



# California Regional Water Quality Control Board

**Item No. 15**  
**Doc. No. 2**

Linda S. Adams  
Secretary for  
Environmental Protection

**San Diego Region**  
9174 Sky Park Court, San Diego, CA 92123-4340  
(916) 341-5455 • FAX (916) 341-5463  
[www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

  
Arnold Schwarzenegger  
Governor



**GENERAL WASTE DISCHARGE REQUIREMENTS AND  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
(NPDES) PERMIT  
FOR DISCHARGES FROM TEMPORARY GROUNDWATER  
EXTRACTION AND SIMILAR WASTE DISCHARGES  
TO SAN DIEGO BAY,  
TRIBUTARIES THERETO UNDER TIDAL INFLUENCE, AND STORM  
DRAINS OR OTHER CONVEYANCE SYSTEMS TRIBUTARY THERETO  
(GENERAL PERMIT)**

**TENTATIVE ORDER NO. R9-2007-0034**  
**NPDES NO. CAG919001**

A Discharger, as described in the following table that has complied with the requirements for coverage under this General Permit is subject to waste discharge requirements, once permit coverage is effective, as set forth in this General Permit.

<b>Dischargers</b>	Any person with temporary discharges from ground water extraction activities to waters of the San Diego Bay, tributaries thereto under tidal influence, and storm drains or other conveyances systems tributary thereto that do not cause, have the reasonable potential to cause, or contribute to an instream excursion above any applicable State or federal water quality objectives/criteria or cause acute or chronic toxicity in the receiving water.
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This General Permit was adopted by the Regional Board on:	June 13, 2007
This General Permit shall become effective on:	June 13, 2007
This General Permit shall expire on:	June 13, 2012
The U.S. Environmental Protection Agency and the California Regional Water Quality Control Board, San Diego Region have classified these discharges as minor discharges.	

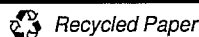
IT IS HEREBY ORDERED that Order No. 2000-90 is rescinded upon the effective date of this General Permit except for enforcement purposes, and, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted therein, and the provisions of the federal Clean Water Act, and regulations and guidelines adopted therein, Dischargers shall comply with the requirements in this General Permit.

I, John H. Robertus, Executive Officer, do hereby certify the following is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region on June 13, 2007.

**TENTATIVE**

John H. Robertus, Executive Officer

**California Environmental Protection Agency**



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## I. DISCHARGE INFORMATION

### A. Groundwater Extraction

Existing and proposed discharges of groundwater extraction waste to San Diego Bay from construction groundwater extraction, foundation groundwater extraction and groundwater extraction related to groundwater remediation cleanup projects (collectively groundwater extraction):

1. Result from similar operations (all involve extraction and discharge of groundwater);
2. Are the same type of wastes (all are groundwater containing or potentially containing petroleum hydrocarbons, solvents, or other pollutants);
3. Require similar effluent limitations for the protection of the beneficial uses of San Diego Bay;
4. Require similar monitoring; and
5. Are more appropriately regulated under a general permit rather than individual permits.

## II. PERMIT INFORMATION

### A. Application

To obtain coverage under this National Pollutant Discharge Elimination System (NPDES) General Permit a Discharger must submit the following to the California Regional Water Quality Control Board, San Diego Region (Regional Board):

1. A Notice of Intent (NOI), including the following information:
  - a. Owner/Operator name;
  - b. Owner/Operator address;
  - c. Owner/Operator telephone number;
  - d. Site name
  - e. Site address
  - f. Type of discharges;
  - g. Name of receiving waterbody and conveyance(s); and
2. An initial sampling and monitoring report of 164 constituents for flows of 50,000 gallons per day (gpd) or more or 38 constituents for flows under 50,000 gpd;
3. A project map(s) that shows the essential features of the groundwater extraction system within the Regional Board boundary, and the corresponding surface water or storm drain to which water will be discharged; and
4. Payment of the application fee, equal to the first annual fee, made payable to "SWRCB."

The NOI form is included within this General Permit package as Attachment B.

The General Permit NOI, including, map(s), the application fee, and other attachments, must be submitted to the following address:

CRWQCB – San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

Attn: Groundwater Extraction to San Diego Bay  
Southern Core Regulatory Unit  
NOTICE OF INTENT

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### **B. Coverage**

Permit coverage will be effective when all of the following have occurred:

1. The Discharger has submitted a complete NOI application (including initial sampling and monitoring report), as determined by the Regional Board; and
2. The Regional Board issues the Discharger's a Notice of Enrollment, which includes the discharge flow limit, mass limit, any additional or increase in monitoring due to specific circumstances of the discharge, and any other additional requirements.
3. Current dischargers enrolled in Order No. 2000-90 shall re-enroll no later than 365 days after adoption of this General Permit, each discharger currently enrolled in Order No. 2000-90 shall continue to comply with Order No. 2000-90 until obtaining permit coverage under this General Permit.

### **C. Eligibility Criteria**

This General Permit is intended to cover temporary discharges of groundwater extraction wastes to San Diego Bay, and its tributaries under tidal influence, from groundwater extraction due to construction and other groundwater extraction activities. Dischargers must meet the following criteria to be subject to waste discharge requirements by this General Permit:

1. The discharge of any flow (rate or volume) of extracted groundwater due to groundwater extraction activities is discharged into San Diego Bay;
2. The discharge of groundwater extraction wastes will not be permanent. Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s) are permanent discharges.
3. Pollutant concentrations in the discharge comply with the Discharge Specifications of this General Permit.

This General Permit does not cover:

**PERMANENT DISCHARGES** – Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s) are permanent discharges except for the following two existing permanent groundwater extraction discharges currently

enrolled in Order 2000-90 until such time the discharges receive an individual permit:

- a. Embassy Suites Hotel permanent dewatering system
- b. One America Plaza permanent dewatering system

**STORM WATER** - Storm water runoff due to construction activities. These activities may be covered under the statewide general NPDES permit for storm water discharges associated with construction activities (CAS000002), the statewide general NPDES permit for storm water runoff associated with small linear underground/overhead construction projects (CAS000005), and/or Clean Water Act (CWA) Section 401 Water Quality Certifications.

**SANITARY SEWER** - Discharges to a sanitary sewer. These discharges do not need coverage under the NPDES Program. Contact the agency controlling the sanitary sewer for approval prior to discharging to its conveyance system.

**UTILITY VAULTS** - Discharges from utility vaults and underground structures. These activities may be covered under the statewide general NPDES permit for discharges from utility vaults and underground structures to surface water (CAG990002).

**HYDROSTATIC/ POTABLE WATER** - Discharges from drinking water well development. These discharges are covered under Order No. R9-2002-0020.

**D. Discharge to a Municipal Separate Storm Sewer System (MS4)**

Prior to discharging into an MS4, the Discharger shall demonstrate alternatives to discharging extracted groundwater waste into an MS4 and why it is technically or economically infeasible to implement these alternatives.

Without prior approval from the appropriate local agency with jurisdiction over the MS4, the discharger shall not discharge extracted groundwater waste under this General Permit into an MS4.

Local agencies responsible for operating the MS4s may not passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the MS4 operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or control. These discharges may cause or contribute to a condition of contamination or a violation of water quality standards.

Therefore, at least 30 days prior to initiating an extracted groundwater discharge to an MS4, the Discharger shall notify and receive authorization from the appropriate local agency with jurisdiction over the MS4. This requirement encourages communication between Dischargers enrolled under this General Permit and local agencies responsible for MS4s in an effort to reduce misunderstandings and concerns over the types of discharges covered by this General Permit.

#### **E. Termination of Discharges**

Dischargers shall submit a written request referred to as a "Notice of Termination (NOT)" to this Regional Board when coverage under this General Permit is no longer required. The NOT letter constitutes a notice that the owner (and his/her agent) of the site has ceased the discharge of ground water associated with the groundwater extraction activities at the site under this General Permit.

The NOT should include "Notice of Termination (NOT)" in the subject line, the Waste Discharge Identification Number (WDID) assigned to the project by the Regional Board when enrolled in the General Permit, the name and address of the owner, and be signed and dated by the owner in accordance with the signatory requirements of the General Permit. The Discharger shall continue to comply with the requirements of the General Permit until the Regional Board approves the NOT. Submittal of a NOT letter does not guarantee termination. Approval of the NOT does not relieve the Discharger's responsibility for paying any applicable outstanding invoices of annual fees as a result of enrollment under this General Permit.

#### **F. Re-Enrollment of Renewed Permit**

Dischargers enrolled under previous General Permit Order No. 2000-90 that plan on continuing their discharge, must re-enroll by submitting an NOI to obtain coverage under this General Permit. Re-enrollees shall re-enroll no later than 365 days after the date of adoption of this General Permit to achieve compliance with the new effluent limitations and criteria established by this General Permit.

At the current time, permanent discharges from the following extraction facilities that were enrolled into the prior General Permit may continue as permanent enrollees, provided they comply with the new effluent limitations, monitoring reporting program, and other criteria in this General Permit:

- a. Embassy Suites Hotel permanent dewatering system
- b. One America Plaza permanent dewatering system

#### **G. Transferring Ownership**

Enrollment under the General Permit for a specific project is not transferable. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the enrolled Discharger, the Discharger must notify the new succeeding owner or operator of the existence of this General Permit by letter 120 days prior to property transfer, a copy of which must be immediately forwarded to the Regional Board office. Additionally, the Discharger must submit a NOT to the Regional Board. The new succeeding owner or operator must submit a new NOI in application of enrollment under this General Permit.

### **III. Findings**

The Regional Board finds:

#### **A. Background**

This General Permit supersedes Order No. 2000-90. The NPDES No. CAG919001 remains the same. Dischargers enrolled under previous Order No.

2000-90 must obtain coverage under this new General Permit to continue their discharge subject to waste discharge requirements in this General Permit.

**B. Discharge Subject to Waste Discharge Requirements**

To be subject to waste discharge requirements in this General Permit for continued and future discharge to waters of the United States, Dischargers must submit an NOI and obtain coverage in order to be regulated under this General Permit as provided in 40 CFR section 122.28 (b)(2).

**C. Discharge Description**

Existing and proposed discharges of groundwater extraction waste to San Diego Bay from construction groundwater extraction, foundation groundwater extraction and groundwater extraction related to groundwater remediation (collectively referred to as Groundwater Extraction):

**D. Legal Authorities**

This General Permit is issued pursuant to CWA section 402 and implementing regulations adopted by USEPA and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from groundwater extraction waste to San Diego Bay. This General Permit also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC.

States may request authority to issue general NPDES permits pursuant to 40 CFR section 122.28. On June 8, 1989, the California State Water Resources Control Board (State Board) submitted an application to USEPA requesting revisions to its NPDES Program in accordance with 40 CFR sections 122.28, 123.62, and 403.10. The application included a request to add general permit authority to its approved NPDES Program. On September 22, 1989, USEPA, Region 9, approved the State Board's request and granted authorization for the State of California to issue general NPDES permits.

**E. Background and Rationale for Requirements**

The Regional Board developed the requirements in this General Permit based on information submitted as part of the applications for several like agencies, individuals, and entities, through monitoring and reporting programs, and through special studies. Attachments A through F, which contain background information and rationale for General Permit requirements, are hereby incorporated into this General Permit and constitute part of the Findings for this General Permit.

**F. California Environmental Quality Act (CEQA)**

This action to adopt a NPDES permit is exempt from the provisions of CEQA (Public Resources Code section 21100, et seq.) in accordance with CWC section 13389.

**G. Technology-Based Effluent Limitations (TBELs)**

Permits shall include applicable TBELs and standards. (40 CFR § 122.44(a)). This General Permit does not include numeric-TBELs because USEPA has not promulgated effluent limitation guidelines for groundwater extraction.



#### **H. Water Quality-Based Effluent Limitations (WQBELs)**

Permits shall include WQBELs to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. (40 CFR § 122.44(d)). Where numeric water quality criteria have not been established, WQBELs may be established using USEPA CWA section 304(a) criteria guidance, proposed State criteria or a State policy interpreting narrative criteria supplemented with other relevant information, or an indicator parameter. (40 CFR § 122.44(d)).

#### **I. Water Quality Control Plan**

The Regional Board's Water Quality Control Plan for the San Diego Basin (hereinafter Basin Plan) designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The Basin Plan was adopted by the Regional Board on September 8, 1994, and was subsequently approved by the State Board on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and the State Board.

In addition, State Board Resolution No. 88-63 establishes state policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal and domestic supplies. Requirements of this General Permit specifically implement the applicable provisions of the Basin Plan and State Board policy.

#### **J. National Toxics Rule (NTR) and California Toxics Rule (CTR)**

The USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995, and November 9, 1999. The CTR was adopted by USEPA on May 18, 2000, and amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to these discharges.

#### **K. State Implementation Policy**

On March 2, 2000, the State 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 USEPA through the NTR and to the priority pollutant objectives established by the Regional Boards in their Basin Plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the USEPA Regional Administrator. The alternate test procedures provision became effective on May 22, 2000. The SIP became effective on May 18, 2000. The SIP includes procedures for determining the need for WQBELs and for calculating WQBELs. The SIP also requires Dischargers to submit sufficient data to make the determination, and if necessary to calculate the WQBELs. The State 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 Permit implement the SIP.

**L. Compliance Schedules and Interim Requirements**

Current dischargers enrolled in Order No. 2000-90 shall re-enroll no later than 365 days after adoption of this General Permit, each discharger currently enrolled in Order No. 2000-90 shall continue to comply with Order No. 2000-90 until obtaining permit coverage under this General Permit.

**M. Antidegradation Policy**

Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Board established California's antidegradation policy in State 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 Boards' Basin Plans implement, and incorporate by reference, both the State and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharges are consistent with the antidegradation provision of 40 CFR section 131.12 and State Board Resolution No. 68-16.

**N. Anti-Backsliding Requirements**

Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations of 40 CFR 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 Permit are at least as stringent as the effluent limitations in the previous Order.

**O. Monitoring and Reporting**

Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Boards to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This MRP is provided in Attachment E.

**P. Standard and Special Provisions**

Standard Provisions, which in accordance with 40 CFR sections 122.41 and 122.42 apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D. The Regional Board has also included in this General Permit special provisions applicable to the enrolled Dischargers. A rationale for the special provisions contained in this General Permit is provided in the attached Fact Sheet (Attachment F).

**Q. Notification of Interested Parties**

The Regional Board has notified the Dischargers, interested agencies and persons of its intent to prescribe WDRs for these discharges, and has provided

them with an opportunity to submit their written comments and recommendations. Notification details are provided in the Fact Sheet of this General Permit.

**R. Consideration of Public Comment**

The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharges. Details of the Public Hearing are provided in the Fact Sheet of this General Permit.

**S. Alaska Rule**

On March 30, 2000, USEPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for CWA purposes (40 CFR section 131.21, 65 FR 24641, April 27, 2000). Under the revised regulation (also known as the Alaska rule), USEPA must approve new and revised standards submitted to USEPA after May 30, 2000, 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.

**IV. Discharge Prohibitions**

- A. The discharge of wastewater at a location, or in a manner different from that described in the Findings, NOI, or Notice of Enrollment is prohibited.
- B. The discharge of wastewater shall not create or cause conditions of nuisance or pollution.
- C. The discharge shall not cause, have a reasonable potential to cause, or contribute to an in-stream excursion above any applicable criterion promulgated by USEPA pursuant to section 303 of the CWA, or water quality objective adopted by the State or Regional Boards.
- D. The discharge of waste to areas designated by the State Board as being of special (ASBS) biological significance is prohibited. Discharges shall be located a sufficient distance from such designated areas to assure maintenance of natural water quality conditions in these areas.
- E. The discharge of groundwater extraction wastes from a specific site in excess of the flowrate specified in the Notice of Enrollment from the Regional Board is prohibited, unless the enrollee obtains a revised discharge Notice of Enrollment authorizing an increased flowrate.
- F. The addition of pollutants to extracted groundwater to be discharged to San Diego Bay is prohibited. The only exception to this prohibition is that chemicals may be added to extracted groundwater to control biofouling in treatment systems, provided that extracted groundwater discharged to San Diego Bay meets the effluent limitations for such chemicals established by this General Permit and in the discharge Notice of Enrollment issued by the Regional Board.

- G.** The discharge of groundwater extraction wastes to San Diego Bay is prohibited unless an NOI has been submitted, and the Regional Board has provided the Discharger with a written Notice of Enrollment identifying the discharge subject to waste discharge requirements.
- H.** Discharges of waste to San Diego Bay from permanent groundwater extraction operations are prohibited. Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s) are permanent discharges except for the following two existing permanent groundwater extraction discharges currently enrolled in Order 2000-90 until such time the discharges receive an individual permit:
- a. Embassy Suites Hotel permanent dewatering system
  - b. One America Plaza permanent dewatering system
- I.** The discharge of groundwater extraction wastes to San Diego Bay from a construction operation after the date of completion of construction of structures requiring construction groundwater extraction is prohibited.
- J.** The discharge of groundwater extraction wastes to San Diego Bay from a groundwater remediation operation after the date groundwater has been remediated to the satisfaction of the Regional Board is prohibited.
- K.** Compliance with Discharge Prohibitions contained in the Basin Plan is also required as a condition of this General Permit.
- L.** Discharges of wastes in a manner, or to a location which have not been specifically regulated by waste discharge requirements of this General Permit are prohibited.
- M.** The discharge of any radiological, chemical, or biological warfare agent, or high level radiological waste is prohibited.
- N.** The dumping or deposition, from shore, of oil, garbage, trash, or other solid municipal, industrial, or agricultural waste directly into waters subject to tidal action or adjacent to waters subject to tidal action in any manner which may permit it to be washed into waters subject to tidal action is prohibited.
- O.** The dumping or deposition of chemical agents or explosives into waters subject to tidal action is prohibited.
- P.** The discharge of copper from extracted groundwater to the Shelter Island Basin watershed or from the Shelter Island Basin watershed to San Diego Bay is prohibited.
- Q.** The discharge of Diazonon from extracted groundwater to Chollas Creek or from Chollas Creek to San Diego Bay is prohibited.

## V. Effluent Limitations and Discharge Specifications

### A. Effluent Limitations

#### 1. General / Inorganic / Biological

No.	Parameter	Units	Effluent Limitations				
			AMEL	AWEL	MDEL	Instantaneous Maximum	6-Month Median
1	Settleable Solids	ml/L	1.0*	1.5*	-	3.0*	-
2	Total Suspended Solids	mg/L	30*	-	-	50*	-
3	Hydrogen Sulfide	µg/L	2*	-	4*	10*	-
4	Total Residual Chlorine	µg/L	-	-	8*	60*	2*
5	Cyanide	µg/L	0.5*	-	1.0*	-	-
6	Acute Toxicity	Tua			0.3		
7	Chronic Toxicity	Tuc			1.0		
8	Total Coliform	MPN/100 ml				1000.0	
9	Fecal Coliform	MPN/100 ml				200.0	
10	pH	Units	Within limit of 6.0 to 9.0 at all times				

\* Mass limit (lbs/d) = Effluent concentration Limit (mg/L) x Flow Limit (MGD) x 8.34 [lb\*L/(Mgal\*mg)]

Mass limit (lbs/d) = Effluent concentration Limit (µg/L) x Flow Limit (MGD) x 0.00834 [lb\*L/(Mgal\*µg)]

No.	Parameter	Units	Effluent Limitations				
			AMEL	AWEL	MDEL	Instantaneous Minimum	6-Month Median
11	Dissolved Oxygen (DO)	mg/L				> 5.0	

### 2. Petroleum-Related

No.	Parameter	Units	Effluent Limitations				
			AMEL	AWEL	MDEL	Instantaneous Maximum	6-Month Median
12	MTBE	µg/L				5*	
13	Benzene	µg/L	-	-	-	5*	-
14	Ethylbenzene	µg/L	-	-	-	5*	-
15	Toluene	µg/L	-	-	-	5*	-
16	Xylene	µg/L	-	-	-	5*	-
17	Total Petroleum Hydrocarbons	mg/L	-	-	-	0.5*	-

\* Mass limit (lbs/d) = Effluent concentration Limit (µg/L) x Flow Limit (MGD) x 0.00834 [lb\*L/(Mgal\*µg)]

### 3. Metals

No.	Parameter	Units	Effluent Limitations				
			AMEL	AWEL	MDEL	Instantaneous Maximum	6-Month Median
18	Arsenic	µg/L	29.4*	-	59.0*	-	-
19	Cadmium	µg/L	7.6*	-	15.3*	-	-
20	Chromium (hexavalent)	µg/L	41.1*	-	82.5*	-	-
21	Copper**	µg/L	2.9*	-	5.8*	-	-
22	Lead	µg/L	7.0*	-	14.0*	-	-
23	Mercury	µg/L	0.050*	-	0.1005*	-	-
24	Nickel	µg/L	6.8*	-	13.6*	-	-
25	Silver	µg/L	1.1*	-	2.2*	-	-
26	Tributyltin (TBT)	µg/L	0.005*				
27	Zinc	µg/L	47.3*	-	95.0*	-	-

\* Mass limit (lbs/d) = Effluent concentration Limit (µg/L) x Flow Limit (MGD) x 0.00834 [lb\*L/(Mgal\*µg)]

\*\* Copper discharge from the Shelter Island Basin watershed to San Diego Bay is prohibited.

### 4. Organics

No.	Parameter	Units	Effluent Limitations				
			AMEL	AWEL	MDEL	Instantaneous Maximum	6-Month Median
28	Phenolic Compounds (non-chlorinated)	µg/L	-	-	120*	300*	30*
29	Chlorinated Phenolics	µg/L	0.025*	-	0.049*	10*	1*

No.	Parameter	Units	Effluent Limitations				
			AMEL	AWEL	MDEL	Instantaneous Maximum	6-Month Median
30	1,1,2,2-tetrachlorethane (PCA)	µg/L	2.3*	-	-	-	-
31	1,1,1-trichloroethane (TCA)	µg/L	5.4x10 <sup>5</sup> *	-	-	-	-
32	1,1,2-trichloroethane (TCA)	µg/L	9.4*	-	-	-	-
33	1,2-dichloroethane	µg/L	28*	-	-	-	-
34	Tetrachloroethylene (PCE)	µg/L	2.0*	-	-	-	-
35	Trichloroethylene (TCE)	µg/L	27*	-	-	-	-
36	Vinyl chloride	µg/L	36*	-	-	-	-
37	Carbon tetrachloride	µg/L	0.90*	-	-	-	-
38	Base/Neutral Organic Compounds	µg/L				10*	

\* Mass limit (lbs/d) = Effluent concentration Limit (µg/L) x Flow Limit (MGD) x 0.00834 [lb\*L/(Mgal\*µg)]

Note: ml/L = milliliters per liter  
 mg/L = milligrams per liter  
 µg/L = micrograms per liter  
 TUa = acute toxicity units  
 TUc = chronic toxicity units  
 lbs/d = pounds per day  
 MGD = million gallons per day

**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 Permit. The discharge of groundwater extraction waste from any site shall not, separately or jointly with any other discharge, cause violations of the following water quality objectives in San Diego Bay. These limitations apply unless more stringent provisions exist in

either the Basin Plan, or an applicable State plan. The more stringent limitation shall apply.

1. Bacterial Characteristics

a. Water-Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water-contact sports, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- (1) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).
- (2) The fecal coliform density based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

b. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

The median total coliform density shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

2. Physical Characteristics

- a. Floating particulates and grease and oil shall not be visible.
- b. The discharge of waste shall not cause aesthetically undesirable discoloration of the surface of San Diego Bay.
- c. Natural light shall not be significantly reduced.
- d. The rate of deposition of solids and the characteristics of inert solids in San Diego Bay sediments shall not be changed such that benthic communities are degraded.

3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen demanding waste materials.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.



- d. The concentration of substances set forth in the Discharge Specifications in marine sediments shall not be increased to levels which would degrade indigenous biota.
  - e. The concentration of organic materials in San Diego Bay sediments shall not be increased to levels which would degrade marine life.
  - f. Nutrient materials shall not cause objectionable aquatic growth or degrade indigenous biota.
4. Biological Characteristics
- a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
  - b. The natural taste, odor, and color of fish, shellfish, or other aquatic resources used for human consumption shall not be altered.
  - c. The concentration of organic materials in fish, shellfish or other aquatic resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.
5. Radioactivity  
Discharge of radioactive waste shall not degrade marine life.
6. Toxic Materials Limitations  
Since there is no dilution, toxic materials limits are the same as the effluent limits.

## **B. Groundwater Limitations (Not Applicable)**

## **VII. Provisions**

### **A. Standard Provisions**

1. The Discharger shall comply with all Standard Provisions included in Attachment D of this General Permit.
2. Regional Board Standard Provisions. The Discharger shall comply with the following provisions:
  - a. The Discharger shall comply with all requirements and conditions of this General Permit. Any permit non-compliance constitutes a violation of the CWA and/or of the CWC and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of an application for permit renewal, modification, or reissuance.
  - b. The Discharger shall comply with all applicable federal, state, and local laws and regulations for handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the state in a manner which causes or threatens to cause a condition of pollution, contamination or nuisance as those terms are defined in CWC 13050.
  - c. The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the CWA.

- d. Any noncompliance with this General Permit is a violation of the CWC and/or the CWA and is grounds for denial of an application for Order renewal or modification.
- e. No discharge of waste into waters of the state, whether or not the discharge is made pursuant to WDRs, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.
- f. For the purposes of this General Permit, the term "permittee" used in parts of 40 CFR incorporated into this General Permit by reference and/or applicable to this General Permit shall have the same meaning as the term "Discharger" used elsewhere in this General Permit.
- g. This General Permit expires on June 13, 2012, after which, the terms and conditions of this permit are automatically continued pending issuance of a new General Permit, provided that all requirements of USEPA's NPDES regulations at 40 CFR 122.6 and the State's regulations at CCR Title 23, Section 2235.4 regarding the continuation of expired Orders and waste discharge requirements are met.
- h. Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this permit will be considered confidential, and all such information and documents shall be available for review by the public at the office of the Regional Water Board.
- i. A copy of this General Permit shall be maintained on-site at the Facility, and shall be available to Regional Water Board, State Water Board, and EPA personnel and/or their authorized representatives at all times.
- j. The Discharger shall comply with any interim limitations established by addendum, enforcement action, or revised waste discharge requirements that have been or may be adopted by the Regional Water Board.
- k. Failure to comply with provisions or requirements of this General Permit, 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.
- l. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, discharge specification, or receiving water limitation of this General Permit, the Discharger shall notify the Regional Water Board by telephone (858) 467-2952 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five 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.

- m. The Discharger is required to retain records, including all monitoring information and copies of all reports required by this General Permit, for five years unless directed otherwise by the Regional Board.
- n. ~~This General Permit may be modified, revoked and reissued, or terminated for cause due to promulgation of amended regulations, receipt of USEPA guidance concerning regulated activities, judicial decision, or in accordance with 40 Code of Federal Regulations (CFR) 122.62, 122.63, 122.64, and 124.5.~~
- o. Enrollment in this General Permit is temporary. The enrollee must re-enroll to be subject to the General Permit. Dischargers enrolled in this General Permit planning to discharge extracted groundwater waste after the expiration date of June 13, 2012 may be subject to new prohibitions or requirements based on the re-issuance of this General Permit after June 13, 2012.
- p. The enrollee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this General Permit and the Notice of Enrollment from the Regional Board, including such accelerated or additional monitoring as may be necessary to determine the nature, and effect of the noncomplying discharge.
- q. This General Permit or the Notice of Enrollment from the Regional Board, may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
  - (1) Violation of any terms or conditions of this General Permit or the Notice of Enrollment from the Regional Board;

- (2) Obtaining enrollment in this General Permit, or a Notice of Enrollment from the Regional Board, by misrepresentation or failure to disclose fully all relevant facts;
  - (3) A change in any condition that requires either a temporary or permanent reduction or elimination of the discharge subject to waste discharge requirements; or
  - (4) A finding that monitoring "indicator" pollutants listed in this General Permit do not ensure compliance with water quality criteria or objectives for the pollutants expected to be represented by the "indicator" pollutants.
- 
- r. The filing of a request by the enrollee for modification, revocation and reissuance, or termination of this General Permit or an associated discharge Notice of Enrollment from the Regional Board, or a notification of planned change in or anticipated noncompliance with this General Permit or discharge Notice of Enrollment does not stay any condition of this General Permit or the Notice of Enrollment from the Regional Board.
  - s. Notwithstanding Provision 2.e above, if any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the CWA for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this General Permit, the Regional Board may institute proceedings under these regulations to modify or revoke and reissue this General Permit to conform to the toxic effluent standard or prohibition.
  - t. In addition to any other grounds specified herein, this General Permit or an Notice of Enrollment from the Regional Board shall be modified or revoked at any time if, on the basis of any data, the Regional Board determines that continued discharges may cause unreasonable degradation of the aquatic environment.
  - u. The Regional Board or the Director of the USEPA may require any person requesting enrollment under this general permit or subject to waste discharge requirements under this general permit to apply for and obtain an individual NPDES permit. Cases where an individual NPDES permit may be required include but are not limited to those described in 40 CFR 122.28 (b)(3)(i) and (b)(3)(ii), and where the volume of a discharge exceeds 10 million gallons per year, or the duration of a discharge exceeds 3 years.

- v. It shall not be a defense for the enrollee in an enforcement action that effluent limitation violations are a result of analytical variability rendering the results inaccurate. The validity of the testing results, whether or not the enrollee has monitored or sampled more frequently than required by this General Permit, shall not be a defense to an enforcement action.
- w. A copy of this General Permit, and the Notice of Enrollment from the Regional Board shall be posted at a prominent location at or near the enrollee's facility, and shall be available to operating personnel at all times.
- x. ~~The enrollee shall take all reasonable steps to minimize or prevent any discharge in violation of this General Permit which has a reasonable likelihood of adversely affecting human health or the environment.~~

## **B. Monitoring and Reporting Program Requirements**

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

## **C. Special Provisions**

1. Reopener Provisions (Not Applicable)
2. Special Studies, Technical Reports and Additional Monitoring Requirements (Not Applicable)
3. Best Management Practices and Pollution Prevention Plan (Not Applicable)
4. Compliance Schedules (Not Applicable)
5. Construction, Operation and Maintenance Specifications (Not Applicable)
6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)
7. Other Special Provisions

The Dischargers shall dispose of solids removed from liquid wastes in a manner that is consistent with Title 27 of the CCR and approved by the Regional Board.

## **VIII. Compliance Determination**

Compliance with the effluent limitations contained in Section IV of this General Permit will be determined as specified below:

**A. Average Monthly Effluent Limitation (AMEL)**

If the average of daily discharges over a calendar month exceeds the AMEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). The average of daily discharges over the calendar month that exceeds the AMEL for a parameter will be considered out of compliance for that month only. If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for that calendar month. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

**B. Average Weekly Effluent Limitation (AWEL)**

If the average of daily discharges over a calendar week exceeds the AWEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for each day of that week for that parameter, resulting in seven days of non-compliance. The average of daily discharges over the calendar week that exceeds the AWEL for a parameter will be considered out of compliance for that week only. If only a single sample is taken during the calendar week and the analytical result for that sample exceeds the AWEL, the Discharger will be considered out of compliance for that calendar week. For any one calendar week during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar week.

**C. Maximum Daily Effluent Limitation (MDEL)**

If a daily discharge exceeds the MDEL for a given parameter, an alleged violation will be flagged and the Discharger will be considered out of compliance for that parameter for that one day only within the reporting period. For any one day during which no sample is taken, no compliance determination can be made for that day.

**D. Instantaneous Minimum Effluent Limitation**

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, a violation will be flagged and 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).

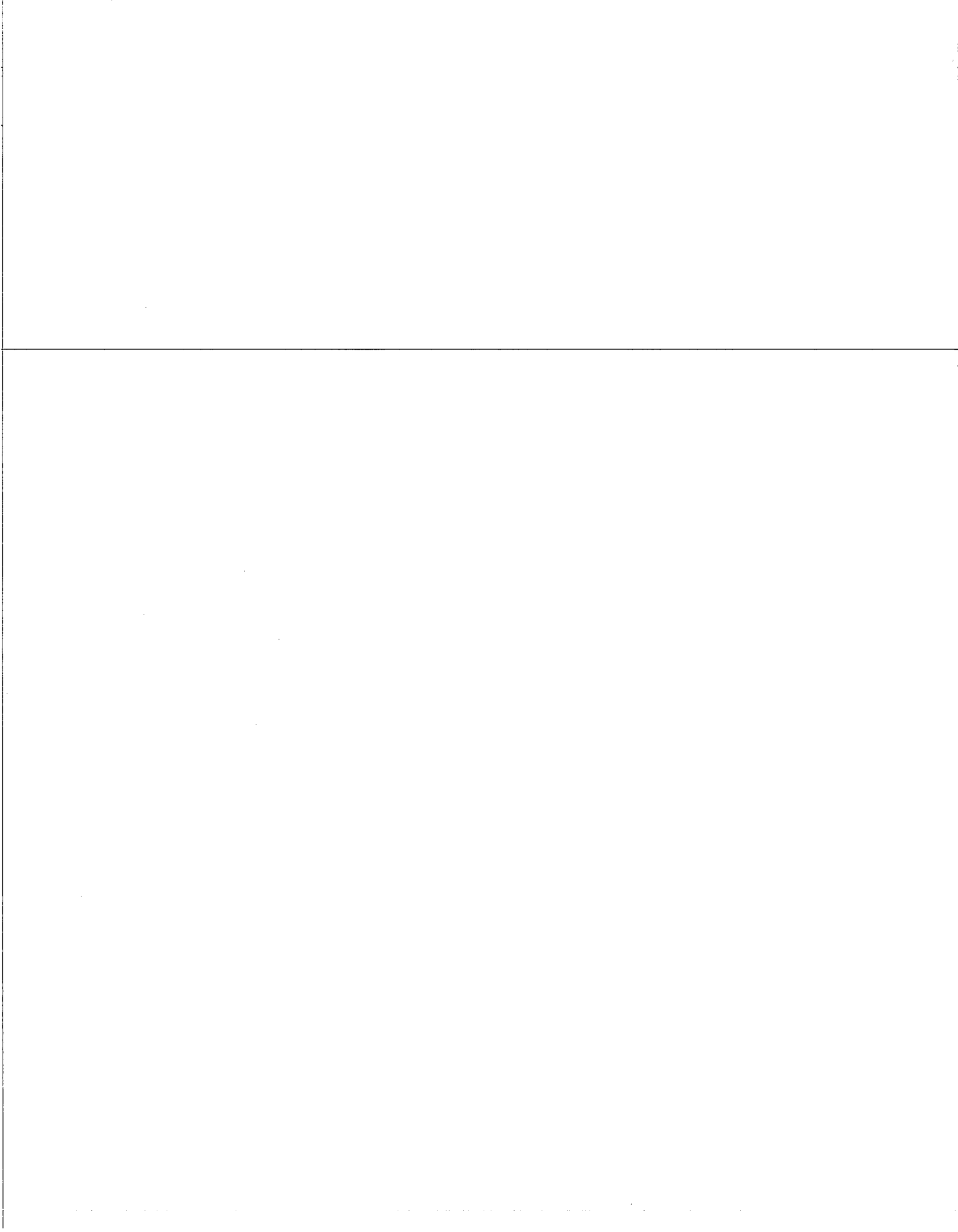
**E. Instantaneous Maximum Effluent Limitation**

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, a violation will be flagged and 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).

#### **F. Six-Month Median Effluent Limitation**

The Discharger shall determine the six-month median effluent value (SMEV) for a given parameter by calculating the statistical median of all daily effluent values (DEVs) for each parameter within each six-month calendar period (January-June and July-December). The SMEV determination for a given six-month calendar period shall not include DEVs from any other six-month calendar period. ~~If only a single DEV is obtained for a parameter during a six-month calendar period, that DEV shall be considered the SMEV for that parameter for that given six-month calendar period.~~ The SMEV shall be attributed to each day of the six-month calendar period for determination of compliance with the six-month median effluent limitation (SMEL) for a given parameter for each day of that given six-month calendar period, resulting in approximately 180 days of non-compliance depending on the number of days in the six-month calendar period. If the SMEV exceeds the six-month median, the Discharger will be considered out of compliance for each day for the six-month period. The SMEV cannot be determined for any six month calendar period during which no DEV is obtained.





## Attachment A – Definitions

**Arithmetic Mean ( $\mu$ ),** also called the average: 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.

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

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

**Coefficient of Variation (CV):** a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

**Cone of Depression:** A depression in the water table that develops around a pumped well.

**Cone of Influence:** The depression, roughly conical in shape, produced in a water table by the pumping of water from a well.

**Contamination Site:** A site that is currently under investigation or cleanup for any medium (air, soil, water), or is provided oversight by any local, state, or federal environmental regulatory agency, such as the County of San Diego, Air Pollution Control District, and Department of Toxics Substance Control, or the quality of surface water or groundwater at a site has been altered by wastes to a degree which unreasonably affects either the waters for beneficial uses or facilities which serve these beneficial uses.

**Daily Discharge:** Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12 a.m. through 11:59 p.m.) 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 one 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):** those sample results less than the Reporting Level (RL), but greater than or equal to the laboratory's Method Detection Limit (MDL).

**Dilution Credit:** the amount of dilution granted to a Discharger 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):** 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:** 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.

**Notice of Enrollment:** A notice from the Regional Board to the discharger that the NOI application has been accepted and the project is enrolled in this General Permit. The Notice of Enrollment will specify the discharge flow limit, any additional or increase in monitoring due to specific circumstances of the discharge, or other requirements.

**Estimated Chemical Concentration:** the estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the Minimum Level value.

**Estuaries:** waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered

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

**Inland Surface Waters:** all surface waters of the State that do not include the ocean, enclosed bays, or estuaries. Inland surface water consist of freshwater and do not have any measurable salinity.

**Instantaneous Maximum Effluent Limitation:** the highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

**Instantaneous Minimum Effluent Limitation:** the lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

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

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

**Method Detection Limit (MDL):** 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:** a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

**Not Detected (ND):** those sample results less than the laboratory's MDL.

**Notice of Intent (NOI):** A form completed and signed by a Discharger notifying the Regional Board that the Discharger is applying for enrollment under the terms and conditions of the General Permit and will comply with the General Permit for a groundwater extraction activity at a specific site.

**Notice of Termination (NOT):** A letter completed and signed by a Discharger notifying the Regional Board that the Discharger no longer wishes to discharge under the General Permit. Submission of a NOT constitutes notice that the owner (and his/her agent) of the site identified on the letter has ceased discharge groundwater associated with groundwater extraction activities at the site under this General Permit.

**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 Board's California Ocean Plan.

**Permanent groundwater extraction activities:** Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s).

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

**Radius of Influence:** The radial distance from the center of a wellbore to the point where there is no lowering of the water table or potentiometric surface (the edge of the cone of depression).

**Reporting Level (RL):** the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this General Permit. The MLs included in this General Permit correspond to approved analytical methods for reporting a sample result that are selected by the Regional 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.

**Six-Month Median Effluent Limitation:** the highest allowable median of all daily discharges, based on 24-hour flow-weighted composite samples, for any 180-day period.

**Source of Drinking Water:** any water designated as municipal or domestic supply (MUN) in a Regional Board Basin Plan.

**Standard Deviation ( $\sigma$ ):** a measure of variability that is calculated as follows:

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

where:

x is the observed value;

$\mu$  is the arithmetic mean of the observed values; and

n is the number of samples.

**Temporary Discharge:** Discharge of extracted groundwater waste from groundwater cleanup with a projected cleanup date and subsurface excavation that requires groundwater extraction that is not a permanent groundwater extraction activity.

Discharges of groundwater for the purpose of protecting subterranean structures from groundwater infiltration are not considered groundwater cleanup projects, whether or not such discharges cleanup or remove pollutants from the groundwater. These activities may be covered under the statewide general NPDES permit for discharges from utility vaults and underground structures to surface water (CAG990002).

**Toxicity Reduction Evaluation (TRE):** 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.)

**Waters of the United States or waters of the U.S.:** (40 e-CFR 122.2, March 20, 2007) (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial sea; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in

paragraphs (a) through (f) of this definition. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Attachment B1 – Notice of Intent Form

**NOTICE OF INTENT (NOI)**  
**TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT**  
**TO DISCHARGE GROUNDWATER EXTRACTION WASTE**  
**TO SAN DIEGO BAY**  
**ORDER NO. R9-2007-0034**

General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges from Temporary Groundwater Extraction and Similar Waste Discharges To San Diego Bay, Tributaries Thereto Under Tidal Influence, and Storm Drains or Other Conveyance Systems Tributary Thereto General Permit No. CAG919001

Attach additional sheets as necessary to provide complete information requested in this NOI.

<b>ELIGIBILITY</b>
<p><input type="checkbox"/> I understand that this General Permit is intended to cover temporary discharges of waste to San Diego Bay from groundwater extraction activities and that this discharge is eligible for enrollment in this General permit because the following applies to this discharge. All items <u>must</u> be checked.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> A. The discharge is into San Diego Bay or a tributary of San Diego Bay that is a water of the United States as defined in the definitions section of this General Permit.</li> <li><input type="checkbox"/> B. The discharge is a temporary discharge, unless exempt.</li> <li><input type="checkbox"/> C. The discharge will comply with the Discharge Specifications of this General Permit.</li> <li><input type="checkbox"/> D. A scale appropriate vicinity map(s) has been included with this submittal.</li> <li><input type="checkbox"/> E. Identify and discuss technical and economic feasibility of alternative disposal options.</li> <li><input type="checkbox"/> F. If discharging to an MS4, obtain authorization from the appropriate municipality and submit proof.</li> </ul>

<b>NOTICE OF INTENT STATUS</b>
<p>A. MARK ONLY ONE ITEM</p> <p>1. <input type="checkbox"/> New Discharger</p> <p>2. <input type="checkbox"/> Change of Information (This section is not for a change of owner), WDID No.: _____</p>
<p>B. Is this a renewal of an expiring individual or general permit? 1. <input type="checkbox"/> No 2. <input type="checkbox"/> Yes, Order No.: _____</p>

<b>OWNER/OPERATOR</b>		
A. Name	Owner/Operator Type (Check One) 1. <input type="checkbox"/> City    5. <input type="checkbox"/> Private 2. <input type="checkbox"/> County 3. <input type="checkbox"/> State 4. <input type="checkbox"/> Gov. Combo	
B. Mailing Address		
C. City		
D. County	E. State	F. Zip Code
G. Contact Person		H. Phone
I. Title		

J. Email \_\_\_\_\_

Additional Owners \_\_\_\_\_  
(If additional owners/operators are involved, provide the information in a supplemental page.)

<b>BILLING ADDRESS</b> (Enter information <b>only</b> if different from above)		
<b>Send to:</b> <input type="checkbox"/> Owner/Operator <input type="checkbox"/> Other	A. Name	
	B. Title	
C. Mailing Address		
D. City		
E. County	F. State	G. Zip Code

<b>GROUNDWATER EXTRACTION INFORMATION</b>	
A. Nature of Groundwater Extraction Activity: 1. <input type="checkbox"/> Subsurface Excavation a. <input type="checkbox"/> Foundation b. <input type="checkbox"/> Tunneling c. <input type="checkbox"/> Construction d. <input type="checkbox"/> Footing e. <input type="checkbox"/> Other _____ 2. <input type="checkbox"/> Remediation Project 3. <input type="checkbox"/> Other _____	
B. <input type="checkbox"/> This project is associated with a project that requires Regional Board license, permit, or oversight? Explain: Construction storm water, 401 Certifications, WDR, UST or cleanup project, etc.	
C. Duration and Start Date 1. Proposed Start Date of Groundwater Extraction Discharge: _____ 2. Estimated Duration of Groundwater Extraction Discharge: _____	
D. 1. <input type="checkbox"/> Describe the historical use of the land within the cone/radius of influence.  2. <input type="checkbox"/> Identify all known contamination sites and ground water plumes within half mile of each groundwater extraction points to be used in the project. Attach a source description and list of constituents. Attach site assessment (If one has been done)	
E. For each discharge point identify the location of discharge according to the following: (show in vicinity map) 1. <input type="checkbox"/> Storm Drain, <input type="checkbox"/> Attach proof of authorization from the appropriate municipality for the discharge into the storm drain or conveyance used to convey the discharge. 2. <input type="checkbox"/> Directly into San Diego Bay, <input type="checkbox"/> submerged or <input type="checkbox"/> on the surface 3. <input type="checkbox"/> Freshwater Tributary of San Diego Bay. Distance to San Diego Bay _____  Salinity of the Tributary at the discharge point _____	



**GROUNDWATER EXTRACTION INFORMATION**

F. Will treatment be required to meet the Discharge Specifications of this General Permit?

1.  Yes      2.  No

If Yes, attach the following:

- a.  A report certifying the adequacy of each component of the treatment facilities or other type of contingency plan. The report shall also certify that:
- (1)  all treatment facility startup and operation instruction manuals are adequate and available to operating personnel,
  - (2)  adequate treatment facility maintenance and testing (if treatment facilities are on "standby") schedules are included in the treatment facility operations manual,
  - (3)  treatment facilities and appurtenances can be fully operational, as designed, within 24 hours, and
  - (4)  influent and effluent sampling locations or ports are located in areas where samples representative of the waste stream to be monitored can be obtained.
- b.  The design engineer shall affix his/her signature and engineering license number to this certification report.

G. Additional Attachments

- 1.  Describe best management practices (bmp) and contingency plan.
- 2.  Provide the results of the analysis of the groundwater to be extracted for all of those constituents, as determined by the sampling requirement criteria described in this General Permit, for the proposed receiving water type.

**RECEIVING WATER INFORMATION**

A. Name of receiving water(s): (San Diego Bay, Chollas Creek, Sweetwater River, etc.)

B. Describe the types of receiving waters affected: (bay, creek, river, etc.)

C. Receiving water flows seasonally 1.  Yes      2.  No

D. More than one discharge point is proposed?

1.  Yes      2.  No      If Yes, how many? \_\_\_\_\_

And distance between points \_\_\_\_\_  
Include in Vicinity Map

3. Location of Discharge Points: (attach)  
Example: Outfall 001 (Latitude and Longitude)

E. Proposed Flow (MGD or gpd) of the discharge:

1. Maximum Discharge: \_\_\_\_\_

2. Average Daily Flowrate: \_\_\_\_\_

3. Basis for flow rate estimates (if necessary attach):

F. Hydrologic Subarea Number(s) at the point of discharge:

### APPLICATION FEE

The initial fee and annual fee are based upon the type of pollutants to be discharged or potentially discharged.

For the current schedule, view the document at: <http://www.waterboards.ca.gov/fees/docs/adoptedfeeschedule.pdf>

The fee, as of the date of adoption of this General Permit is as follows (established pursuant to CCR Title 23, Division 3, Chapter 9, Article 1, Section 22000(b)(9)):

Make checks payable to "SWRCB" and include the project's name in the "memo" field.

**Category 3 Lowest Threat to Water Quality**

The discharge will not require any treatment.

Current fee is \$1,000 plus \$185 surcharge = \$1,185

**Category 2 Moderate Threat to Water Quality**

The discharge will require treatment to meet non-priority pollutant limits. Examples of non-priority pollutants include, but are not limited to, nutrients, inorganic compounds, pH, and temperature.

Current fee is \$2,900 plus \$537 surcharge = \$3,437

**Category 1 Highest Threat to Water Quality**

The discharge will require treatment to meet priority toxic pollutant limits and that could impair beneficial uses if limits are violated.

Current fee is \$4,800 plus \$888 surcharge = \$5,688

### DESCRIPTION OF DISCHARGE

Describe the discharge(s) proposed. List any potential pollutants in the discharge. Attach additional sheets if needed.

**CALIFORNIA CONSTITUTION COMPLIANCE**

- A.  Discuss the potential uses of the extracted groundwaters, efforts made to ensure use to the fullest extent possible and compliance with Article 10, Section 2 of the California Constitution (attach)

CALIFORNIA CONSTITUTION  
ARTICLE 10 WATER

SEC. 2. It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served; ~~and such right does not and shall not extend to the waste or unreasonable use or~~ unreasonable method of use or unreasonable method of diversion of water. Riparian rights in a stream or water course attach to, but to no more than so much of the flow thereof as may be required or used consistently with this section, for the purposes for which such lands are, or may be made adaptable, in view of such reasonable and beneficial uses; provided, however, that nothing herein contained shall be construed as depriving any riparian owner of the reasonable use of water of the stream to which the owner's land is riparian under reasonable methods of diversion and use, or as depriving any appropriator of water to which the appropriator is lawfully entitled.

This section shall be self-executing, and the Legislature may also enact laws in the furtherance of the policy in this section contained.

## ANTIDEGREDATION POLICIES

- A.  Statement of compliance with 40 CFR 131.12 and State Water Resources Control Board Resolution No. 68-16 (attach) (collectively antidegradation policies)

### 40 CFR 131.12 Antidegradation policy.

(a) The State shall develop and adopt a statewide antidegradation policy and identify the methods for implementing such policy pursuant to this subpart. The antidegradation policy and implementation methods shall, at a minimum, be consistent with the following:

- (1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
- (2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable best management practices for nonpoint source control.
- (3) Where high quality waters constitute an outstanding National resource, such as waters of National and State parks and wildlife refuges, and waters of exceptional recreational or ecological significance, that water quality shall be maintained and protected.
- (4) In those cases where potential water quality impairment associated with a thermal discharge is involved, the antidegradation policy and implementing method shall be consistent with section 316 of the Act.

### RESOLUTION NO. 68-16

#### STATEMENT OF POLICY WITH RESPECT TO MAINTAINING HIGH QUALITY OF WATERS IN CALIFORNIA

WHEREAS the California Legislature has declared that it is the policy of the State that the granting of permits and licenses for unappropriated water and the disposal of wastes into the waters of the State shall be so regulated as to achieve highest water quality consistent with maximum benefit to the people of the State and shall be controlled so as to promote the peace, health, safety and welfare of the people of the State; and

WHEREAS water quality control policies have been and are being adopted for waters of the State; and

WHEREAS the quality of some waters of the State is higher than that established by the adopted policies and it is the intent and purpose of this Board that such higher quality shall be maintained to the maximum extent possible consistent with the declaration of the Legislature;

#### NOW, THEREFORE, BE IT RESOLVED:

1. Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.
2. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur, and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.
3. In implementing this policy, the Secretary of the Interior will be kept advised and will be provided with such information as he will need to discharge his responsibilities under the Federal Water Pollution Control Act.

BE IT FURTHER RESOLVED that a copy of this resolution be forwarded to the Secretary of the Interior as part of California's water quality control policy submission.

#### CERTIFICATION

The undersigned, Executive Officer of the State Water Resources Control Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on October 24, 1968.

Dated: October 28, 1968

Kerry W. Mulligan, Executive Officer  
State Water Resources Control Board

**CERTIFICATION**

- I have read this general groundwater extraction waste discharge permit Order No. R9-2007-0034 and hereby certify that:
1. I understand the requirements of Order No. R9-2007-0034.
  2. The enclosed information describing my proposed groundwater extraction waste discharge is accurate and describes a discharge that meets the requirements of Order No. R9-2007-0034, which is the applicable general groundwater extraction waste discharge permit.
  3. I will comply with all terms, conditions, and requirements of Order No. R9-2007-0034.

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 ensure 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 directly responsible for gathering the information, the information submitted is true, accurate, and complete to the best of my knowledge and belief. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the criteria for eligibility will be complied with.

A. Printed Name:

B. Signature:

C. Date:

D. Title: No Contractor/ No Consultant\*

\*No contractor nor consultant may sign for this permit.

Please submit the NOI, first annual fee, map, and other attachments to the following address:

CRWQCB – San Diego Region  
9174 Sky Park Court, Suite 100  
San Diego, CA 92123

Attn: Groundwater Extraction to San Diego Bay  
Southern Core Regulatory Unit  
NOTICE OF INTENT

**XIII. STATE USE ONLY**

WDID:	Staff Initials:	Status: <input type="checkbox"/> Complete <input type="checkbox"/> Incomplete <input type="checkbox"/> Withdrawn
Date NOI Received:	Check #:	
Date NOI Processed:	Fee Amount Received: \$	
Comments:		

Attachment B2 – Priority Toxic Pollutants

Source: [65 FR 31711, May 18, 2000, as amended at 66 FR 9961, Feb. 13, 2001; 68 FR 62747, Nov. 6, 2003]

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
Numeric criteria for priority toxic pollutants for the State of California

A		B Freshwater		C Saltwater		D Human Health (10 <sup>-6</sup> risk for carcinogens) For consumption of:	
# Compound	CAS Number	Criterion Maximum Conc. <sup>c</sup> B1	Criterion Continuous Conc. <sup>c</sup> B2	Criterion Maximum Conc. <sup>c</sup> C1	Criterion Continuous Conc. <sup>c</sup> C2	Water & Organisms (µg/L) D1	Organisms Only (µg/L) D2
1. Antimony	7440360					14 a,s	4300 a,t
2. Arsenic <sup>b</sup>	7440382	340 i,m,w	150 i,m,w	69 i,m	36 i,m		
3. Beryllium	7440417					n	n
4. Cadmium <sup>b</sup>	7440439	4.3 e,i,m,w,x	2.2 e,i,m,w	42 i,m	9.3 i,m	n	n
5a. Chromium (III)	16065831	550 e,i,m,o	180 e,i,m,o			n	n
5b. Chromium (VI) <sup>b</sup>	18540299	16 i,m,w	11 i,m,w	1100 i,m	50 i,m	n	n
6. Copper <sup>b</sup>	7440508	13 e,i,m,w,x	9.0 e,i,m,w	4.8 i,m	3.1 i,m	1300	
7. Lead <sup>b</sup>	7439921	65 e,i,m	2.5 e,i,m	210 i,m	8.1 i,m	n	n
8. Mercury <sup>b</sup>	7439976	[Reserved]	[Reserved]	[Reserved]	[Reserved]	0.050 a	0.051 a
9. Nickel <sup>b</sup>	7440020	470 e,i,m,w	52 e,i,m,w	74 i,m	8.2 i,m	610 a	4600 a
10. Selenium <sup>b</sup>	7782492	[Reserved] p	5.0 q	290 i,m	71 i,m	n	n
11. Silver <sup>b</sup>	7440224	3.4 e,i,m		1.9 i,m			
12. Thallium	7440280					1.7 a,s	6.3 a,t
13. Zinc <sup>b</sup>	7440666	120 e,i,m,w,x	120 e,i,m,w	90 i,m	81 i,m		
14. Cyanide <sup>b</sup>	57125	22 o	5.2 o	1 r	1 r	700 a	220,000 a,j
15. Asbestos	1332214					7,000,000 fibers/L k,s	
16. 2,3,7,8-TCDD (Dioxin)	1746016					0.000000013 c	0.000000014 c
17. Acrolein	107028					320 s	780 t
18. Acrylonitrile	107131					0.059 a,c,s	0.66 a,c,t
19. Benzene	71432					1.2 a,c	71 a,c
20. Bromoform	75252					4.3 a,c	360 a,c
21. Carbon Tetrachloride	56235					0.25 a,c,s	4.4 a,c,t
22. Chlorobenzene	108907					680 a,s	21,000 a,j,t
23. Chlorodibromomethane	124481					0.401 a,c	34 a,c
24. Chloroethane	75003						
25. 2-Chloroethylvinyl Ether	110758						

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
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26. Chloroform	67663					[Reserved]	[Reserved]
27. Dichlorobromomethane	75274					0.56 a,c	46 a,c
28. 1,1-Dichloroethane	75343						
29. 1,2-Dichloroethane	107062					0.38 a,c,s	99 a,c,t
30. 1,1-Dichloroethylene	75354					0.057 a,c,s	3.2 a,c,t
31. 1,2-Dichloropropane	78875					0.52 a	39 a
32. 1,3-Dichloropropylene	542756					10 a,s	1,700 a,t
33. Ethylbenzene	100414					3,100 a,s	29,000 a,t
34. Methyl Bromide	74839					48 a	4,000 a
35. Methyl Chloride	74873					n	n
36. Methylene Chloride	75092					4.7 a,c	1,600 a,c
37. 1,1,2,2-Tetrachloroethane	79345					0.17 a,c,s	11 a,c,t
38. Tetrachloroethylene	127184					0.8 c,s	8.85 c,t
39. Toluene	108883					6,800 a	200,000 a
40. 1,2-Trans-Dichloroethylene	156605					700 a	140,000 a
41. 1,1,1-Trichloroethane	71556					n	n
42. 1,1,2-Trichloroethane	79005					0.60 a,c,s	42 a,c,t
43. Trichloroethylene	79016					2.7 c,s	81 c,t
44. Vinyl Chloride	75014					2 c,s	525 c,t
45. 2-Chlorophenol	95578					120 a	400 a
46. 2,4-Dichlorophenol	120832					93 a,s	790 a,t
47. 2,4-Dimethylphenol	105679					540 a	2,300 a
48. 2-Methyl-4,6-Dinitrophenol	534521					13.4 s	765 t
49. 2,4-Dinitrophenol	51285					70 a,s	14,000 a,t
50. 2-Nitrophenol	88755						
51. 4-Nitrophenol	100027						
52. 3-Methyl-4-Chlorophenol	59507						
53. Pentachlorophenol	87865	19 f,w	15 f,w	13	7.9	0.28 a,c	8.2 a,c,j
54. Phenol	108952					21,000 a	4,600,000 a,j,t
55. 2,4,6-Trichlorophenol	88062					2.1 a,c	6.5 a,c
56. Acenaphthene	83329					1,200 a	2,700 a
57. Acenaphthylene	208968						
58. Anthracene	120127					9,600 a	110,000 a



**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
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59. Benzidine	92875					0.00012 a,c,s	0.00054 a,c,l
60. Benzo(a)Anthracene	56553					0.0044 a,c	0.049 a,c
61. Benzo(a)Pyrene	50328					0.0044 a,c	0.049 a,c
62. Benzo(b)Fluoranthene	205992					0.0044 a,c	0.049 a,c
63. Benzo(ghi)Perylene	191242						
64. Benzo(k)Fluoranthene	207089					0.0044 a,c	0.049 a,c
65. Bis(2-Chloroethoxy)Methane	111911						
66. Bis(2-Chloroethyl)Ether	111444					0.031 a,c,s	1.4 a,c,t
67. Bis(2-Chloroisopropyl)Ether	39638329					1,400 a	170,000 a,l
68. Bis(2-Ethylhexyl)Phthalate	117617					1.8 a,c,s	5.9 a,c,t
69. 4-Bromophenyl Phenyl Ether	101553						
70. Butylbenzyl Phthalate	85687					3,000 a	5,200 a
71. 2-Chloronaphthalene	91587					1,700 a	4,300 a
72. 4-Chlorophenyl Phenyl Ether	7005723						
73. Chrysene	218019					0.0044 a,c	0.049 a,c
74. Dibenzo(a,h)Anthracene	53703					0.0044 a,c	0.049 a,c
75. 1,2 Dichlorobenzene	95501					2,700 a	17,000 a
76. 1,3 Dichlorobenzene	541731					400	2,600
77. 1,4 Dichlorobenzene	106467					400	2,600
78. 3,3'-Dichlorobenzidine	91941					0.04 a,c,s	0.077 a,c,t
79. Diethyl Phthalate	84662					23,000 a,s	120,000 a,t
80. Dimethyl Phthalate	131113					313,000 s	2,900,000 t
81. Di-n-Butyl Phthalate	84742					2,700 a,s	12,000 a,t
82. 2,4-Dinitrotoluene	121142					0.11 c,s	9.1 c,l
83. 2,6-Dinitrotoluene	606202						
84. Di-n-Octyl Phthalate	117840						
85. 1,2-Diphenylhydrazine	122687					0.040 a,c,s	0.54 a,c,l
86. Fluoranthene	206440					300 a	370 a
87. Fluorene	86737					1,300 a	14,000 a
88. Hexachlorobenzene	118741					0.00075 a,c	0.00077 a,c
89. Hexachlorobutadiene	87683					0.44 a,c,s	50 a,c,t
90. Hexachlorocyclopentadiene	77474					240 a,s	17,000 a,l,t
91. Hexachloroethane	67721					1.9 a,c,s	8.9 a,c,t

**Table in Paragraph (b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS**  
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92. Indeno(1,2,3-cd) Pyrene	193395					0.0044 a,c	0.049 a,c
93. Isophorone	78591					8.4 c,s	600 c,t
94. Naphthalene	91203						
95. Nitrobenzene	98953					17 a,s	1,900 a,j,t
96. N-Nitrosodimethylamine	62759					0.00069 a,c,s	8.1 a,c,t
97. N-Nitrosodi-n-Propylamine	621647					0.005 a	1.4 a
98. N-Nitrosodiphenylamine	86308					5.0 a,c,s	16 a,c,t
99. Phenanthrene	85018						
100. Pyrene	129000					960 a	11,000 a
101. 1,2,4-Trichlorobenzene	120821						
102. Aldrin	309002	3 g		1.3 g		0.00013 a,c	0.00014 a,c
103. alpha-BHC	319846					0.0039 a,c	0.013 a,c
104. beta-BHC	319857					0.014 a,c	0.046 a,c
105. gamma-BHC	58899	0.95 w		0.16 g		0.019 c	0.063 c
106. delta-BHC	319868						
107. Chlordane	57749	2.4 g	0.0043 g	0.09 g	0.004 g	0.00057 a,c	0.00059 a,c
108. 4,4'-DDT	50293	1.1 g	0.001 g	0.13 g	0.001 g	0.00059 a,c	0.00059 a,c
109. 4,4'-DDE	72559					0.00059 a,c	0.00059 a,c
110. 4,4'-DDD	72548					0.00083 a,c	0.00084 a,c
111. Dieldrin	80571	0.24 w	0.056 w	0.71 g	0.0019 g	0.00014 a,c	0.00014 a,c
112. alpha-Endosulfan	959988	0.22 g	0.056 g	0.034 g	0.0087 g	110 a	240 a
113. beta-Endosulfan	33213659	0.22 g	0.056 g	0.034 g	0.0087 g	110 a	240 a
114. Endosulfan Sulfate	1031078					110 a	240 a
115. Endrin	72208	0.086 w	0.036 w	0.037 g	0.0023 g	0.76 a	0.81 a,j
116. Endrin Aldehyde	7421934					0.76 a	0.81 a,j
117. Heptachlor	76448	0.52 g	0.0038 g	0.053 g	0.0036 g	0.00021 a,c	0.00021 a,c
118. Heptachlor Epoxide	1024573	0.52 g	0.0038 g	0.053 g	0.0036 g	0.00010 a,c	0.00011 a,c
119-125. Polychlorinated biphenyls (PCBs)			0.014 u		0.03 u	0.00017 c,v	0.00017 c,v
126. Toxaphene	8001352	0.73	0.0002	0.21	0.0002	0.00073 a,c	0.00075 a,c
Total Number of Criteria <sup>h</sup>		22	21	22	20	92	90

## Footnotes to

### Table in paragraph(b)(1) of 40 CFR 131.38 —126 PRIORITY POLLUTANTS:

- a. Criteria revised to reflect the Agency  $q1^*$  or RfD, as contained in the Integrated Risk Information System (IRIS) as of October 1, 1996. The fish tissue bioconcentration factor (BCF) from the 1980 documents was retained in each case.
- b. Criteria apply to California waters except for those waters subject to objectives in Tables III-2A and III-2B of the San Francisco Regional Water Quality Control Board's (SFRWQCB) 1986 Basin Plan that were adopted by the SFRWQCB and the State Water Resources Control Board, approved by EPA, and which continue to apply. For copper and nickel, criteria apply to California waters except for waters south of Dumbarton Bridge in San Francisco Bay that are subject to the objectives in the SFRWQCB's Basin Plan as amended by SFRWQCB Resolution R2-2002-0061, dated May 22, 2002, and approved by the State Water Resources Control Board. EPA approved the aquatic life site-specific objectives on January 21, 2003. The copper and nickel aquatic life site-specific objectives contained in the amended Basin Plan apply instead.
- c. Criteria are based on carcinogenicity of 10 (-6) risk.
- d. Criteria Maximum Concentration (CMC) equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects. Criteria Continuous Concentration (CCC) 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. ug/L equals micrograms per liter.
- e. Freshwater aquatic life criteria for metals are expressed as a function of total hardness (mg/L) in the water body. The equations are provided in matrix at paragraph (b)(2) of this section. Values displayed above in the matrix correspond to a total hardness of 100 mg/l.
- f. Freshwater aquatic life criteria for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Values displayed above in the matrix correspond to a pH of 7.8.  $CMC = \exp(1.005(\text{pH})-4.869)$ .  $CCC = \exp(1.005(\text{pH})-5.134)$ .
- g. This criterion is based on 304(a) aquatic life criterion issued in 1980, and was issued in one of the following documents: Aldrin/Dieldrin (EPA 440/5-80-019), Chlordane (EPA 440/5-80-027), DDT (EPA 440/5-80-038), Endosulfan (EPA 440/5-80-046), Endrin (EPA 440/5-80-047), Heptachlor (440/5-80-052), Hexachlorocyclohexane (EPA 440/5-80-054), Silver (EPA 440/5-80-071). The Minimum Data Requirements and derivation procedures were different in the 1980 Guidelines than in the 1985 Guidelines. For example, a "CMC" derived using the 1980 Guidelines was derived to be used as an instantaneous maximum. If assessment is to be done using an averaging period, the values given should be divided by 2 to obtain a value that is more comparable to a CMC derived using the 1985 Guidelines.
- h. These totals simply sum the criteria in each column. For aquatic life, there are 23 priority toxic pollutants with some type of freshwater or saltwater, acute or chronic criteria. For human health, there are 92 priority toxic pollutants with either "water + organism" or "organism only" criteria. Note that these totals count chromium as one pollutant even though EPA has developed criteria based on two valence states. In the matrix, EPA has assigned numbers 5a and 5b to the criteria for chromium to reflect the fact that the list of 126 priority pollutants includes only a single listing for chromium.
- i. Criteria for these metals are expressed as a function of the water-effect ratio, WER, as defined in paragraph (c) of this section.  $CMC = \text{column B1. or C1 value} \times \text{WER}$ ;  $CCC = \text{column B2. or C2 value} \times \text{WER}$ .
- j. No criterion for protection of human health from consumption of aquatic organisms (excluding water) was presented in the 1980 criteria document or in the 1986 Quality Criteria for Water. Nevertheless, sufficient information was presented in the 1980 document to allow a calculation of a criterion, even though the results of such a calculation were not shown in the document.
- k. The CWA 304(a) criterion for asbestos is the MCL.

I. [Reserved]

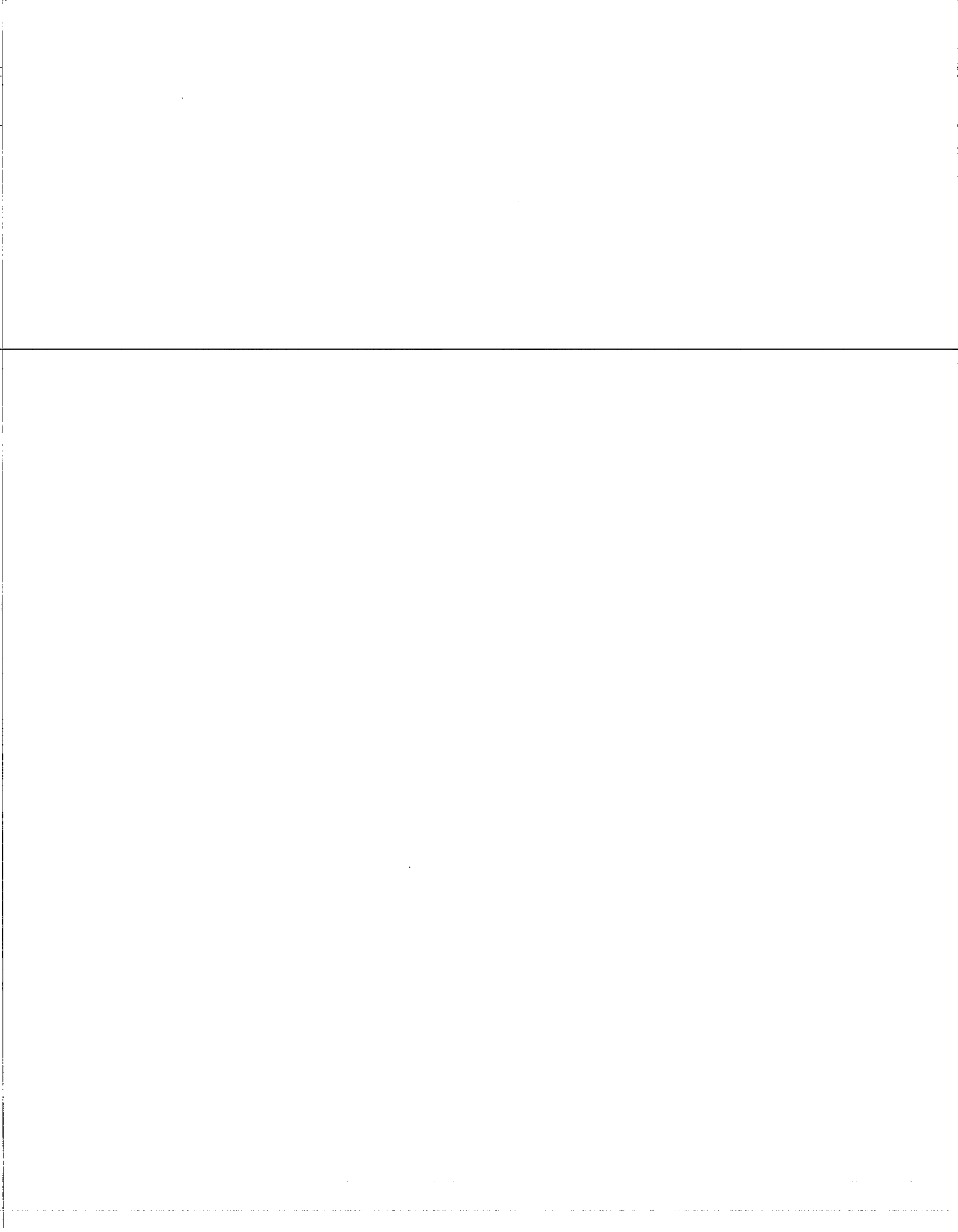
- m. These freshwater and saltwater criteria for metals are expressed in terms of the dissolved fraction of the metal in the water column. Criterion values were calculated by using EPA's Clean Water Act 304(a) guidance values (described in the total recoverable fraction) and then applying the conversion factors in §131.36(b)(1) and (2).
- n. EPA is not promulgating human health criteria for these contaminants. However, permit authorities should address these contaminants in NPDES permit actions using the State's existing narrative criteria for toxics.
- o. These criteria were promulgated for specific waters in California in the National Toxics Rule ("NTR"), at §131.36. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays or estuaries and waters of the State defined as inland, i.e., all surface waters of the State not ocean waters. These waters specifically include the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. This section does not apply instead of the NTR for this criterion.
- p. A criterion of 20 ug/l was promulgated for specific waters in California in the NTR and was promulgated in the total recoverable form. The specific waters to which the NTR criterion applies include: Waters of the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to the mouth of the Merced River. This section does not apply instead of the NTR for this criterion. The State of California adopted and EPA approved a site specific criterion for the San Joaquin River, mouth of Merced to Vernalis; therefore, this section does not apply to these waters.
- q. This criterion is expressed in the total recoverable form. This criterion was promulgated for specific waters in California in the NTR and was promulgated in the total recoverable form. The specific waters to which the NTR criterion applies include: Waters of the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to Vernalis. This criterion does not apply instead of the NTR for these waters. This criterion applies to additional waters of the United States in the State of California pursuant to 40 CFR 131.38(c). The State of California adopted and EPA approved a site-specific criterion for the Grassland Water District, San Luis National Wildlife Refuge, and the Los Banos State Wildlife Refuge; therefore, this criterion does not apply to these waters.
- r. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays or estuaries including the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. This section does not apply instead of the NTR for these criteria.
- s. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the Sacramento-San Joaquin Delta and waters of the State defined as inland ( i.e., all surface waters of the State not bays or estuaries or ocean) that include a MUN use designation. This section does not apply instead of the NTR for these criteria.
- t. These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays and estuaries including San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of the State defined as inland (i.e., all surface waters of the State not bays or estuaries or ocean) without a MUN use designation. This section does not apply instead of the NTR for these criteria.
- u. PCBs are a class of chemicals which include aroclors 1242, 1254, 1221, 1232, 1248, 1260, and 1016, CAS numbers 53469219, 11097691, 11104282, 11141165, 12672296, 11096825, and 12674112, respectively. The aquatic life criteria apply to the sum of this set of seven aroclors.
- v. This criterion applies to total PCBs, e.g., the sum of all congener or isomer or homolog or aroclor analyses.

- w. This criterion has been recalculated pursuant to the 1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water, Office of Water, EPA-820-B-96-001, September 1996. See also Great Lakes Water Quality Initiative Criteria Documents for the Protection of Aquatic Life in Ambient Water, Office of Water, EPA-80-B-95-004, March 1995.
- x. The State of California has adopted and EPA has approved site specific criteria for the Sacramento River (and tributaries) above Hamilton City; therefore, these criteria do not apply to these waters.

**40 CFR 131.38 Editorial Note:** At 66 FR 9961, Feb. 13, 2001, §131.38 was amended in the table to paragraph (b)(1) under the column heading for "B Freshwater" by revising the column headings for "Criterion Maximum Concentration" and "Criterion Continuous Concentration"; under the column heading for "C Saltwater" by revising the column headings for "Criterion Maximum Concentration" and "Criterion Continuous Concentration"; and by revising entries "23." and "67.", effective Feb. 13, 2001. However, this is a photographed table and the amendments could not be incorporated into the text. For the convenience of the user, the amended text is set forth as follows:

- 1) § 131.38 Establishment of Numeric Criteria for priority toxic pollutants for the State of California.  
(b)(1) \* \* \*

A		B Freshwater		C Saltwater		D Human Health (10 <sup>-6</sup> risk for carcinogens) For consumption of:	
# Compound	CAS number	Criterion maximum conc. (µg/L) <sup>d</sup> B1	Criterion continous conc. (µg/L) <sup>d</sup> B2	Criterion maximum conc. (µg/L) <sup>d</sup> C1	Criterion continous conc. (µg/L) <sup>d</sup> C2	Water & organisms (µg/L) D1	Organisms only (µg/L) D2
23. Chlorodibromomethane	124481					<sup>a,c</sup> 0.41	<sup>a,c</sup> 34
67. Bis(2-Chloroisopropyl)Ether	108601					<sup>a1</sup> 1,400	<sup>a1</sup> 170,000



Attachment C – (Not applicable)

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 Permit. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code (CWC) and is grounds for enforcement action, for permit termination, revocation and reissuance, or denial of a permit renewal application [40 CFR §122.41(a)].
2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants 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 Permit has not been modified to incorporate the requirement [40 CFR §122.41(a)(1)].

### **B. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this General Permit [40 CFR §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 Permit that has a reasonable likelihood of adversely affecting human health or the environment [40 CFR §122.41(d)].

### **D. Proper Operation and Maintenance**

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance with the conditions of this General Permit. 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 Permit [40 CFR §122.41(e)].

### **E. Property Rights**

1. This General Permit does not convey any property rights of any sort or any exclusive privileges [40 CFR §122.41(g)].

2. The issuance of this General Permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations [40 CFR §122.5(c)].

#### **F. Inspection and Entry**

The Discharger shall allow the Regional Water Quality Control Board (Regional Board), California State Water Resources Control Board (State Board), United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to [40 CFR §122.41(i)] [CWC 13383(c)]:

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 Permit [40 CFR §122.41(i)(1)];
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Permit [40 CFR §122.41(i)(2)];
3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this General Permit [40 CFR §122.41(i)(3)];
4. Sample or monitor, at reasonable times, for the purposes of assuring General Permit compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location [40 CFR §122.41(i)(4)].

#### **G. Bypass**

1. Definitions
  - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR §122.41(m)(1)(i)].
  - b. "Severe property damage" means substantial physical damage to property, 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 CFR §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 and I.G.5 below [40 CFR §122.41(m)(2)].



3. Prohibition of bypass – Bypass is prohibited, and the Regional Board may take enforcement action against a Discharger for bypass, unless [40 CFR §122.41(m)(4)(i)]:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage [40 CFR §122.41(m)(4)(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 CFR §122.41(m)(4)(B)]; and
  - c. The Discharger submitted notice to the Regional Board as required under Standard Provision – Permit Compliance I.G.5 below [40 CFR §122.41(m)(4)(C)].
4. The Regional Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above [40 CFR §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 CFR §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 [40 CFR §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 CFR §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 paragraph H.2 of this section 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 CFR §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 CFR §122.41(n)(3)]:
  - a. An upset occurred and that the Discharger can identify the cause(s) of the upset [40 CFR §122.41(n)(3)(i)];
  - b. The permitted facility was, at the time, being properly operated [40 CFR §122.41(n)(3)(i)];
  - c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b [40 CFR §122.41(n)(3)(iii)]; and
  - d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above [40 CFR §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 CFR §122.41(n)(4)].

## II. Standard Provisions – Permit Action

### A. General

This General Permit 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 General Permit condition [40 CFR §122.41(f)].

If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant which is present in the discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this General permit, this General Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the Discharger so notified.

### B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this General Permit after the expiration date of this General Permit, the Discharger must apply for and obtain a new permit [40 CFR §122.41(b)].

### **C. Transfers**

This Order is not transferable to any person because the Regional Board is required to modify or revoke and reissue this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the CWC [40 CFR §122.41(l)(3)] [40 CFR §122.61]. Since this is a General Permit a new owner or operator shall instead submit an NOI application to enroll in this General Permit and the previous owner or operator shall submit a NOT.

### **D. Severability**

The provisions of this General Permit are severable and if any provisions of this General Permit or the application of any provisions of this General Permit to any circumstance is held invalid, the applications of such provision to other circumstances and the remainder of this General Permit shall not be affected thereby.

### **E. Pollution, Contamination, or Nuisance [CWC §13050]**

Neither the treatment nor the discharge shall create a condition of pollution, contamination or nuisance.

## **III. Standard Provisions – Monitoring**

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

## **IV. Standard Provisions – Records**

- A.** Except for records of monitoring information required by this General Permit 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 40 CFR section 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 Permit, and records of all data used to complete the application for this General Permit, 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 Board Executive Officer at any time [40 CFR §122.41(j)(2)].

**B. Records of monitoring information shall include:**

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

**C. Claims of confidentiality for the following information will be denied [40 CFR §122.7(b)]:**

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

**V. Standard Provisions – Reporting**

**A. Duty to Provide Information**

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

**B. Signatory and Certification Requirements**

1. All applications, reports, or information submitted to the Regional Board, State Board, and/or USEPA shall be signed and certified in accordance with paragraph (B.2) and (B.3) of this provision [40 CFR §122.41(k)].
2. All permit applications shall be signed as follows:

- a. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures [40 CFR §122.22(a)(1)];
  - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively [40 CFR §122.22(a)(2)]; or
  - c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this provision, a principal executive officer of a federal agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of USEPA) [40 CFR §122.22(a)(3)].
3. All reports required by this General Permit and other information requested by the Regional Board, State Board, or USEPA shall be signed by a person described in paragraph (B.2) of this provision, 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 paragraph (B.2) of this provision [40 CFR §122.22(b)(1)];
  - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position) [40 CFR §122.22(b)(2)]; and

- c. The written authorization is submitted to the Regional Board, State Board, or USEPA [40 CFR §122.22(b)(3)].
4. If an authorization under paragraph (B.3) of this provision 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 paragraph (B.3) of this provision must be submitted to the Regional Board, State Board or USEPA prior to or together with any reports, information, or applications, to be signed by an authorized representative [40 CFR §122.22(c)].
5. Any person signing a document under paragraph (B.2) or (B.3) of this provision shall make the following certification:

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

### C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the MRP in this General Permit [40 CFR §122.41(l)(4)].
2. Monitoring results must be reported on a Self-Monitoring Report (SMR) form or forms provided or specified by the Regional Board or State Board for reporting results of monitoring of sludge use or disposal practices [40 CFR §122.41(l)(4)(i)].
3. If the Discharger monitors any pollutant more frequently than required by this General Permit using test procedures approved under 40 CFR section 136 or, in the case of sludge use or disposal, approved under 40 CFR section 136 unless otherwise specified in 40 CFR section 503, or as specified in this General Permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the SMR or sludge reporting form specified by the Regional Board [40 CFR §122.41(l)(4)(ii)].
4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this General Permit [40 CFR §122.41(l)(4)(iii)].

#### D. Compliance Schedules

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

#### E. Twenty-Four Hour Reporting

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

#### F. Planned Changes

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

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b) [40 CFR §122.41(l)(1)(i)]; or
2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which

are subject neither to effluent limitations in this General Permit nor to notification requirements under 40 CFR section 122.42(a)(1) (see Additional Provisions—Notification Levels VII.A.1) [40 CFR §122.41(l)(1)(ii)]; or

3. 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 CFR §122.41(l)(1)(iii)].

#### **G. Anticipated Noncompliance**

The Discharger shall give advance notice to the Regional Board or State Board of any planned changes in the permitted facility or activity that may result in noncompliance with the requirements of this General Permit [40 CFR §122.41(l)(2)].

#### **H. Other Noncompliance**

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting E.3, E.4, and E.5 at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E [40 CFR §122.41(l)(7)].

#### **I. Discharge Monitoring Quality Assurance (DMQA) Program [STATE WATER BOARD/USEPA 106 MOA]**

The Discharger shall conduct appropriate analyses on any sample provided by USEPA as part of the DMQA program. The results of such analyses shall be submitted to USEPA's DMQA manager.

#### **J. 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 Board, State Board, or USEPA, the Discharger shall promptly submit such facts or information [40 CFR §122.41(l)(8)].

### **VI. Standard Provisions – Enforcement**

- A. The CWA provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section



402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one (1) year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than two (2) years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three (3) years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than six (6) years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR §122.41(a)(2)] [CWC 13385 and 13387].

- B.** Any person may be assessed an administrative penalty by the Regional Board for violating CWA section 301, 302, 306, 307, 308, 318 or 405, or any permit condition or limitation implementing any of such sections in a permit issued under CWA section 402. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day, during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000 [40 CFR §122.41(a)(3)].
- C.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four years, or both [40 CFR §122.41(j)(5)].
- D.** The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this General Permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be

punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than six months per violation, or by both [40 CFR §122.41(k)(2)].

## VII. Additional Provisions – Notification Levels

### A. Non-Municipal Facilities

Dischargers of existing manufacturing, commercial, mining, and silvicultural wastes shall notify the Regional Board as soon as they know or have reason to believe [40 CFR §122.42(a)]:

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this General Permit, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(1)]:
  - a. 100 micrograms per liter ( $\mu\text{g/L}$ ) [40 CFR §122.42(a)(1)(i)];
  - b. 200  $\mu\text{g/L}$  for acrolein and acrylonitrile; 500  $\mu\text{g/L}$  for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter ( $\text{mg/L}$ ) for antimony [40 CFR §122.42(a)(1)(ii)];
  - c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(1)(iii)]; or
  - d. The level established by the Regional Board in accordance with 40 CFR section 122.44(f) [40 CFR §122.42(a)(1)(iv)].
2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this General Permit, if that discharge will exceed the highest of the following "notification levels" [40 CFR §122.42(a)(2)]:
  - a. 500 micrograms per liter ( $\mu\text{g/L}$ ) [40 CFR §122.42(a)(2)(i)];
  - b. 1 milligram per liter ( $\text{mg/L}$ ) for antimony [40 CFR §122.42(a)(2)(ii)];
  - c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge [40 CFR §122.42(a)(2)(iii)]; or
  - d. The level established by the Regional Board in accordance with 40 CFR §122.44(f) [40 CFR §122.42(a)(2)(iv)].

### B. Publicly-Owned Treatment Works (POTWs) (Not Applicable)

## Attachment E – Monitoring and Reporting Program (MRP)

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

### I. General Monitoring Provisions

- A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring location identified in the representative sampling and analysis program. Another waste stream, body of water, or substance shall not dilute the monitored discharge. Monitoring points shall not be changed without notification to and the approval of the appropriate Regional Board.
- B. Monitoring must be conducted according to USEPA test procedures approved under 40 CFR section 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act as amended, unless other test procedures are specified in this General Permit and/or by the appropriate Regional Board.
- C. If the Discharger monitors any pollutant more frequently than required by this General Permit using test procedures approved under 40 CFR section 136, or as specified in this General Permit or by the appropriate Regional Board, the results of the monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's Annual Report. The increased frequency of monitoring shall also be reported.
- D. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this General Permit.
- E. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Regional Board.
- F. All monitoring instruments and devices used by the Discharger to fulfill the monitoring program shall be properly maintained and calibrated to ensure accuracy. All flow measurement devices shall be calibrated at least once per year to ensure accuracy of the devices.

### II. Monitoring Locations

- A. Dischargers enrolling for the first time under this General Permit shall develop a representative sampling and analysis program to be used as case studies to represent the typical types of discharges occurring within their service areas.

This study, to be submitted as the first annual report, will include the monitoring locations and rationale for choosing those locations.

- B. Re-enrollees must submit a new case study defining monitoring locations and rationale for these locations, if there are new types of discharges.

### III. Influent Monitoring Requirements (Not Applicable)

### IV. Effluent Monitoring Requirements

- A. Dischargers who are enrolling for the first time under this General Permit shall develop a representative sampling and analysis program based on the discharge anticipated from the extracted groundwater activity as compared to the Effluent Limitations and Discharge Specifications established in this Permit to ensure the discharge will not violate Regional Board Discharge Prohibitions.
- B. The Regional Board may increase monitoring requirements on a case-by-case basis. Additional monitoring for individual discharges may be required, where necessary, to show that during the term of the discharge, applicable water quality objectives will be maintained.
- C. Treatment System Status  
The daily status (e.g., onsite, in operation/on standby, etc.) of any treatment systems used to achieve compliance with this General Permit or the Notice of Enrollment from the Regional Board shall be reported monthly.
- D. Initial and Annual Monitoring Program  
The discharger shall, initially and on an annual basis, sample the constituents from the Annual Monitoring Program A below for discharge flows under 50,000 gallons per day (gpd) or from the Annual Monitoring Program B below for discharge flows of 50,000 gpd or more.

Annual Monitoring Program A consists of the 38 constituents from Section V. Effluent Limitations and Discharge Specifications of this General Permit.

Annual Monitoring Program B consists of 164 constituents. The 38 constituents from Section V. Effluent Limitations and Discharge Specifications and the 126 constituents from Attachment B2 – Priority Toxic Pollutants of this General Permit.

**E. Discharge Monitoring**

The minimum frequency of analysis for constituents listed below identified with an asterisk (\*), that are reported as non-detect (ND) for two consecutive monitoring periods may be decreased from; every other week to monthly; every other month to quarterly; and quarterly to semiannually, after notification from the Regional Board. The reporting frequency does not change.

Discharge monitoring shall be conducted as follows:

Constituent	Analyzed Sample	Reporting and Calculated Values				Frequency of Monitoring	Frequency of Reporting
		Inst. Max	MDEL	AWEL	AMEL		
Lab Results							
Units		Type		Units			
<b>General / Inorganic / Biological</b>							
Flow	MGD	N/A	MGD			Daily	Monthly
Settleable Solids	ml/L	Grab	ml/L	ml/L	ml/L	Every other week	Monthly
Total Suspended Solids	mg/L	Grab	mg/L lb/d	mg/L lb/d	mg/L lb/d	Every other week	Monthly
Hydrogen Sulfide	µg/L	Grab	µg/L lb/d	µg/L lb/d	µg/L lb/d	Every other week	Monthly
Total Residual Chlorine	µg/L	Grab	µg/L lb/d	µg/L lb/d	µg/L lb/d	Daily when chlorinating	Monthly
Cyanide*	µg/L	Grab	µg/L lb/d	µg/L lb/d	µg/L lb/d	Every other month	Quarterly
Acute Toxicity	TUa	Grab	TUa			Quarterly	Quarterly
Chronic Toxicity	TUc	Grab	TUc			Quarterly	Quarterly
Total Coliform†	MPN/ 100 ml	Grab	MPN/ 100 ml			Weekly	Monthly
Fecal Coliform†	MPN/ 100 ml	Grab	MPN/ 100 ml			Weekly	Monthly
pH	Units	Grab	Units			Every other week	Monthly

Constituent	Analyzed Sample	Reporting and Calculated Values					Frequency of Monitoring	Frequency of Reporting
		Inst. Max	MDEL	AWEL	AMEL	6-Month Median		
Lab Results								
Units	Type	Units						
Dissolved Oxygen (DO)†	Grab	mg/L					Weekly	Monthly
Petroleum - Related								
MTBE*	Grab	µg/L	lb/d				Quarterly	Quarterly
Benzene*	Grab	µg/L	lb/d			yes	Quarterly	Quarterly
Ethylbenzene*	Grab	µg/L	lb/d			yes	Quarterly	Quarterly
Toluene*	Grab	µg/L	lb/d			yes	Quarterly	Quarterly
Xylene*	Grab	µg/L	lb/d			yes	Quarterly	Quarterly
Total Petroleum Hydrocarbons*	Grab	mg/L	lb/d			yes	Quarterly	Quarterly
Metals								
Arsenic*	Grab	µg/L	lb/d	µg/L	lb/d	yes	Every other month	Quarterly
Cadmium*	Grab	µg/L	lb/d	µg/L	lb/d	yes	Every other month	Quarterly
Chromium (hexavalent)*	Grab	µg/L	lb/d	µg/L	lb/d	yes	Every other month	Quarterly
Copper*	Grab	µg/L	lb/d	µg/L	lb/d	yes	Every other month	Quarterly
Lead*	Grab	µg/L	lb/d	µg/L	lb/d	yes	Every other month	Quarterly
Mercury*	Grab	µg/L	lb/d	µg/L	lb/d	yes	Every other month	Quarterly
Nickel*	Grab	µg/L	lb/d	µg/L	lb/d	yes	Every other month	Quarterly
Silver*	Grab	µg/L	lb/d	µg/L	lb/d	yes	Every other month	Quarterly

Constituent	Analyzed Sample		Reporting and Calculated Values					Frequency of Monitoring	Frequency of Reporting				
	Lab Results	Inst. Max	MDEL	AWEL	AMEL	6-Month Median	Calculate Mass Loading?						
	Units	Type	Units										
Tributyltin (TBT)*	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Every other month	Quarterly
Zinc*	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Every other month	Quarterly
<b>Organics</b>													
Phenolic Compounds (non-chlorinated)*	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly
Chlorinated Phenolics	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly
1,1,2,2-tetrachloroethane (PCA)	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly
1,1,1-trichloroethane (TCA)	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly
1,1,2-trichloroethane (TCA)	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly
1,2-dichloroethane	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly
Tetrachloroethylene (PCE)	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly
Trichloroethylene (TCE)	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly
Vinyl chloride	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly
Carbon tetrachloride	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly
Base/Neutral Organic Compounds	µg/L	Grab	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	µg/L	lb/d	yes	Quarterly	Quarterly

† for Groundwater Extraction Operations associated with Sewer System Replacement Construction Projects.

Laboratories analyzing monitoring samples shall be certified by the Department of Health Services, in accordance with the provision of Water Code Section 13176, and must include quality assurance/quality control data with their reports.

The results of such analysis shall be reported in the annual report. Grab samples shall be collected at the applicable point of discharge (either at the storm drain or the receiving water). If a Discharger monitors the above constituents more frequently than required by this General Permit, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the annual report. Separate annual reports are required for each region.

**F.** 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 Permit, and records of all data used to complete the application for this General Permit, for a period of at least five years from the date of the sample, measurement, report, or application. This period may be extended by request of this Regional Board. These records shall include:

1. The date, place, and time of site inspections, sampling, visual observation, and/or measurement;
2. The individual(s) who performed the site inspections, sampling, visual observations, and/or measurements;
3. The dimension, size and/or volume of vault;
4. Flow measurements (if required) and duration of discharge;
5. The estimated volume of discharge;
6. The date and time of analyses;
7. The laboratory, staff, or wholesaler who performed the analyses; and
8. Analytical results.

**G.** Toxicity Reduction Evaluation (TRE)

The enrollee shall develop a Toxicity Reduction Evaluation (TRE) workplan. The workplan shall be subject to the approval of the Regional Board and shall be modified as directed by the Regional Board. Enrollees shall submit the TRE workplan to the Regional Board upon request of the Regional Board. The TRE workplan shall be developed no later than six months after adoption of this General Permit in accordance with the following manuals:

1. Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (EPA/600/2-88/070).
2. Toxicity Identification Evaluation (TIE), Phase I (EPA/600/6-91/005F).



3. Methods for Aquatic Toxicity Identification Evaluations, Phase II (EPA/600/R-92/080).
  4. Methods for Aquatic Toxicity Identification Evaluations, Phase III (EPA/600/R-92/081).
- H.** If toxicity-testing results show a violation of any acute toxicity limitation identified in Discharge Specifications of this General Permit, the enrollee shall:
1. Take all reasonable measures necessary to immediately minimize toxicity; and
  2. Increase the frequency of the toxicity test(s), which showed a violation, to at least two times per month until the results of at least two consecutive toxicity tests do not show violations.
- I.** If the Regional Board determines that toxicity testing shows consistent violation of any acute toxicity limitation identified in Discharge Specifications of this General Permit, the enrollee shall conduct a TRE that includes all reasonable steps to identify the source of toxicity. Once the source of toxicity is identified, the enrollee shall take all reasonable steps to reduce the toxicity to meet the toxicity limitations identified in Discharge Specifications of this General Permit.
- J.** Within 14 days of completion of the TRE, the enrollee shall submit the results of the TRE, including a summary of the findings, data generated, a list of corrective actions necessary to achieve consistent compliance with all the toxicity limitations of this General Permit and to prevent recurrence of violations of those limitations, and a time schedule for implementation of such corrective actions. The corrective actions and time schedule shall be modified at the direction of the Regional Board.
- V. Whole Effluent Toxicity Testing Requirements (Not Applicable)**
- VI. Land Discharge Monitoring Requirements (Not Applicable)**
- VII. Reclamation Monitoring Requirements (Not Applicable)**
- VIII. Receiving Water Monitoring Requirements – SURFACE WATER AND GROUNDWATER (Not Applicable)**
- IX. Other Monitoring Requirements (Not Applicable)**
- X. Reporting Requirements**
- A. General Monitoring and Reporting Requirements**
- All reports submitted in response to this General Permit shall comply with signatory requirements set forth in the Standard Provisions.

**B. Self Monitoring Reports (SMRs) to State and Regional Board**

1. At any time during the term of this permit, the State or Regional Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Board's California Integrated Water Quality System (CIWQS) Program Web site (<http://www.waterboards.ca.gov/ciwqs/index.html>). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.
2. The Discharger shall submit annual monitoring results to the Regional Board by the 20th day of March for the preceding calendar year. The Discharger shall report in the SMR the results for all monitoring specified in this MRP. The Discharger shall submit annual SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this General Permit. If the Discharger monitors any pollutant more frequently than required by this General Permit, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.
3. 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 are 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 this General Permit; 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 appropriate Regional Board, signed and certified as required by the Standard Provisions (Attachment D).

**C. Self-Monitoring Reports (SMRs) to EPA**

When requested by USEPA, the Discharger shall also complete and submit Self-Monitoring Reports to USEPA. The submittal date shall be specified in the request.

**D. OTHER REPORTS (NOT APPLICABLE)**

## Attachment F – Fact Sheet

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

### I. Permit Information

#### A. INTRODUCTION

This Order establishes a general permit regulating the discharge of groundwater extraction waste discharges to San Diego Bay, tributaries thereto under tidal influence, and storm drains or other conveyance systems tributary thereto from all temporary construction groundwater extraction, and similar waste discharges.

#### B. BACKGROUND

In 1972, the Federal Water Pollution Control Act, currently referred to as the Federal Clean Water Act (CWA), was amended to provide that the discharge of pollutants to waters of the United States from any point source is prohibited, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The federal regulations allow authorized states to issue either general permits or individual permits to regulate discharges of pollutants to waters of the United States. On April 23, 1990, the California Regional Water Quality Control Board, San Diego Region (Regional Board) issued a General Permit for groundwater extraction waste discharges to San Diego Bay and tributaries thereto (Order No. 90-31). The permit was reissued two more times on May 16, 1995 (Order No. 95-25) and June 14, 2000 (Order No. 2000-90).

Order No. 2000-90 regulated temporary groundwater extraction discharges to San Diego Bay and prohibited permanent groundwater extraction discharges. However, Order No. 2000-90 exempted three pre-existing permanent groundwater extraction discharges that were enrolled in the Order No. 95-25 when Order No. 2000-90 was adopted. They were, the City of San Diego, San Diego Convention Center permanent dewater system, the Embassy Suites Hotel permanent dewatering system, and the One America Plaza permanent dewatering system. On March 12, 2003, the City of San Diego was issued an individual NPDES permit for the discharge of extracted groundwater waste from the San Diego Convention Center. As of the date of adoption of this General Permit, the following two existing permanent groundwater extraction discharges enrolled in Order No. 2000-90 will continue to be regulated in this General Permit.

- a. Embassy Suites Hotel permanent dewatering system
- b. One America Plaza permanent dewatering system

In accordance with Title 40, Code of Federal Regulations (CFR), the Regional Board must meet general program requirements prior to the re-issuance and adoption of a general NPDES permit. General program requirements include preparing a draft General Permit, public noticing, allowing a public comment period, and conducting a public hearing. To meet these requirements, the Regional Board prepared a draft General Permit. The draft General Permit was made available to interested parties on April 27, 2007 for comments. A public hearing to receive testimony from interested parties was scheduled for June 13, 2007. The Notice of Public Hearing was sent to the interested party list at the same time the draft General Permit was made available. A public hearing notice was also posted in major newspapers in the San Diego Region.

### C. GENERAL CRITERIA

This General Permit is intended to cover temporary discharges of pollutants to San Diego Bay and its tributaries under tidal influence from groundwater extraction due to construction and other groundwater extraction activities. To be subject to waste discharge requirements by this General Permit, Dischargers must meet the following criteria:

1. The discharge of any flow of extracted groundwater into San Diego Bay.
2. The discharge of groundwater extraction wastes will not be permanent. Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s) are permanent discharges.
3. Pollutant concentrations in the discharge will comply with the Discharge Specifications of this General Permit.

This General Permit does not cover:

PERMANENT DISCHARGES – Groundwater extraction operations for structures which 1) are not designed or constructed to withstand hydrostatic pressure or do not preclude infiltration of groundwater, and 2) require removal of groundwater to prevent water infiltration to the structure(s) are permanent discharges except for the following two existing permanent groundwater extraction discharges currently enrolled in Order 2000-90 until such time the discharges receive an individual permit:

- c. Embassy Suites Hotel permanent dewatering system
- d. One America Plaza permanent dewatering system

STORM WATER - Storm water runoff due to construction activities. These activities may be covered under the statewide general NPDES permit for storm water discharges associated with construction activities (CAS000002), the statewide general NPDES permit for Storm Water Runoff Associated With Small

Linear Underground/Overhead Construction Projects (CAS000005), and/or Clean Water Act (CWA) Section 401 Water Quality Certifications.

**SANITARY SEWER** - Discharges to a sanitary sewer. These discharges do not need coverage under the NPDES Program, although the agency controlling the sanitary sewer must approve discharges to its conveyance system.

**UTILITY VAULTS** - Discharges from utility vaults and underground structures. These activities may be covered under the statewide general NPDES permit for discharges from utility vaults and underground structures to surface water (CAG990002).

**HYDROSTATIC/ POTABLE WATER** – Discharges from drinking water well development. These discharges are covered in Order No. R9-2002-0020.

#### Notification Requirements

The purpose of this General Permit is to facilitate regulation of discharges from groundwater extraction activities. To obtain coverage under this General Permit, the Discharger must submit a Notice of Intent (NOI), a project map(s), an initial Monitoring Report, and first annual fee. Signing the certification on the NOI signifies that the Discharger intends to comply with the provisions and requirements of this General Permit. AN NOI must be signed to be valid.

#### **D. DISCHARGE TO A MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)**

Prior to discharging into an MS4, the Discharger shall demonstrate alternatives to discharging extracted groundwater waste into an MS4 and why it is technically or economically infeasible to implement these alternatives.

Without prior approval from the appropriate local agency with jurisdiction over the MS4, the discharger shall not discharge extracted groundwater waste under this General Permit into an MS4.

Local agencies responsible for operating the MS4s may not passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the MS4 operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or control. These discharges may cause or contribute to a condition of contamination or a violation of water quality standards.

Therefore, at least 30 days prior to initiating an extracted groundwater discharge to an MS4, the Discharger shall notify and receive authorization from the appropriate local agency with jurisdiction over the MS4. This requirement encourages communication between Dischargers enrolled under this General Permit and local agencies responsible for MS4s in an effort to reduce misunderstandings and concerns over the types of discharges covered by this General Permit.

## E. DISCHARGE DESCRIPTION

Existing and proposed discharges of groundwater extraction waste to San Diego Bay from construction dewatering, foundation dewatering, and groundwater cleanup projects: 1) result from similar operations (all involve extraction and discharge of groundwater), 2) are the same type of waste (all are groundwater), 3) require similar effluent limitations for the protection of the beneficial uses of San Diego Bay, 4) require the issuance of a permit in a short time period because the nature of the project is short term, 5) require similar monitoring, and 6) are more appropriately regulated under a general permit rather than an individual permit.

Much of the groundwater in the downtown San Diego area contains petroleum products and solvents, mainly resulting from underground storage tank leaks and pipeline leaks.

## F. DESCRIPTION OF WASTEWATER AND BIOSOLIDS TREATMENT OR CONTROLS (NOT APPLICABLE)

## G. DISCHARGE POINTS AND RECEIVING WATERS

San Diego Bay has a surface area of approximately 18.5 square miles and is surrounded by metropolitan San Diego. Most of the shore line has been heavily developed for recreational, residential, military, and industrial use.

Under the General Permit, there may be multiple discharge points. Additional information regarding the receiving waters can be found in the completed NOI which describes the discharge and identifies the points of discharge.

Storm drains are not designed to maximize initial dilution; therefore, this General Permit uses zero initial dilution factor. In addition, the Regional Board has the practice not to consider dilution when setting water quality-based effluent limitations for discharges to bays and estuaries unless the dilution ratio is verified with field data. Since this is a general permit without existing data points, no dilution credit is considered for the discharge.

## H. SUMMARY OF EXISTING REQUIREMENTS AND SELF-MONITORING REPORT DATA

Order No. 2000-90, which this General Permit replaces, requires the Discharger not to exceed the Effluent Limitations for a number of constituents, and to monitor and report these constituents. Significant changes occurred in the Effluent Limitation requirements for some constituents. Effluent Limitations under Order No. 2000-90 were developed using the CTR, while the SIP was used for this General Permit.

## I. Compliance Summary (Not Applicable)

**J. Planned Changes (Not Applicable)**

**II. Applicable Plans, Policies, and Regulations**

The requirements contained in this General Permit are based on the requirements and authorities described in this section.

**A. Legal Authorities**

This General Permit is issued pursuant to CWA section 402 and implementing regulations adopted by the USEPA and Chapter 5.5, Division 7 of the California Water Code (CWC). It shall serve as a NPDES permit for point source discharges from groundwater extraction waste discharges to surface waters. This General Permit also serves as Waste Discharge Requirements (WDRs) pursuant to Article 4, Chapter 4 of the CWC for discharges that are not subject to regulation under CWA section 402.

States may request authority to issue general NPDES permits pursuant to 40 CFR section 122.28. On June 8, 1989, the State Board submitted an application to the USEPA requesting revisions to its NPDES Program in accordance with 40 CFR 122.28, 123.62, and 403.10. The application included a request to add general permit authority to its approved NPDES Program. On September 22, 1989, the USEPA, Region 9, approved the State Board's request and granted authorization for the State to issue general NPDES permits.

**B. California Environmental Quality Act (CEQA)**

This action to adopt a NPDES permit is exempt from the provisions of CEQA (Public Resources Code section 21100, et seq.) in accordance with CWC section 13389 for the following reasons: 1) A Discharger cannot obtain coverage under this General Permit if pollutants in the discharge, cause, contribute, or have the reasonable potential to cause or contribute to a water quality standards violation; 2) The permit requires Dischargers to monitor and report the discharge to ensure the Dischargers will not cause a violation; and 3) The Regional Board's granting of the exceptions does not have the potential for causing significant adverse environmental effects. See California Code of Regulations, Title 14, section 15061(b)(3).

**C. State and Federal Regulations, Policies, and Plans**

**1. Water Quality Control Plan**

On September 8, 1994, the Regional Board adopted a Water Quality Control Plan for the San Diego Region (hereinafter Basin Plan), that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, State Board Resolution No. 88-63 requires that, with certain exceptions, the Regional Board assigns the municipal and domestic supply use to water

bodies that do not have beneficial uses listed in the Basin Plans.  
Beneficial uses applicable to San Diego Bay waters are as follows:

- a. Industrial service supply;
- b. Navigation;
- c. Contact water recreation;
- d. Non-contact water recreation;
- e. Ocean commercial and sport fishing;
- f. Preservation of rare, threatened or endangered species;
- g. Marine habitat;
- h. Fish migration;
- i. Shellfish harvesting;
- j. Fish spawning;
- k. Wildlife habitat;
- l. Preservation of areas of special biological significance; and
- m. Mariculture.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR)**  
USEPA adopted the NTR on December 22, 1992, which was amended on May 4, 1995, and November 9, 1999, and the CTR on May 18, 2000, which was amended on February 13, 2001. These rules include water quality criteria for priority pollutants and are applicable to this discharge.
3. **State Implementation Policy (SIP)**  
On March 2, 2000, the State Board adopted the SIP, which 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 Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP includes procedures for determining the need for and calculating Water Quality-Based Effluent Limitations (WQBELs), and requires Dischargers to submit data sufficient to do so. The State 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 Permit implement the SIP.
4. **Antidegradation Policy**  
Section 131.12 of 40 CFR requires that State water quality standards include an antidegradation policy consistent with the federal policy. The State Board established California's antidegradation policy in State Board Resolution No. 68-16, which incorporates the requirements of the federal antidegradation policy where applicable. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified



based on specific findings. As discussed in detail in this Fact Sheet, the permitted discharge shall be consistent with the antidegradation provision of 40 CFR section 131.12 and State Board Resolution No. 68-16.

**5. Anti-Backsliding Requirements**

Sections 402(o)(2) and 303(d)(4) of the CWA and 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 the General Permit are at least as stringent as the effluent limitations in the previous Order.

**6. Monitoring and Reporting Requirements**

Section 122.48 of 40 CFR requires that all NPDES permits specify requirements for recording and reporting monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Boards to require technical and monitoring reports. The MRP establishes monitoring and reporting requirements to implement Federal and State requirements. This MRP is provided in Attachment E.

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

The federal Clean Water Act requires States to identify and make a list of surface water bodies that are polluted. These water bodies, referred to in law as "water quality limited segments," do not meet water quality standards even after discharges of wastes from point sources have been treated by the minimum required levels of pollution control technology. Wastewater treatment plants, a city's storm drain system, or a boat yard, are a few examples of point sources that discharge wastes to surface waters. States are required to compile the water bodies into a list, referred to as the "Clean Water Act Section 303(d) List of Water Quality Limited Segments" (303(d) List). States must also prioritize the water bodies on the list and develop action plans, called total maximum daily loads (TMDLs) to improve the water quality.

The State Board updated the 2004-2006 303(d) List for California on October 25, 2006, and EPA approved it on November 30, 2006.

There are approximately 100 impaired water bodies on the 303(d) List in the San Diego Region. Most TMDLs for water bodies within the San Diego Region are under development or have not been started. However, four TMDLs for the San Diego Region need only State Board approval to be complete, and three are already complete. Of the three completed TMDLs, two impact the water quality of San Diego Bay. One TMDL is for Diazinon in Chollas Creek, while the other is for copper in the watershed that drains Shelter Island Basin. These TMDLs did not allocate any waste load for groundwater extraction waste discharge; therefore, the discharge of copper into San Diego Bay via Shelter Island Basin watershed, and the discharge of Diazinon into San Diego Bay via Chollas Creek are prohibited.

## E. Other Plans, Policies and Regulations

### **Ocean Plan**

The State Board adopted the Water Quality Control Plan for Ocean Waters of California (Ocean Plan) in 2005, it was approved by USEPA, and became effective on February 14, 2006. The Ocean Plan identifies the following beneficial uses of state ocean waters to be protected:

- a. Industrial water supply;
- b. Navigation;
- c. Aesthetic enjoyment;
- d. Water contact recreation;
- e. Non-contact water recreation;
- f. Ocean commercial and sport fishing;
- g. Mariculture;
- h. Preservation and enhancement of Areas of Special Biological Significance;
- i. Preservation and enhancement of rare and endangered species;
- j. Marine habitat;
- k. Fish migration;
- l. Fish spawning; and
- m. Shellfish harvesting.

In order to protect the above beneficial uses, the Ocean Plan establishes water quality objectives (for bacteriological, physical, chemical, and biological characteristics, and for radioactivity), general requirements for management of waste discharged to the ocean, quality requirements for waste discharges (effluent quality requirements), discharge prohibitions, and general provisions.

Limits derived from the Ocean Plan have been included in this General Permit to protect beneficial uses of San Diego Bay because beneficial uses of San Diego Bay are similar to those of the ocean waters of the State.

### **Toxic Hot Spots**

On June 17, 1999, the State Board adopted the Consolidated Toxic Hot Spot Cleanup Plan (Consolidated Plan) required under Bay Protection and Toxic Cleanup Program (CWC Section 13395). The Consolidated Plan listed known toxic hot spots, including several located in San Diego Bay. The Consolidated Plan also requires Regional Boards to reevaluate waste discharge requirements for those discharges associated with each known toxic hot spot that can reasonably be expected to cause or contribute to the creation and maintenance of the known toxic hot spot. The Regional Board finds that discharges from groundwater extraction waste discharges activities may contribute to the pollution present at the toxic hot spots listed in the Consolidated Plan. In the event that future groundwater extraction waste discharges are proposed to an area of San Diego Bay that is designated as a toxic hot spot, the Regional Board will at that time, review both the Discharge Specifications and the Monitoring and Reporting Programs for appropriate modification(s).

### III. 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. Effluent limitations are based on the following principles:

- A. 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards;
- B. 40 CFR 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. Where numeric water quality criteria have not been established, three options exist to protect water quality: 1) 40 CFR section 122.44(d) specifies that WQBELs may be established using USEPA criteria guidance under CWA section 304(a); 2) proposed state criteria or a state policy interpreting narrative criteria supplemented with other relevant information may be used; or 3) an indicator parameter may be established;
- C. Any discharge of untreated groundwater to San Diego Bay threatens to cause or contribute to excursions above narrative water quality objectives contained in the Basin Plan as a result of the potential discharge of petroleum related compounds, solvents, and metals. On May 26, 1989, USEPA enacted revisions to NPDES program regulations (40 CFR 122). When a proposed discharge of a compound or chemical threatens to cause or contribute to an excursion above a State narrative water quality standard and a numeric water quality standard for the specific chemical has not been established, the NPDES program regulations require the Regional Board to do the following: 1) Establish effluent limitations using a proposed State water quality objective or standard, or an explicit State policy or regulation interpreting its narrative water quality objective which will protect and maintain water quality and designated beneficial uses of the receiving water; 2) Establish effluent limitations on a case-by-case basis, using USEPA's water quality criteria published under CWA section 307(a); or 3) Establish effluent limitations on an indicator parameter for the pollutants of concern; and
- D. 40 CFR section 122.44(l) requires that when a permit is renewed or reissued, effluent limitations must be at least as stringent as the effluent limitations in the previous permit. Since this permit is a renewal of a previous permit, anti-backsliding is applicable and the following pollutants are included:

Settleable Solids	Ethylbenzene
Total Suspended Solids	Toluene
Hydrogen Sulfide	Xylene
Total Residual Chlorine	Total Petroleum Hydrocarbons
pH	Arsenic
Benzene	Cadmium

Chromium (hexavalent)	1,2-dichloroethane
Copper	Tetrachloroethylene (PCE)
Lead	Trichloroethylene (TCE)
Mercury	Vinyl chloride
Nickel	Carbon tetrachloride
Silver	Base/Neutral Organic
Zinc	Compounds
Cyanide	Acute Toxicity
Phenolic Compounds (non-chlorinated)	Chronic Toxicity
Chlorinated Phenolics	Tributyltin (TBT)
1,1,2,2-tetrachlorethane (PCA)	Total Coliform
1,1,1-trichloroethane (TCA)	Fecal Coliform
1,1,2-trichloroethane (TCA)	Dissolved Oxygen (DO)

- E. Methyl Tertiary-Butyl Ether (MTBE), is a chemical compound that is manufactured by the chemical reaction of methanol and isobutylene. MTBE is produced in very large quantities (over 200,000 barrels per day in the U.S. in 1999) and is almost exclusively used as a fuel additive in motor gasoline. It is one of a group of chemicals commonly known as "oxygenates" because they raise the oxygen content of gasoline. At room temperature, MTBE is a volatile, flammable and colorless liquid that dissolves rather easily in water.

Because MTBE dissolves easily in water and does not "cling" to soil very well, it migrates faster and farther in the ground than other gasoline components, thus making it more likely to migrate to groundwater extraction wells. MTBE does not degrade (breakdown) easily and is difficult and costly to remove from ground water.

On January 1, 1998, Senate Bill (SB) 521 was passed. SB521 adds language to the Health & Safety Code which is applicable to leaking underground storage tanks as follows: "Section 25299.37.1. No closure letter pursuant to this chapter shall be issued unless the soil or groundwater, or both, where applicable, at the site have been tested for Methyl Tertiary Butyl Ether (MTBE) and the results of that testing are known to the Regional Board." Subsequently, on February 20, 1998, the Regional Board, Site Mitigation & Cleanup Unit, issued written notification to interested parties of Mandatory MTBE Sampling For Underground Storage Tank (UST) Site Closures-Senate Bill (SB) 521. The February 20, 1998, notification specifies that "For ground water impacted sites or soil sites that may threaten ground water, both soil and ground water sampling and analysis for MTBE will be required."

Sections 13272.1 and Section 13285 of the CWC address discharges of MTBE. The California Department of Health Services (DHS) adopted limits for Maximum Contaminant Levels for MTBE. The Primary MCL of 13 µg/L was adopted by DHS on May 17, 2000. The Secondary MCL (for taste and odor not health affects) of 5 µg/L was adopted on January 7,

1999. The UST program uses the more conservative secondary MCL of 5 µg/L.

F. Discharge Prohibitions

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

Mass emission rate limitations will be determined using the discharge flowrate and effluent concentration limitations specified in this General permit; therefore, the daily maximum discharge flowrate limitation for each discharge will be specified in the discharge Notice of Enrollment from the Regional Board. The discharge flowrate will be designated as the maximum discharge flowrate and the Discharger shall be prohibited from discharging in excess of the maximum discharge flowrate.

G. Technology-Based Effluent Limitations (TBELs)

1. Scope and Authority

The CWA requires that TBELs be established based on several levels of controls:

Best Practicable Treatment Control Technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. The BPT standards apply to toxic, conventional, and nonconventional pollutants.

Best Available Technology Economically Achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. The BAT standards apply to toxic and nonconventional pollutants.

Best Conventional Pollutant Control Technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge

and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

New Source Performance Standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

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

## 2. Applicable Technology-Based Effluent Limitations

The USEPA has not developed numeric Technology-Based effluent limitations for pollutants in discharges from groundwater extraction.

## H. Water Quality-Based Effluent Limitations (WQBELs)

### 1. Scope and Authority

As specified in 40 CFR section 122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. 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, achieve applicable water quality objectives and criteria contained in state plans and policies, and meet water quality criteria in the CTR and NTR.

### 2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The designated beneficial uses of surface waters throughout the State may include municipal, domestic, industrial, and agricultural supply; water contact and non-contact recreation; navigation; groundwater recharge and freshwater replenishment; hydropower generation; wildlife habitat; cold freshwater and warm freshwater habitat; fish migration and fish spawning; marine habitat; estuarine habitat; shellfish harvesting; ocean commercial and sport fishing; areas of special biological significance; and preservation of rare and endangered species. To the extent that the Basin Plan designates additional or different beneficial uses, the Basin Plan shall control.

### 3. Determining the Need for WQBELs

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

As specified in the SIP, the Regional Board shall conduct an analysis for each priority pollutant with applicable criterion or objective to determine if a water quality-based effluent limitation is required.

Data are unavailable to conduct an analysis because as a General Permit there is no Report of Waste Discharge. Therefore, the discharger shall conduct an initial sample based on flow to determine the requirements.

The previous General Permit 2000-90 did not differentiate discharges based on flows; however, General Permit 2001-96 (*General Waste Discharge Requirements and National Pollutant Discharge Elimination System (NPDES) Permit for Groundwater Extraction Waste Discharges from Construction, Remediation, And Permanent Groundwater Extraction Projects To Surface Waters Within The San Diego Region except for San Diego Bay*) does differentiate discharges based on flows. The General Permit 2001-96 does not require effluent limits for discharges less than 100,000 gallons per day that do not contain pollutants because lack of complaints of adverse impacts to water quality and/or beneficial uses of the receiving waters, and lack of documentation of adverse impacts to water quality and/or beneficial uses of the receiving waters.

Based on General Permit 2001-96 the same could be assumed for discharges for San Diego Bay. However, to be environmentally conservative only half of the discharge will be assumed. Instead of differentiating the discharge by 100,000 gallons per day, this General Permit will differentiate the flow by 50,000 gallons per day.

#### Reasonable Potential Analysis

In order to determine what to sample and frequency an initial set of data is needed.

If the discharger proposes to discharge less than 50,000 gallons per day, then the discharger shall initially conduct Annual Monitoring Program A (sample for the entire constituents listed in III.D. and MTBE for a total of 38 constituents).

However, if the discharger proposes to discharge 50,000 gallons per day or more, then the discharger shall initially conduct Annual Monitoring

Program B (sample the entire constituents listed in III.D., MTBE, and all 126 priority pollutants for a total of 164 constituents).

Based on the initial monitoring program if the discharge will require no treatment to meet the discharge specifications of this General Permit, then the discharger will not have effluent limits and only need to conduct Annual Monitoring Program A (if discharging less than 50,000 gallons per day) or Annual Monitoring Program B (if discharging 50,000 gallons per day or more) once per year. This will provide data to identify reasonable potential for future effluent limits.

If the discharge will require treatment prior to discharge, then in addition to the Annual Monitoring Program listed above, the discharger will also monitor for all the constituents listed in the discharge specification with effluent limits at the frequency required in the Monitoring and Reporting Program stated in Attachment E because of the reasonable potential of exceeding the effluent limits in the discharge specifications of this General Permit.

If there are any contaminated sites within the radius of influence of the groundwater extraction activities, then the constituent of concern will be monitored at the frequency required in the Monitoring and Reporting Program stated in Attachment E because of the reasonable potential of exceeding the effluent limits in the discharge specifications of this General Permit. If the constituent of concern is not listed in the Monitoring and Reporting Program stated in Attachment E then a monitoring and reporting frequency will be stated in the Notice of Enrollment.

Table summarizing effluent limits and monitoring

DISCHARGE	EFFLUENT LIMITS	MONITORING PROGRAM (Will include one or more)
< 50,000		<ul style="list-style-type: none"> <li>Annual Monitoring Program A</li> </ul>
>= 50,000		<ul style="list-style-type: none"> <li>Annual Monitoring Program B</li> </ul>
Treatment	Yes	<ul style="list-style-type: none"> <li>Monitoring and Reporting Program in Attachment E</li> </ul>
Contaminated Site in Radius of Influence		<ul style="list-style-type: none"> <li>Monitor and Report constituent(s) of concern as stated in the Notice of Enrollment</li> </ul>

#### 4. WQBEL Calculations

The Average Monthly Effluent and Maximum Daily Effluent WQBELs were calculated using a statistical approach with the following considerations and assumptions:

No dilution credit is considered for the discharge. Therefore, the discharge must comply with the Water Quality Objective at the point of discharge.



The WQBEL based on the CTR were implemented using the procedure list in the SIP. The procedure is listed below with copper as the example.

CTR/SIP calculations - Copper Example:

Criteria for Priority Toxic Pollutant in the State of California is described in the CTR table listed in 40 CFR 131.38.

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A		B Freshwater		C Saltwater		D Human Health (10 <sup>-6</sup> risk for carcinogens) For consumption of:	
# Compound	CAS Number	Criterion Maximum Conc. <sup>d</sup> B1	Criterion Continuous Conc. <sup>d</sup> B2	Criterion Maximum Conc. <sup>d</sup> C1	Criterion Continuous Conc. <sup>d</sup> C2	Water & Organisms (µg/L) D1	Organisms Only (µg/L) D2
1. Antimony	7440360					14 a,s	4300 a,1
2. Arsenic <sup>b</sup>	7440382	340 l,m,w	150 l,m,w	69 i,m	36 i,m		
3. Beryllium	7440417					n	n
4. Cadmium <sup>b</sup>	7440439	4.3 e,l,m,w,x	2.2 e,l,m,w	42 i,m	9.3 i,m	n	n
5a. Chromium (III)	19065631	550 e,l,m,o	180 e,l,m,o			n	n
5b. Chromium (VI) <sup>b</sup>	18540299	16 i,m,w	11 i,m,w	1100 i,m	50 i,m	n	n
6. Copper <sup>b</sup>	7440508	13 e,l,m,w,x	9.0 e,l,m,w	4.8 i,m	3.1 i,m	1300	

Saltwater criterion maximum concentration (CMC) = 4.8 µg/L  
Saltwater criterion continuous concentration (CCC) = 3.1 µg/L

The SIP requires that discharge effluent limitations be specified as total recoverable concentrations and converted to dissolved concentration for determining compliance with water quality criteria. Effluent limitations as a total recoverable concentration are also required by 40 CFR 122.45(c). The General Permit includes effluent limitations as a total recoverable concentration for the discharge.

The SIP specifies use of a conversion factor to adjust a criterion expressed as a dissolved form to a total recoverable form. The CTR specifies the use of a conversion factor (CF). The dissolved criterion is divided by the CF to calculate the total recoverable concentration.

The CF for saltwater acute criteria recommended for converting a metal criterion expressed as the total recoverable fraction in the water column to a criterion expressed

as the dissolved fraction in the water column is described in Table 2 of 40 CFR 131.38.

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(iv) Table 2 to paragraph (b)(2) of this section:

Metal	Conversion factor (CF) for freshwater acute criteria	CF for fresh-water chronic criteria	CF for saltwater acute criteria	CF* for salt-water chronic criteria
Antimony .....	(d)	(d)	(d)	(d)
Arsenic .....	1.000	1.000	1.000	1.000
Beryllium .....	(d)	(d)	(d)	(d)
Cadmium .....	0.944	0.909	0.994	0.994
Chromium (III) .....	0.316	0.860	(d)	(d)
Chromium (VI) .....	0.982	0.962	0.993	0.993
Copper .....	0.960	0.960	0.83	0.83

CF for copper = 0.83

Total recoverable concentration = Dissolved concentration criterion / CF

Dissolved concentrations for copper:

4.8 µg/L dissolved (CMC) / 0.83 (CF) = 5.8 µg/L total recoverable for CMC

3.1 µg/L dissolved (CCC) / 0.83 (CF) = 3.7 µg/L total recoverable for CCC

Effluent variability multiplier and Coefficient of Variation (CV)

For each concentration based on an aquatic life criterion, the long-term average (LTA) is calculated by multiplying the concentration with a factor that adjusts for effluent variability. The multiplier can be found in Table 1 of the SIP. Since this is a general permit without existing data points, the number of effluent data points is less than ten; the CV shall be set equal to 0.6 per the SIP.

Table 1. Effluent Concentration Allowance (ECA)  
Multipliers for Calculating Long-Term Averages (LTAs)

Coefficient Of Variation (CV)	Acute Multiplier	Chronic Multiplier
	99 <sup>th</sup> Percentile Occurrence Probability	99 <sup>th</sup> Percentile Occurrence Probability
0.1	0.797	0.891
0.2	0.643	0.797
0.3	0.527	0.715
0.4	0.440	0.643
0.5	0.373	0.581
0.6	0.321	0.527

Therefore, from Table 1 of the SIP, the effluent variability multiplier will be as follows:

Acute Multiplier = 0.321  
Chronic Multiplier = 0.527

The long-term average (LTA) is calculated by multiplying the dissolved concentrations for copper with the acute and chronic multipliers:

LTA acute = 5.8 µg/L \* 0.321 = 1.9 µg/L  
LTA chronic = 3.7 µg/L \* 0.527 = 2.0 µg/L

The MDEL and AMEL will be based on the most limiting of the acute and chronic LTA, in the case for copper it will be LTA acute of 1.9 µg/L.

Water quality-based effluent limits are calculated by multiplying the most limiting LTA with a factor (multiplier) that adjusts for the averaging periods and exceedance frequencies of the criteria and the effluent limitations. The multiplier can be found in Table 2 of the SIP. Since this is a general permit without existing data points, the CV will be set equal to 0.6 and since sampling frequency is four times a month or less, n shall be set equal to 4 per SIP (n=4).

Table 2. Long-Term Average (LTA) Multipliers for Calculating Effluent Limitations

Coefficient of Variation	MDEL Multiplier	AMEL Multiplier			MDEL/AMEL Multiplier		
	99 <sup>th</sup> Percentile Occurrence Probability	95 <sup>th</sup> Percentile Occurrence Probability			MDEL = 99 <sup>th</sup> Percentile Occurrence Probability AMEL = 95 <sup>th</sup> Percentile Occurrence Probability		
(CV)		n = 4	n = 8	n = 30	n = 4	n = 8	n = 30
0.1	1.25	1.08	1.06	1.03	1.16	1.18	1.22
0.2	1.55	1.17	1.12	1.06	1.33	1.39	1.46
0.3	1.90	1.26	1.18	1.09	1.50	1.60	1.74
0.4	2.27	1.36	1.25	1.12	1.67	1.82	2.02
0.5	2.68	1.45	1.31	1.16	1.84	2.04	2.32
0.6	3.11	1.55	1.38	1.19	2.01	2.25	2.62

Therefore, from Table 2 of the SIP, the LTA multipliers will be as follows:

MDEL Multiplier = 3.11  
AMEL Multiplier = 1.55

The MDEL and AMEL limits are calculated by multiplying the LTA with an LTA multiplier for each limit:

Maximum Daily Effluent Limit (MDEL) = 1.9 µg/L \* 3.11 = 5.8 µg/L  
Average Monthly Effluent Limit (AMEL) = 1.9 µg/L \* 1.55 = 2.9 µg/L

I. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) tests measure the aggregate toxic effect of a mixture of pollutants that may be present in a waste stream and provides information on potential toxic impacts to receiving waters from the discharge of wastes. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach provides a means of assessing compliance with the narrative toxicity water quality objective for aquatic life protection of the Basin Plan while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and development.

The SIP requires that a Toxicity Reduction Evaluation (TRE) be conducted if a discharge causes or contributes to chronic toxicity in a receiving water body. This General Permit requires the Discharger to periodically monitor the toxicity of its discharge and to develop a TRE Workplan if the toxicity effluent limitations are exceeded.

J. Anti-Backsliding Effluent Limitations

Sections 402(o)(2) and 303(d)(4) of the CWA and 40 CFR section 122.44(l) prohibit backsliding in NPDES permits. The following limits designated with AB in the Final Effluent Limitations table below have the same limit as the previous permit.

K. Final Effluent Limitations

**Summary of Water Quality-Based Effluent Limitations**

**Discharge Point**

Summary of Water Quality-based Effluent Limitations Table

General / Inorganic / Biological

Parameter	Units	Effluent Limitations				
		AMEL	AWEL	MDEL	Instantaneous Maximum	6-Month Median
Settleable Solids	ml/L	1.0 <sup>OP</sup>	1.5 <sup>OP</sup>	-	3.0 <sup>OP</sup>	-
Total Suspended Solids	mg/L	30 <sup>AB</sup>	-	-	50 <sup>AB</sup>	-
Hydrogen Sulfide	µg/L	2 <sup>AB</sup>	-	4 <sup>AB</sup>	10 <sup>AB</sup>	-
Total Residual Chlorine	µg/L	-	-	8 <sup>OP</sup>	60 <sup>OP</sup>	2 <sup>OP</sup>
Cyanide	µg/L	0.5 <sup>CTR</sup>		1.0 <sup>CTR</sup>	-	-
Acute Toxicity	Tua			0.3 <sup>OP</sup>		

Parameter	Units	Effluent Limitations				
		AMEL	AWEL	MDEL	Instantaneous Maximum	6-Month Median
Chronic Toxicity	Tuc			1.0 <sup>OP</sup>		
Total Coliform	MPN/ 100 ml				1000.0 <sup>AB</sup>	
Fecal Coliform	MPN/ 100 ml				200.0 <sup>AB</sup>	
pH	Units	Within limit of 6.0 to 9.0 at all times <sup>OP</sup>				

Parameter	Units	Effluent Limitations				
		AMEL	AWEL	MDEL	Instantaneous Minimum	6-Month Median
Dissolved Oxygen (DO)	mg/L				> 5.0 <sup>AB</sup>	

Petroleum

Parameter	Units	Effluent Limitations				
		AMEL	AWEL	MDEL	Instantaneous Maximum	6-Month Median
MTBE	µg/L				5 <sup>DHS</sup>	
Benzene	µg/L	-	-	-	5 <sup>AB</sup>	-
Ethylbenzene	µg/L	-	-	-	5 <sup>AB</sup>	-
Toluene	µg/L	-	-	-	5 <sup>AB</sup>	-
Xylene	µg/L	-	-	-	5 <sup>AB</sup>	-
Total Petroleum Hydrocarbons	mg/L	-	-	-	0.5 <sup>AB</sup>	-

Metals

Parameter	Units	Effluent Limitations			
		AMEL	MDEL	Instantaneous Maximum	6-Month Median
Arsenic	µg/L	29.4 <sup>CTR</sup>	59.0 <sup>CTR</sup>	-	-
Cadmium	µg/L	7.6 <sup>CTR</sup>	15.3 <sup>CTR</sup>	-	-
Chromium (hexavalent)	µg/L	41.1 <sup>CTR</sup>	82.5 <sup>CTR</sup>	-	-
Copper *	µg/L	2.9 <sup>CTR</sup>	5.8 <sup>CTR</sup>	-	-
Lead	µg/L	7.0 <sup>CTR</sup>	14.0 <sup>CTR</sup>	-	-
Mercury	µg/L	0.050 <sup>CTR</sup>	0.1005 <sup>CTR</sup>	-	-
Nickel	µg/L	6.8 <sup>CTR</sup>	13.6 <sup>CTR</sup>	-	-
Silver	µg/L	1.1 <sup>CTR</sup>	2.2 <sup>CTR</sup>	-	-

Parameter	Units	Effluent Limitations			
		AMEL	MDEL	Instantaneous Maximum	6-Month Median
Tributyltin (TBT)	µg/L	0.005 <sup>AB</sup>			
Zinc	µg/L	47.3 <sup>CTR</sup>	95.0 <sup>CTR</sup>	-	-

Organics

Parameter	Units	Effluent Limitations			
		AMEL	MDEL	Instantaneous Maximum	6-Month Median
Phenolic Compounds (non-chlorinated)	µg/L	-	120 <sup>OP</sup>	300 <sup>OP</sup>	30 <sup>OP</sup>
Chlorinated Phenolics	µg/L	0.025 <sup>CTR</sup>	0.049 <sup>CTR</sup>	10 <sup>OP</sup>	1 <sup>OP</sup>
1,1,2,2-tetrachlorethane (PCA)	µg/L	2.3 <sup>OP</sup>	-	-	-
1,1,1-trichloroethane (TCA)	µg/L	5.4E5 <sup>OP</sup>	-	-	-
1,1,2-trichloroethane (TCA)	µg/L	9.4 <sup>OP</sup>	-	-	-
1,2-dichloroethane	µg/L	28 <sup>OP</sup>	-	-	-
Tetrachloroethylene (PCE)	µg/L	2.0 <sup>OP</sup>	-	-	-
Trichloroethylene (TCE)	µg/L	27 <sup>OP</sup>	-	-	-
Vinyl chloride	µg/L	36 <sup>OP</sup>	-	-	-
Carbon tetrachloride	µg/L	0.90 <sup>OP</sup>	-	-	-
Base/Neutral Organic Compounds	µg/L			10 <sup>AB</sup>	

<sup>OP</sup> Basis – Ocean Plan 2005

<sup>AB</sup> Basis – Anti-Backsliding, values from the previous permit

<sup>DHS</sup> Basis – Department of Health Services

<sup>CTR</sup> Basis – California Toxics Rule/ State Implementation Plan 2005

\* Copper discharge from the Shelter Island Basin watershed to San Diego Bay is prohibited.

Mass Limits

All permit limitations, standards or prohibitions shall be expressed in terms of mass except for pH, or other pollutants which cannot appropriately be

expressed by mass or under certain circumstances including "when applicable standards and limitations are expressed in terms of other units of measurement." (40 CFR § 122.45(f)(1)). Therefore, all concentration limits stated above except for Settleable Solids, Acute Toxicity, Chronic Toxicity, Total Coliform, Fecal Coliform, pH, and Dissolved Oxygen shall also have a mass limit based on its concentration limit times the discharge flow limit in the Notice of Enrollment expressed in pounds per day (lbs/d) as shown in the equations below:

$$\begin{aligned} \text{Concentration Limit} * \text{Flow Limit} * \text{Conversion Factor} &= \text{Mass Limit} \\ (\text{mg/l}) * (\text{MGD}) * 8.34 (\text{lb} * \text{L} / (\text{Million Gallons} * \text{mg})) &= \text{lbs/day} \\ (\mu\text{g/l}) * (\text{MGD}) * 0.00834 (\text{lb} * \text{L} / (\text{Million Gallons} * \mu\text{g})) &= \text{lbs/day} \\ (\text{mg/l}) * (\text{gpd}) * 0.00000834 (\text{lb} * \text{L} / (\text{Gallons} * \text{mg})) &= \text{lbs/day} \\ (\mu\text{g/l}) * (\text{gpd}) * 0.0000000834 (\text{lb} * \text{L} / (\text{Million Gallons} * \mu\text{g})) &= \text{lbs/day} \end{aligned}$$

- L. Interim Effluent Limitations (Not Applicable)
- M. Land Discharge Specifications (Not Applicable)
- N. Reclamation Specifications (Not Applicable)

#### IV. Rationale for Receiving Water Limitations

##### A. Surface Water

Receiving Water Limitations are based upon water quality objectives contained in the Basin Plan. The discharge of groundwater extraction waste from any site shall not, separately or jointly with any other discharge, cause violations of the following water quality objectives in San Diego Bay.

##### 1. Bacterial Characteristics

##### a. Water-Contact Standards

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for water-contact sports, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- (1) Samples of water from each sampling station shall have a density of total coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).
- (2) The fecal coliform density based on a minimum of not less than five samples for any 30-day period shall not exceed a

geometric mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 60-day period exceed 400 per 100 ml.

b. Shellfish Harvesting Standards

At all areas where shellfish may be harvested for human consumption, as determined by the Regional Board, the following bacterial objectives shall be maintained throughout the water column:

- 1) The median total coliform density shall not exceed 70 per 100 ml; and
- 2) Not more than 10 percent of the samples shall exceed 230 per 100 ml.

2. Physical Characteristics

- a. Floating particulates and grease and oil shall not be visible.
- b. The discharge of waste shall not cause aesthetically undesirable discoloration of the surface of San Diego Bay.
- c. Natural light shall not be significantly reduced.
- d. The rate of deposition of solids and the characteristics of inert solids in San Diego Bay sediments shall not be changed such that benthic communities are degraded.

3. Chemical Characteristics

- a. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as a result of the discharge of oxygen demanding waste materials.
- b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- c. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
- d. The concentration of substances set forth in the Discharge Specifications in marine sediments shall not be increased to levels which would degrade indigenous biota.
- e. The concentration of organic materials in San Diego Bay sediments shall not be increased to levels which would degrade marine life.
- f. Nutrient materials shall not cause objectionable aquatic growth or degrade indigenous biota.

4. Biological Characteristics

- a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
- b. The natural taste, odor, and color of fish, shellfish, or other aquatic resources used for human consumption shall not be altered.



- c. The concentration of organic materials in fish, shellfish or other aquatic resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

5. Radioactivity

Discharge of radioactive waste shall not degrade marine life.

6. Toxic Materials Limitations

Since there is no dilution, toxic materials limits are the same as the effluent limits.

## V. Rationale for Monitoring and Reporting Requirements

Section 122.48 of 40 CFR requires all NPDES permits to specify recording and reporting of monitoring results. Sections 13267 and 13383 of the CWC authorize the Regional Board to require technical and monitoring reports. The MRP, Attachment E of this General Permit, 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 permit.

- A. Influent Monitoring (Not applicable)

- B. Effluent Monitoring

In reviewing the monitoring reports, the State Board found that although Dischargers were reporting Total Petroleum Hydrocarbons (TPH), a distinction between diesel and gasoline was not always made. Results for TPH should be reported as total TPH, TPH diesel (TPH-d), and TPH gasoline (TPH-g). Also, for detections of TPH-g, the amount of benzene, ethylbenzene, toluene, and xylene should be reported. Benzene, ethylbenzene, and toluene are priority pollutants. (40 CFR § 131).

- C. Whole Effluent Toxicity (WET) Testing Requirements

A WET Limit is required if a discharge causes, has a reasonable potential to cause, or contributes to an exceedance of applicable water quality standards, including numeric and narrative. Since these types of discharges are prohibited under this General Permit, WET limits are not applicable.

- D. Receiving Water Monitoring

States are required to adopt numeric criteria where they are necessary to protect designated uses. (CWA §§ 303(a) – 303(c)). The Regional Board adopted numeric criteria in the Basin Plan. The Basin Plan is a regulatory reference for meeting the State and Federal requirements for water quality control. (40 CFR 131.20). State Board Resolution 68-16, the Antidegradation Policy, does not allow changes in water quality less than that prescribed in Water Quality Control

Plans (Basin Plans). The Basin Plan states that; "The numerical and narrative water quality objectives define the least stringent standards that the Regional Water Board will apply to regional waters in order to protect the beneficial uses." This General Permit contains Receiving Water Limitations based on the Basin Plan numerical and narrative water quality objectives for Biostimulatory Substances, Chemical Constituents, Color, Dissolved Oxygen, Floating Material, Oil and Grease, pH, Pesticides, Radioactivity, Salinity, Sediment, Settleable Material, Suspended Material, Tastes and Odors, Temperature, Toxicity and Turbidity.

Section 13267 of the California Water Code states, in part,

(a) A regional board, in establishing ... waste discharge requirements ... may investigate the quality of any waters of the state within its region" and "(b) (1) In conducting an investigation ... the regional board may require that any person who ... discharges ... waste ... that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports.

The attached Monitoring and Reporting Program is issued pursuant to CWC section 13267. The groundwater monitoring and reporting program required by this General Permit and the attached Monitoring and Reporting Program are necessary to determine compliance with these waste discharge requirements. The Discharger is responsible for the discharges of waste at the facility subject to this General Permit.

E. Other Monitoring Requirements (Not Applicable)

## **VI. Rationale for Provisions**

A. Standard Provisions

Standard Provisions, which in accordance with 40 CFR sections 122.41 and 122.42, apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachment D.

B. Special Provisions

1. Reopener Provisions (Not Applicable)
2. Special Studies and Additional Monitoring Requirements (Not Applicable)
3. Best Management Practices and Pollution Prevention Plan (Not Applicable)
4. Compliance Schedules (Not Applicable)

5. Construction, Operation, and Maintenance Specifications (Not Applicable)
6. Special Provisions for Municipal Facilities (POTWs Only) (Not Applicable)
7. Other Special Provisions

The Dischargers shall dispose of solids removed from liquid wastes in a manner that is consistent with Title 27 of the CCR and approved by the Regional Board.

## VII. Public Participation

In considering the re-issuance and adoption of this General Permit the Regional Board has developed a draft General Permit. The Regional Board encouraged public participation in the WDR adoption process.

### A. Notification of Interested Parties

The Regional Board notified interested agencies and persons of its intent to prescribe waste discharge requirements in this General Permit and provided them with an opportunity to submit their written comments and recommendations. On April 13, 2007, the Regional Board sent out notification through the Regional Board Agenda by an electronic mail list and by U.S. Postal Service. Notification was posted on the Regional Board's webpage on April 27, 2007, and published in the San Diego Union Tribune newspaper.

### B. Written Comments

Interested persons were invited to submit written comments concerning this tentative General Permit. Comments were to be submitted in person, by fax, email, or mail to the Executive Officer at the Regional Board at the address on the cover page of this Permit.

To be fully addressed and considered by the Regional Board, written comments should be submitted at the Regional Board office by 5 p.m. on May 30, 2007.

### C. Public Hearing

The Regional Board held a public hearing on the tentative General Permit during its regular meeting on the following date and at the following location:

Date: **June 13, 2007**  
Location: **California Regional Water Quality Control Board  
San Diego Region  
Regional Board Meeting Room  
9174 Sky Park Court, Suite 100  
San Diego, California 92123**

Interested persons were invited to attend. At the public hearing, the Regional Board heard testimony pertinent to the discharge and General Permit.

D. Information and Copying

General Permit-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. A partial list of these items are on the Regional Board's web site at:  
[www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

Copying of documents may be arranged through the Regional Board by calling (858) 467-2952.

E. Register of Interested Persons

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

F. Additional Information

Requests for additional information or questions regarding this General Permit may be directed to Vicente Rodriguez at (858) 627-3940 or at:  
[VRodriguez@waterboards.ca.gov](mailto:VRodriguez@waterboards.ca.gov)

This General Permit will expire on June 13, 2012. Enrollees covered under this General Permit at the time of expiration will be required to re-enroll under the reissued permit.