____		
Township/Range/Section T_____, R_____, Section_____, SBB&M Attach a map of at least 1:24000 (1"=2000') showing the discharge site (e.g., USGS 7.5' topographic map). The map should also show the treatment system, discharge point, and surface waters. Wells and residences within 1,500 feet shall be identified.		
1. Assessor's Parcel Numbers Discharge Point:	2. Latitude Discharge Point:	3. Longitude Discharge Point:

IX. PROJECT DESCRIPTION AND TREATMENT PROCESS DESCRIPTION

Provide a description of the project and the discharge requiring coverage under this General Board Order. If additives are added to your process, briefly describe their composition if the information is available. If treatment is necessary prior to discharge, attach a schematic flow diagram and provide description of all treatment processes. In addition, include the proposed discharge rate in million gallons per day (MGD), the approximate project start date, and the projected discharge duration. (Attach additional sheets, if necessary)		

Start Date_____	Estimated Stop Date_____	Discharge or Design Flow Rate_____ MGD
Is the discharge continuous or intermittent? _____		

--

X. RECEIVING WATER INFORMATION

1. Name of closest Receiving Water. _____		
2. Receiving Water is tributary to (name major downstream water body): _____		
Receiving Water Designation (check one)	1. Municipal Designated Receiving Water <input type="checkbox"/>	2. Non-Municipal Designated Receiving Water <input type="checkbox"/>

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

Please identify (mark all that apply). Discharger to submit report on analysis of constituents identified below:			
<input type="checkbox"/> Nitrates	<input type="checkbox"/> Color	<input type="checkbox"/> Suspended material	<input type="checkbox"/> Turbidity
<input type="checkbox"/> pH	<input type="checkbox"/> Oil and grease	<input type="checkbox"/> Chlorine	<input type="checkbox"/> Metals
<input type="checkbox"/> Total Dissolved Solids <input type="checkbox"/> Other (e.g., E. Coli, nutrients, BOD, etc.) (please describe): _____			
Priority Pollutant Monitoring – Required of ALL applicants:			
Have samples been collected: <input type="checkbox"/> Yes (attach results) <input type="checkbox"/> No			
Do any priority pollutants results exceed the Water Quality Screening Criteria contained in General Board Order No. R7-2009-0400, Attachment B? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If your answer is yes, a facility-specific individual permit may be required from this Regional Water Board rather than this General Board Order.			
Are additives in the discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If yes, please specify the additive and/or sample results: _____ _____			

XII. ABILITY TO COMPLY

Do you believe the discharge may have acute or chronic toxicity, chemical, or organic constituents, bacteria, pesticides, oil and grease, radioactivity, salinity, or temperature that may adversely impact beneficial uses of the Receiving Water? <input type="checkbox"/> Yes <input type="checkbox"/> No
If your answer is yes, a facility-specific individual permit may be required from this Regional Water Board rather than this General Board Order.

XIII. FEES

A check payable to the State Water Resources Control Board in the amount of \$6,970 (or appropriate current fee) must be submitted for a New Discharge. (Please mark the appropriate box) <input type="checkbox"/> Check Enclosed with NOI <input type="checkbox"/> Renewal – Annual Fee is Billed Automatically

XIV. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Name of Lead Agency: _____			
Has a public agency determined that the proposed project is exempt from CEQA? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If Yes, state the basis for the exemption and the name of the public agency supplying the exemption on the line below: Basis of the Exemption/Agency: _____			
Has a Notice of Determination been filed under CEQA? <input type="checkbox"/> Yes <input type="checkbox"/> No			
If Yes, enclose a copy of the CEQA document, Environmental Impact Report, or Negative Declaration. If no, identify the expected type of CEQA document and expected date of completion.			
Expected CEQA Document and completion date: _____ Estimated completion date: _____			
<input type="checkbox"/> EIR	<input type="checkbox"/> Negative Declaration	<input type="checkbox"/> Mitigated Negative Declaration	<input type="checkbox"/> Categorical Exemption

XV. CERTIFICATION

I hereby certify under penalty of perjury that the information provided in this application and in any attachments is true and accurate to the best of my knowledge. By signing this NOI, I agree to closely monitor and stop the discharge if there is any violation of the General Permit.			
The Regional Water Board will be immediately notified of any violation, or threatened violation, of this General Permit.			
Signature of Contractor/Operator		Signature of Property Owner	
Print or Type Name		Print or Type Name	
Title	Date	Title	Date

XVI. OTHER

Attach additional sheets to explain any responses which need clarification. List attachments with titles and dates below: _____ _____ _____
A representative of the Regional Water Board will notify you within 30 days of receipt of your Notice of Intent. The notice will state if your discharge meets the criteria for this General Board Order, whether the Notice of Intent is complete or if additional information must be submitted to complete your application for this General Board Order, pursuant to division 7, section 13260 of the California Water Code.
The completion date of your application is normally the date when all required information, including the correct fee, is received by the Regional Water Board.

FOR REGIONAL WATER BOARD OFFICE USE ONLY

Date NOI Received:	Letter to Discharger Sent:	Fee Amount Received:	Check #:
--------------------	----------------------------	----------------------	----------

D.

ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this General Board Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 C.F.R. § 122.41(a).)
2. The Discharger shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions, even if this General Board Order has not yet been modified to incorporate the requirement. (40 C.F.R. § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Board Order. (40 C.F.R. § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this General Board Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 C.F.R. § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this General Board Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this General Board Order. (40 C.F.R. § 122.41(e).)

E. Property Rights

1. This General Board Order does not convey any property rights of any sort or any exclusive privileges. (40 C.F.R. § 122.41(g).)

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

F. Inspection and Entry

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

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this General Board Order (40 C.F.R. § 122.41(i)(1));
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Board Order (40 C.F.R. § 122.41(i)(2));
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this General Board Order (40 C.F.R. § 122.41(i)(3)); and
4. Sample or monitor, at reasonable times, for the purposes of assuring General Board Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 C.F.R. § 122.41(i)(4).)

G. Bypass

1. Definitions
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 C.F.R. § 122.41(m)(1)(i).)
 - b. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities, which causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 C.F.R. § 122.41(m)(1)(ii).)
2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 C.F.R. § 122.41(m)(2).)

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 C.F.R. § 122.41(m)(4)(i)):
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 C.F.R. § 122.41(m)(4)(i)(A));
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance (40 C.F.R. § 122.41(m)(4)(i)(B)); and
 - c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 C.F.R. § 122.41(m)(4)(i)(C).)
4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 C.F.R. § 122.41(m)(4)(ii).)
5. Notice
 - a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 C.F.R. § 122.41(m)(3)(i).)
 - b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 C.F.R. § 122.41(m)(3)(ii).)

H. Upset

Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Discharger. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. (40 C.F.R. § 122.41(n)(1).)

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was

caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 C.F.R. § 122.41(n)(2).)

2. Conditions necessary for a demonstration of upset. A Discharger who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that (40 C.F.R. § 122.41(n)(3)):
 - a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 C.F.R. § 122.41(n)(3)(i));
 - b. The permitted facility was, at the time, being properly operated (40 C.F.R. § 122.41(n)(3)(ii));
 - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 C.F.R. § 122.41(n)(3)(iii)); and
 - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 C.F.R. § 122.41(n)(3)(iv).)
3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 C.F.R. § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

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

B. Duty to Reapply

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

C. Transfers

This General Board Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the General Board Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 C.F.R. § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

- A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 C.F.R. § 122.41(j)(1).)
- B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this General Board Order. (40 C.F.R. § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

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

B. Records of monitoring information shall include:

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

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

1. The name and address of any permit applicant or Discharger (40 C.F.R. § 122.7(b)(1)); and
2. Permit applications and attachments, permits and effluent data. (40 C.F.R. § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this General Board Order or to determine compliance with this General Board Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 C.F.R. § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 C.F.R. § 122.41(k).)
2. All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 C.F.R. § 122.22(a)(1).)
3. All reports required by this General Board Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 C.F.R. § 122.22(b)(1));
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility

for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 C.F.R. § 122.22(b)(2)); and

- c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 C.F.R. § 122.22(b)(3).)
4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 C.F.R. § 122.22(c).)
5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.” (40 C.F.R. § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 C.F.R. § 122.22(l)(4).)
2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 C.F.R. § 122.41(l)(4)(i).)
3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this General Board Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Regional Water Board. (40 C.F.R. § 122.41(l)(4)(ii).)
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this General Board Order. (40 C.F.R. § 122.41(l)(4)(iii).)

D. Compliance Schedules

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

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. (40 C.F.R. § 122.41(l)(6)(i).)
2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 C.F.R. § 122.41(l)(6)(ii)):
 - a. Any unanticipated bypass that exceeds any effluent limitation in this General Board Order. (40 C.F.R. § 122.41(l)(6)(ii)(A).)
 - b. Any upset that exceeds any effluent limitation in this General Board Order. (40 C.F.R. § 122.41(l)(6)(ii)(B).)
3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 C.F.R. § 122.41(l)(6)(iii).)

F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 C.F.R. § 122.41(l)(1)(i)); or
2. The alteration or addition results in a significant change in the Discharger's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 C.F.R. § 122.41(l)(1)(iii).)

G. Anticipated Noncompliance

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

H. Other Noncompliance

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

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 C.F.R. § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

- A.** The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

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

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

- 2.** That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this General Board Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(2)):
 - a.** 500 micrograms per liter ($\mu\text{g/L}$) (40 C.F.R. § 122.42(a)(2)(i));
 - b.** 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));
 - c.** Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or
 - d.** The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

E.
ATTACHMENT E – MONITORING AND REPORTING PROGRAM

Table of Contents

I.	General Monitoring Provisions.....	E-2
II.	Monitoring Locations	E-4
III.	Influent Monitoring Requirements.....	E-4
	A. Monitoring Location INF-001.....	E-4
IV.	Effluent Monitoring Requirements	E-4
	A. Monitoring Location EFF-001 (as specified in NOA).....	E-4
V.	Whole Effluent Toxicity Testing Requirements	E-6
	A. Monitoring Requirements.....	E-6
	B. Quality Assurance.....	E-7
	C. Accelerated Monitoring Requirements.....	E-8
	D. Conducting Toxicity Identification Evaluations and Toxicity Reduction Evaluations.....	E-9
	E. Definition of Toxicity.....	E-10
	F. Reporting	E-10
VI.	Land Discharge Monitoring Requirements – Not Applicable	E-11
VII.	Reclamation Monitoring Requirements – Not Applicable.....	E-11
VIII.	Receiving Water Monitoring Requirements – Not Applicable	E-11
	A. Monitoring Location RSW-001	E-11
	B. Monitoring Location RSW-002	E-11
IX.	Other Monitoring Requirements – Not Applicable.....	E-12
X.	Reporting Requirements.....	E-12
	A. General Monitoring and Reporting Requirements.....	E-12
	B. Self-Monitoring Reports (SMRs)	E-12
	C. Discharge Monitoring Reports (DMRs)	E-15
	D. Other Reports	E-15

List of Tables

Table E-1.	Monitoring Station Locations.....	E-4
Table E-2.	Influent Monitoring	E-4
Table E-3.	Effluent Monitoring.....	E-5
Table E-4.	Whole Effluent Toxicity Testing.....	E-6
Table E-5.	Whole Effluent Toxicity Test Species.....	E-7
Table E-6.	Receiving Water Monitoring Requirements – RSW-001	E-11
Table E-7.	Receiving Water Monitoring Requirements – RSW-002	E-11
Table E-8.	Monitoring Periods and Reporting Schedule.....	E-12
Table E-9.	Self-Monitoring Report – Mailing Address	E-14
Table E-10.	Discharge Monitoring Reports – Mailing Address	E-15

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

I. GENERAL MONITORING PROVISIONS

- A.** Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be collected at the monitoring locations specified in the Notice of Authorization (NOA) granted by the Regional Water Board's Executive Officer, and, unless otherwise specified, at the most representative sampling point available before the monitored flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of this Regional Water Board.

- B.** Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than ± 10 percent from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:
 - 1.** "A Guide to Methods and Standards for the Measurement of Water Flow," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 96 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by SD Catalog No. C13.10:421.)
 - 2.** "Water Measurement Manual," U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by Catalog No. 172.19/2:W29/2, Stock No. S/N 24003-0027.)
 - 3.** "Flow Measurement in Open Channels and Closed Conduits," U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 197, 982 pp. (Available in paper copy or microfiche from National Technical Information Services (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273 535/5ST.)
 - 4.** "NPDES Compliance Sampling Manual," USEPA, Office of Water Enforcement, Publication MDC-51, 1977, 140 pp. (Available from the General Services

Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver
Federal Center, CO 80225.)

- C.** All analyses shall be conducted at a laboratory certified for such analyses by the State Department of Public Health. Laboratories analyzing monitoring samples shall be certified by the Department of Public Health, in accordance with the provision of Water Code section 13176, and must include quality assurance/quality control data with their reports. All analyses shall be conducted in accordance with the latest edition of "Guidelines Establishing Test Procedures for Analysis of Pollutants", promulgated by the USEPA.
- D.** All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year to ensure continued accuracy of the devices.
- E.** Monitoring results, including noncompliance, shall be reported at intervals and in a manner specified in this MRP.
- F.** If the facility is not in operation, or there is no discharge during a required reporting period, the Discharger shall forward a letter to the Regional Water Board indicating that there has been no activity during the required reporting period.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Treatment System Influent	INF-001	Untreated groundwater at a point in the groundwater collection system immediately prior to treatment.
Discharge Point 001	EFF-001	Treated effluent, after treatment and before contact with the receiving water and/or dilution by any other water or waste.
Discharge Point 002	EFF-002	If more than one discharge point is authorized under the General Permit, compliance monitoring locations shall be named EFF-002, EFF-003, etc., and shall be located so as to allow collection of treated effluent after treatment and before contact with receiving water and/or dilution by any other water or waste.
Receiving Water – Upstream	RSW-001	Receiving water immediately upstream of the point of discharge so that samples are representative of upstream, background conditions within the receiving stream.
Receiving Water – Downstream	RSW-002	Receiving water at an appropriate monitoring location, downstream of the point of discharge, that adequately represents downstream water quality.

III. INFLUENT MONITORING REQUIREMENTS

A. Monitoring Location INF-001

- The Discharger shall monitor extracted groundwater immediately prior to being treated as follows:

Table E-2. Influent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Gasoline Range Organics (BTEX, MTBE, and Oxygenates)	µg/L ¹	Grab	2x/Year	EPA Method 8260/8015

¹ µg/L = micrograms per liter

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Location EFF-001 (as specified in NOA)

- The Discharger shall monitor treated groundwater as follows. If more than one analytical test method is listed for a given parameter, the Discharger must select from the listed methods and corresponding Minimum Level:

Table E-3. Effluent Monitoring

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow Rate	GPD ¹	Continuous	Continuous ²	N/A
pH	standard units	Grab	1x/Month	See Footnote 3
Temperature	°C	Grab	1x/Month	See Footnote 3
Conductivity	µmhos/cm @ 25°C	Grab	1x/Month	See Footnote 3
Dissolved Oxygen	mg/L ⁴	Grab	1x/Month	See Footnote 3
Total Dissolved Solids	mg/L	Grab	1x/Month	See Footnote 3
Lead, Total Recoverable	µg/L	Grab	1x/Quarter	See Footnote 3
Acrolein	µg/L	Grab	1x/Quarter	See Footnote 3
Acrylonitrile	µg/L	Grab	1x/Quarter	See Footnote 3
Benzene	µg/L	Grab	1x/Quarter	See Footnote 3
Bromoform	µg/L	Grab	1x/Quarter	See Footnote 3
Carbon Tetrachloride	µg/L	Grab	1x/Quarter	See Footnote 3
Chlorobenzene	µg/L	Grab	1x/Quarter	See Footnote 3
Chlorodibromomethane	µg/L	Grab	1x/Quarter	See Footnote 3
Chloroethane	µg/L	Grab	1x/Quarter	See Footnote 3
Chloroform	µg/L	Grab	1x/Quarter	See Footnote 3
Dichlorobromomethane	µg/L	Grab	1x/Quarter	See Footnote 3
1,1-Dichloroethane	µg/L	Grab	1x/Quarter	See Footnote 3
1,2-Dichloroethane	µg/L	Grab	1x/Quarter	See Footnote 3
1,1-Dichloroethylene	µg/L	Grab	1x/Quarter	See Footnote 3
1,2-Dichloropropane	µg/L	Grab	1x/Quarter	See Footnote 3
1,3-Dichloropropylene	µg/L	Grab	1x/Quarter	See Footnote 3
Ethylbenzene	µg/L	Grab	1x/Quarter	See Footnote 3
Methyl Bromide	µg/L	Grab	1x/Quarter	See Footnote 3
Methyl Chloride	µg/L	Grab	1x/Quarter	See Footnote 3
Methylene Chloride	µg/L	Grab	1x/Quarter	See Footnote 3
1,1,2,2-Tetrachloroethylene	µg/L	Grab	1x/Quarter	See Footnote 3
Tetrachloroethylene	µg/L	Grab	1x/Quarter	See Footnote 3
Toluene	µg/L	Grab	1x/Quarter	See Footnote 3
1,1,1-Trichloroethane	µg/L	Grab	1x/Quarter	See Footnote 3
1,1,2-Trichloroethane	µg/L	Grab	1x/Quarter	See Footnote 3
Trichloroethylene	µg/L	Grab	1x/Quarter	See Footnote 3
Vinyl Chloride	µg/L	Grab	1x/Quarter	See Footnote 3
cis-1,2-Dichloroethylene	µg/L	Grab	1x/Quarter	See Footnote 3
trans-1,2-Dichloroethylene	µg/L	Grab	1x/Quarter	See Footnote 3
Di-isopropyl Ether	µg/L	Grab	1x/Quarter	See Footnote 3
Ethanol	µg/L	Grab	1x/Quarter	See Footnote 3
Hydrocarbons, Petroleum (Total)	µg/L	Grab	1x/Quarter	See Footnote 3
Methanol	µg/L	Grab	1x/Quarter	See Footnote 3
Methyl tertiary-butyl ether	µg/L	Grab	1x/Quarter	See Footnote 3

(MTBE)				
Tertiary-amyl-methyl-ether (TAME)	µg/L	Grab	1x/Quarter	See Footnote 3
Tertiary Butyl Alcohol	µg/L	Grab	1x/Quarter	See Footnote 3
Trichlorofluoroethane	µg/L	Grab	1x/Quarter	See Footnote 3
Xylenes, Total	µg/L	Grab	1x/Quarter	See Footnote 3
Hardness as CaCO ₃	mg/L	Grab	1x/Quarter	See Footnote 3
Total Suspended Solids	mg/L	Grab	1x/Month	See Footnote 3

- 1 GPD = Gallons per Day
- 2 Reported monthly with monthly average daily flow.
- 3 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. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.
- 4 mg/L = milligrams per liter

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Monitoring Requirements

1. Bioassays shall be performed to evaluate the toxicity of the discharged wastewater in accordance with the following procedures unless otherwise specified by the Regional Water Board’s Executive Officer or his designee:
 - a. Bioassays shall be conducted on a sensitive fish species and an invertebrate species as approved by the Regional Water Board’s Executive Officer. *Pimephales promelas* (fathead minnow) and *Ceriodaphnia dubia* (water flea) are suggested test species that may be utilized. The bioassays shall be conducted in accordance with the protocol given in EPA/821-R-02-013 – *Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Waters to Freshwater Organisms, 4th Edition*, and EPA/821-R-02-012 – *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, 5th Edition*, or subsequent editions.
2. The Discharger shall conduct chronic and acute toxicity testing on the final effluent discharged.

Table E-4. Whole Effluent Toxicity Testing

Test	Units	Sample Type	Minimum Sampling Frequency
Chronic Toxicity	TU _c ¹	Grab	1x/Quarter, 1x/Year ²
Acute Toxicity	TU _a ^{3,4,5} & % Survival	Grab	1x/Quarter, 1x/Year ²

- 1 Chronic toxicity units
- 2 Quarterly for the first year of operation, and annually thereafter
- 3 Acute toxicity units
- 4 Acute Bioassay results can be calculated from chronic bioassay test for *Pimephales promelas*
- 5 Discharger can provide Pass/Fail when using a t-test

3. Both test species given below shall be used to measure chronic and acute toxicity:

Table E-5. Whole Effluent Toxicity Test Species

Species	Effect	Test Duration (days)	Reference
Fathead Minnow (<i>Pimephales promelas</i>)	Larval Survival and Growth	7	EPA/821-R-02-013 (Chronic) EPA/821-R-02-012 ¹ (Acute)
Water Flea (<i>Ceriodaphnia dubia</i>)	Survival and Reproduction	7	EPA/821-R-02-013 (Chronic) EPA/821-R-02-012 ¹ (Acute)

¹ Acute bioassay results can be calculated from chronic bioassay test for *Pimephales promelas*

4. Toxicity Test References for Conducting Toxicity Tests

- a. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth Edition, EPA/821-R-02-012, October 2002 or subsequent editions.
- b. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water for Freshwater Organisms, Fourth Edition, EPA/821-R-02-013, October 2002 or subsequent editions.

B. Quality Assurance

- 1. Dilution and control waters may be obtained from an unaffected area of receiving waters. Synthetic (standard) dilution is an option and may be used if the above source is suspected to have toxicity greater than 1.0 TU_c.
- 2. A series of at least five dilutions and a control shall be tested for chronic toxicity testing and may be used for acute toxicity testing. The series shall include the following concentrations: 12.5, 25, 50, 75, and 100 percent effluent.
- 3. For the acute toxicity testing using a t-test, two dilutions shall be used, i.e., 100 percent effluent and a control (when a t-test is used instead of an LC₅₀).
- 4. If organisms are not cultured in-house, concurrent testing with a referenced toxicant shall be conducted. Where organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests shall also be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration).
- 5. If either the reference toxicant test or effluent test does not meet all test acceptability criteria (TAC) as specified in the toxicity test references, then the permittee must re-sample and retest within 15 working days or as soon as possible. The retesting period begins when the Discharger receives the test results that indicate retesting is needed or collects the first sample required to complete the retest.

6. The reference toxicant and effluent tests must meet the upper and lower bounds on test sensitivity as determined by calculating the percent minimum significant difference (PMSD) for each test result. The test sensitivity bound is specified for each test method in the respective methods manuals.

C. Accelerated Monitoring Requirements

When the numeric toxicity trigger is exceeded during regular toxicity monitoring, and the testing meets all test acceptability criteria, the Discharger shall initiate accelerated monitoring to confirm the effluent toxicity.

The Discharger shall implement an accelerated monitoring frequency consisting of performing three (3) toxicity tests in a nine (9)-week period beginning from the date the Discharger receives an initial exceedance of the chronic or acute toxicity triggers described below:

Any chronic toxicity test that exceeds 2 chronic toxicity units (TU_c) or a three (3)-sample median (consecutive samples) that exceeds 1 TU_c shall trigger an accelerated monitoring frequency. In addition, any acute toxicity test results showing high toxicity shall trigger an accelerated monitoring frequency. High acute toxicity is defined as follows:

1. Less than 80% survival when acute toxicity is calculated from results of the chronic toxicity test (only for *Pimephales promelas*), or
2. Less than 90% survival when acute toxicity is calculated from the results of the acute toxicity test, or
3. Results of acute toxicity t-test for 100 percent effluent concentration that is reported as failed.

The scope of accelerated monitoring shall be limited to the species and analytical method that failed the test.

The numeric toxicity triggers are not an effluent limitation, they are the toxicity threshold at which the Discharger is required to perform accelerated monitoring to confirm effluent toxicity, as well as, the threshold to initiate a toxicity reduction evaluation (TRE) if toxicity is confirmed.

If implementation of the generic TRE workplan indicates the source of the exceedance of the toxicity trigger (for instance, a temporary plant upset), then only one additional test is necessary. If exceedance of the toxicity trigger is detected in this test, the Discharger will continue with accelerated monitoring requirements or implement the Toxicity Identification and Toxicity Reduction Evaluations.

If none of the three tests indicated exceedance of the toxicity trigger, then the permittee may return to the normal bioassay testing frequency.

D. Conducting Toxicity Identification Evaluations and Toxicity Reduction Evaluations

1. A Toxicity Identification Evaluation (TIE) shall be triggered if testing from the accelerated monitoring frequency indicates any of the following:
 - a. Two of the three accelerated chronic toxicity tests are reported as failed tests meeting any of the conditions specified in section V.C of this MRP; or
 - b. Two of the three acute toxicity tests are reported as failed tests meeting any of the conditions specified in section V.C of this MRP.
 - c. The TIE shall be initiated within 15 days following failure of the second accelerated monitoring test.
 - d. If a TIE is triggered prior to the completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.
2. The TIE shall be conducted to identify and evaluate toxicity in accordance with procedures recommended by the USEPA which include the following:
 - a. Toxicity Identification Evaluations: Characterization of Chronically Toxic Effluents, Phase I, (USEPA, 1992a);
 - b. Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures, Second Edition (USEPA, 1991a);
 - c. Methods for Aquatic Toxicity Identification Evaluations: Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (USEPA, 1993a); and
 - d. Methods for Aquatic Toxicity Identification Evaluations: Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (USEPA, 1993b).
3. As part of the TIE Investigation, the Discharger shall be required to implement its TRE workplan. The Discharger shall take all reasonable steps to control toxicity once the source of the toxicity is identified. A failure to conduct required toxicity tests or a TRE within a designated period shall result in the establishment of numerical effluent limitations for chronic toxicity in a permit or appropriate enforcement action. Recommended guidance in conducting a TRE include the following:
 - a. Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants, August 1999, EPA/833B-99-002; and

- b. Clarifications Regarding Toxicity Reduction and Identification Evaluations in the National Pollutant Discharge Elimination System Program dated March 27, 2001, USEPA Office of Wastewater Management, Office of Regulatory Enforcement.

E. Definition of Toxicity

1. Chronic toxicity measures sublethal effect (e.g., reduced growth, reproduction) to experimental test organisms exposed to an effluent or ambient waters compared to that of the control organisms.
2. Chronic toxicity shall be measured in TU_c , where $TU_c = 100/NOEC$. The no observed effect concentration (NOEC) is the highest concentration of toxicant to which organisms are exposed in a chronic test that causes no observable adverse effect on the test organisms (e.g., the highest concentration of toxicant to which the values for the observed responses are not statistically significantly different from the control(s)).
3. Acute toxicity is a measure of primarily lethal effects that occur over a ninety-six (96) hour period. Acute toxicity for *Pimephales promelas* can be calculated from the results of the chronic toxicity test for *Pimephales promelas* and reported along with the results of each chronic test. Acute toxicity for *Ceriodaphnia dubia* cannot be calculated from the results of the chronic toxicity test for *Ceriodaphnia dubia* because the test design is not amenable to calculation of a lethal concentration (LC_{50}) value as needed for the acute requirement.
4. Acute toxicity shall be measured in TU_a , where $TU_a = 100/LC_{50}$ and percent survival or as pass/fail using a t-test. LC_{50} is the toxicant concentration that would cause death in 50 percent of the test organisms.

F. Reporting

1. The Discharger shall submit the analysis and results of the toxicity test, including any accelerated testing in toxicity units with the discharge monitoring reports for the month in which the last test is conducted. Further, the Discharger shall include a cover letter with the results of the toxicity test. The Discharger shall indicate in the cover letter, status of compliance with the toxicity triggers contained in section V.C, above.
2. If a TIE is conducted the Discharger shall submit the results of the TIE with the discharge monitoring reports for the month in which the final report is completed.
3. If the TRE Workplan has been initiated, the Discharger shall report on the progress of the actions being taken and include this information with each monthly monitoring report.

VI. LAND DISCHARGE MONITORING REQUIREMENTS – NOT APPLICABLE

VII. RECLAMATION MONITORING REQUIREMENTS – NOT APPLICABLE

VIII. RECEIVING WATER MONITORING REQUIREMENTS – NOT APPLICABLE

A. Monitoring Location RSW-001

1. The Discharger shall monitor the receiving water at monitoring location RSW-001, as follows. In the event that no receiving water is present at RSW-001, no receiving water monitoring data are required for station RSW-001.

Table E-6. Receiving Water Monitoring Requirements – RSW-001

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	Grab	1x/Year	See Footnote 1
pH	standard units	Grab	1x/Year	See Footnote 1
Hardness as CaCO ₃	mg/L	Grab	1x/Year	See Footnote 1
Temperature	°F	Grab	1x/Year	See Footnote 1
Total Dissolved Solids	mg/L	Grab	1x/Year	See Footnote 1
Priority Pollutants	µg/L	Grab	1x/Year ²	See Footnote 1

- 1 Pollutants shall be analyzed using the analytical methods described in Part 136; for priority pollutants the methods must meet the lowest minimum levels (MLs) specified in Attachment 4 of the SIP. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.
- 2 Monitoring for priority pollutants in the receiving water at monitoring location RSW-001 shall be required during the first year of operation only.

B. Monitoring Location RSW-002

1. The Discharger shall monitor the receiving water at monitoring location RSW-002, as follows. In the event that no receiving water is present at RSW-002, no receiving water monitoring data are required for station RSW-002.

Table E-7. Receiving Water Monitoring Requirements – RSW-002

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Dissolved Oxygen	mg/L	Grab	1x/Year	See Footnote 1
pH	standard units	Grab	1x/Year	See Footnote 1
Temperature	°F	Grab	1x/Year	See Footnote 1
Total Dissolved Solids	mg/L	Grab	1x/Year	See Footnote 1

- 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. Where no methods are specified for a given pollutant, the methods must be approved by this Regional Water Board or the State Water Board.

IX. OTHER MONITORING REQUIREMENTS – NOT APPLICABLE

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. New Dischargers who have received an NOA for coverage under this General Board Order shall inform the Regional Water Board 24 hours prior to the commencement of discharge.
2. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.
3. The Discharger shall report the results of acute and chronic toxicity testing, TRE, and TIE as required in Section IV, “Effluent Toxicity Testing.
4. The results of any analysis taken more frequently than required using analytical methods, monitoring procedures and performed at the locations specified in this MRP shall be reported to the Regional Water Board.

B. Self-Monitoring Reports (SMRs)

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

Table E-8. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On...	Monitoring Period	SMR Due Date
Continuous	NOA effective date	All	Submit with monthly SMR

1x/Month	<First day of calendar month following NOA effective date or on NOA effective date if that date is first day of the month>	1 st day of calendar month through last day of calendar month	First day of second month following month of sampling
1x/Quarter	<Closest of January 1, April 1, July 1, or October 1 following (or on) NOA effective date>	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
2x/Year	<Closest of January 1 or July 1 following (or on) NOA effective date>	January 1 through June 30 July 1 through December 31	February 1 July 1
1x/Year	<January 1 following (or on) NOA effective date>	January 1 through December 31	February 1

4. Reporting Protocols. The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in Part 136.

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

- a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).
- b. Sample results less than the RL, but greater than or equal to the laboratory’s MDL, shall be reported as “Detected, but Not Quantified,” or DNQ. The estimated chemical concentration of the sample shall also be reported.

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

- c. Sample results less than the laboratory’s MDL shall be reported as “Not Detected,” or ND.
- d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. Multiple Sample Data. If the permit contains an AMEL for a priority pollutant and more than one sample result is available for the pollutant, the Discharger shall report the arithmetic mean unless the data set contains one or more reported determinations of DNQ or ND. In those cases, the Discharger shall report the median in place of the arithmetic mean in accordance with the following procedure:
 - a. 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.
 - b. 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.

6. The Discharger shall submit SMRs in accordance with the following requirements:
 - a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.
 - b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.
 - c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below in Table E-9:

Table E-9. Self-Monitoring Report – Mailing Address

Standard Mail/FedEx/UPS/Other Private Carriers
California Regional Water Quality Control Board Colorado River Basin Region 73-720 Fred Waring, Suite 100 Palm Desert, CA 92260

C. Discharge Monitoring Reports (DMRs)

1. As described in Section IX.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.
2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below in Table E-10:

Table E-10. Discharge Monitoring Reports – Mailing Address

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15 th Floor Sacramento, CA 95814

3. All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format of EPA Form 3320-1.

D. Other Reports

1. The Discharger shall report the results of any special studies, acute and chronic toxicity testing, TRE/TIE, PMP, required by Special Provisions – VI.C.2.a, VI.C.2.b, and VI.C.3.a of this General Board Order. The Discharger shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – VI.C.7 of this General Board Order. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

F.
ATTACHMENT F – FACT SHEET

Table of Contents

I.	Permit Information.....	F-3
II.	Background.....	F-3
III.	Applicable Plans, Policies, and Regulations	F-8
	A. Legal Authorities	F-8
	B. California Environmental Quality Act (CEQA)	F-8
	C. State and Federal Regulations, Policies, and Plans.....	F-8
	D. Impaired Water Bodies on CWA 303(d) List.....	F-11
	E. Other Plans, Polices and Regulations – Not Applicable	F-13
IV.	Rationale For Effluent Limitations and Discharge Specifications	F-13
	A. Discharge Prohibitions	F-13
	B. Technology-Based Effluent Limitations	F-14
	1. Scope and Authority	F-14
	2. Applicable Technology-Based Effluent Limitations.....	F-15
	C. Water Quality-Based Effluent Limitations (WQBELs)	F-16
	1. Scope and Authority	F-16
	2. Applicable Beneficial Uses and Water Quality Criteria and Objectives	F-16
	3. Determining the Need for WQBELs	F-16
	4. WQBEL Calculations.....	F-17
	5. Whole Effluent Toxicity (WET)	F-18
	D. Final Effluent Limitations	F-19
	1. Satisfaction of Anti-Backsliding Requirements.....	F-21
	2. Satisfaction of Antidegradation Policy	F-21
	3. Stringency of Requirements for Individual Pollutants	F-21
	E. Interim Effluent Limitations – Not Applicable	F-22
	F. Land Discharge Specifications – Not Applicable	F-22
	G. Reclamation Specifications – Not Applicable	F-22
V.	Rationale for Receiving Water Limitations	F-22
	A. Surface Water	F-22
	B. Groundwater—Not Applicable	F-23
VI.	Rationale for Monitoring and Reporting Requirements	F-23
	A. Influent Monitoring.....	F-23
	B. Effluent Monitoring	F-23
	C. Whole Effluent Toxicity Testing Requirements.....	F-23
	D. Receiving Water Monitoring	F-24
	1. Surface Water	F-24
	2. Groundwater – Not Applicable	F-24
	E. Other Monitoring Requirements – Not Applicable	F-24
VII.	Rationale for Provisions	F-24
	A. Standard Provisions	F-24
	B. Special Provisions	F-25
	1. Reopener Provisions.....	F-25
	2. Special Studies and Additional Monitoring Requirements.....	F-25

3. Best Management Practices and Pollution Prevention.....	F-25
4. Construction, Operation, and Maintenance Specifications.....	F-25
5. Special Provisions for Municipal Facilities (POTWs Only) – Not Applicable.....	F-25
6. Other Special Provisions.....	F-25
7. Required Submittals and Reports	F-25
VIII. Public Participation	F-25
A. Notification of Interested Parties	F-26
B. Written Comments	F-26
C. Public Hearing.....	F-26
D. Waste Discharge Requirements Petitions.....	F-26
E. Information and Copying	F-27
F. Register of Interested Persons.....	F-27
G. Additional Information.....	F-27

List of Tables

Table F-1. Historic Effluent Limitations.....	F-7
Table F-2. Summary of Technology-based Effluent Limitations	F-15
Table F-3. Summary of Water Quality-based Effluent Limitations	F-17
Table F-4. Summary of Final Effluent Limitations.....	F-19

ATTACHMENT F – FACT SHEET

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

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

I. PERMIT INFORMATION

- A.** On June 26, 2002, the Regional Water Board adopted General Board Order R7-2002-1000 (NPDES Permit No. CAG917001) in accordance with section 122.28 to regulate discharges of extracted and treated groundwater resulting from the cleanup of groundwater polluted by VOCs into surface waters. General Board Order R7-2002-1000 rescinded General Board Order No. 98-400. Presently, there is one discharger currently enrolled under the General NPDES Permit.
- B.** For the purposes of this General Board Order, references to the “discharger” or “permittee” in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

II. BACKGROUND

- A.** There are currently over 180 cases of soil and/or groundwater pollution in the Colorado River Basin Region resulting from leaks at fuel storage and dispensing facilities and unauthorized discharges of VOCs, including purgeable halocarbons and aromatic compounds, into State waters. Pollution of these sites is typically caused by leaky containment vessels for fuel, solvents, and other wastes at service stations and similar operations. More cases are expected. Remedial activities at many of these sites are expected to necessitate discharge of treated groundwater to surface waters within the Colorado River Basin Region. Cleanup of these sites involve similar treatment technologies and result in similar waste discharges. The regulation of these discharges includes similar effluent limitations and monitoring requirements. Consequently, these discharges are more efficiently regulated with a general NPDES permit rather than an individual NPDES permit. This General Board Order updates General Board Order R7-2002-1000 and establishes general WDRs for discharges resulting from the cleanup of groundwater polluted by VOCs.

On September 22, 1998, USEPA Region IX authorized the State of California to issue general NPDES permits in accordance with section 122.28. Section 122.28 allows for the issuance of general permits to regulate categories of discharges if the sources within each category:

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

B. General Permit Application and Coverage

The General Board Order requires that Discharger(s) (i.e., parties deemed responsible by the Regional Water Board for remediation of groundwater polluted by VOCs) to file a Notice of Intent (NOI) to be eligible for coverage under this General Permit. The NOI shall accompany a Report of Waste Discharge (Form 200), an NPDES Application Forms 1 and 2D, analytical results for a representative sample of groundwater to be treated and discharged under this General Board Order (for parameters listed in Attachment B), the appropriate filing fee plus surcharges, and an engineering report.

1. **Notice of Intent.** All applicants must complete and submit an NOI as provided in Attachment C. The NOI requires dischargers seeking coverage under this General Board Order, to submit the following information:
 - a. A completed Report of Waste Discharge (Form 200);
 - b. A completed NPDES Application Form 1;
 - c. A completed NPDES Application Form 2D; and
 - d. The current filing fee, plus surcharges.
2. **Wastewater Sampling.** All Dischargers are required to analyze the proposed discharge for the priority pollutants regulated under the CTR and for the constituents specified in the Basin Plan. These parameters are specified in Attachment B. Dischargers are also required to analyze their discharges for hardness, to determine eligibility for coverage. If the surface water body to receive the proposed direct discharge is impaired, pursuant to the latest CWA section 303(d) list,¹ the Discharger shall also analyze for the constituent(s) causing the impairment(s). Finally, applicants proposing to discharge treated groundwater from the cleanup of VOCs to the New River, Alamo River, Imperial Valley Drains, Coachella Valley Drains, Palo Verde Valley Drains, and to tributaries to the Salton Sea must also sample for a few additional parameters specified in the Basin Plan and summarized in Tables B-4 to B-6 of Attachment B. The results of all Discharger sampling efforts are to be submitted with the completed NOI.

Attachment B contains screening levels for priority pollutants. Since this General Board Order covers discharges of treated groundwater from the cleanup of VOCs to all surface waters in the Colorado River Basin Region, the screening levels are based on the most

¹ The list of WQLSs can be found under the CWA section 303(d) List at http://www.swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml.

restrictive water quality objectives / criteria. Dischargers who exceed a screening level, where they are provided in Attachment B, will be considered ineligible for enrollment under this General Board Order.

- 3. Engineering Report.** All dischargers are required to submit an engineering report discussing the proposed cleanup project, design parameters, expected treatment performance, and stating how the proposed discharge is consistent with the type of discharge eligible for coverage under this General Board Order and why a discharge to surface waters is the only feasible method for disposing of the treated effluent; specifically:
 - a. A discussion of how the proposed discharge is consistent with the type of discharge eligible for coverage under this General Board Order;
 - b. An explanation of why a discharge to surface waters is the only feasible method for disposing of the treated effluent supported by a letter from the local publicly-owned treatment works (POTW) stating that they cannot accept the discharge;
 - c. A general discussion of the proposed cleanup project including descriptions of the extraction method, treatment processes, design parameters, flow rates, and expected treatment performance;
 - d. A schematic of the treatment process;
 - e. A site map showing the extraction wells, monitoring wells, treatment site, and the storm drain or surface water discharge location; and
 - f. A map showing the path from the point of initial discharge to the ultimate location of discharge.
- 4. Filing Fee.** In addition to the material outlined in items II.A.1 through 3 above, dischargers shall submit the current State Water Board adopted permit fee, plus surcharges. Information concerning current permit fees may be found at: <http://www.waterboards.ca.gov/resources/fees>.
- 5. Application Period and Notice of Applicability.** Dischargers seeking coverage under this General Board Order shall file a completed NOI (with appropriate attachments) at least 45 days prior to the proposed discharge. Upon receipt of a complete NOI and the additional information required, as described above in II.B.1 through 4, the Regional Water Board's Executive Officer shall determine whether the proposed discharge complies with the following criteria:
 1. The proposed discharge results from the cleanup of groundwater polluted by VOCs;
 2. The proposed discharge is to surface waters in this region;
 3. The proposed discharge is classified as a minor discharge; and
 4. The proposed treatment system and associated operation, maintenance, and monitoring plans are believed to be reasonably capable of meeting the provisions,

prohibitions, effluent limitations, and receiving water limitations of this proposed General Board Order.

5. Analytical results for a representative sample of the proposed discharge do not exceed the water quality screening criteria for any constituent listed in Attachment B, other than those for which limitations are established in Section IV.A of the General Board Order, Effluent Limitations.

If the discharge is deemed eligible for coverage, the Regional Water Board's Executive Officer shall issue a Notice of Authorization (NOA) to the discharger specifying whether the discharge is authorized under the terms and conditions of this General Board Order. Discharges shall not commence until after receiving the Executive Officer's written NOA or until the Regional Water Board has issued an individual permit for the discharge.

C. Description of Discharge

All discharges authorized under this General Board Order are of extracted and treated groundwater resulting from the cleanup of groundwater polluted by VOCs into surface waters. Pollution of these sites is typically caused by leaky containment vessels for fuel, solvents, and other wastes at service stations and similar operations. VOCs of concern include petroleum hydrocarbons (e.g., gasoline, diesel, kerosene, fuel oil, and heavier ranges), purgeable hydrocarbons, aromatic hydrocarbons, and fuel octane enhancers (e.g., methyl tertiary butyl ether (MTBE), methanol, ethanol, tertiary butyl alcohol (TBA), and di-isopropyl ether).

Wastewater from a groundwater cleanup project can include the following and may be produced and treated on a continuous or batch basis:

1. Treated groundwater from the cleanup of VOC contamination;
2. Groundwater pumped from beneath a layer of free product in order to establish a cone of depression to aid in the containment and extraction of pollutants;
3. Potentially polluted groundwater extracted during short- and long-term pump tests;
4. Potentially polluted well development water; and/or
5. Potentially polluted water purged prior to well sampling.

D. Discharge Points and Receiving Waters

Under the General Board Order, there may be multiple discharge points. Information regarding the receiving waters will be found in the completed NOI and will be included in the NOA.

E. Eligible Discharges

This General Board Order covers discharges to surface waters within the Colorado River Basin Region of extracted and treated groundwater resulting from the cleanup of groundwater polluted by VOCs.

To be covered under this General Board Order, a discharger must demonstrate the following:

1. The discharge is classified as a minor discharge;
2. Pollutant concentrations in the discharge shall not cause violation of any applicable water quality objective for the receiving waters, including discharge prohibitions;
3. The discharge shall not exceed the water quality criteria for toxic pollutants (Attachment B), and there shall be no reasonable potential to cause or contribute to an excursion above the criteria;
4. The representative sample of the contaminated groundwater to be treated and discharged must not exceed the water quality screening criteria for any constituent listed in Attachment B, other than for those constituents for which effluent limitations are established in Section V.A, Effluent Limitations.
5. The discharge shall not cause acute nor chronic toxicity in receiving waters;
6. The discharge shall pass through a treatment system designed and operated to reduce the concentration of contaminants to meet the effluent limitations of this General Board Order;
7. The discharge does not include water added for the purpose of diluting pollutant concentrations; and
8. The Discharger shall be able to comply with the terms or provisions of this General Board Order.

F. Summary of Existing Requirements

Effluent limitations contained in General Board Order R7-2002-1000 for discharges of extracted and treated groundwater resulting from the cleanup of groundwater polluted by VOCs are presented in Table F-1, below.

Table F-1. Historic Effluent Limitations

Parameter	Units	Instantaneous Maximum Effluent Limitation	
		Municipal Designated Receiving Waters	Non-Municipal Designated Receiving Waters
pH	Standard units	6.0 – 9.0	6.0 – 9.0
Total Lead	µg/L	15	15
Benzene	µg/L	1.0	70
Carbon Tetrachloride	µg/L	0.25	4.4
Chloroform	µg/L	100	100
1,1-Dichloroethane	µg/L	5.0	5.0

Parameter	Units	Instantaneous Maximum Effluent Limitation	
		Municipal Designated Receiving Waters	Non-Municipal Designated Receiving Waters
1,2-Dichloroethane	µg/L	0.38	99
1,1-Dichloroethylene	µg/L	0.057	3.2
Ethylbenzene	µg/L	30	29,000
Methylene Chloride (Dichloromethane)	µg/L	4.7	1,600
Tetrachloroethylene	µg/L	0.8	8.85
Toluene	µg/L	40	200,000
1,1,1-Trichloroethane	µg/L	200	200
1,1,2-Trichloroethane	µg/L	0.6	42
Trichloroethylene	µg/L	2.7	81
Vinyl Chloride	µg/L	0.5	525
cis-1,2-Dichloroethylene	µg/L	6	10
trans-1,2-Dichloroethylene	µg/L	10	140,000
Di-isopropyl ether	µg/L	5	5
Ethanol	µg/L	5	1,000
Total Petroleum Hydrocarbons	µg/L	100	100
Methanol	µg/L	5	1,000
Methyl tertiary-butyl ether (MTBE)	µg/L	13	13
Tertiary-amyl methyl ether (TAME)	µg/L	5	5
Total Xylenes	µg/L	20	1,750
Trichlorotrifluoroethane	µg/L	5	5

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This General Board Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as an NPDES permit for point source discharges from this facility to surface waters. This General Board Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of CEQA, commencing with Section 21100 of the Public Resources Code.

C. State and Federal Regulations, Policies, and Plans

1. Water Quality Control Plans. The Regional Water Quality Control Board (Regional Water Board) adopted a Water Quality Control Plan for the Colorado River Basin (hereinafter Basin Plan) on November 17, 1993, 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 (includes amendments adopted by the Regional Water Board to date). 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. Beneficial uses applicable to surface waters within the Colorado River Basin Region include one or more of the following:

- Agricultural supply (AGR)
- Aquaculture (AQUA)
- Cold freshwater habitat (COLD)
- Freshwater replenishment (FRSH)
- Ground water recharge (GWR)
- Hydropower generation (POW)
- Industrial service supply (IND)
- Municipal and domestic supply (MUN)
- Non-contact water recreation (REC-II)
- Preservation of rare, threatened, or endangered species (RARE)
- Warm freshwater habitat (WARM)
- Water contact recreation (REC-I)
- Wildlife habitat (WILD)

The Basin Plan establishes the following beneficial uses for ground waters throughout the Colorado River Basin Region:

- Agricultural supply (AGR)
- Industrial service supply (IND)
- Municipal and domestic supply (MUN)²

Requirements of this General Board Order implement the Basin Plan.

- 2. 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. The Regional Water Board does not consider the discharges of treated groundwater from the cleanup of VOCs regulated by this General Board Order to contain thermal or elevated temperature wastes. Therefore, requirements of this General Board Order do not implement the Thermal Plan.

² At such time as the need arises to know whether a particular aquifer which has no known existing MUN use should be considered a source of drinking water, the Regional Water Board will make that determination based on criteria listed in the "Sources of Drinking Water Policy" in Chapter 2 of the Basin Plan. As stated in footnote 2 for Table 2-5 of the Basin Plan, an "X" placed under the MUN column in Table 2-5 of the Basin Plan for a particular hydrologic unit indicates only that at least one of the aquifers in that unit currently supports a MUN beneficial use. The actual MUN usage of the Imperial hydrologic unit is limited only to a small portion of that ground water unit.

- 3. 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.
- 4. 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 General Board Order implement the SIP.
- 5. Emergency Planning and Community Right to Know Act.** Section 13263.6(a), CWC, requires that “the Regional Water Board shall prescribe effluent limitations as part of the WDRs of a POTW for all substances that the most recent toxic chemical release data reported to the state emergency response commission pursuant to Section 313 of the Emergency Planning and Community Right to Know Act of 1986 (42 U.S.C. Sec. 11023) (EPCRA) indicate as discharged into the POTW, for which the State Water Board or the Regional Water Board has established numeric water quality objectives, and has determined that the discharge is or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to, an excursion above any numeric water quality objective.
- 6. Endangered Species Act.** This General Board 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 (California Fish and Game Code section 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. Sections 1531 to 1544). This General Board 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.
- 7. 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 C.F.R. § 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.

- 8. Stringency of Requirements for Individual Pollutants.** This General Board Order contains both technology-based effluent limitations and water quality-based effluent limitations (WQBELs) for individual pollutants. The technology-based effluent limitations consist of restrictions on di-isopropyl ether, methyl tertiary-butyl ether (MTBE), tertiary-amyl methyl ether (TAME), and total petroleum hydrocarbons (TPH), are specified in Federal regulations as discussed in Part 133 and the Permit's technology-based pollutant restrictions are no more stringent than required by the CWA. This General Board 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 water quality-based effluent limitations were derived from the CTR, the CTR is the applicable standard pursuant to Title 40, CFR Section 131.38.³ The scientific procedures for calculating the individual water quality-based effluent limitations are based on the CTR-SIP, which was approved by the 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. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to Section 131.21(c)(1). Collectively, this General Board Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.
- 9. 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 water quality 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 must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.
- 10. Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

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

Under section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of water quality limited segments (WQLSs). The waters on these lists do not

³ All further regulatory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. On November 30, 2006, USEPA gave final approval to California's 2006 section 303(d) list of impaired waters (303(d) List). CWA section 303(d) further mandates that once waters are impaired by a particular constituent, the NPDES permitting authority is to develop total maximum daily loads (TMDLs) for the impaired water body. A TMDL is the maximum amount of pollution that a waterbody can assimilate without violating state water quality standards.

The 2006 303(d) List classifies the Imperial Valley Drains as impaired by dieldrin, DDT, endosulfan, PCBs, toxaphene, and selenium. The Regional Water Board has not yet developed TMDLs for these parameters.⁴ Further, sedimentation/silt had previously been listed as a pollutant impairing Imperial Valley Drains; a sedimentation/siltation Total Maximum Daily Load (TMDL) for the Imperial Valley Drains has been approved by USEPA. The sedimentation/siltation TMDL does not establish a Waste Load Allocation (WLA) for discharges from groundwater remediation projects. However, monitoring for TSS is required during each discharge event. Imperial Valley Drains discharge to two (2) major water bodies, the New River and the Alamo River.

The New River is listed as impaired by 1,2,4-trimethylbenzene, chlordane, chloroform, chlorpyrifos, DDT, diazinon, dieldrin, mercury, meta-para xylenes, nutrients, dissolved oxygen, o-xylenes, PCBs, p-cymene, p-dichlorobenzene, pesticides, selenium, toluene, toxaphene, toxicity, copper and trash. TMDLs for these various parameters are under development by the Regional Water Board. The New River is also listed as impaired for bacteria and sediment/siltation. USEPA has approved the Regional Water Board's TMDLs for these parameters. These TMDLs establish WLAs for fecal coliform, E. coli, enterococci and sediment. The established receiving water limitations for fecal coliform, E. coli, enterococci and TSS in this General Board Order comply with the WLAs established in the New River TMDLs. The Regional and State Water Boards have each approved a trash TMDL for the New River; the TMDL is in the process of being approved by the State's Office of Administrative Law and USEPA. The TMDL essentially establishes a prohibition on the discharge of any trash to the New River by point sources. This General Board Order prohibits discharges of trash to the New River.

The Alamo River is listed as impaired by chlorpyrifos, DDT, dieldrin, PCBs (polychlorinated biphenyls), selenium, toxaphene, and sediment/silt. USEPA has approved a sedimentation/siltation TMDL for the Alamo River. The requirements of this General Board Order are consistent with the WLAs contained in the sedimentation/siltation TMDL for the Alamo River.

Also, the 2006 303(d) List classifies the Coachella Valley Storm Water Channel as impaired by pathogens and toxaphene. A TMDL has not yet been developed for toxaphene, but one is under development for pathogens.

The Colorado River (Imperial Reservoir to California-Mexico border) is listed as impaired for selenium (metal). The Palo Verde Outfall Drain and Lagoon is listed as impaired for

⁴ The schedule for TMDL development may be found at http://swrcb.ca.gov/water_issues/programs/tmdl/303d_lists2006_epa.shtml.

pathogens and DDT (pesticide). TMDLs have not yet been developed for these parameters.

Finally, the Salton Sea is impaired by nutrients, salt, and selenium. No TMDLs have been developed to date for the Salton Sea, although a nutrient TMDL is under development. Tributaries to the Salton Sea, including the Coachella Valley Storm Channel and Imperial Valley Drains, may be affected by the nutrient TMDL and any others developed for the Salton Sea. Furthermore, the Basin Plan establishes selenium objectives for tributaries to the Salton Sea.

E. Other Plans, Polices and Regulations – Not Applicable

IV. 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.

Effluent and receiving water limitations in this General Board Order are based on the federal CWA, Basin Plan, State Water Board's plans and policies, USEPA guidance and regulations, and best practicable waste treatment technology. While developing effluent limitations and receiving water limitations, monitoring requirements, and special conditions for the draft permit, the following information sources were used:

1. Code of Federal Regulations – Title 40.
2. Water Quality Control Plan (Colorado River Basin – Region 7) as amended to date.
3. General Board Order R7-2002-1000.
4. Other General Regional Board Orders regulating discharges of treated groundwater from cleanup of VOCs (e.g., General Board Orders R4-2007-0022 and R1-2006-0048)

A. Discharge Prohibitions

Effluent and receiving water limitations in this General Board Order are based on the Federal CWA, Basin Plan, State Water Board's plans and policies, USEPA guidance and regulations, and best practicable waste treatment technology.

General Board Order R7-2008-1000 prohibits any discharge of wastes causing degradation of any water supply. This General Board Order also prohibits the extraction of groundwater for treatment in excess of the design capacity of the treatment system as specified in the

discharger's NOA from the Executive Officer, to ensure proper operation and treatment by the groundwater treatment system. In addition, this General Board Order prohibits the discharge of material other than extracted and treated groundwater from the investigation and cleanup of VOC-polluted groundwater. These prohibitions are carried forward from the existing General Board Order.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, 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 General Board Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with section 125.3.

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

- a.** Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- b.** Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- c.** Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- d.** New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and section 125.3 of the Code of Federal Regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in section 125.3.

2. Applicable Technology-Based Effluent Limitations

- a. Groundwater pollutant plumes are often complex mixtures of hundreds of petroleum-related compounds that make complete chemical analysis very expensive, often impractical, and sometimes impossible due to sample matrix interferences, constituent masking, or the lack of standardized analytical techniques. Further, neither the State Water Board nor USEPA has proposed or established water quality criteria for many of the petroleum hydrocarbon compounds that are likely to be found in the discharges authorized under this General Board Order. The indicators used to evaluate compliance with gasoline and diesel-related compounds are benzene, toluene, ethylbenzene, and xylene (BTEX), and total petroleum hydrocarbons (TPH). For chlorinated hydrocarbon solvents such as trichloroethylene (TCE) and tetrachloroethylene (PCE), the specific chemical constituents can be used to determine compliance. The effluent limitations for these constituents are based on USEPA's and DHS's MCLs.
- b. A number of treatment options are available for the treatment of contaminated groundwater. The more commonly used methods include air stripping, air sparging, granular activated carbon adsorption, UV-peroxidation, nutrient-enhanced biodegradation, and a combination of two or more of the above technologies. To remediate subsurface soil contamination, vapor extraction systems and in-situ bioremediation are commonly used. Most of these systems, if designed and operated properly, can lower the concentration of VOCs to below detection limits. For constituents without established water quality criteria, technology-based effluent limitations were applied. The technology-based effluent limitations are derived from reasonable detection limits for each pollutant.
- c. This General Board Order includes technology-based effluent limitations based on achievable detection limits, considered BPJ in accordance with section 125.3. Based on BPJ, effluent limitations for di-isopropyl ether, ethanol, methanol, methyl tertiary-butyl ether (MTBE), tertiary-amyl methyl ether (TAME), total petroleum hydrocarbons (TPH), and trichlorofluoroethane in this General Board Order have been carried over from the previous General Board Order R7-2002-1000.

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

Parameter	Units	Instantaneous Maximum Effluent Limitation	
		Municipal Designated Waters	Non-Municipal Designated Waters
Di-isopropyl ether	µg/L	5	5
Methyl tertiary-butyl ether (MTBE)	µg/L	13	13
Tertiary-amyl methyl ether (TAME)	µg/L	5	5
Total Petroleum Hydrocarbons (TPH)	µg/L	100	100

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

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

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

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

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Discharges of treated groundwater from the cleanup of VOCs may potentially be discharged to all surface waters in the Colorado River Basin Region. The designated beneficial uses of surface waters throughout the Colorado River Basin Region include agricultural supply, aquaculture, cold freshwater habitat, freshwater replenishment, ground water recharge, hydropower generation, industrial service supply, municipal and domestic supply, non-contact water recreation, preservation of rare, threatened, or endangered species, warm freshwater habitat, water contact recreation, and wildlife habitat.

3. Determining the Need for WQBELs

The CWA requires WQBELs if technology-based effluent limitations are not sufficiently stringent to meet applicable water quality criteria. In the suite of VOCs regulated by this General Board Order, several VOCs have water quality criteria in the CTR that are below the respective technology-based effluent limitation. Therefore, the effluent limitation for those VOCs is established at the CTR water quality criteria.

As stated in Sections II.A and II.B of this General Board Order, the Discharger is required to submit analytical results representing the quality of groundwater to be treated and discharged, prior to obtaining coverage under this General Board Order.

The analytical results from this sample will be compared to the water quality screening criteria for any constituent listed in Attachment B, as a means of determining reasonable potential to cause or contribute to an exceedance of a water quality standard. As stated previously, if the analysis determines the discharge cause or contribute to an exceedance of a water quality standard, based on the comparison to the water quality screening criteria, the discharge is ineligible for coverage under this General Board Order.

In order to address the wide range of surface water beneficial uses throughout the Colorado River Basin Region, this General Permit applies separate effluent limitations for discharges to water bodies dependent upon the beneficial uses of the receiving waters. Receiving waters that have been designated to support domestic and municipal supply (MUN) will be held to effluent limitations based on human health and drinking water standards. Discharges to receiving waters that are not designated as MUN will be held to standards that protect aquatic life and human health based on the CTR.

4. WQBEL Calculations

The effluent limitations established in this General Board Order for discharges to receiving waters that have been designated to support domestic and municipal supply (MUN) are set at human health water quality criteria contained in the CTR and drinking water standards (USEPA and CA DHS). Further, effluent limitations established in this General Board Order for discharges to receiving waters that are not designated as MUN are set at the more stringent of the water quality criteria that protect aquatic life or human health based on those criteria contained in the CTR. For pollutants where the MCL was more stringent than the CTR water quality criterion, the MCL was established as the effluent limitation, for both discharge scenarios.

The Discharger is required to monitor the effluent as directed in the Monitoring and Reporting Program and Notice of Applicability. The effluent limitations are established as maximum values. Because these values are set at the levels that would otherwise be required for average monthly limits to ensure that enrolled discharges are appropriate for coverage under a general permit, only maximum limitations are included.

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

Parameter	Units	Instantaneous Maximum Effluent Limitations	
		Municipal Designated Waters	Non-Municipal Designated Waters
Lead, Total Recoverable	µg/L	15	15
Acrolein	µg/L	320	780
Acrylonitrile	µg/L	0.059	0.66
Benzene	µg/L	1.0	70
Bromoform	µg/L	4.3	360
Carbon Tetrachloride	µg/L	0.25	4.4
Chlorobenzene	µg/L	70	21,000

Parameter	Units	Instantaneous Maximum Effluent Limitations	
		Municipal Designated Waters	Non-Municipal Designated Waters
Chlorodibromomethane	µg/L	0.41	34
Chloroethane	µg/L	300	300
Chloroform	µg/L	100	100
Dichlorobromomethane	µg/L	0.56	46
1,1-Dichloroethane	µg/L	5.0	5.0
1,2-Dichloroethane	µg/L	0.38	99
1,1-Dichloroethylene	µg/L	0.057	3.2
1,2-Dichloropropane	µg/L	0.52	39
1,3-Dichloropropylene	µg/L	0.5	1,700
Ethylbenzene	µg/L	30	29,000
Methyl Bromide	µg/L	48	4,000
Methyl Chloride	µg/L	3	3
Methylene Chloride	µg/L	4.7	1,600
1,1,2,2-Tetrachloroethane	µg/L	0.17	11
Tetrachloroethylene	µg/L	0.8	8.85
Toluene	µg/L	40	200,000
1,1,1-Trichloroethane	µg/L	200	200
1,1,2-Trichloroethane	µg/L	0.6	42
Trichloroethylene	µg/L	2.7	81
Vinyl Chloride	µg/L	0.5	525
cis-1,2-Dichloroethylene	µg/L	6	10
trans-1,2-Dichloroethylene	µg/L	10	140,000
Ethanol	µg/L	760,000	760,000
Methanol	µg/L	3,500	740,000
Tertiary Butyl Alcohol	µg/L	12	12
Trichlorofluoroethane	µg/L	1,200	4,000

5. Whole Effluent Toxicity (WET)

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 shorter 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 response on 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.

This General Board Order implements the narrative objective for toxicity, requiring there shall be no acute or chronic toxicity in the treatment plant effluent. In addition, the General Board Order establishes thresholds that when exceeded requires the Discharger to conduct accelerated toxicity testing and/or conduct toxicity identification evaluation (TIE) and toxicity reduction evaluation (TRE) studies.

In addition to the Basin Plan requirements, section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Therefore, in accordance with the SIP, this General Board Order requires the Discharger to conduct chronic toxicity testing for discharges to receiving waters of the Colorado River Basin Region.

D. Final Effluent Limitations

Table F-4, below, summarizes the proposed effluent limitations for the discharge from authorized facilities to receiving waters in the Colorado River Basin Region. Proposed effluent limitations are based on USEPA and CA DHS drinking water standards, the California Toxics Rule, and Colorado River Basin Plan Water Quality Standards.

For discharges to receiving waters that are designated as domestic and municipal supply, the most stringent value of water quality criteria contained in the CTR for protection of human health (consumption of water and organisms), CA DHS Primary MCLs, USEPA MCLs, or currently achievable detection limits, were established as effluent limitations. For discharges to receiving waters that are not designated as domestic and municipal supply, the most stringent value of CTR for protection of human health (consumption of organisms only), CA DHS Primary MCLs, or currently achievable detection limits, were established as effluent limitations. All effluent limitations are carried over from the previous General Board Order R7-2002-1000.

Table F-4. Summary of Final Effluent Limitations

Parameter	Units	Effluent Limitation – Municipal Designated Waters	Basis	Effluent Limitation – Non-Municipal Designated Waters	Basis
Lead, Total Recoverable	µg/L	15	DHS MCL	15	DHS MCL
Acrolein	µg/L	320	CTR (HH-W&O)	780	CTR (HH-Org)
Acrylonitrile	µg/L	0.059	CTR (HH-W&O)	0.66	CTR (HH-Org)
Benzene	µg/L	1.0	DHS MCL	70	CTR (HH-Org)
Bromoform	µg/L	4.3	CTR (HH-W&O)	360	CTR (HH-Org)
Carbon Tetrachloride	µg/L	0.25	CTR (HH-W&O)	4.4	CTR (HH-Org)
Chlorobenzene	µg/L	70	DHS MCL	21,000	CTR (HH-Org)

Parameter	Units	Effluent Limitation – Municipal Designated Waters	Basis	Effluent Limitation – Non-Municipal Designated Waters	Basis
Chlorodibromomethane	µg/L	0.41	CTR (HH-W&O)	34	CTR (HH-Org)
Chloroethane	µg/L	300	USEPA PMCL	300	USEPA PMCL
Chloroform	µg/L	100	DHS MCL	100	DHS MCL
Dichlorobromomethane	µg/L	0.56	CTR (HH-W&O)	46	CTR (HH-Org)
1,1-Dichloroethane	µg/L	5.0	DHS MCL	5.0	DHS MCL
1,2-Dichloroethane	µg/L	0.38	CTR (HH-W&O)	99	CTR (HH-Org)
1,1-Dichloroethylene	µg/L	0.057	CTR (HH-W&O)	3.2	CTR (HH-Org)
1,2-Dichloropropane	µg/L	0.52	CTR (HH-W&O)	39	CTR (HH-Org)
1,3-Dichloropropylene	µg/L	0.5	DHS MCL	1,700	CTR (HH-Org)
Ethylbenzene	µg/L	30	USEPA SMCL	29,000	CTR (HH-Org)
Methyl Bromide	µg/L	48	CTR (HH-W&O)	4,000	CTR (HH-Org)
Methyl Chloride	µg/L	3	USEPA Action Level	3	USEPA Action Level
Methylene Chloride	µg/L	4.7	CTR (HH-W&O)	1,600	CTR (HH-Org)
1,1,2,2-Tetrachloroethane	µg/L	0.17	CTR (HH-W&O)	11	CTR (HH-Org)
Tetrachloroethylene	µg/L	0.8	CTR (HH-W&O)	8.85	CTR (HH-Org)
Toluene	µg/L	40	USEPA SMCL	200,000	CTR (HH-Org)
1,1,1-Trichloroethane	µg/L	200	DHS MCL	200	DHS MCL
1,1,2-Trichloroethane	µg/L	0.6	CTR (HH-W&O)	42	CTR (HH-Org)
Trichloroethylene	µg/L	2.7	CTR (HH-W&O)	81	CTR (HH-Org)
Vinyl Chloride	µg/L	0.5	DHS MCL	525	CTR (HH-Org)
cis-1,2-Dichloroethylene	µg/L	6	DHS MCL	10	Technology
trans-1,2-Dichloroethylene	µg/L	10	DHS MCL	140,000	CTR (HH-Org)
Di-isopropyl Ether	µg/L	5	Best Professional Judgement (BPJ)	5	Technology
Ethanol	µg/L	760,000	USEPA SMCL	760,000	USEPA SMCL
Hydrocarbons, Petroleum (Total)	µg/L	100	BPJ	100	Technology
Methanol	µg/L	3,500	USEPA IRIS	740,000	USEPA SMCL
Methyl tertiary-butyl ether (MTBE)	µg/L	13	DHS Action Level	13	DHS Action Level
Tertiary-amyl methyl ether (TAME)	µg/L	5	BPJ	5	Technology
Tertiary Butyl Alcohol	µg/L	12	DHS Action Level	12	DHS Action Level
Trichlorofluoroethane	µg/L	1,200	DHS MCL	4,000	CA PHG
Xylenes, Total	µg/L	20	USEPA SMCL	1,750	Technology

DHS MCL = California Department of Health Maximum Contaminant Level; CTR (HH-Org) = California Toxics Rule water quality criteria for the protection of human health, consumption of organisms; CTR (HH-W&O) = California Toxics Rule water quality criteria for the protection of human health, consumption of water and organisms; USEPA SMCL = Federal Secondary Maximum Contaminant Level; USEPA PMCL = Federal Primary Maximum Contaminant Level; USEPA IRIS = Integrated Risk Information System Reference Dose as a Drinking Water Level; CA PHG = California Public Health Goal; BPJ is based on Quantification Limits.

- a. **pH:** The hydrogen ion (pH) of the treated effluent shall be maintained within the limits of 6.0 to 9.0 standards units.
- b. **Toxicity:** There shall be no acute or chronic toxicity in the treatment plant effluent nor shall the treatment plant effluent cause any acute or chronic toxicity in the receiving water, as defined in Section V.E of the MRP. All waters shall be maintained free of toxic substances in concentrations which are toxic to, or which produce detrimental physiological responses in human, plant, animal, or indigenous aquatic life. Compliance with this objective will be determined by use of indicator organisms, analyses of species diversity, population density, growth anomalies, or bioassays of appropriate duration or other appropriate methods specified by the Regional Water Board.

1. Satisfaction of Anti-Backsliding Requirements

All effluent limitations in this General Board Order are at least as stringent as the effluent limitations in the previous General Board Order.

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at Title 40, CFR section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed. All effluent limitations in this General Board Order are at least as stringent that those in the previous General Board Order.

2. Satisfaction of Antidegradation Policy

Section 131.12 requires that the state water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Board established California's anti-degradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal anti-degradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal anti-degradation policies. As discussed in detail in Fact Sheet section III.C.10, the permitted discharge is consistent with the anti-degradation provision of Section 131.12 and State Water Board Resolution No. 68-16.

3. Stringency of Requirements for Individual Pollutants

This General Board Order contains both technology-based effluent limitations and WQBELs for individual pollutants. The technology-based effluent limitations consist of

restrictions on di-isopropyl ether, ethanol, methanol, methyl tertiary-butyl ether (MTBE), Tertiary-amyl methyl ether (TAME), total petroleum hydrocarbons (TPH), and trichlorofluoroethane. Restrictions on di-isopropyl ether, methyl tertiary-butyl ether (MTBE), tertiary-amyl methyl ether (TAME), and total petroleum hydrocarbons (TPH), are discussed in Section IV.B. This General Board 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.

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 WQBELs 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. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this General Board Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Reclamation Specifications – Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The receiving water limitations in the proposed General Board Order are based upon the water quality objectives contained in the Basin Plan. As such, they are a required part of the proposed General Board Order.

A. Surface Water

The surface water receiving water limitations in the proposed General Board Order are based upon the water quality objectives contained in the Basin Plan are carried forward from the previous General Board Order. As such, they are a required part of the proposed General Board Order.

In addition, the Basin Plan specifies bacterial objectives for surface waters for specific designated uses. This General Board Order incorporates those objectives as receiving water limitations for bacterial indicators (i.e., E. coli, enterococci, and fecal coliform).

The Basin Plan also specifies water quality objectives for specific waterbodies. Those objectives are incorporated in this General Board Order as receiving water limitations.

B. Groundwater—Not Applicable

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this General Board Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

This General Board Order carries forward the treatment system influent monitoring requirements. Influent monitoring is required to assess the effectiveness of the groundwater remediation activity and treatment performance.

B. Effluent Monitoring

The Discharger is required to conduct monitoring of the permitted discharges in order to evaluate compliance with permit conditions. Monitoring requirements are given in the proposed MRP. This provision requires compliance with the Monitoring and Reporting Program, and is based on Sections 122.44(i), 122.62, 122.63 and 124.5. The MRP is a standard requirement in almost all NPDES permits (including the proposed General Board Order) issued by the Regional Water Board. In addition to containing definitions of terms, it specifies general sampling/analytical protocols and the requirements of reporting of spills, violations, and routine monitoring data in accordance with NPDES regulations, the CWC, and Regional Water Board's policies. The MRP also contains sampling program specific for the Discharger's groundwater treatment facility. It defines the sampling stations and frequency, pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all pollutants for which effluent limitations are specified.

Monitoring for those pollutants expected to be present in the discharge from the groundwater treatment facility, will be required as shown in the proposed MRP.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) testing requirements establish monitoring of the effluent to ensure that the receiving water quality is protected 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 requirement establishes conditions and protocol by which compliance with the Basin Plan narrative water quality objective for toxicity will be demonstrated and in accordance with section 4.0 of the SIP. Conditions include required monitoring and evaluation of the effluent for acute and chronic toxicity and numerical values for chronic toxicity evaluation to be used as 'triggers' for initiating accelerated monitoring and toxicity reduction evaluation(s).

The WET testing requirements contained in the MRP, Section V were developed based on the Draft National Whole Effluent Toxicity Implementation Guidance under the NPDES Program developed by USEPA (Docket ID. No. OW-2004-0037). This is the most current guidance available to the Regional Water Board. This General Board Order includes a reopener to allow the requirements of this section to be revised pending the issuance of final guidance or policies developed by either the USEPA or State Water Board.

D. Receiving Water Monitoring

1. Surface Water

Surface water monitoring is required to determine compliance with receiving water limitations and to characterize the water quality of the receiving water pursuant to the Basin Plan. Receiving water monitoring locations, frequencies and sample types for dissolved oxygen, pH, hardness, temperature, and total dissolved solids have been established in this General Board Order.

2. Groundwater – Not Applicable

E. Other Monitoring Requirements – Not Applicable

VII. RATIONALE FOR PROVISIONS

A. 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 General Board 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 General Board 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 General Board Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

This provision is based on Part 123. The Regional Water Board may reopen the permit to modify permit conditions and requirements. Causes for modifications include the promulgation of new regulations, modification in sludge use or disposal practices, or adoption of new regulations by the State Water Board or Regional Water Board, including revisions to the Basin Plan.

2. Special Studies and Additional Monitoring Requirements

a. Toxicity Identification Evaluations or Toxicity Reduction Evaluations. This provision is based on the SIP, section 4, Toxicity Control Provisions.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program. This provision is based on the requirements of section 2.4.5 of the SIP.

4. Construction, Operation, and Maintenance Specifications

a. Facility and Treatment Operation. This provision is based on the requirements of section 122.41(e) and the previous General Board Order.

b. Start-Up Phase and Start-Up Reporting. This provision is based on the previous General Board Order.

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

6. Other Special Provisions

Special Provisions VII.C.6.a and VII.C.6.b are included to ensure the compliance with requirements established in General Board Order R7-2009-0400, and are based on the previous General Board Order, the CWA, USEPA regulations, CWC, and Regional Water Board plans and policies.

7. Required Submittals and Reports

This General Board Order requires the Discharger to submit a TRE Workplan and Start-Up Phase Notification and Reporting, in Special Provisions, VII.C.2.a and VII.C.4.b.

VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as a NPDES permit for the discharge of extracted and treated groundwater resulting from the cleanup of groundwater polluted by VOCs. 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 through the Desert Sun, Imperial Valley Press, Press Enterprise, San Bernardino Sun, and Palo Verde Times newspapers.

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 General Board Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on August 13, 2009.

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: September 17, 2009
Time: 10:00 a.m.
Location: City of Palm Desert
City Council Chambers
73-510 Fred Waring Drive
Palm Desert, CA 92260

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/coloradoriver> where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any person aggrieved by this action of the Regional Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and the California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after date of this General Board Order, except that if the thirtieth day following the date of this General Board Order falls on

a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

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

E. Information and Copying

The Report of Waste Discharge (RWD), 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 (760) 346-7491.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this General Board Order should be directed to John Carmona at (760) 340-4521.