REVISED TENTATIVE ORDER NO. R2-2012-XXXX
NPDES NO. CAG912004

GENERAL WASTE DISCHARGE REQUIREMENTS FOR: Discharge or Reuse of Extracted Brackish Groundwater, Reverse Osmosis Concentrate Resulting from Treated Brackish Groundwater, and Extracted Groundwater from Structural Dewatering Requiring Treatment (Groundwater General Permit)

Table 1. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	
This Order shall become effective on:	**August 8, 2012**
This Order shall expire on:	**August 9, 2017**
Place and Regulatory Measure ID Nos.	**778700 and 383919**
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified the discharges under this General National Pollutant Discharge Elimination System (NPDES) Permit as minor discharges based on the discharges' impacts to receiving water bodies.	
To obtain coverage under this General Permit, dischargers must submit a Notice of Intent (NOI) Form as described in Attachment B and a filing fee equivalent to the first year's annual fee. If the NOI is complete, Authorization to Initiate Discharge will be issued by the Regional Water Quality Control Board Executive Officer.	
Authorized Dischargers who need to continue discharging after the expiration date of this Order shall file a completed NOI form no later than 180 days in advance of this Order's expiration date. Such Dischargers for which coverage is extended will become subject to the new Order upon authorization by the Executive Officer.	

I, Bruce H. Wolfe, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on the date indicated above.

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Bruce H. Wolfe, Executive Officer

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I. SCOPE OF GENERAL PERMIT

Facilities that may be covered under this Order are groundwater discharges (typically long term) that fall under one of the three categories in I.A., below, and not otherwise covered by municipal stormwater permits or other applicable NPDES permits. This Order covers discharges from these facilities to all surface waters such as creeks, streams, rivers including flood control canals, lakes, or San Francisco Bay. Such discharges may occur directly to surface waters or through constructed storm drain systems.

A. The three discharge categories are as follows:

1. Aquifer reclamation program well discharges;

2. Reverse osmosis (RO) concentrate from aquifer reclamation program well discharges to estuarine receiving waters; and,

3. Structural dewatering discharges of greater than 10,000 gallons per day and requiring treatment, for pollutants other than fuels and volatile organic compounds, before discharging. (This does not include treatment required for contamination by fuels or volatile organic compounds because such dischargers must seek coverage under a separate general permit, VOC Fuel General Permit No. CAG912002.)

B. Examples of typical discharges to be covered by this permit are provided in Findings II.D.1 through 3, below. Specific facility information for each discharge is required in the Notice of Intent (NOI) Form submitted for that discharge (see Attachment B). Any discharger proposing similar discharges at multiple sites may be covered under one discharge authorization letter subject to the approval of the Regional Water Board Executive Officer on a case-by-case basis. Each outfall will be subject to individual fees.

II. FINDINGS

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter, the Regional Water Board), finds:

A. Background. In April 2007, the Regional Water Board adopted Order No. R2-2007-0033, NPDES Permit No. CAG912004, General Waste Discharge Requirements for Discharge or Reuse of Extracted Brackish Groundwater and Reverse Osmosis Concentrate Resulting from Treatment of Groundwater by Reverse Osmosis and Discharge or Reuse of Extracted and Treated Groundwater Resulting from Structural Dewatering. Order No. R2-2007-0033 included the three discharge categories explained in I.A.1 through 3, above.

B. From July 2007 to June 2012, the Executive Officer authorized 41 discharges pursuant to Order No. R2-2007-0033. Out of these 41 discharges, 12 discharges were under category 1, 1 discharge under category 2, and 28 discharges under category 3.

C. As of January 3, 2012, the Regional Water Board received notices of termination for 13 discharges and NOIs for 28 discharges. Out of these 28 discharges, 11 discharges are under category 1, 1 discharge under category 2, and 16 discharges under category 3.

For the purposes of this Order, references to the "Discharger" or "permittee" in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger(s) herein.

D. Facility Description(s). This Order regulates discharges to surface waters from the following sources:

1. Aquifer reclamation program well discharges (typically long term): this consists of extracted groundwater discharges related to protecting, reclaiming, and restoring groundwater quality impacted by, or the possible occurrence of, salinity intrusion.

2. RO concentrate from aquifer reclamation program well discharges to estuarine environments (typically long term): pumped groundwater may be treated by RO so that less saline groundwater may be returned to the drinking water supply and the RO concentrate discharged as waste. RO concentrate discharges to sanitary sewer systems, or that are regulated under a sanitary agency's pretreatment program, are not required to seek coverage under this Order.

3. Long-term structural dewatering of greater than 10,000 gallons per day and requiring treatment for pollutants other than fuels or volatile organic compounds: these are long-term dewatering systems under or around buildings and pipelines to control groundwater infiltration. Buildings and underpass structures are two examples of structures that may require continuous dewatering. Treatment is required where a physical, biological, or chemical treatment process is necessary in order for the structural dewatering discharge to comply with the prohibitions and limitations of this Order. The target of treatment may include naturally-occurring compounds (e.g., sulfides, alkalinity, acidity) that, if not treated, would pollute or contribute to pollution of surface receiving waters. This Order does not cover groundwater that requires treatment due to contamination from fuels or volatile organic compounds. Such discharges must seek coverage under a separate general permit, VOC Fuel General Permit No. CAG912002. This Order requires Dischargers to provide in the NOI (Attachment B) a complete description of the treatment system installed at each facility, if any, and the pollutants that the system will remove.

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

States may request authority to issue general NPDES permits pursuant to title 40 of the Code of Federal Regulations (40 CFR) section 122.28. On June 8, 1989, the State Water Resources Control Board (State Water 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, USEPA Region 9 approved the State Water Board's request and granted authorization for the State to issue general NPDES permits.

F. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of NOIs, through monitoring and reporting programs, and other available environmental information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G are also incorporated into this Order.

G. California Environmental Quality Act (CEQA). Under CWC section 13389, this action to adopt an NPDES permit is exempt from Chapter 3 of CEQA.

H. Technology-based Effluent Limitations. CWA section 301(b) and NPDES regulations at 40 CFR 122.44 requires that permits include conditions meeting applicable technology-based requirements, at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. Technology-based effluent limitations have not been established by USEPA for the types of discharges authorized by this Order.

I. Water Quality-Based Effluent Limitations (WQBELs). CWA section 301(b) and NPDES regulations at 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards. NPDES regulations at 40 CFR122.44(d)(1)(i) mandate that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44(d)(1)(vi).

J. Water Quality Control Plans. The *Water Quality Control Plan for the San Francisco Bay Basin* (Basin Plan) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives (WQOs) for waters of the State, including surface waters and groundwater. It also includes programs of implementation to achieve WQOs. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Board, the Office of Administrative Law, and USEPA.

The Basin Plan states that the beneficial uses of any specifically identified water body generally apply to its tributary streams. The Basin Plan may not specifically identify beneficial uses for every receiving water regulated under this Order, but may identify present and potential uses for the downstream water body, to which the receiving water, via an intermediate water body, is a tributary. These potential and existing beneficial uses are municipal and domestic supply, fish migration and fish spawning, industrial service supply, navigation, industrial process supply, marine habitat, agricultural supply, estuarine habitat, groundwater recharge, shellfish harvesting, water contact and non-contact recreation, ocean, commercial, and sport fishing, wildlife habitat, areas of special biological significance, cold freshwater and warm freshwater habitat, and preservation of rare and endangered species for surface waters and municipal and domestic supply, industrial service supply, industrial process supply, agricultural supply, and freshwater replenishment for groundwaters. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Requirements of this Order implement the Basin Plan.

On September 18, 1975, the State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal Interstate Waters and Enclosed Bays and Estuaries of California* (hereinafter the Thermal Plan). The Thermal Plan contains objectives governing cooling water discharges, providing different and specific numeric and narrative water quality objectives for new and existing discharges.

The State Water Board's *Water Quality Control Plan for Enclosed Bays and Estuaries—Part 1, Sediment Quality* became effective on August 25, 2009. This plan supersedes other narrative sediment quality objectives and establishes new sediment quality objectives and related implementation provisions for specifically defined sediments in most bays and estuaries.

K. National Toxics Rule (NTR) and California Toxics Rule (CTR). USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995, and November 9, 1999. About 40 criteria in the NTR apply in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria (WQC) for priority pollutants.

L. State Implementation Policy. On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

M. Recycled Water Policy. The State Water Board adopted Resolution No. 2009-0011 (*Policy for Water Quality Control for Recycled Water*) on February 3, 2009. The policy is intended to promote sustainable local water supplies by increasing the acceptance and promoting the use of recycled water. It sets a goal of increasing recycled water use statewide by at least one million acre feet per year by 2030. The policy also requires Regional Water Boards to exercise their authority to the fullest extent possible to encourage recycled water use and to develop watershed-based salt and nutrient management plans to ensure that groundwater resources are not degraded by recycled water use.

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

O. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based and water quality-based effluent limitations (TBELs and WQBELs, respectively) for individual pollutants. Derivation of these limitations is discussed in the Fact Sheet (Attachment F.) This Order's technology-based pollutant restrictions on pH and chlorine residual implement the minimum applicable federal technology-based requirements and meet requirements of the Basin Plan.

WQBELs have been derived to implement WQOs that protect beneficial uses. Both the beneficial uses and the WQOs have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutants WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to 40 CFR 131.38. The procedure for calculating individual WQBELs for priority pollutants is based on the SIP. Most beneficial uses and WQOs contained in the Basin Plan were approved under State law and submitted to and approved by USEPA. Any WQOs and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for the purposes of the CWA" pursuant to 40 CFR 131.21(c)(1).

P. Antidegradation Policy. NPDES regulations at 40 CFR 131.12 require that state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law and requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

Q. Anti-Backsliding Requirements. CWA sections 402(o)(2) and 303(d)(4) and 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit be as stringent as those in the previous permit, with some

exceptions where limitations may be relaxed. This Order retains effluent limitations no less stringent than those established by previous order.

R. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the State. Dischargers are responsible for meeting all requirements of applicable State and federal law pertaining to threatened and endangered species.

S. Monitoring and Reporting. NPDES regulations at 40 CFR 122.48 require that all NPDES permits specify requirements for recording and reporting monitoring results. CWC sections 13267 and 13383 authorize the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

T. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42 and as modified for this Order, are provided in Attachment D. Dischargers must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR 122.42. Dischargers must also comply with the Regional Standard Provisions provided in Attachment G. The Regional Water Board has also included in this Order special provisions applicable to the Dischargers. The Fact Sheet (Attachment F) provides rationale for the special provisions contained in this Order.

U. Provisions and Requirements Implementing State Law. The provisions/requirements in subsections IV.C (Reclamation Specifications) and V.B (Groundwater Limitations) of this Order are included to implement State law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

V. Notification of Interested Parties. The Regional Water Board notified the Dischargers and interested agencies and persons of its intent to prescribe GWDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. The Fact Sheet (Attachment F) provides details of the notification.

W. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. The Fact Sheet (Attachment F) provides details of the public hearing.

IT IS HEREBY ORDERED, that this Order supersedes Order No. R2-2007-0033, except for enforcement purposes, and in order to meet the provisions contained in CWC Division 7 (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal CWA and regulations and guidelines adopted thereunder, the Dischargers shall comply with the requirements in this Order.

III. DISCHARGE PROHIBITIONS

A. The discharge of extracted groundwater or RO concentrate of groundwater is prohibited unless an NOI application for the proposed discharge has been submitted and the Executive Officer has provided the Discharger with an Authorization to Discharge. The discharge of extracted groundwater or RO concentrate of groundwater at a location or in a manner different from that authorized by the Authorization to Discharge is prohibited.

B. The discharge of extracted groundwater or RO concentrate in excess of the flow rate specified by the Executive Officer in the Authorization to Discharge is prohibited unless an increase in the flow rate is approved by the Executive Officer.

C. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance, as defined by CWC section 13050.

D. Discharges to a storm drain shall not cause scouring or erosion at the point where the storm drain discharges into the receiving water, and shall not cause or contribute to scouring of banks, excessive sedimentation, or flooding of the storm drain system or receiving water downstream of the point of discharge.

E. Discharges of filter backwash water, membrane cleaning solutions, or other waste streams resulting from or associated with the treatment of uncontaminated brackish groundwater by RO and not described as RO concentrate are prohibited.

F. Discharges of drilling fluids are prohibited.

G. Discharges of groundwater contaminated with volatile organic compounds (VOC) or fuels are prohibited. Dischargers with VOC or fuels contamination must obtain coverage under the VOC Fuel General Permit, NPDES permit No. CAG912002.

H. In case of structural dewatering requiring treatment before discharging, bypass or overflow of untreated or partially treated groundwater to waters of the State either at the treatment system or from any of the collection or transport systems or pump stations tributary to the treatment system is prohibited, except as provided for in the conditions stated in section I.G of Attachment D.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations (Surface Water Discharges Only)

1. **Residual Chlorine:** There shall be no detectable levels of residual chlorine in the effluent (a non-detect result using a detection level equal or less than 0.05 milligram per liter will not be

deemed to be out of compliance). This limit only applies to Dischargers that chlorinate their well water.

2. **pH:** The pH of the discharge shall not exceed 8.5 nor be less than 6.5.

3. **Acute Toxicity:**

   a. Representative samples of the effluent, with compliance measured at Monitoring Location EFF-001 as described in the Authorization to Discharge, shall meet the following limits for acute toxicity. Bioassays shall be conducted in compliance with Section V.A of the Monitoring and Reporting Program (MRP) (Attachment E).

      The survival of test fish in 96-hour static renewal bioassays with the effluent shall be not less than a three sample moving median of 90% survival and a single test value of not less than 70% survival.

   b. These acute toxicity limitations are further defined as follows:

      (1) 3-sample median. A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if one or more of the past two or less bioassay tests show less than 90 percent survival.

      (2) Single sample. A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit.

   c. Bioassays shall be performed using the most up-to-date USEPA protocol. Bioassays shall be conducted using rainbow trout as the test species in compliance with *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, currently 5th Edition (EPA-821-R-02-012), with exceptions granted to the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP) upon the Discharger's request with justification.

B. Discharge Specifications

All authorized Dischargers shall conduct receiving water, effluent monitoring, and/or special studies as specified in the MRP (Attachment E) and compare analytical results with the triggers described in Provisions VI.C.6. These triggers are not effluent limitations. Exceedances to triggers, however, do lead to additional requirements, which are designed to mitigate potential adverse impacts and to determine if discharges continue to be suitable for coverage under this Order. All Dischargers shall adhere to applicable procedures, described by Provision VI.C.6.

C. Reclamation Specification and Land Discharge Specifications

1. **Reuse Policy:** The Regional Water Board adopted Resolution No. 88-160 on October 19, 1988. The Resolution urges dischargers of extracted groundwater from site cleanup projects to reclaim their effluent and that when reclamation is not technically and/or economically feasible, to discharge to a publicly owned treatment works (POTW). If neither reclamation

nor discharge to a POTW is technically or economically feasible and if beneficial uses of the receiving water are not adversely affected, it is the intent of the Regional Water Board to authorize the discharge of treated extracted groundwater in accordance with the requirements of this Order.

2. **Reuse Allowed:** This Order permits reuse or reclamation of extracted or extracted and treated groundwater in conjunction with the discharge to surface water, except for purposes of recharge or reinjection. Reuse of extracted or extracted and treated groundwater can take many forms, such as irrigation of landscaping or agriculture, dust control or soil compaction on construction sites, and industrial water supply.

3. **Water Reclamation Specifications (Water Reuse Only)**

   a. Water reclaimed for beneficial reuse shall meet the requirements in Section IV.A - Effluent Limitations.

   b. Water reclamation activities shall be described in the Discharger's NOI, including the method of any additional treatment and the location and type of water reuse.

   c. Reclaimed water shall not be allowed to escape from the authorized use area by airborne spray, from conveyance facilities, or by surface flow, except in minor amounts associated with good irrigation practice.

   d. Reclamation involving irrigation shall not occur when the ground is saturated.

   e. The use of reclaimed water shall not impair the quality of waters of the State, nor shall it create a nuisance as defined by CWC section 13050(m).

   f. Adequate measures shall be taken to minimize public contact with reclaimed water and to prevent the breeding of flies, mosquitoes, and other vectors of public health significance during the process of reuse.

   g. Appropriate public warnings must be posted to advise the public that the water is not suitable for drinking. Signs must be posted in the area, and all reclaimed water valves and outlets appropriately labeled.

   h. There shall be no cross-connection between the potable-water supplies and piping containing extracted or extracted treated groundwater intended for reuse.

   i. Water reclamation consisting of recharge or reinjection is not authorized under this Order.

4. **Land Discharge Specifications:** This Order permits limited land discharges of groundwater in conjunction with the discharge to surface water, except for purposes of significant recharge or reinjection. In general, the specifications in Section IV.C.3 also apply to land discharges.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Discharges shall not cause the following in surface receiving waters:

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

a. Floating, suspended, or deposited macroscopic particulate matter or foam;

b. Bottom deposits or aquatic growths to the extent that such deposits or growths cause nuisance or adversely affect beneficial uses;

c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

d. Visible, floating, suspended, or deposited oil or other products of petroleum origin; and

e. Toxic or other deleterious substances to be present in concentrations or quantities that cause deleterious effects on aquatic biota, wildlife, or waterfowl, or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

a. Dissolved oxygen:

<u>For all tidal waters</u>:

In the Bay downstream of Carquinez Bridge - 5.0 mg/L minimum

Upstream of Carquinez Bridge - 7.0 mg/L minimum

<u>For nontidal waters</u>:

Waters designated as cold water habitat - 7.0 mg/L minimum

Waters designated as warm water habitat - 5.0 mg/L minimum

<u>For all inland surface waters</u>:

The median dissolved oxygen concentration for any three consecutive months shall not be less than 80% of the dissolved oxygen content at saturation. When natural factors cause concentrations less than that specified above, the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.

d. Dissolved Sulfide	Natural background levels
e. pH:	The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH by more than 0.5 pH units. In receiving waters that are naturally alkaline, the discharge shall not cause changes greater than 0.5 units in background ambient pH levels.
f. Un-ionized Ammonia	0.025 mg/L as an annual median; 0.16 mg/L as a maximum for Central Bay and upstream; 0.4 mg/L as a maximum for Lower Bay.
g. Nutrients	Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
h. Turbidity	The discharges shall not cause the following:

Receiving Water	Limit
Dry creek	≧ 50 NTU
< 50 NTU	< 5 NTU incremental increase above background
≥ 50 NTU	< 10 percent increase above background

3. Discharges shall not cause or contribute to a violation of any applicable water quality standard for receiving waters adopted by the Regional Water Board or the State Water Board as required by the CWA and regulations adopted there under. If more stringent applicable water quality standards are promulgated or approved pursuant to CWA section 303, or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

B. Groundwater Limitations

Discharges shall not cause violations of Basin Plan water quality standards for receiving groundwaters with existing and potential beneficial uses of municipal and domestic supply, industrial water supply, industrial process water supply, agricultural water supply, and/or freshwater replenishment to surface water (see Table 2 numerical triggers in Column A which are protective of municipal and domestic supply, agricultural water supply, and freshwater).

VI. PROVISIONS

A. Standard Provisions

Dischargers shall comply with federal Standard Provisions included in Attachment D of this Order.

B. Monitoring and Reporting Program Requirements

1. Dischargers shall comply with the Monitoring and Reporting Program (Attachment E), and future revisions thereto, including applicable sampling and reporting requirements in the standard provisions listed in VI.A, above.

2. Dischargers authorized under this permit may be required to comply with additional monitoring requirements. The Executive Officer will specify such additional monitoring requirements in the Authorization to Discharge letter. Examples of additional monitoring that could be required are listed below:

a. Monitoring in response to a complaint received about a Facility authorized to discharge under this permit,
b. Stormwater monitoring,
c. Dioxins and furans monitoring,
d. Regional Monitoring Program (RMP) monitoring,
e. Additional discharge observations, and
f. Additional effluent and ambient priority pollutant scans.

C. Special Provisions

1. Reopener Provisions

The Regional Water Board may modify or reopen this Order prior to its expiration date in any of the following circumstances as allowed by law:

a. If present or future investigations demonstrate that the discharges governed by this Order have or will have a reasonable potential to cause or contribute to, or will cease to have, adverse impacts on water quality or beneficial uses of the receiving waters.

b. If new or revised WQOs or total maximum daily loads (TMDLs) come into effect for the San Francisco Bay Estuary and contiguous water bodies (whether Statewide, regional, or site-specific). In such cases, effluent limitations in this Order will be modified as necessary to reflect updated WQOs and waste load allocations in TMDLs. Adoption of effluent limitations contained in this Order is not intended to restrict in any way future modifications based on legally adopted WQOs or TMDLs, or as otherwise permitted under federal regulations governing NPDES permit modifications.

c. If State Water Board precedential decisions, new policies, new laws, or new regulations on chronic toxicity or total chlorine residual become available. For example, pursuant to CWC section 13170.3, the State Water Board will establish water quality objectives and effluent limitations that are specifically appropriate to brackish groundwater treatment system facilities that produce municipal water supplies for local use.

d. If an administrative or judicial decision on a separate NPDES permit or WDRs addresses requirements similar to this discharge.

e. The Discharger may request permit modification based on any of the circumstances described above. In any such request, the Discharger shall include an antidegradation and anti-backsliding analysis.

f. Or as otherwise authorized by law.

2. **NOI or Modified NOI Application.** The NOI or Modified NOI application for each point of proposed discharge to a storm drain system shall contain the information required in the NOI Application as explained in attachments B and C of this Order and as may be amended by the Executive Officer.

3. **NOI Review.** Upon receipt of a complete NOI application package for proposed discharge, the Executive Officer will review the application to determine whether the proposed Discharger is eligible to discharge waste under this Order. The application package shall document that the proposed treatment system and associated operation, maintenance, and monitoring plans are capable of ensuring that the discharge will meet the provisions, prohibitions, effluent limitations, and receiving water limitations of this Order.

4. **Discharge Authorization and Termination.** If the Executive Officer determines that the proposed Discharger is eligible to discharge waste under this Order, the Executive Officer will issue an Authorization to Discharge for the proposed discharge. Any Discharger proposing similar discharges at multiple sites may be covered under one discharge authorization letter subject to the approval of the Executive Officer on a case-by-case basis. Each outfall will be subject to individual fees. After notice and opportunity for a hearing, coverage of an individual discharge under this Order may be terminated or modified for cause, including but not limited to, the following:

   a. Violation of any term or condition of this Order;

   b. In obtaining coverage under this Order, misrepresentation or failure to disclose all relevant facts; and

   c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

   The discharge authorization may be terminated by the Executive Officer at any time.

5. **Non-Compliance Is A Violation.** Upon receipt of the Executive Officer's discharge authorization, the Discharger(s) shall comply with all applicable conditions and limitations of this Order and its attachments. Any permit noncompliance (violations of requirements in this Order or Monitoring Program) constitutes a violation of the CWA and the CWC and is grounds for enforcement action, permit or authorization termination, revocation and reissuance, modification, the issuance of an individual permit, or denial of a renewal application.

6. **Triggers.** The following triggers in Table 2 are not effluent limitations and must not be construed as such. Instead, the triggers are levels above which additional investigation is

required to determine further action and to determine whether a numeric effluent limitation for a particular constituent is necessary. The authorization issued to each Discharger will indicate which trigger column is applicable to that specific discharge. If any constituent in the discharge exceeds the corresponding trigger as listed in Table 2, below, the Discharger shall take monthly influent and effluent samples for three consecutive months for each exceeded constituent and conduct activities as required in Provisions VI.C.7 or VI.C.8. If additional monitoring has already been completed, the Discharger shall summarize the results including a description of plans underway to address the previous exceedance, such as details of source elimination, changes in operation of existing treatment units, or the re-design of any treatment unit.

Table 2. Trigger Pollutants

Pollutant	Chemical Abstract Service (CAS) Number	Column A Trigger for discharges to freshwater bodies with municipal and domestic supply, agricultural water supply, and/or freshwater replenishment beneficial uses (µg/L)[1],[2]	Column B Trigger for discharges to Bay/Estuary (See Note 2) (µg/L)[1],[2]
Turbidity (Units)		5	---
Total Dissolved Solids (TDS)		500,000	---
Conductivity (mmhoms/cm)		200	---
Chloride		142,000	---
Total Solids (TS) - TDS		30,000	30,000
Antimony	7440360	6	4,300
Arsenic	7440382	10	36
Beryllium	7440417	4	---
Cadmium	7440439	2.2	2.2
Chromium (total)	18540299	11	11
Chromium (VI)	18540299	11[3]	11
Copper[4]	7440508	20	5.9
Copper[5]	7440508	12	3.4
Copper[6]	7440508	17	4.7
Lead	7439921	2.5	2.5
Mercury	7439976	0.025	0.025
Nickel[4]	7440020	100	30
Nickel[5]	7440020	80	13
Nickel[6]	7440020	100	19
Selenium	7782492	5.0	5.0
Silver	7440224	3.4	1.9
Thallium	7440280	1.7	6.3
Zinc	7440666	120	81
Cyanide	57125	5.2	2.9
Asbestos	1332214	7 MFibers/L	---
2,3,7,8-TCDD (Dioxin)	1746016	1.3E-08	1.4E-08
Acrylonitrile	107131	0.059	0.66
Bromoform	75252	4.3	360
Chlorodibromomethane	124481	0.401	34
Dichlorobromomethane	75274	0.56	46
1,2-Dichloropropane	78875	0.52	39
1,3-Dichloropropylene	542756	0.5	1,700
1,1,2,2-Tetrachloroethane	79345	0.17	11
Pentachlorophenol	87865	0.28	7.9
2,4,6-Trichlorophenol	88062	2.1	6.5
Benzidine	92875	0.00012	0.00054
Benzo(a)anthracene	56553	0.0044	0.049
Benzo(a)pyrene	50328	0.0044	0.049
Benzo(b)fluoranthene	205992	0.0044	0.049

Pollutant	Chemical Abstract Service (CAS) Number	Column A Trigger for discharges to freshwater bodies with municipal and domestic supply, agricultural water supply, and/or freshwater replenishment beneficial uses (µg/L)[1],[2]	Column B Trigger for discharges to Bay/Estuary (See Note 2) (µg/L)[1],[2]
Benzo(k)fluoranthene	207089	0.0044	0.049
Bis(2-chloroethyl)ether	111444	0.031	1.4
Bis(2-ethylhexyl)phthalate	117817	1.8	5.9
Chrysene	218019	0.0044	0.049
Dibenzo(a,h)anthracene	53703	0.0044	0.049
3,3'-Dichlorobenzidine	91941	0.04	0.077
2,4-Dinitrotoluene	121142	0.11	9.1
1,2-Diphenylhydrazine	122667	0.04	0.54
Hexachlorobenzene	118741	0.00075	0.00077
Hexachlorobutadiene	87683	0.44	50
Hexachloroethane	67721	1.9	8.9
Indeno(1,2,3-c,d)pyrene	193395	0.0044	0.049
N-nitrosodimethylamine	62759	0.00069	8.1
N-nitrosodi-n-propylamine	621647	0.005	1.4
Aldrin	309002	0.00013	0.00014
alpha-BHC	319846	0.0039	0.013
beta-BHC	319857	0.014	0.046
gamma-BHC	58899	0.019	0.063
Chlordane	57749	0.00057	0.00059
4,4-DDT	50393	0.00059	0.00059
4,4-DDE	72559	0.00059	0.00059
4,4-DDD	72548	0.00083	0.00084
Dieldrin	60571	0.00014	0.00014
alpha-Endosulfan	959988	0.0087	0.0087
beta-Endosulfan	33213659	0.0087	0.0087
Endrin	72208	0.036	0.0023
Endrin aldehyde	7421934	0.76	0.81
Heptachlor	76448	0.00021	0.00021
Heptachlor epoxide	1024573	0.00010	0.00011
PCBs, sum	1336363	0.00017	0.00017
Toxaphene	8001352	0.0002	0.0002
Odor-Threshold (Units)	---	3	---
Sulfate	---	250,000	---
Foaming Agents	---	500	---
Color (Units)	---	15	---
Aluminum	---	5,000	---
Boron	---	500	---
Cobalt	---	50	---
Fluoride	---	1,000	---
Iron	---	300	---
Lithium	---	2,500	---
Manganese	---	50	---
Molybdenum	---	10	---
Nitrate (as NO3)	---	45,000	---
Nitrate + Nitrite (as N) NO3 + NO2 (as N)	---	5,000	---
Nitrite (as N)	---	1,000	---
Vanadium	---	100	---
Combined Radium-226 and Radium 228 (in pCi/l)	---	5	---
Gross Alpha Particle (includes Radium-226 but excludes Radon and Uranium) (in pCi/l)	---	15	---
Tritium (in pCi/l)	---	20,000	---
Strontium-90 (in pCi/l)	---	8	---
Gross Beta Particle Activity (in pCi/l)	---	50	---
Uranium (in pCi/l)	---	20	---

Pollutant	Chemical Abstract Service (CAS) Number	Column A Trigger for discharges to freshwater bodies with municipal and domestic supply, agricultural water supply, and/or freshwater replenishment beneficial uses (µg/L)[1],[2]	Column B Trigger for discharges to Bay/Estuary (See Note 2) (µg/L)[1],[2]
Fuels Related Pollutants and Solvents Related Pollutants	---	Apply for NPDES No CAG912002	

Table Notes:

[1] Units are in µg/L unless noted otherwise right after the name of pollutant

[2] If a discharger is reporting non-detect monitoring data with a reporting level higher than the trigger, the reason for the higher detection level shall be consistent with Appendix 4 of the SIP (Minimum Levels) and must be explained within the monitoring report. Please refer to the Regional Water Board web site for the latest version of SIP.

[3] If total chromium concentration exceeds 11 µg/L, then analysis for chromium (VI) shall also be conducted.

[4] Applicable to Suisun Bay and San Pablo Bay segments of San Francisco Bay.

[5] Applicable to Central Bay and Lower Bay segments of San Francisco Bay

[6] Applicable to South San Francisco Bay, south of Hayward Shoals.

7. **Triggers Case 1:** If the results of all three additional discharge samples **do not** exceed the triggers, the Discharger shall report the results in the next Monitoring Report, and shall return to the schedule of sampling and analysis in the MRP (Attachment E).

8. **Triggers Case 2:** If the results of **any one of the three** additional discharge samples exceed the triggers, the Discharger shall investigate the source (e.g., comparing influent and discharge sample results) and investigate source control and/or treatment options for each triggered pollutant. The Discharger shall document its progress on these efforts in the Annual Self-Monitoring Report required by section IX.B of the MRP (Attachment E). Until the Executive Officer determines that the "triggered pollutants" investigation is complete, the Discharger must implement the following monitoring schedule for the triggered pollutants:

   a. In case of a triggered inorganic pollutant; the Discharger shall accelerate monitoring of the discharge to quarterly and provide information, updated annually, confirming that pollutant source is background and explain the reasons why treatment of that pollutant is not feasible. Specifically, the annual monitoring reports shall include site-specific background groundwater concentrations, types of treatment available, and costs of treatment systems for each triggered inorganic pollutant, and

   b. In case of a triggered organic pollutant; the Discharger shall accelerate monitoring of the effluent to every two weeks and provide information, updated annually, confirming the reason(s) why that pollutant could not be treated to the level not exceeding the trigger for that pollutant.

9. The Executive Officer may require the Discharger to perform additional investigations or take additional actions if the Discharger: (1) exceeds a trigger value for the same pollutant and confirms (Trigger Case 2 above) the exceedance greater than two times in one calendar year; and (2) is not pursuing resolution of trigger exceedances in a timely fashion in the judgment of the Executive Officer. These two trigger exceedances do not include the data collected to verify the trigger (i.e., effluent data collected to confirm the trigger exceedance). These conditions are also grounds for termination of the Authorization to Discharge.

10. **Individual NPDES Permit May Be Required.** The USEPA Administrator may request the Executive Officer to require any Discharger authorized to discharge waste by this Order to apply for and obtain an individual NPDES permit. The Executive Officer may require any Discharger authorized to discharge waste by this Order to apply for and obtain an individual NPDES permit. Cases where an individual NPDES permit may be required include the following:

    a. The Discharger is not in compliance with the conditions of this Order or as authorized by the Executive Officer;

    b. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;

    c. Effluent limitation guidelines are promulgated for point sources covered by this Order; or

    d. A water quality control plan containing requirements applicable to such point sources is approved.

11. **Treatment Reliability.** Dischargers shall, at all times, retain a professional engineer certified in the State of California to oversee the design, and operation and maintenance of the treatment system to properly operate and maintain all facilities that are used by the Dischargers to achieve compliance with this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. All of these procedures shall be described in an Operation and Maintenance (O&M) Manual. Dischargers shall keep in a state of readiness all systems necessary to achieve compliance with the conditions of this Order. All systems, both those in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the tests (e.g., analytical or treatment system tests) and made available to the Regional Water Board for at least five years. Additional requirements for compliance with this provision are explained in Attachment B of the Order.

12. **No Preemption**. This Order permits the discharge of uncontaminated extracted groundwater, extracted and treated groundwater, and RO concentrate resulting from treatment of uncontaminated extracted groundwater by RO, to waters of the State subject to the prohibitions, effluent limitations, and provisions of this Order. It does not pre-empt or supersede the authority of municipalities, flood control agencies, or other local agencies to prohibit, restrict, or control discharges of waste to storm drain systems or other watercourses subject to their jurisdiction. For example, this Order provides no water or groundwater rights and does not preempt the authority of any local or state agencies as relates to water rights.

VII. COMPLIANCE DETERMINATION

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

A. General

Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

B. Multiple Sample Data

When determining compliance with an AMEL **or** MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

ATTACHMENT A – ACRONYMS AND DEFINITIONS

Acronyms

AMEL	Average Monthly Effluent Limitation
Basin Plan	Water Quality Control Plan for the San Francisco Bay Basin
BPJ	Best Professional Judgment
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CIWQS	California Integrated Water Quality System
CTR	California Toxics Rule
CV	Coefficient of Variation
CWA	Federal Clean Water Act
CWC	California Water Code
DNQ	Detected, but Not Quantified
DO	Dissolved oxygen
ECA	Effluent Concentration Allowance
EFF	Effluent
GWDRs	General Waste Discharge Requirements
MDEF	Maximum Daily Effluent Limitation
MDL	Method Detection Limit
mg/L	Milligram per Liter
ML	Minimum Level
ND	Not Detected
NTR	National Toxics Rule
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
POTW	Publicly Owned Treatment Work
RL	Reporting Level
RMP	Regional Monitoring Program
RO	Reverse Osmosis
RPA	Reasonable Potential Analysis
SIP	State Implementation Policy
SSTs	Site-Specific Translators
TMDL	Total Maximum Daily Load
µg/L	Microgram per Liter
USEPA	U.S. Environmental Protection Agency
VOC	Volatile Organic Compounds
WQO	Water Quality Objective
WQS	Water Quality Standard

Definitions

Arithmetic Mean (μ), also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

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

Average Monthly Effluent Limitation (AMEL) is 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.

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

Carcinogenic pollutants are substances that are known to cause cancer in living organisms.

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

Detected, but Not Quantified (DNQ) are those sample results less than the RL, but greater than or equal to the laboratory's MDL.

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

Duly Authorized Representative is one whose:

a. Authorization is made in writing by a principal executive officer or ranking elected official;
b. Authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as general partner in a partnership, sole proprietor in a sole proprietorship, 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).

Effluent Concentration Allowance (ECA) is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

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

Field Blank is defined as an individual sample demonstrated to be free from the contaminants of interest and other potentially interfering substances, and treated as a sample in all respects, including exposure to grab-sampling site conditions, storage, preservation, and all analytical procedures. The purpose of the field blank is to determine if the field or sample transporting procedures and environments have contaminated the sample.

Flow Sample is defined as the accurate measurement of the average daily flow volume using a properly calibrated and maintained flow-measuring device.

Grab Sample is defined as an individual sample collected in a short period of time not exceeding 15 minutes. Grab samples shall be collected during normal peak loading conditions for the parameter of interest, which may or may not be during hydraulic peaks. It is used primarily in determining compliance with maximum daily limits and average monthly limits. Grab samples represent only the condition that exists at the time the wastewater is collected.

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

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

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

Method Detection Limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

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

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

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

Quality Assurance Officer is a qualified individual who was not otherwise involved in sample collection, transport, or analysis to investigate the cause of data error.

Persistent Pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Reporting Level (RL) is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

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

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

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

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

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

ATTACHMENT B – NOTICE OF INTENT (NOI) APPLICATION FORM

Complete and submit this NOI to receive Authorization or Reauthorization to Discharge or Reuse of Extracted Brackish Groundwater, Reverse Osmosis Concentrate Resulting from Treated Brackish Groundwater, and Extracted Groundwater from Structural Dewatering Requiring Treatment under the requirements of NPDES Permit No. CAG912004 (Groundwater General Permit)

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the design engineer whose signature and engineering license number is documented in this notice, 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.

_____ _____

Name (print) Signature and Date

_____ _____

Title/Organization Address

This Application is for the Groundwater Treatment Facility located at:

_____

This NOI form and all required attachments shall be submitted to Farhad Azimzadeh by e-mail at fazimzadeh@waterboards.ca.gov.

If electronic submittal is not possible, applicants may submit the NOI package to the following address: California Regional Water Quality Control Board, San Francisco Bay Region, located at 1515 Clay Street, Suite 1400, Oakland, California 94612. **Please include a check for $1,943, or current fee amount, payable to the State Water Resources Control Board.**

Table B-1. Mark only one as applicable

1	**This is a new discharge.**	
2	**This discharge is currently authorized under this Order (No. R2-2012-00XX)**, which requires authorized dischargers who need to continue discharging after **August 9, 2017**, to file a completed NOI form no later than **February 10, 2017**.	
3	**This discharge is currently authorized under this Order,** and this Form is submitted for the **modification** of the current Authorization to Discharge.	
4	**This discharge is currently authorized under this Order,** and this Form is submitted to report change of the Professional Engineer responsible for the groundwater treatment system (the new Professional Engineer shall affix his/her signature and engineering license number to a new certification report attached to this Form).	

Table B-2. Mark only one discharge category as applicable

Category 1	Aquifer reclamation program well discharges.	
Category 2	RO concentrate from aquifer reclamation program well discharges.	
Category 3	Structural dewatering discharges greater than 10,000 gallons per day and requiring treatment. Treatment is required where a physical, biological, or chemical treatment process is necessary in order for the structural dewatering discharge to comply with the prohibitions and limitations of this order.	

Table B-3. Mark or provide information as applicable

1	I have contacted the local sanitary sewer agency serving the above address and determined that discharging to the local sanitary sewer system is not a feasible option.	
2	I have contacted the local agencies having jurisdiction over the use of the storm drain system or watercourse and informed them about this proposed discharge.	
3	Approximately, what percentage of the total effluent is reused or will be reused?	%

Table B-4. Facility and Professional Engineer(s) information

1	Facility Name Discharger Name Discharger's Contact Person Name, Address, Phone number, and Email Address	
2	Authorized Person to Sign & Submit Reports	
3	Billing Information Contact Person Name, Address, Phone number, and Email Address	
4	Design Professional Engineer's Name, California License Number, Address, Phone Number, and Email Address	
5	Operation and Maintenance (O&M) Professional Engineer's Name, California License Number, Address, Phone Number, and Email Address A copy of the PE certification approving the O&M manual including a copy of O&M manual table of contents must be attached to this application	
6	Professional Engineer has designed the capacity of groundwater treatment system in gallons per minute (gpm) for:	_____gpm
7	Professional Engineer recommends operating the groundwater treatment system with a flow not exceeding:	_____ gpm
8	Professional Engineer certification report including flow schematics showing every components of the treatment system is attached to this application (the Professional Engineer shall affix his/her signature and engineering license number to this certification report).	
9	In case of using rental equipment in the treatment system, the Professional Engineer shall extend the certification in line 8 above to cover any rental equipment.	
10	Watershed Refer to the State of California Watershed Browser located online at www.conservation.ca.gov/dlrp/watershedportal/Watershed Browser/Pages/WatershedBrowser.aspx or the Guide to San Francisco Bay Area Creeks located online at http://museumca.org/creeks/index.html.	
11	Aerial Map	

	Please list the complete path of the Discharge and highlight the complete Discharge path in an attached aerial map (e.g., the discharge would travel about quarter of a mile inside a storm drain system before reaching a river (provide the name of the river), and then would travel two miles in the creek before reaching the Bay).	
12	**Beneficial Uses of Receiving Water(s)** Is this Discharge to freshwater bodies with municipal and domestic supply, agricultural water supply, and/or freshwater replenishment beneficial uses? If yes, please list the beneficial uses (for a list of beneficial uses, please refer to the Chapter 2 of the Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin at http://www.waterboards.ca.gov/sanfranciscobay/basin_planning.shtml#basinplan**.**	
13	Brief Project Description and Tentative Completion Date (if applicable)	
14	**Modified NOI -** I understand that for any significant changes, I need to submit a modified NOI. Examples of significant changes are changing the treatment system or responsible Professional Engineer, an increase in discharge flow rates, or a change in discharge location.	
15	**Expiration Date -** I understand this authorization letter expires on August 9, 2017, the expiration date of Order No. R2-2012-00XX and if I need to continue discharging after that date, I must file an NOI application no later than February 10, 2017.	

Table B-5. Treatment System Description

	Unit	Number	Further Description (size, capacity, location and function) If Applicable
1	Extraction Well(s)		
2	Extraction Wells with Dedicated Treatment Unit(s)		
3	Dedicated Treatment Unit(s)		
4	Settling Tank(s) in series		
5	Settling Tank(s) in parallel		
6	Oil/Water Separator(s)		
7	Filter(s)		
8	Air Strippers with Air Filters		
9	Air Strippers without Air Filters		
10	Oxygenation Treatment Unit(s)		
11	Advanced Treatment Unit(s)		
12	Liquid-phase Granular Activated Carbon (GAC) Vessel(s) in Series		
13	GAC Vessel(s) in Parallel		
14	De-chlorination Unit (applies to Dischargers that chlorinate their well water)		
15	Effluent reuse infrastructure (If so, provide additional detail)		
16	Effluent land discharge infrastructure (If so, provide additional detail)		
17	Energy Dissipater System		
18	Other Treatment Systems		
19	Other BMPs (e.g., range of the RO facility blending ratio)		
20	Bay-edge Groundwater Dewatering for Landfills - dischargers shall provide full description that the Groundwater Dewatering facility is completely separate from the landfill leachate collection system.		

Table B-6. Discharge location information

Discharge Point Location	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
Influent Monitoring Point(s)	____° ____' ____"	____° ____' ____"	
Effluent Monitoring Point(s)	____° ____' ____"	____° ____' ____"	
Storm-Drain Location (if applicable):	____° ____' ____"	____° ____' ____"	Storm-Drain
Outfall Location:	____° ____' ____"	____° ____' ____"	
Upstream Receiving Water Monitoring Location (RSW-001U)			At a point 50 feet upstream from the point of discharge into the receiving water, or if access is limited, at the first point upstream which is accessible.
Downstream Receiving Water Monitoring Location (RSW-001D)			At a point 50 feet downstream from the point of discharge into the receiving water, or if access is limited, at the first point downstream which is accessible.

Table B-7. List of pollutants (For new and existing discharges. For existing discharges, complete one table for influent and one for effluent.)

☐ New Discharge, or Effluent for Existing Discharge

Monitoring data since effective date of the initial discharge authorization letter or estimated from groundwater monitoring data for new discharges	Pollutant 1	Pollutant 2	Pollutant 3	Add Columns and/or tables as needed (all detected pollutants with effluent limitations and all triggered pollutants exceeding the triggers shall be listed in this table)
Number of Samples				
Maximum Concentration				
Average Concentration (average of detected pollutants only)				
Number of times the effluent limitation was exceeded				
Median Concentration				
Minimum Concentration				
Number of Non-Detects				
Lowest Reporting Limit				
Highest Reporting Limit				
Number of Samples with Lowest Reporting Limit				
Most recent sample Date, Method Number				

Note: The Regional Water Board may modify this form at any time to reflect any new fees and other needed improvements as applicable.

☐ Influent for Existing Discharge

Monitoring data since effective date of the initial discharge authorization letter or estimated from groundwater monitoring data for new discharges	**Pollutant 1**	**Pollutant 2**	**Pollutant 3**	**Add Columns and/or tables as needed (all detected pollutants with effluent limitations and all triggered pollutants exceeding the triggers shall be listed in this table)**
Number of Samples				
Maximum Concentration				
Average Concentration (average of detected pollutants only)				
Number of times the effluent limitation was exceeded				
Median Concentration				
Minimum Concentration				
Number of Non-Detects				
Lowest Reporting Limit				
Highest Reporting Limit				
Number of Samples with Lowest Reporting Limit				
Most recent sample Date, Method Number				

Note: The Regional Water Board may modify this form at any time to reflect any new fees and other needed improvements as applicable.

ATTACHMENT C – NOTICE OF TERMINATION

Complete and Submit to Request Termination of Coverage under the Requirements of General Waste Discharge Requirements for Discharge or Reuse of Extracted Brackish Groundwater, Reverse Osmosis Concentrate Resulting from Treated Brackish Groundwater, and Extracted Groundwater from Structural Dewatering Requiring Treatment

NPDES PERMIT NO. CAG912004
(Groundwater General Permit)

For the Groundwater Treatment Facility located at:

_____ _____
Type or Print Facility Address above the line CIWQS Place Identification Number

A PDF electronic copy of this Form shall be submitted to **Farhad Azimzadeh by e-mail at fazimzadeh@waterboards.ca.gov.**.

Table 1. The Following Discharge Category is Terminated (check only one as applicable)

Category 1	Aquifer reclamation program well discharges.	
Category 2	RO concentrate from aquifer reclamation program well discharges.	
Category 3	Structural dewatering discharges greater than 10,000 gallons per day and requiring treatment. Treatment is required where a physical, biological, or chemical treatment process is necessary in order for the structural dewatering discharge to comply with the prohibitions and limitations of this order.	

I, the Discharger, certify under penalty of law that this notice is prepared under my direction or supervision and last/final date of this discharge was _____. I am aware that discharging without a discharge authorization is in violation of the California Water Code.

_____
Name (print) Signature and Date

_____
Title/Organization (Discharger's Organization) Address, email, and phone number

Note: The Regional Water Board may modify this form at any time to reflect the new requirements and other needed improvements.

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 Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. (40 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 within the time provided in the regulations that establish these standards or prohibitions, even if this Order has not yet 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 Order. (40 CFR § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order 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 Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR § 122.41(e).)

E. Property Rights

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

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

F. Inspection and Entry

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

1. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (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 Order (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 Order (40 CFR § 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, 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 of extracted groundwater. During a dewatering project, the Discharger may allow any bypass of uncontaminated extracted groundwater to occur which originates from uncontaminated extraction well(s). The Discharger shall monitor the water quality of these extractions wells to confirm that the extracted water remains uncontaminated. The Discharger may also allow any bypass to occur which does not cause exceedances of effluent limitation, but only if it is for essential maintenance to assure efficient operation. In this case, weekly monitoring results of pollutants of concern shall be reported in the quarterly monitoring reports.

3. Prohibition of bypass. Bypass is prohibited, and the Regional Water 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)(i)(A));

b. There were no feasible alternatives to the bypass, such as turning off the extraction wells pump(s), discharge to a POTW, retention of untreated wastes, maintenance during normal periods of equipment downtime, or the use of auxiliary treatment facilities. 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)(i)(B)); and

c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may not take enforcement action against a Discharger for bypass, if the Regional Water Board determines that the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above have been met. (40 CFR § 122.41(m)(4)(ii).)

5. Notice

a. Anticipated bypass of uncontaminated extracted groundwater. If the Discharger knows in advance of the need for a bypass of uncontaminated extracted groundwater, it shall submit the necessary information in the initial or modified Notice of Intent, if possible at least 45 days before the date of the bypass. The necessary information includes but not limited to the name and number of extraction wells, flow rates for each well, the distance to other contaminated wells, and monitoring data such as turbidity, color, conductivity, pH, temperature, metals, TPH, VOC, SVOC, PAHs, Oxygenates.

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 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 Standard Provisions – Permit Compliance I.H.2 below are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. (40 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)(ii));

   c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (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 Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must submit a completed Notice of Intent form (see Attachment B), 180 days in advance of the Order expiration date, **to** obtain a new permit. (40 CFR § 122.41(b).)

C. Transfers

Any authorization to discharge issued under this Order is not transferable to any person except after filing a modified Notice of Intent with the Regional Water Board. If the new Discharger has a different professional engineer, the modified Notice of Intent shall be revised accordingly.\

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 Part 136 or other test procedures specified in this Order. (40 CFR § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. 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 Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time (40 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 Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); California Water Code (CWC), § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR § 122.41(k).)
2. All permit applications shall be signed by a responsible person as explained below:

a. **For a corporation.** All permit applications shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. (40 CFR § 122.22(a)(1).)

b. **For a partnership or sole proprietorship.** All permit applications shall be signed by a general partner or the proprietor, respectively. (40 CFR § 122.22(a)(2).)

c. **For a municipality, State, federal, or other public agency.** All permit applications shall be signed 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 Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

   a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR § 122.22(b)(1));

   b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) (40 CFR § 122.22(b)(2)); and

   c. The written authorization is submitted to the Regional Water Board. (40 CFR § 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.3 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to

or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above shall make the following certification:

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

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.22(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (40 CFR § 122.41(l)(4)(i).) or paper or electronic forms provided or specified by the Regional Water Board or State Water Board.

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or other reporting form specified by the Regional Water 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 Order. (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 Order, 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 Order. (40 CFR § 122.41(l)(6)(ii)(A).)

   b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(iii).)

F. Planned Changes

The discharger shall file with the Executive Officer an amended Notice of Intent at least 60 days before making any material change in the character, location, or volume of the discharge. In case of proposing any change of treatment system or operation and maintenance procedures, a professional engineer certified in State of California shall certify the adequacy of the design and/or the procedures. A modified Notice of Intent is required under this provision only when (40 CFR § 122.41(l)(1)) the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged (pollutants regulated or not regulated by this Order). Three examples of significant changes are a change in discharge location, a change of the engineer responsible for the design and/or operation and maintenance of the treatment system, and an increase in discharge flow rates.

G. Anticipated Noncompliance

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

H. Other Noncompliance

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

I. Other Information

When the Discharger becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the

Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

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

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

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

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 C.F.R. § 122.42(a)(1)):

    a. 100 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(1)(i));

    b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(1)(ii));

    c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(1)(iii)); or

    d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(1)(iv).)

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" (40 C.F.R. § 122.42(a)(2)):

    a. 500 micrograms per liter (µg/L) (40 C.F.R. § 122.42(a)(2)(i));

    b. 1 milligram per liter (mg/L) for antimony (40 C.F.R. § 122.42(a)(2)(ii));

    c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 C.F.R. § 122.42(a)(2)(iii)); or

    d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 C.F.R. § 122.42(a)(2)(iv).)

ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

National Pollutant Discharge Elimination System (NPDES) regulations at 40 CFR 122.48 require that all NPDES permits specify monitoring and reporting requirements. California Water Code (CWC) Sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This Monitoring and Reporting Program establishes monitoring and reporting requirements that implement the federal and State regulations.

I. GENERAL MONITORING PROVISIONS

A. The Discharger shall comply with this Monitoring and Reporting Program. The Executive Officer may amend this Monitoring and Reporting Program pursuant to 40 CFR 122.62, 122.63, and 124.5.

B. The Discharger shall conduct all monitoring in accordance with Attachment D, section III, and all tests must be performed by laboratories certified for the analyses in accordance with the California Water Code Section 13176. Equivalent test methods must be more sensitive than those specified in 40 CFR 136 and must be specified in the permit or in the related discharge authorization letter.

The Discharger shall report with each sample result the Reporting Level (RL) from the Minimum Levels (MLs) listed in Appendix 4 of the State Implementation Policy or SIP (http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf). When there is more than one ML value for a given substance, the Discharger may select any one of the analytical methods cited in SIP Appendix 4 for compliance determination, or any other method described in 40 CFR part 136 or approved by the USEPA (such as the 1600 series) if authorized by the Regional Water Board Executive Officer. However, the ML must be below the trigger level and water quality objective. If no ML value is below the trigger level and water quality objective, then the method must achieve an ML no greater than the lowest ML value indicated in SIP Appendix 4. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. The number and frequency of bypasses and accidental spills shall be recorded.

D. A copy of this Order, a complete copy of the Notice of Intent (NOI) filed, documentation of the Authorization to Initiate Discharge received from the Regional Water Board, a full copy of the Operation and Maintenance (O&M) Manual, and any other documents relevant to the operation and maintenance of the treatment facility shall be stored at or near the treatment facility, and made available to the Regional Water Board upon request. Dischargers shall inspect their facilities as frequently as required by the O&M Manual.

II. MONITORING LOCATIONS

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

Table E-1. Monitoring Station Locations

Discharge Point Name (if applicable)	Monitoring Location Name	Monitoring Location Description (include Latitude and Longitude when available)
---	INF-001	At a point in the extraction system immediately prior to inflow to the treatment unit.
001	EFF-001	At a point in the discharge line immediately following treatment and before it joins or is diluted by any other waste stream, body of water, or substance.
---	RSW-001U	At a point 50 feet upstream from the point of discharge into the receiving water, or if access is limited, at the first point upstream which is accessible.
---	RSW-001D	At a point 50 feet downstream from the point of discharge into the receiving water, or if access is limited, at the first point downstream which is accessible.
---	REU-001	At a point immediately prior to reuse location; not applicable if effluent is not reused or reclaimed.
---	LDE-001	At a point immediately prior to land discharge; not applicable if land discharge of groundwater is the same as effluent.

III. INFLUENT MONITORING REQUIREMENTS

For aquifer reclamation program well discharges (Category 1) and RO concentrate discharges (Category 2), no influent monitoring is required by the Order, unless effluent violation trigger constituent values are exceeded in the previous self-monitoring report. In that event, influent monitoring is required as part of an investigation to determine the cause of the exceedance. For structural dewatering discharges (Category 3), influent monitoring is required if recommended by the Professional Engineer in charge of the operation and maintenance of the treatment system.

IV. EFFLUENT MONITORING REQUIREMENTS

Dischargers shall perform sampling and analyses according to the schedule in Table E-2 for Aquifer Reclamation Program Well Discharges (Category 1); Table E-3 for RO Concentrate Discharges (Category 2); and/or Table E-4 for Structural Dewatering Discharges (Category 3) in accordance with the following conditions:

A. Samples of effluent shall be collected on days coincident with influent sampling (if applicable).

B. When any type of bypass occurs, grab samples shall be collected on a daily basis for all constituents at all affected discharge points that have effluent limits for the duration of the bypass.

C. If the analytical results show violation of any effluent limitation, the Discharger shall take a confirmation effluent sample, together with receiving water samples (see third column of Table E-2) within 24 hours of knowledge of violation of effluent limit. The Discharger must have the confirmation sample analyzed by expedited methods and obtain results within 24

hours of sample collection. If the analytical results are also in violation of the effluent limit, the Discharger shall terminate the discharge until it has corrected the cause of violation. In this case, both the initial and confirmed results are violations. However, if the confirmation effluent sampling shows compliance, the Regional Water Board will consider only the initial exceedance as a violation.

V. WHOLE EFFLUENT ACUTE TOXICITY TESTING REQUIREMENTS

The Discharger shall monitor acute toxicity at EFF-001 as follows:

A. Compliance with the acute toxicity effluent limitations of this Order shall be evaluated by measuring survival of test organisms to 96-hour static renewal bioassays at Monitoring Location EFF-001.

B. Test organisms shall be rainbow trout unless the Executive Officer specifies otherwise in writing.

C. All bioassays shall be performed according to the most up-to-date protocols in 40 CFR 136m currently in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, 5th Edition.

D. If specific identifiable substances in the discharge can be demonstrated by the Discharger as being rapidly rendered harmless upon discharge to the receiving water, compliance with the acute toxicity limitation may be determined after the test samples are adjusted to remove the influence of those substances. Written approval from the Executive Officer must be obtained to authorize such an adjustment.

E. Monitoring of the bioassay water shall include, on a daily basis, the following parameters: pH, dissolved oxygen, ammonia, (if toxicity is observed), temperature, hardness, and alkalinity. These results shall be reported. If a violation of acute toxicity requirements occurs, the bioassay test shall be repeated with new fish as soon as practical and shall be repeated until a test fish survival rate of 90 percent or greater is observed. If the control fish survival rate is less than 90 percent, the bioassay test shall be restarted with new fish and shall continue as soon as practical until an acceptable test is completed (i.e., control fish survival rate is 90 percent or greater).

VI. RECLAMATION MONITORING REQUIREMENTS

The Discharger shall monitor effluent for reuse at Monitoring Location REU-001, as shown on the third column of Table E.2 for Category 1 discharges; Table E.3 for Category 2 discharges; and Table E.4 for Category 3 discharges.

VII. LAND DISCHARGE MONITORING REQUIREMENTS

The Discharger shall monitor effluent for land discharge at Monitoring Location LDE-001, as shown on the third column of Table E.2 for Category 1 discharges; Table E.3 for Category 2 discharges; and Table E.4 for Category 3 discharges.

VIII. RECEIVING WATER AND EFFLUENT MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

The Discharger shall monitor receiving water at Monitoring Locations RSW-001U and RSW-001D as shown on column four of Table E.2 for Category 1 discharges; Table E.3 for Category 2 discharges; and Table E.4 for Category 3 discharges as follows:

A. Receiving water sampling shall occur concurrently with effluent sampling.

B. Receiving water samples shall be collected at each station on each sampling day during the period within 1 hour following low slack water, if relevant. Where sampling at lower slack water period is not practical, sampling shall be performed during higher slack water period. Samples shall be collected within the discharge plume and 50 feet down current of the discharge point so as to be representative, unless otherwise stipulated.

C. Samples should be collected within one foot below the surface of the receiving water body. Explanation shall be provided in the monitoring report if this specification could not be met.

Table E-2. Schedule for Sampling, Measurements, and Analysis for Aquifer Reclamation Program Well Discharges (Category 1)

Required Analytical Test Method Number, Technique, Standard Methods (SM), USEPA Method Number (EPA), 40 CFR Part (or equivalent)/Sampling Station	Units	Minimum Sampling Frequency for Effluent EFF-001. Effluent for Reuse REU-001, or Effluent for Land Discharge LDE-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D
Type of Sample is "Grab" unless noted otherwise			
Flow Rate	MGD	D (meter or calculation based on time and pump capacity)	--
Acute Whole Effluent Toxicity	% Survival	Y	--
pH	Standard Units	Q	--
Hardness (as $CaCO_3$)	mg/L	Y	--
Total Solids	mg/L	Q	--
Total Dissolved Solids	mg/L	Q	--
Temperature	ºC	Q	--
Salinity	ppt	Q	--
Turbidity in Nephelometric Turbidity Units (NTU)	NTU	Q	Q
Chlorine (applicable to facilities that treat effluent with chlorine)	mg/L	D	--
Chlorides	mg/L	Q	--
Dissolved Oxygen	mg/L	Q	--
Conductivity	mmhoms/cm	Q	--
Antimony, Total (see note 1)	µg/L	Y	--
Arsenic, Total (see note 1)	µg/L	Y	--
Beryllium, Total (see note 1)	µg/L	Y	--

Required Analytical Test Method Number, Technique, Standard Methods (SM), USEPA Method Number (EPA), 40 CFR Part (or equivalent)/Sampling Station	Units	Minimum Sampling Frequency for Effluent EFF-001. Effluent for Reuse REU-001, or Effluent for Land Discharge LDE-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D
Type of Sample is "Grab" unless noted otherwise			
Cadmium, Total (see note 1)	µg/L	Y	--
Hexavalent Chromium (see note 1)	µg/L	Y	--
Total Chromium (see note 1)	µg/L	Y	--
Copper, Total (see note 1)	µg/L	Y	--
Cyanide, Total (see note 1)	µg/L	Y	--
Lead, Total (see note 1)	µg/L	Y	--
Mercury, Total (see note 1)	µg/L	Y	--
Nickel, Total (see note 1)	µg/L	Y	--
Selenium, Total (see note 1)	µg/L	Y	--
Silver, Total (see note 1)	µg/L	Y	--
Thallium, Total (see note 1)	µg/L	Y	--
Zinc, Total (see note 1)	µg/L	Y	--
Volatile Organic Compounds	µg/L	1/Permit Term from each outfall	--
Semi Volatile Organic Compounds except Polynuclear Aromatic Hydrocarbons	µg/L	1/Permit Term from each outfall	--
Polynuclear Aromatic Hydrocarbons	µg/L	1/Permit Term from each outfall	--
Other Pollutants not listed above but there is evidence to be present in the influent and/or effluent and being treated. Examples are Benzene, Toluene, Ethylbenzene, and/or Total Xylenes, EPA 8020; and Total Petroleum Hydrocarbons as Gasoline and as Diesel, EPA 8015 Modified	µg/L	Q	--
All Applicable Standard Observations (see note 2)	No Units	Quarterly or whenever attending the Facility	Quarterly or whenever sampling the receiving water

Note 1: The Discharger shall appropriately select analytical procedures that will compensate for salinity in the sample matrix. Inorganic compounds samples shall be analyzed for total (unfiltered) constituents with the reporting levels not exceeding the following: 0.002 µg/L for Mercury and 1.0 µg/L for Cyanide. For all other inorganic compounds, the minimum levels shall not exceed the following if Inductively Coupled Plasma Mass Spectrometry (ICP-MS) analytical technique is utilized: 0.25 µg/L for Cadmium and Silver, 1.0 µg/L for Nickel, Thallium and Zinc; 2.0 µg/L for Arsenic and Selenium; and 0.5 µg/L for Antimony, Beryllium; Total Chromium, Copper, and Lead (SIP Appendix 4 Minimum Levels (http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf)). If the Discharger exceeds the trigger for mercury of 0.025, the Discharger shall sample and analyze the additional samples using ultra-clean techniques as described in USEPA methods 1669 and 1631 to eliminate the possibility of artifactual contamination of the sample.

Note 2: Standard Observations are explained in Provisions IX.C through IX.E of this document.

Definitions:
ug/L = microgram per liter or parts per billion (ppb), g/day = grams per day, gpm = gallons per minute, mg/L = milligram per liter or parts per million (ppm), gpd = gallons per day, MFL = million fibers per liter, GC = Gas Chromatography; GCMS = Gas Chromatography/Mass Spectrometry; FAA = Flame Atomic Absorption; GFAA = Graphite Furnace Atomic Absorption; Hydride = Gaseous Hydride Atomic Absorption; ICP = Inductively Coupled Plasma; and ICPMS = Inductively Coupled Plasma/Mass Spectrometry.

Legend:
D: Once each day.
Q: Once each quarter.
Y: Once each year.

Table E-3. Schedule for Sampling, Measurements, and Analysis for RO Concentrate Discharges (Category 2)

Required Analytical Test Method Number, Technique, Standard Methods (SM), USEPA Method Number (EPA), 40 CFR Part (or equivalent)/Sampling Station	Units	Minimum Sampling Frequency for Effluent EFF-001. Effluent for Reuse REU-001, or Effluent for Land Discharge LDE-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D
Type of Sample is "Grab" unless noted otherwise			
Flow Rate	MGD	D (meter or calculation based on time and pump capacity)	--
Acute Whole Effluent Toxicity	% Survival	M/Q	--
pH	Standard Units	M	--
Hardness (as $CaCO_3$)	mg/L	Q	--
Total Solids	mg/L	M	--
Total Dissolved Solids	mg/L	M	--
Temperature	ºC	Q	--
Salinity	ppt	M	--
Turbidity in Nephelometric Turbidity Unit (NTU)	NTU	M	Q
Chlorine (applicable to facilities that treat effluent with chlorine)	mg/L	D	--
Chlorides	mg/L	M	--
Dissolved Oxygen	mg/L	M	--
Conductivity	mmhoms/cm	M	--
Antimony, Total (see note 1)	µg/L	Q	--
Arsenic, Total (see note 1)	µg/L	Q	--
Beryllium, Total (see note 1)	µg/L	Q	--
Cadmium, Total (see note 1)	µg/L	Q	--
Hexavalent Chromium (see note 1)	µg/L	Q	--
Total Chromium (see note 1)	µg/L	Q	--
Copper, Total (see note 1)	µg/L	Q	--
Cyanide, Total (see note 1)	µg/L	Q	--
Lead, Total (see note 1)	µg/L	Q	--
Mercury, Total (see note 1)	µg/L	Q	--
Nickel, Total (see note 1)	µg/L	Q	--
Selenium, Total (see note 1)	µg/L	Q	--
Silver, Total (see note 1)	µg/L	Q	--
Thallium, Total (see note 1)	µg/L	Q	--
Zinc, Total (see note 1)	µg/L	Q	--
Volatile Organic Compounds	µg/L	1/within the first year	--
Semi Volatile Organic Compounds except Polynuclear Aromatic Hydrocarbons	µg/L	1/within the first year	--

Required Analytical Test Method Number, Technique, Standard Methods (SM), USEPA Method Number (EPA), 40 CFR Part (or equivalent)/Sampling Station	Units	Minimum Sampling Frequency for Effluent EFF-001. Effluent for Reuse REU-001, or Effluent for Land Discharge LDE-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D
Type of Sample is "Grab" unless noted otherwise			
Polynuclear Aromatic Hydrocarbons	µg/L	1/within the first year	--
Other Pollutants not listed above but where there is evidence to be present in the influent and/or effluent and being treated.	µg/L	Q	--
All Applicable Standard Observations (see note 2)	No Units	Quarterly or whenever attending the Facility	Quarterly or whenever sampling the receiving water
Note 1: The Discharger shall appropriately select analytical procedures that will compensate for salinity in the sample matrix. Inorganic compounds samples shall be analyzed for total (unfiltered) constituents with the reporting levels not exceeding the following: 0.002 µg/L for Mercury and 1.0 µg/L for Cyanide. For all other inorganic compounds, the minimum levels shall not exceed the following if Inductively Coupled Plasma Mass Spectrometry (ICP-MS) analytical technique is utilized: 0.25 µg/L for Cadmium and Silver, 1.0 µg/L for Nickel, Thallium and Zinc; 2.0 µg/L for Arsenic and Selenium; and 0.5 µg/L for Antimony, Beryllium; Total Chromium, Copper, and Lead (SIP Appendix 4 Minimum Levels (http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf)). If the Discharger exceeds the trigger for mercury of 0.025, the Discharger shall sample and analyze the additional samples using ultra-clean techniques as described in USEPA methods 1669 and 1631 to eliminate the possibility of artifactual contamination of the sample. Note 2: Standard Observations are explained in Provisions IX.C through IX.E of this document.			
Definitions: ug/L = microgram per liter or parts per billion (ppb), g/day = grams per day, gpm = gallons per minute, mg/L = milligram per liter or parts per million (ppm), gpd = gallons per day, MFL = million fibers per liter, GC = Gas Chromatography; GCMS = Gas Chromatography/Mass Spectrometry; FAA = Flame Atomic Absorption; GFAA = Graphite Furnace Atomic Absorption; Hydride = Gaseous Hydride Atomic Absorption; ICP = Inductively Coupled Plasma; and ICPMS = Inductively Coupled Plasma/Mass Spectrometry.			
Legend: D: Once each day. M: Once each month. Q: Once each quarter. Y: Once each year. M/Q: Monthly for the first year of operation, Quarterly thereafter.			

Table E-4. Schedule for Sampling, Measurements, and Analysis (see note 3) for Structural Dewatering Discharges (Category 3)

Required Analytical Test Method Number, Technique, Standard Methods (SM), USEPA Method Number (EPA), 40 CFR Part (or equivalent)/Sampling Station	Units	Minimum Sampling Frequency for Effluent EFF-001. Effluent for Reuse REU-001, or Effluent for Land Discharge LDE-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D
Type of Sample is "Grab" unless noted otherwise			
Discharge Flow	MGD	Daily (meter or calculation based on time and pump capacity)	--
Acute Whole Effluent Toxicity	% Survival	Once during the first year of operation and if at least 90% survival rate for the first year, then every three years thereafter.	--
pH	Standard Units	Monthly during the first year of operation and if in full compliance during the first year, then once a quarter thereafter	--
Hardness (as $CaCO_3$)	mg/L	1/Year	--
Total Solids (applicable to facilities that treat effluent to remove any form of solids)	mg/L	Monthly	--
Total Dissolved Solids	mg/L	1/Year	--
Temperature	ºC	1/Year	--

Required Analytical Test Method Number, Technique, Standard Methods (SM), USEPA Method Number (EPA), 40 CFR Part (or equivalent)/Sampling Station	Units	Minimum Sampling Frequency for Effluent EFF-001. Effluent for Reuse REU-001, or Effluent for Land Discharge LDE-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D
Type of Sample is "Grab" unless noted otherwise			
Salinity	ppt	1/Year	--
Turbidity in Nephelometric Turbidity Unit (NTU) (applicable to facilities that treat effluent to remove any form of solids)	NTU	Monthly during the first year of operation and if in full compliance during the first year, then once a quarter thereafter	1/Every 3 Years
Chlorine (applicable to facilities that treat effluent with chlorine)	mg/L	Daily	--
Chlorides	mg/L	1/Year	--
Dissolved Oxygen	mg/L	1/Year	--
Conductivity	mmhoms/cm	1/Year	--
Antimony, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Arsenic, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Beryllium, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Cadmium, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Hexavalent Chromium (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Total Chromium (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Copper, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Cyanide, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Lead, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Mercury, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Nickel, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Selenium, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Silver, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Thallium, Total (see note 1)	µg/L	1/Year during the first year of operation and if not detected or triggered then 1/Every 3 Years thereafter.	--
Zinc, Total (see note 1)	µg/L	1/Year during the first year of operation	--

Required Analytical Test Method Number, Technique, Standard Methods (SM), USEPA Method Number (EPA), 40 CFR Part (or equivalent)/Sampling Station	Units	Minimum Sampling Frequency for Effluent EFF-001. Effluent for Reuse REU-001, or Effluent for Land Discharge LDE-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D
Type of Sample is "Grab" unless noted otherwise			
		and if not detected or triggered then 1/Every 3 Years thereafter.	
Volatile Organic Compounds	µg/L	Once within the first year of operation	--
Semi Volatile Organic Compounds except Polynuclear Aromatic Hydrocarbons	µg/L	Once within the first year of operation	--
Polynuclear Aromatic Hydrocarbons	µg/L	Once within the first year of operation	--
Other Pollutants not listed above but there is evidence to be present in the influent and/or effluent and being treated.	µg/L	Quarterly for the first year of operation and if not detected or triggered then once every three years thereafter	--
All Applicable Standard Observations (see note 2)	No Units	Quarterly or whenever attending the Facility	Quarterly or whenever sampling the receiving water

Note 1: The Discharger shall appropriately select analytical procedures that will compensate for salinity in the sample matrix. Inorganic compounds samples shall be analyzed for total (unfiltered) constituents with the reporting levels not exceeding the following: 0.002 µg/L for Mercury and 1.0 µg/L for Cyanide. For all other inorganic compounds, the minimum levels shall not exceed the following if Inductively Coupled Plasma Mass Spectrometry (ICP-MS) analytical technique is utilized: 0.25 µg/L for Cadmium and Silver, 1.0 µg/L for Nickel, Thallium and Zinc; 2.0 µg/L for Arsenic and Selenium; and 0.5 µg/L for Antimony, Beryllium; Total Chromium, Copper, and Lead (SIP Appendix 4 Minimum Levels (http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf)). If the Discharger exceeds the trigger for mercury of 0.025, the Discharger shall sample and analyze the additional samples using ultra-clean techniques as described in USEPA methods 1669 and 1631 to eliminate the possibility of artifactual contamination of the sample.

Note 2: Standard Observations are explained in Provisions IX.C through IX.E of this document.

Note 3: The monitoring program in this table is the minimum requirements. The Professional Engineer in charge of the treatment system operation may require more frequent monitoring program with additional monitoring parameters.

Definitions: ug/L = microgram per liter or parts per billion (ppb), g/day = grams per day, gpm = gallons per minute, mg/L = milligram per liter or parts per million (ppm), gpd = gallons per day, MFL = million fibers per liter
GC = Gas Chromatography; GCMS = Gas Chromatography/Mass Spectrometry; FAA = Flame Atomic Absorption; GFAA = Graphite Furnace Atomic Absorption; Hydride = Gaseous Hydride Atomic Absorption; ICP = Inductively Coupled Plasma; and ICPMS = Inductively Coupled Plasma/Mass Spectrometry.

Table E-5. Additional Monitoring Requirements: Applicable when Limit or Trigger Value is Exceeded in Previous Sample Set

Monitoring outlined in Table E-5 is required for up to two quarters (as specified below) following an exceedance of an effluent limit or trigger value.

Required Analytical Test Method Number, Technique, Standard Methods (SM), USEPA Method Number (EPA), 40 CFR Part (or equivalent)/Sampling Station	Units	Minimum Sampling Frequency for Influent INF-001	Minimum Sampling Frequency for Effluent EFF-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D
Type of Sample is "Grab" unless noted otherwise				
		The monitoring requirements in these two columns apply when any constituent in the effluent of a discharge, as monitored per Table E-2, E-3 or E-4, exceeds the corresponding trigger as listed in Table 2 of the Order.		
Flow Rate	MGD	--	D (meter or calculation based on time and pump capacity)	--

Required Analytical Test Method Number, Technique, Standard Methods (SM), USEPA Method Number (EPA), 40 CFR Part (or equivalent)/Sampling Station	Units	Minimum Sampling Frequency for Influent INF-001	Minimum Sampling Frequency for Effluent EFF-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D
Type of Sample is "Grab" unless noted otherwise				
Acute Whole Effluent Toxicity	% Survival	--	V	--
pH	Standard Units	V	V	V, Q [4]
Hardness (as $CaCO_3$)	mg/L	--	--	Q [5]
Total Solids	mg/L	--	--	Q [4]
Total Dissolved Solids	mg/L	3 per Q	3 per Q	3 per Q [3]
Temperature	°C	--	--	Q [4]
Salinity	ppt	--	M [4]	M [4]
Turbidity in Nephelometric Turbidity Unit (NTU)	NTU	3 per Q	3 per Q	3 per Q [3]
Chlorine (applicable to facilities that treat effluent with chlorine)	mg/L	--	V	--
Chlorides	mg/L	3 per Q	3 per Q	3 per Q [3]
Dissolved Oxygen	mg/L	--	--	3 per Q [3]
Conductivity	mmhoms/cm	3 per Q	3 per Q	3 per Q [3]
Antimony, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Arsenic, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Beryllium, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Cadmium, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Hexavalent Chromium (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Total Chromium (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Copper, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Cyanide, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Lead, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Mercury, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Nickel, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Selenium, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Silver, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Thallium, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Zinc, Total (see note 1)	µg/L	3 per Q	3 per Q	3 per Q [3]
Volatile Organic Compounds	µg/L	3 per Q	3 per Q	3 per Q [3]
Semi Volatile Organic Compounds except Polynuclear Aromatic Hydrocarbons	µg/L	3 per Q	3 per Q	3 per Q [3]
Polynuclear Aromatic Hydrocarbons	µg/L	3 per Q	3 per Q	3 per Q [3]
All Applicable Standard Observations (see note 2)	No Units	Q or whenever attending the Facility	Q or whenever attending the facility	Q or whenever sampling the receiving water
Note 1: The Discharger shall appropriately select analytical procedures that will compensate for salinity in the sample matrix. Inorganic compounds samples shall be analyzed for total (unfiltered) constituents with the reporting levels not exceeding the following: 0.002 µg/L for Mercury and 1.0 µg/L for Cyanide. For all other inorganic compounds, the minimum levels shall not exceed the following if Inductively				

Required Analytical Test Method Number, Technique, Standard Methods (SM), USEPA Method Number (EPA), 40 CFR Part (or equivalent)/Sampling Station	Units	Minimum Sampling Frequency for Influent INF-001	Minimum Sampling Frequency for Effluent EFF-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D
Type of Sample is "Grab" unless noted otherwise				
Coupled Plasma Mass Spectrometry (ICP-MS) analytical technique is utilized: 0.25 µg/L for Cadmium and Silver, 1.0 µg/L for Nickel, Thallium and Zinc; 2.0 µg/L for Arsenic and Selenium; and 0.5 µg/L for Antimony, Beryllium; Total Chromium, Copper, and Lead (SIP Appendix 4 Minimum Levels (http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf)). If the Discharger exceeds the trigger for mercury of 0.025, the Discharger shall sample and analyze the additional samples using ultra-clean techniques as described in USEPA methods 1669 and 1631 to eliminate the possibility of artifactual contamination of the sample.				
Note 2: Standard Observations are explained in Provisions IX.C through IX.E of this document.				
Note 3: In addition to the monitoring required, during the same period, the Discharger shall take three additional samples (three up-gradient receiving surface water (RSW-001U) and three down-gradient receiving surface water (RSW-001D) for each exceeded constituent.				
Note 4: This parameter should be monitored if changes in this parameter may cause changes in the concentration of the triggered constituent.				
Note 5: Sampling should be performed when Cadmium, Chromium (total), Copper, Lead, Nickel, Silver, or Zinc triggers are exceeded.				
Definitions: ug/L = microgram per liter or parts per billion (ppb), g/day = grams per day, gpm = gallons per minute, mg/L = milligram per liter or parts per million (ppm), gpd = gallons per day, MFL = million fibers per liter GC = Gas Chromatography; GCMS = Gas Chromatography/Mass Spectrometry; FAA = Flame Atomic Absorption; GFAA = Graphite Furnace Atomic Absorption; Hydride = Gaseous Hydride Atomic Absorption; ICP = Inductively Coupled Plasma; and ICPMS = Inductively Coupled Plasma/Mass Spectrometry.				
Legend: D: Once each day. M: Once each month. Q: Once each quarter. V: Sampling should be performed within 24 hours after an effluent limit violation is confirmed in EFF-001.				

IX. OTHER MONITORING REQUIREMENTS

A. Chemical Additives Monitoring: If applicable, monitoring related to chemical usage shall be conducted by the Discharger as required in its treatment system design specification and Operation and Maintenance Manual.

B. Standard Observations for Receiving Water

1. Floating and suspended materials (e.g., oil, grease, algae, and other macroscopic particulate matter): presence or absence, source, and size of affected area.

2. Discoloration and turbidity: description of color, source, and size of affected area.

3. Odor: presence or absence, characterization, source, distance of travel, and wind direction.

4. Beneficial water use: presence of water-associated waterfowl or wildlife, fisherperson, and other recreational activities in the vicinity of each sampling station.

5. Hydrographic condition, if relevant:
   a. Time and height of corrected high and low tides (corrected to nearest National Oceanic and Atmospheric Administration location for the sampling date and time of sample and collection).

   b. Depth of water columns and sampling depths.

6. Weather condition:
    a. Air temperature.
    b. Wind direction and estimated velocity.
    c. Total precipitation during the five days prior to observation.

C. Standard Observations for Onsite Usage of Reclaimed Water

1. Floating and suspended materials of waste origin (to include oil, grease, algae, and other macroscopic particulate matter): presence or absence, source, and size of affected area.
2. Discoloration and turbidity: description of color, source, and size of affected area.
3. Odor: presence or absence, characterization, source, distance of travel, and wind direction.
4. Weather condition:
    a. Air temperature.
    b. Wind direction and estimated velocity.
    c. Total precipitation during the previous five days and on the day of observation.
5. Deposits, discolorations, and/or plugging in the conveyance system that could adversely affect the system reliability and performance.
6. Operation of the valves, outlets, sprinkler heads, and/or pressure shutoff valves in conveyance system.

D. Standard Observations for Groundwater Treatment and/or Pumping System

1. Odor: presence or absence, characterization, source, distance of travel, and wind direction.
2. Weather condition: wind direction and estimated velocity.
3. Deposits, discolorations, and/or plugging in the treatment system (stripping tower, carbon filters, etc.) that could adversely affect the system reliability and performance.
4. Operation of the float and/or pressure shutoff valves installed to prevent system overflow or bypass.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and record keeping.

B. Self-Monitoring Reports (SMRs)

1. **SMR Format.** At any time during the term of this Order, the State or Regional Water Board may notify the Discharger to electronically submit SMRs using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). The CIWQS website will provide additional directions for SMR submittal in the event of a service interruption for electronic submittal.

2. **SMR Due Dates and Contents.** The Discharger shall submit SMRs within 45 days after the end of each calendar quarter, with the contents specified below:

   a. The Discharger shall attach a cover letter to the SMRs. The information contained in the cover letter shall clearly identify number of permit violations; 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. In the cover letter, the Discharger shall also document the volume of the effluent reused during that reporting period.

   b. 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 the effluent limitations. The Discharger shall not include laboratory reports unless requested.

   c. SMRs must be submitted to the Regional Water Board signed and certified as required by the Standard Provisions (Attachment D) to the address listed below:

      California Regional Water Quality Control Board
      San Francisco Bay Region
      1515 Clay Street, Suite 1400
      Oakland, CA 94612
      Attn: NPDES Wastewater Division
      Extracted Brackish Groundwater General NPDES NO. CAG912004

   d. SMRs shall also include a description of operation and maintenance (O&M) of the groundwater extraction and treatment system consistent with the O&M manual, which shall be available to all personnel who are responsible for operation and maintenance activities.

   e. SMRs shall include the results of analyses and observations as follows:

      (1) Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

      (2) A table identifying by method number the analytical procedures used for analyses. Any special methods shall be identified and should have prior approval of the Regional Water Board's Executive Officer.

      (3) Laboratory results shall be summarized in tabular form but actual laboratory reports do not need to be included in the report. A summary of quality assurance/quality

control activities data such as field, travel, and laboratory blanks shall be reported for each analyzed constituent or group of constituents.

(4) A summary of the monitoring data to include information such as source of the sample (influent, effluent, or receiving water); the constituents; the methods of analysis used; the laboratory reporting limits in µg/L; the sample results (µg/L); the date sampled; and the date sample was analyzed.

(5) Flow (in gpm) and mass removal data (in kilograms).

(6) Summary of treatment system status during the reporting period (e.g., in operation/on standby) and reason(s) for non-routine treatment system shut down.

(7) The Discharger shall submit annual SMRs by February 15 of each year, covering the previous calendar year. The annual SMR shall contain all data required for the fourth quarter in addition to summary data required for annual reporting. This report may be submitted in lieu of the SMR for the fourth quarter of a calendar year.

(8) Annual SMRs shall contain tabular summary of the monitoring data obtained during the previous year. In addition, the annual SMR shall contain a comprehensive discussion of the compliance record and the corrective actions taken or planned that may be needed to bring the Discharger into full compliance with the waste discharge requirements including any trigger study required by Special Provision VI.C.6 and the progress in satisfaction of Special Provisions VI.C.7 and VI.C.8 of this Order. The annual SMR shall document that the annual fee has been paid.

(9) If, during any calendar quarter, a Discharger becomes aware that any monitoring data obtained for compliance with this Order may be invalid, the Discharger shall submit a claim of invalid monitoring data, as uploaded on CIWQS with a confirmation email to the Regional Water Board staff in charge of this permit, within 45 days after end of that calendar quarter. The Discharger shall include with this claim, the name, phone number, and email of its assigned staff to investigate the cause(s) of errors and the corrective actions taken, or date when actions will be completed to eliminate or reduce future data errors. The Discharger shall also provide, in this claim, a date that the O&M manual will be updated to include errors prevention measures. These preventive measures shall include but not be limited to accelerated monitoring (e.g., twice a month monitoring for at least one month) to provide valid monitoring data indicating the effectiveness of the proposed preventive measures.

f. Additional Specifications for Submitting SMRs to CIWQS — If the Discharger submits SMRs to CIWQS, it shall submit analytical results and other information using one of the following methods:

Table E-6. SMR Reporting for CIWQS

Parameter	Method of Reporting	
	EDF/CDF data upload or manual entry	Attached File
All parameters identified in influent, effluent, and receiving	Required for All Results	

water monitoring tables (except Dissolved Oxygen and Temperature)		
Dissolved Oxygen Temperature	Required for Monthly Maximum and Minimum Results Only [1]	Discharger may use this method for all results or keep records
Cyanide Arsenic Cadmium Chromium Copper Lead Mercury Nickel Selenium Silver Zinc Dioxins and Furans (by U.S. EPA Method 1613)	Required for All Results [2]	
Antimony Beryllium Thallium Pollutants by U.S. EPA Methods 601, 602, 608, 610, 614, 624, and 625	Not Required (unless identified in influent, effluent, or receiving water monitoring tables), but encouraged [1]	Discharger may use this method and submit results with application for permit reissuance, unless data submitted by CDF/EDF upload
Analytical Method	Not Required (Discharger may select "data unavailable") [1]	
Collection Time Analysis Time	Not Required (Discharger may select "0:00") [1]	

Footnotes for Table E-6:

[1] The Discharger shall continue to monitor at the minimum frequency specified in the monitoring tables, keep records of the measurements, and make the records available upon request.

[2] These parameters require EDF/CDF data upload or manual entry regardless of whether monitoring is required by this Monitoring and Reporting Program or other provisions of this Order (except for biosolids, sludge, or ash provisions).

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-7. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period
Continuous	Effective startup date	All
Daily	Effective startup date	(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.
Weekly	Effective startup date	Effective startup day through one week after Effective startup date
Monthly	First day of calendar month following the last day of the startup date	1st day of calendar month through last day of calendar month

Quarterly	Closest of January 1, April 1, July 1, or October 1 following (or on) the last day of the startup date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31
Semiannually	Closest of January 1 or July 1 following (or on) the last day of the startup date	January 1 through June 30 July 1 through December 31
Annually	January 1 following (or on) the last day of the start -up date	January 1 through December 31
Once Every 3 Years	Permit effective date	Once within 3 years of the effective date of the permit
Once per Permit Term (1/5 years)	Permit effective date	Once during the permit term within 12 months prior to applying for permit reissuance

4. RL and MDL Reporting. The Discharger shall report with each sample result the applicable Reporting Level (RL) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136. The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

   a. Sample results greater than or equal to the RL shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   b. Sample results less than the RL, but greater than or equal to the laboratory's MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (± a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

   c. Sample results less than the laboratory's MDL shall be reported as "Not Detected," or ND.

   d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from *extrapolation* beyond the lowest point of the calibration curve.

C. Discharge Monitoring Reports (DMRs) - Not Applicable

D. Other Reports

1. Trigger Study Report: The Discharger shall report the results of any trigger study required by Special Provision – VI.C.6 and the progress in satisfaction of compliance schedule dates specified in Special Provisions VI.C.7, VI.C.8, and VI.C.9 of this Order.

2. Spill Reports: If any hazardous substance is discharged in or on any waters of the state, or discharged and deposited where it is, or probably will be discharged in or on any waters of the state, the Discharger shall report such a discharge to this Regional Water Board, at (510) 622-2369 and to Cal/EMA at (800) 852-7550 within 24 hours of becoming aware of the spill. A written report shall be uploaded on CIWQS, with an confirmation email to staff, within five (5) working days and shall contain information relative to:

a. Nature of waste or pollutant,

b. Quantity involved,

c. Duration of incident,

d. Cause of spilling,

e. Spill Prevention, Control, and Countermeasure Plan (SPCC) in effect, if any,

f. Estimated size of affected area,

g. Nature of effects (i.e., fish kill, discoloration of receiving water, etc.),

h. Corrective measures that have been taken or planned, and a schedule of these activities, and

i. Persons/agencies notified.

3. Reports of Treatment Unit Bypass and Permit Violation: In the event the Discharger violates or threatens to violate the conditions of the waste discharge requirements and prohibitions or intends to permit a treatment unit bypass due to:

a. Maintenance work, power failures, or breakdown of waste treatment equipment,

b. Accidents caused by human error or negligence,

c. The self-monitoring program results exceeding effluent limitations,

d. Any activity that would result in a frequent or routine discharge of any toxic pollutant not limited by this Order, or

e. Other causes, such as acts of nature.

The Discharger shall notify the Regional Water Board within 24 hours of when the Discharger or Discharger's agent has knowledge of the incident and confirm this notification in writing and uploaded on CIWQS with a confirmation email to Regional Water Board staff, within 5 working days of the initial notification. The written report shall include time, date, duration and estimated volume of waste bypassed, method used in estimating volume and person notified of the incident. The report shall include pertinent information explaining reasons for the noncompliance and shall indicate what steps were taken to prevent the problem from recurring.

If a violation of the effluent limitations should occur, the Discharger shall direct the effluent to a holding tank, or the extraction and treatment system shall be shut down. The confirmation sampling shall be conducted when the discharge is directed to a holding tank and contained or right before the extraction and treatment system is shut down. The content of the holding tank shall be retreated until the retreated effluent is in compliance, be discharged to a sanitary sewer system, or be disposed in accord with the provisions of applicable California Code of Regulations. The Discharger shall obtain permission from the sanitary sewer agency for any temporary or permanent discharges to the sanitary sewer.

ATTACHMENT F – FACT SHEET

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ATTACHMENT F – FACT SHEET

As described in Section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order. This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for dischargers in California. Except where identified as "not applicable", all sections or subsections are applicable to the discharges regulated under this Order.

This Order is intended to cover discharge or reuse of extracted brackish groundwater, reverse osmosis concentrate from treatment of groundwater by reverse osmosis, and extracted and treated groundwater resulting from structural dewatering.

I. PERMIT INFORMATION

In 2007, the Regional Water Board issued the first NPDES General Permit for the discharge or reuse of extracted brackish groundwater and reverse osmosis concentrate resulting from the treatment of groundwater by reverse osmosis and the discharge or reuse of extracted and treated groundwater resulting from structural dewatering (Extracted Brackish Groundwater General Permit). The Extracted Brackish Groundwater General Permit (Regional Water Board Order No. R2-2007-0033) was adopted on April 11, 2007, became effective July 1, 2007, and expired July 1, 2012. From July 2007 to June 2012, the Regional Water Board's Executive Officer authorized 41 discharges pursuant to Order No. R2-2007-0033. Out of these 41 discharges, 12 discharges were under category 1, 1 discharge under category 2, and 28 discharges under category 3. (See II.A below for descriptions of the discharge categories.)

The Extracted Brackish Groundwater General Permit needs to be reissued because 7 Dischargers have submitted 28 Notice of Intent (NOI) applications to either continue discharging or initiate the discharge of groundwater to surface water. Out of these 28 discharges, 11 discharges are under category 1, 1 discharge under category 2, and 16 discharges under category 3.

Within the next five years, it is anticipated based on a review of the type of discharges authorized under Order No. R2-2007-0033 that a number of additional construction-related sites will need structural dewatering where the groundwater requires treatment prior to discharge. Some sanitary sewage treatment facilities do not accept new discharges from groundwater extraction sites, and, therefore, a number of sites conducting groundwater extraction will require waste discharge requirements from the Regional Water Board for discharge to surface water. The number of groundwater discharges anticipated exceeds the capacity of available Regional Water Board staff to develop and bring individual waste discharge requirements to the Regional Water Board for adoption. These circumstances create the need for an expedited system to process the anticipated requests. The reissuance of the Extracted Brackish Groundwater General Permit will expedite the processing of requirements and enable the Regional Water Board to better utilize limited staff resources.

The following table (Table F-1) and paragraphs summarize administrative information related to the facilities. As applicable, Table F-1 provides cross-references to the specific sections of the NOI Form, in Attachment B, that each Discharger enrolled under this Order must initially complete and submit as part of the NOI.

Table F-1. Facility Information

California Integrated Water Quality System (CIWQS) Regulatory measure and Place ID	A CIWQS Place ID and Regulatory measure identification number will be assigned to a facility when the Executive Officer issues the Authorization to Initiate Discharge
Discharger	NOI Form in Attachment B
Name of Facility	
Facility Address	
Facility Contact, Title, Phone, and email address	
Consultant Name, Phone, and email address	
Authorized Person to Sign and Submit Reports	
Mailing Address and Contact Person Name, Phone, and email address	
Billing Address and Contact Person Name, Phone, and email address	
Type of Project	
Major or Minor Facility	Minor
Pretreatment Program	Not Applicable
Reclamation Requirements	Producer (See NOI in Attachment B)
Facility Permitted Flow	NOI Form in Attachment B
Facility Design Flow	
Watershed	
Receiving Water Type	

A. Site Owners or Operators who apply for an Authorization to Discharge under this Order and who are granted such authorization are hereinafter called Discharger(s). The groundwater treatment facility is considered the Facility regulated under this Order (hereinafter Facility). For the purposes of this Order, references to the "Discharger(s)" or "permittee(s)" in applicable federal and State laws, regulations, plans, or policy are held to be equivalent to references to the Discharger(s) herein.

B. The Facilities regulated under the previous general NPDES permit, Regional Water Board Order No. R2-2007-0033, discharge wastewater to multiple receiving waters of the State and/or the United States. The terms and conditions of the previous permit were automatically continued in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order. During the term of Order No. R2-2007-0033, 41 discharges were authorized to discharge or reuse extracted brackish groundwater and reverse osmosis concentrate resulting from treatment of groundwater by reverse osmosis and discharge or reuse extracted and treated groundwater resulting from structural dewatering to the receiving water documented in the NOI submitted for each discharge.

C. As of January 2012, seven Dischargers had filed 28 reports of waste discharge by submitting an NOI to continue their discharge authorization under this Order. In the process of reviewing and approving NOIs, supplemental information may be requested from a subset of these facilities. It may also be necessary to visit facilities for which an NOI has been submitted, to observe operations and collect additional data to determine the eligibility of authorizing those discharges under this Order. This Order requires Dischargers to submit monitoring data according to the requirements contained in the Monitoring and Reporting Program (Attachment E). If monitoring data indicate significant contamination by metals, pesticides, or other conservative pollutants, Dischargers authorized under this General Permit may be required to apply for an individual NPDES permit.

II. DISCHARGE DESCRIPTION

The facilities that may be covered under this Order are aquifer reclamation program well discharges, reverse osmosis (RO) concentrate discharges from the aquifer reclamation program, and structural dewatering discharges. This Order covers discharges from these facilities to all surface waters such as creeks, streams, rivers including flood control canals, lakes, or San Francisco Bay. Such discharges may occur directly to surface waters or through constructed storm drain systems.

A. Description of Wastewater

All discharges authorized under this Order originate as groundwater. The Regional Water Board acknowledges that groundwater may contain naturally-occuring or incidental pollutants and various organic pollutants not addressed by the Fuel and VOC General Permit at levels that exceed those found in surface waters and in limited circumstances at concentrations above applicable water quality criteria for surface waters. Such naturally-occuring pollutants of concern include total dissolved solids (TDS) and common metals. In addition, discharges authorized by this Order may include suspended and settleable solids and turbidity that are introduced to discharges due to poorly constructed or deteriorating wells and at the points of discharge by erosion and scouring of the banks and bottoms of receiving waters.

This Order also authorizes the discharge of RO concentrate resulting from the treatment of uncontaminated groundwater by RO. Such discharges may contain naturally-occuring dissolved pollutants that are present in well waters, but these dissolved materials may be concentrated by the RO process. In these discharges, therefore, the pollutants of concern include dissolved solids and common metals.

In summary, this Order regulates discharges to surface water from the three following sources:

1. Aquifer reclamation program well discharges (typically long term): these groundwater extraction facilities are in operation to protect drinking water supply aquifers or other municipal facilities from salt water intrusion. For example, the Alameda County Water District (ACWD) operates a series of wells along the southeast side of San Francisco Bay. Historically, ACWD has discharged and in the future may again discharge up to 30 MGD of extracted brackish groundwater in the Fremont-Newark area to flood control channels. These discharges have been below 5,000 mg/L total dissolved solids.

2. RO concentrate from aquifer reclamation program well discharges to estuarine environments (typically long term): pumped groundwater may be treated by RO so that less saline groundwater may be returned to the drinking water supply and the RO concentrate discharged as waste. For example, this is the case with the ACWD RO facility located in Newark. RO concentrate discharges to a sanitary sewer system are not required to obtain coverage under this Order.

3. Structural dewatering resulting in greater than 10,000 gallons per day and requiring treatment for pollutants other than fuels or volatile organic compounds (typically long term): these are long-term dewatering systems under or around buildings and pipelines to control groundwater infiltration. Buildings and underpass structures are two examples of structures that may require continuous dewatering. Treatment is required where a physical, biological, or chemical treatment process is necessary in order for the structural dewatering discharge to comply with the prohibitions and limitations of this Order. The target of treatment may include naturally occurring compounds (e.g., sulfides, alkalinity, acidity) that, if not treated, would pollute or contribute to pollution of surface receiving waters. This Order does not cover groundwater that requires treatment due to contamination from fuels or volatile organic compounds. Such discharges must seek coverage under a separate general permit, VOC Fuel General Permit No. CAG912002.

B. Discharge Points and Receiving Waters

The Order authorizes discharges to all surface waters of the San Francisco Bay Region, including inland surface waters, enclosed bays, and estuaries. The NOI Form (Attachment B) requires every Discharger to provide the discharge location and a map highlighting the discharge path to surface waters.

C. Summary of Existing Requirements

The effluent limitations contained in the previous order (Regional Water Board Order No. R2-2007-0033) are described below:

1. **Residual Chlorine:** There shall be no detectable levels of residual chlorine in the effluent (a non-detect result using a detection level equal or less than 0.08 milligram per liter will not be deemed to be out of compliance). This limit only applies to Dischargers who chlorinate their well water.

2. **pH:** The pH of the discharge shall not exceed 8.5 nor be less than 6.5.

3. **Acute Toxicity:** Representative samples of the effluent, with compliance measured at Monitoring Location EFF-001 as described in the Authorization to Initiate Discharge, shall meet the following limits for acute toxicity. Bioassays shall be conducted in compliance with Section V.A of the Monitoring and Reporting Program (Attachment E).

The survival of test fish in 96-hour static renewal bioassays with the effluent shall be not less than a three sample moving median of 90% survival and a single test value of not less than 70% survival.

These acute toxicity limitations are further defined as follows:

a) 3-sample median. A bioassay test showing survival of less than 90 percent represents a violation of this effluent limit, if one or more of the past two or less bioassay tests show less than 90 percent survival.

b) Single sample. A bioassay test showing survival of less than 70 percent represents a violation of this effluent limit.

Bioassays shall be performed using the most up-to-date USEPA protocol. Bioassays shall be conducted using rainbow trout as the test species in compliance with *Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms*, currently 5th Edition (EPA-821-R-02-012), with exceptions granted to the Discharger by the Executive Officer and the Environmental Laboratory Accreditation Program (ELAP) upon the Discharger's request with justification.

D. Compliance Summary

Except for two, no other Dischargers authorized under the previous Extracted Brackish Groundwater General Permit reported any effluent limits violations. The East Bay Municipal Utility District (EBMUD) reported two residual chlorine and two pH violations, and the City of Mountain View reported a series of acute toxicity violations. Regional Water Board enforcement staff assessed legally-mandated minimum penalties for the EBMUD chlorine and pH violations. After the City of Mountain View reported its acute toxicity violations, the City proactively investigated the cause and contacted the local sanitary sewer agency, received a permit to discharge to the sanitary sewer system, and subsequently terminated the discharge.

E. Planned Changes

As required in Attachment D, a Discharger authorized under this Order shall submit a modified NOI before making any material change in the character, location, or volume of the discharge.

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

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

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code [(CWC), commencing with section 13370]. It

shall serve as an NPDES permit for point source discharges from these facilities to surface waters. This Order also serves as General Waste Discharge Requirements pursuant to CWC article 4, chapter 4, division 7 (commencing with section 13260). States may request authority to issue general NPDES permits pursuant to Code of Federal Regulations, Title 40, Chapter 1, Subchapter D, part 122.28 (40 CFR 122.28). 40 CFR 122.28 provides for the issuance of general permits to regulate discharges of waste which result from similar operations, are the same types of waste, require the same effluent limitations, require similar monitoring, and are more appropriately regulated under a general permit rather than individual permits. This general permit meets the requirements of 40 CFR 122.28 because the discharges and proposed discharges:

- result from similar operations (all involve extraction, treatment, and discharge of groundwater);
- are the same types of waste (all are extracted brackish groundwater or RO concentrate from extracted groundwater);
- require similar effluent limitations for the protection of the beneficial uses of surface waters in the San Francisco Bay Region (this general permit does not cover direct discharges to the Pacific Ocean);
- require similar monitoring; and
- are more appropriately regulated under a general permit rather than individual permits.

B. California Environmental Quality Act (CEQA)

Under CWC section 13389, this action to issue an NPDES permit is exempt from the provisions of CEQA.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** *The Water Quality Control Plan for the San Francisco Bay Basin* (the Basin Plan) is the Regional Water Board's master water quality control planning document. It designates beneficial uses and water quality objectives (WQOs) for waters of the State, including surface and groundwater. It also includes implementation programs to achieve WQOs. The Basin Plan was duly adopted by the Regional Water Board and approved by the State Water Resources Control Board (State Water Board), the Office of Administrative Law, and USEPA.

   The Basin Plan designates beneficial uses, establishes WQOs, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan states that the beneficial uses of any specifically-identified water body generally apply to its tributary streams. The Basin Plan may not specifically identify beneficial uses for every receiving water regulated under this permit, but identifies present and potential uses for the downstream water body, to which the receiving water, via an intermediate water body, is tributary. The potential and existing beneficial uses for surface waters are:

   - Municipal and domestic supply
   - Fish migration

- Fish spawning
- Industrial service supply
- Navigation
- Industrial process supply
- Marine habitat
- Agricultural supply
- Estuarine habitat
- Groundwater recharge
- Shellfish harvesting
- Water contact recreation
- Non-contact water recreation
- Ocean, commercial, and sport fishing
- Wildlife habitat
- Areas of special biological significance
- Cold freshwater habitat
- Warm freshwater habitat
- Preservation of rare and endangered species

The potential and existing beneficial uses for groundwaters are:

- Municipal and domestic supply
- Industrial service supply
- Industrial process supply
- Agricultural supply
- Freshwater replenishment

In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Requirements of this Order implement the Basin Plan.

On September 18, 1975, the State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal Interstate Waters and Enclosed Bays and Estuaries of California* (hereinafter the Thermal Plan). The Thermal Plan contains objectives governing cooling water discharges, providing different and specific numeric and narrative water quality objectives for new and existing discharges.

The State Water Board's *Water Quality Control Plan for Enclosed Bays and Estuaries—Part 1, Sediment Quality* became effective on August 25, 2009. This plan supersedes other narrative sediment quality objectives and establishes new sediment quality objectives and related implementation provisions for specifically defined sediments in most bays and estuaries.

2. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and amended it on May 4, 1995, and November 9, 1999. About 40 criteria in the NTR and apply in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that applied in the State. The CTR was amended on February 13, 2001. These rules contain water quality criteria (WQC) for priority toxic pollutants.

3. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated through the NTR and to the WQOs established in the Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

4. **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 [65 Fed. Reg. 24641 (April 27, 2000), codified at 40 CFR 131.21]. Under the revised regulation (also known as the Alaska Rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

5. **Antidegradation Policy.** 40 CFR 131.12 requires that state WQS include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution 68-16, which incorporates the federal antidegradation policy where the federal policy applies under federal law and requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

6. **Anti-Backsliding Requirements.** CWA Sections 402(o)(2) and 303(d)(4) and 40 CFR 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. This Order retains effluent limitations at least as stringent as those established by the previous order.

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

In October 2011, USEPA approved a revised list of impaired water bodies prepared pursuant to CWA section 303(d), which requires identification of specific waterbodies where it is expected that water quality standards will not be met after implementation of technology-based effluent limitations on point sources. Where it has not already done so, the Regional Water Board plans to adopt Total Maximum Daily Loads (TMDLs) for pollutants on the 303(d) list. TMDLs establish wasteload allocations for point sources and load allocations for non-point source and are established to achieve the water quality standards for the impaired waterbodies. The SIP requires final effluent limitations for all 303(d)-listed pollutants to be based on total maximum daily loads and associated waste load allocations.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in 40 CFR: Section 122.44(a) requires that permits include applicable technology-based limitations and standards; and Section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs may be established: (1) using USEPA criteria guidance under CWA section 304 (a), supplemented where necessary by other relevant information; (2) on an indicator parameter for the pollutant of concern; or (3) using a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state's narrative criterion, supplemented with other relevant information, as provided in 40 CFR 122.44 (d)(1)(vi). As noted in Section III, above, other applicable plans and regulations contain specifications that form the basis for the requirements in the Order.

Several specific factors affecting the development of limitations and requirements in this Order are discussed as follows:

A. Discharge Prohibitions

1. **Prohibition III.A (Unauthorized discharges of extracted brackish groundwater and reverse osmosis concentrate are prohibited):** This discharge prohibition is based on 40CFR122.21(a), duty to apply, and CWC Section 13260, which requires filing of a report of waste discharge (ROWD) before discharges can occur. Thus, discharges not described in an NOI are prohibited.

2. **Prohibition III.B (Discharges in excess of the authorized flow rate are prohibited):** This prohibition is retained from the previous order. The basis for the prohibition is the same rationale documented for Prohibition III.A. Dischargers have submitted an NOI that included a description of treatment facility design and the maximum design flow rate, certified by a

professional engineer. When considering authorization, the Regional Water Board will consider the potential erosive effects of the discharge on the receiving water. Flow rate will, therefore, be an important consideration in the authorization process and flows in excess of the design flow rate may result in lowering the reliability of achieving compliance with water quality requirements.

3. **Prohibition III.C (No pollution, contamination, or nuisance):** This prohibition is based on CWC section 13050, and has been retained from the previous order.

4. **Prohibition III.D (No discharges at a volume or velocity that causes erosion and/or scouring):** This prohibition is retained from the previous order and is based on the sediment and erosion control goals of section 4.19 of the Basin Plan.

5. **Prohibition III.E (No discharges of filter backwash water, membrane cleaning solutions, or other waste streams associated with reverse osmosis other than reverse osmosis concentrate**): This prohibition is retained from the previous order. Although this Order authorizes the discharge of groundwater and concentrate resulting from treatment of groundwater by reverse osmosis, this prohibition clarifies that the discharge of filter backwash water, membrane cleaning solutions, or other waste streams associated with reverse osmosis (other than reverse osmosis concentrate) are not authorized by this Order.

6. **Prohibition III.F (No discharges of well drilling fluids**): This prohibition is retained from the previous order. Although the Order authorizes only the discharge of uncontaminated groundwater and concentrate resulting from treatment of uncontaminated groundwater by reverse osmosis, this prohibition clarifies that the discharge of well drilling fluids are not authorized by the Order.

7. **Prohibition III.G (Discharges or groundwater contaminated with volatile organic compounds [VOCs] and fuels are prohibited):** Although this prohibition is obvious, it is included to remind potential dischargers of VOC or fuel contaminated groundwater to apply for coverage under the VOC Fuel General Permit.

8. **Prohibition III.H (No bypass or overflow of untreated or partially treated polluted groundwater**): This is based on 40 CFR 122.41(m) and applicable to structural dewatering requiring treatment before discharging.

B. Shallow Water Discharges and Basin Plan Discharge Prohibition 1

The Basin Plan (Chapter 4, Table 4-1, Discharge Prohibition 1) prohibits discharges not receiving a minimum 10:1 initial dilution or to dead end sloughs. In accordance with the Basin Plan, this Order continues to grant Dischargers an exception to the discharge prohibition for discharges to shallow waters. The exception is based on section 4.2 of the Basin Plan, which states that an exception to Prohibition 1 will be considered where:

"A discharge is approved as part of a groundwater cleanup project, and in accordance with Resolution No. 88-160 'Regional Board Position on the Disposal of Extracted Groundwater from Groundwater Clean-Up Projects,' and it has been demonstrated that neither reclamation nor discharge to a publicly owned treatment works is technically and economically feasible, and the discharger has provided certification of the adequacy and reliability of treatment facilities and a plan that describes procedures for proper operation and maintenance of all treatment facilities."

The Basin Plan further states:

"Significant factors to be considered by the Regional Water Board in reviewing requests for exceptions will be the reliability of the discharger's system in preventing inadequately treated wastewater from being discharged to the receiving water and the environmental consequences of such discharges."

To comply with the exception, this Order requires Dischargers to document in the NOI that neither reclamation nor discharge to a POTW is technically and economically feasible. In addition, to prevent inadequately treated wastewater from being discharged to receiving waters, Dischargers are required to document in the NOI that the discharge of inadequately treated waste will be reliably prevented.

C. Technology-Based Effluent Limitations

1. Scope and Authority

The CWA requires technology-based effluent limitations (TBELs) based on several levels of controls:

- Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

- Best conventional pollutant control technology (BCT) represents the control from existing 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 125.3 authorize the use of Best Professional Judgment (BPJ) to derive TBELs on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR 125.3.

2. Applicable Technology-Based Effluent Limitations

Except for residual chlorine and pH, the Order does not establish TBELs. The effluent chlorine residual limitation limit applies only to the Dischargers that chlorinate their well water. Whether the chlorine limitation applies to a particular facility shall be determined based on its NOI, and confirmed in the Notice of Authorization to Discharge for that facility.

Effluent Limitations for residual chlorine and pH are both pursuant to Table 4-2 (page 4-69) of the Basin Plan. While the Basin Plan defines the effluent limit as 0.0 mg/L, a measurement of 0.05 mg/L is considered a violation. The reporting limit was 0.08 mg/L in the previous permit and originally came from negotiations with water treatment plants. Since that time, the lower 0.05 mg/L reporting limit is considered achievable using chlorine test kits consistent with Standard Methods 4500-Cl F and G. This 0.05 mg/L reporting limit is consistent with that imposed by the Regional Water Board in three other permits. These permits are the San Francisco Public Utilities Commission's Drinking Water Transmission System Order No. R2-2008-0102, the East Bay Municipal Utility District's Orinda Water Treatment Plant Order No. R2-2009-0067, and the Municipal Regional Stormwater Permit Order No. 2009-0074.

Regional Water Board staff used BPJ in developing TBELs in this Order. BPJ is defined as the highest quality technical opinion developed by a permit writer after consideration of all reasonably available and pertinent data or information that forms the basis for the terms and conditions of an NPDES permit. The authority for BPJ is contained in CWA section 402(a)(1).

Table F-2, below, summarizes the TBELs established by this Order:

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

No.	Compound	Units	Limitations Established by BPJ
---	pH	Standard Units	6.5 – 8.5
---	Residual Chlorine	mg/L	0.08[A]

[A] There shall be no detectable levels of residual chlorine in the effluent; a non-detect using a detection level equal or less than 0.05 milligrams per liter will not be deemed out of compliance.

D. Water Quality-Based Effluent Limitations (WQBELs)

WQBELs have been derived to implement WQOs that protect beneficial uses. Both the beneficial uses and the WQOs have been approved pursuant to federal law. The procedures for calculating

individual WQBELs are based on the SIP and the Basin Plan. Most Basin Plan beneficial uses and WQOs were approved under State law and submitted to and approved by USEPA prior to May 30, 2000. Any WQOs and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the [Clean Water] Act" pursuant to 40 CFR 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than those required by CWA water quality standards.

1. Scope and Authority

a. 40 CFR 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have reasonable potential to cause or contribute to an excursion of a water quality standard, including numeric and narrative objectives within a standard. As specified in 40 CFR 122.44(d)(1)(i), permits are required to include WQBELs for all pollutants "which the Director determines are or may be discharged at a level which will cause, have the 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 beneficial uses of the receiving water as specified in the Basin Plan, and achieve applicable WQOs contained in other state plans and policies, and applicable WQC contained in the CTR and NTR.

b. NPDES regulations and the SIP provide the basis to establish Maximum Daily Effluent Limitations (MDELs):

(1) NPDES Regulations. NPDES regulations at 40 CFR 122.45(d) state, "For continuous discharges all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall *unless impracticable* be stated as maximum daily and average monthly discharge limitations for all discharges other than publicly owned treatment works."

(2) SIP. SIP section 1.4 requires WQBELs to be expressed as MDELs and average monthly effluent limitations (AMELs).

c. MDELs are used in this Order to protect against acute water quality effects. The MDELs are necessary for preventing fish kills or mortality to aquatic organisms.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The WQOs applicable to the receiving waters for these discharges are from the Basin Plan; the CTR, established by USEPA at 40 CFR 131.38; and the NTR, established by USEPA at 40 CFR 131.36. Some pollutants have WQOs established by more than one of these three sources:

a. Basin Plan. The Basin Plan specifies numeric WQOs for 10 priority toxic pollutants, as well as narrative WQOs for toxicity and bioaccumulation in order to protect beneficial

uses. The pollutants for which the Basin Plan specifies numeric objectives are arsenic, cadmium, chromium (VI), copper in fresh and marine water, lead, mercury, nickel, silver, zinc, and cyanide. The narrative toxicity objective states, "All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms." The bioaccumulation objective states, "Controllable water quality factors shall not cause a detrimental increase in concentrations of toxic substances found in bottom sediments or aquatic life. Effects on aquatic organisms, wildlife, and human health will be considered." Effluent limitations and provisions contained in this Order are designed to implement these objectives, based on available information.

The Basin Plan also contains a narrative objective for surface waters designated for use as a domestic or municipal supply (MUN) which states that these surface waters shall not contain concentrations of constituents in excess of the maximum contaminant levels (MCLs) or secondary MCLs specified in Title 22 of the California Code of Regulations. Effluent limitations and provisions contained in this Order are designed to implement these objectives, based on available information.

b. CTR. The CTR specifies numeric aquatic life criteria for 23 priority toxic pollutants and numeric human health criteria for 57 priority toxic pollutants. These criteria apply to all inland surface waters and enclosed bays and estuaries of the San Francisco Bay Region, although Tables 3-3 and 3-4 of the Basin Plan include numeric objectives for certain of these priority toxic pollutants, which supersede criteria of the CTR (except in the South Bay south of the Dumbarton Bridge).

Human health criteria are further identified as "water and organisms" and "organisms only." Human health criteria are further identified as "water and organisms" and "organisms only." Discharges covered by this permit could be to waters with or without a MUN designation. However, since the most stringent WQO for all WQBELs are aquatic life criteria, the WQBELs will apply to all discharges.

c. NTR. The NTR establishes numeric aquatic life criteria for selenium and numeric "organisms only" human health criteria for 33 toxic pollutants for waters of San Francisco Bay upstream to, and including Suisun Bay and the San Joaquin-Sacramento River Delta.

d. Sediment Quality Objectives. The *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1, Sediment Quality* contains a narrative WQO, "Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities in bays and estuaries of California." This WQO is to be implemented by integrating three lines of evidence: sediment toxicity, benthic community condition, and sediment chemistry. The policy requires that is the Regional Water Board determines that a discharge has reasonable potential to cause or contribute to an exceedance of this WQO, it is to impose the WQO as a receiving water limit.

e. Basin Plan Receiving Water Salinity Policy. The Basin Plan (like the CTR and the NTR) states that the salinity characteristics (i.e., freshwater vs. saltwater) of the receiving water are to be considered in determining the applicable WQOs. Freshwater criteria apply to discharges to waters with salinities equal to or less than one part per thousand (ppt) at least 95 percent of the time. Saltwater criteria apply to discharges to waters with salinities equal to or greater than 10 ppt at least 95 percent of the time in a normal water year. For discharges to water with salinities between these two categories, or tidally influenced freshwaters that support estuarine beneficial uses, the WQOs are the lower of the salt or freshwater WQOs (the latter calculated based on ambient hardness) for each substance.

Receiving waters for this Order are the San Francisco Bay and other estuarine and tidally-influenced waters, and inland freshwaters. Aquatic life criteria were based on the most stringent of the fresh and salt water criteria, to be fully protective of all receiving waters.

f. Receiving Water Hardness. Ambient hardness values are used to calculate freshwater WQOs that are hardness dependent. In determining the WQOs for this Order, Regional Water Board staff used a hardness value of 100 mg/L as CaCO3, which is a conservative value and generally protective of aquatic life in all circumstances contemplated by the Order.

g. Site Specific Translators. NPDES regulations at 40 CFR 122.45(c) require that effluent limitations for metals be expressed as total recoverable metal. Since applicable WQOs for metals are typically expressed as dissolved metal, translators must be used to convert metals concentrations from dissolved to total recoverable and vice versa. The CTR includes default translators; however, site-specific conditions, such as water temperature, pH, suspended solids, and organic carbon greatly affect the form of metal (dissolved, non-filterable, or otherwise) present in the water and therefore available to cause toxicity. In general, the dissolved form of the metal is more available and more toxic to aquatic life than non-filterable forms. Site-specific translators can be developed to account for site-specific conditions, thereby preventing exceedingly stringent or under protective WQOs.

Receiving waters for discharges from the facilities covered under this Order are varied, and therefore site specific conditions are varied. In determining the need for and calculating WQBELs for all metals except for copper and nickel, the Regional Water Board has used default translators established by the USEPA in the CTR at 40 CFR 131.38 (b) (2), Table 2 to be protective in all circumstances. Most discharges are anticipated to eventually enter San Francisco Bay, and therefore, the site specific translators were applied in determining criteria for copper and nickel. For copper, the Regional Water Board applied the SSTs adopted by Regional Water Board Resolution No. R2-2007-0042 for North and Central San Francisco Bay, and the SST contained in the Basin Plan Table 7.2.1-1 for South San Francisco Bay. For nickel, the Regional Water Board applied the translators for North and Central San Francisco Bay based on the recommendation of the Clean Estuary Partnership's *North of Dumbarton Bridge Copper and Nickel Development and Selection of Final Translators* (2005), and applied the

translators contained in Table 7.2.1-1 of the Basin Plan for South San Francisco Bay. These translators for copper and nickel are summarized below.

Table F-3. SSTs for Copper and Nickel for San Francisco Bay

	Copper		Nickel	
San Francisco Bay Segment	**AMEL Translator**	**MDEL Translator**	**AMEL Translator**	**MDEL Translator**
North	0.38	0.66	0.27	0.57
Central	0.73	0.87	0.65	0.85
South	0.53	0.53	0.44	0.44

3. Determining the Need for WQBELs

Assessing whether a pollutant has Reasonable Potential is the fundamental step in determining whether or not a WQBEL is required.

a. Reasonable Potential Methodology

For priority pollutants and most other toxic pollutants, the RPA identifies the observed maximum effluent concentration (MEC) for each pollutant based on effluent concentration data. There are three triggers in determining Reasonable Potential according to SIP Section 1.3:

(1) The first trigger (Trigger 1) is activated if the MEC is greater than or equal to the lowest applicable WQO (MEC ≥ WQO), which has been adjusted, if appropriate, for pH, hardness, and translator data. If the MEC is greater than or equal to the adjusted WQO, then that pollutant has Reasonable Potential, and a WQBEL is required.

(2) The second trigger (Trigger 2) is activated if the observed maximum ambient background concentration (B) is greater than the adjusted WQO (B > WQO), and the pollutant is detected in any of the effluent samples (MEC > ND).

(3) The third trigger (Trigger 3) is activated if a review of other information determines that a WQBEL is required to protect beneficial uses, even though both MEC and B are less than the WQO/WQC.

b. Effluent Data

The Regional Water Board analyzed the Dischargers' priority pollutant data and the nature of the discharges to determine if discharges have Reasonable Potential. Each Discharger covered under Order No. R2-2007-0033 was required to conduct effluent monitoring pursuant to the Self-Monitoring Program for that order. Effluent data used to conduct this RPA consisted of data submitted as part of each facility's submitted Notice of Intent (NOI) to be covered under NPDES Permit CAG912004. The Regional Water

Board analyzed effluent quality data from a total of six Dischargers covering a total of 15 discharge locations in the San Francisco Bay Region, collected from 2007 to 2011, to determine if the discharges have Reasonable Potential in each of the three categories.

From this analysis, it was concluded that the data for metals, such as copper, would be excluded for use in the RPA pursuant to SIP 1.2. The reason is that the metals were detected only occasionally and likely due to false positives from salt interference in the analysis or from natural background in the groundwater. Structural dewatering discharge metals data were also excluded for use in the RPA because a few metals were detected only once and not confirmed during confirmation monitoring and were likely due to the use of contaminated rental treatment equipment.

c. Ambient Background Data

The SIP states that, for calculating WQBELs, ambient background concentrations are either the observed maximum ambient water column concentrations or, for objectives intended to protect human health from carcinogenic effects, the arithmetic mean of observed ambient water concentrations. Ambient background concentrations are the observed maximum detected water column concentrations for aquatic life protection.

Because the receiving waters for discharges from the facilities covered under this General Permit are varied, receiving water background concentrations were not considered for this RPA.

d. Reasonable Potential Determination for Priority Pollutants

The MECs and the most stringent applicable WQC used in the RPA are presented in the following table, along with the RPA results (yes or no) for each pollutant. Reasonable Potential was not determined for all pollutants because there are not applicable WQC for all pollutants, or monitoring data are not available for others. Based on a review of the effluent data, no reasonable potential was found for Category 1, Category 2, or Category 3 discharges. Tables F-4, F-5, and F-6 present the results of the RPA for each category.

Table F-4. Summary of RPA Results – Category 1 Discharges

CTR #	Priority Pollutants	MEC or Minimum DL [1][2] (µg/L)	Governing Applicable Criteria (µg/L)				RPA Results [3]
			Aquatic Life	Human Health			
			(Most stringent of salt and fresh water)	CTR Water + Organisms	Basin Plan Title 22 MCLs	CTR Organisms Only	
1	Antimony	0.19	---	14	6	4300	No
2	Arsenic	2.2	36	---	10	---	No
3	Beryllium	0.008	---	---	4	---	No
4	Cadmium	0.117	1.1	---	5	---	No

CTR #	Priority Pollutants	MEC or Minimum DL [1][2] (µg/L)	Governing Applicable Criteria (µg/L)				RPA Results [3]
			Aquatic Life	Human Health			
			(Most stringent of salt and fresh water)	CTR Water + Organisms	Basin Plan Title 22 MCLs	CTR Organisms Only	
5a	Chromium (III)	8.8	207	---	50	---	No
5b	Chromium (VI)	< 0.5	11	---	---	---	No
6	Copper	5.09	4.7[4]	1300	1000	---	Ud
	Copper	5.09	3.4[5]	1300	1000	---	Ud
	Copper	5.09	5.9[6]	1300	1000	---	No
7	Lead	0.918	3.2	---	---	---	No
8	Mercury (303d listed)	0.005	0.025	0.050	2	0.051	No
9	Nickel	12	19[7]	610	100	4600	No
	Nickel	12	13[8]	610	100	4600	No
	Nickel	12	30[9]	610	100	4600	No
10	Selenium (303d listed)	0.59	5.0	---	50	---	No
11	Silver	0.7	2.2	---	---	---	No
12	Thallium	0.004	---	1.7	2.0	6.3	No
13	Zinc	17	86	---	5000	---	No
14	Cyanide	< 0.5	2.9[10]	700	150	220,000	No
53	Pentachlorophenol	< 0.5	7.9	0.28	1	8.2	No
55	2,4,6-Trichlorophenol	< 0.5	---	2.1	---	6.5	No
59	Benzidine	< 0.5	---	0.00012	---	0.00054	No
60	Benzo(a)Anthracene	< 0.5	---	0.0044	---	0.049	No
61	Benzo(a)Pyrene	< 0.5	---	0.0044	0.2	0.049	No
62	Benzo(b)Fluoranthene	< 0.5	---	0.0044	---	0.049	No
64	Benzo(k)Fluoranthene	< 0.5	---	0.0044	---	0.049	No
66	Bis(2-Chloroethyl)Ether	< 0.5	---	0.031	---	1.4	No
68	Bis(2-Ethylhexyl)Phthalate	< 0.5	---	1.8	4	5.9	No
73	Chrysene	< 0.5	---	0.0044	---	0.049	No
74	Dibenzo(a,h)Anthracene	< 0.5	---	0.0044	---	0.049	No
78	3,3-Dichlorobenzidine	< 0.5	---	0.04	---	0.077	No
79	Diethyl Phthalate	< 0.5	---	23,000	---	120,000	No
82	2,4-Dinitrotoluene	< 0.5	---	0.11	---	9.1	No
88	Hexachlorobenzene	< 0.5	---	0.00075	1	0.00077	No
89	Hexachlorobutadiene	< 0.5	---	0.44	---	50	No
91	Hexachloroethane	< 0.5	---	1.9	---	8.9	No
96	N-Nitrosodimethylamine	< 0.5	---	0.00069	---	8.1	No
97	N-Nitrosodi-n-Propylamine	< 0.5	---	0.005	---	1.4	No
100	Pyrene	< 0.5	---	960	---	11,000	No

Table F-5. Summary of RPA Results – Category 2 Discharges

CTR #	Priority Pollutants	MEC or Minimum DL [1][2] (µg/L)	Governing Applicable Criteria (µg/L)				RPA Results [3]
			Aquatic Life	Human Health			
			(Most stringent of salt and fresh water)	CTR Water + Organisms	Basin Plan Title 22 MCLs	CTR Organisms Only	
1	Antimony	0.31	---	14	6	4300	No
2	Arsenic	3.12	36	---	10	---	No
3	Beryllium	0.029	---	---	4	---	No
4	Cadmium	0.255	1.1	---	5	---	No
5a	Chromium (III)	1.14	207	---	50	---	No
6	Copper	1	4.7[4]	1300	1000	---	No
	Copper	1	3.4[5]	1300	1000	---	No
	Copper	1	5.9[6]	1300	1000	---	No
7	Lead	0.011	3.2	---	---	---	No
8	Mercury (303d listed)	0.0054	0.025	0.050	2	0.051	No
9	Nickel	1	19[7]	610	100	4600	No
	Nickel	1	13[8]	610	100	4600	No
	Nickel	1	30[9]	610	100	4600	No
10	Selenium (303d listed)	0.225	5.0	---	50	---	No
11	Silver	0.49	2.2	---	---	---	No
12	Thallium	0.018	---	1.7	2.0	6.3	No
13	Zinc	15.1	86	---	5000	---	No
14	Cyanide	2.8	2.9[10]	700	150	220,000	No

Table F-6. Summary of RPA Results – Category 3 Discharges

CTR #	Priority Pollutants	MEC or Minimum DL [1][2] (µg/L)	Governing Applicable Criteria (µg/L)				RPA Results [3]
			Aquatic Life	Human Health			
			(Most stringent of salt and fresh water)	CTR Water + Organisms	Basin Plan Title 22 MCLs	CTR Organisms Only	
1	Antimony	0.33	---	14	6	4300	No
2	Arsenic	1.8	36	---	10	---	No
3	Beryllium	< 0.1	---	---	4	---	No
4	Cadmium	0.062	1.1	---	5	---	No
5a	Chromium (III)	0.32	207	---	50	---	No
5b	Chromium (VI)	< 0.1	11	---	---	---	No
6	Copper	3.0	4.7[4]	1300	1000	---	No
	Copper	3.0	3.4[5]	1300	1000	---	No
	Copper	3.0	5.9[6]	1300	1000	---	No

CTR #	Priority Pollutants	MEC or Minimum DL [1][2] (µg/L)	Governing Applicable Criteria (µg/L)				RPA Results [3]
			Aquatic Life	Human Health			
			(Most stringent of salt and fresh water)	CTR Water + Organisms	Basin Plan Title 22 MCLs	CTR Organisms Only	
7	Lead	0.59	3.2	---	---	---	No
8	Mercury (303d listed)	0.00133	0.025	0.050	2	0.051	No
9	Nickel	4	19[7]	610	100	4600	No
	Nickel	4	13[8]	610	100	4600	No
	Nickel	4	30[9]	610	100	4600	No
10	Selenium (303d listed)	0.78	5.0	---	50	---	No
13	Zinc	27	86	---	5000	---	No
14	Cyanide	<2.0	2.9[10]	700	150	220,000	No

Footnotes for Tables F-4, F-5, and F-6:

[1] The Maximum Effluent Concentration (MEC) is the actual detected concentration unless preceded by a "<" sign, in which case the value shown is the minimum detection level (DL).

[2] The tables only include results for parameters reported in NOIs submitted by the Dischargers in each Category.

[3] RPA Results = Yes, if MEC > WQO/WQC, B > WQO/WQC and MEC is detected, or Trigger 3;
= No, if MEC and B are < WQO/WQC or all effluent data are undetected;
= Undetermined (Ud), if no criteria have been promulgated or there are insufficient data. For metals, specifically copper, Ud was determined because as noted previously the reported discharge data were excluded for use in RPA pursuant to SIP 1.2. Though the detected levels are high as shown in the MECs above, these were in just a few samples. Metals and cyanide were detected only occasionally and generally at low levels likely from analytical interference from salinity in the sample, or natural background in the groundwater extracted. Because this Order would exclude coverage for sites where there is persistent metals contamination, and the relative small load of background metals to the Bay from all the discharges, a finding of undetermined is appropriate.

[4] Criterion based on the Basin Plan marine SSO for copper and the site-specific translators (0.53 acute and chronic) for the Lower and South Bay.

[5] Criterion based on the Basin Plan marine SSO for copper and the site-specific translators (0.87 acute, 0.73 chronic) for the Central Bay.

[6] Criterion based on the Basin Plan marine SSO for copper and the site-specific translators (0.66 acute, 0.38 chronic) for Suisun and San Pablo Bay.

[7] Criterion based on the Basin Plan marine SSO for nickel and the site-specific translators (0.44 acute and chronic) for the Lower and South Bay.

[8] Criterion based on the Basin Plan marine WQO for nickel and the site-specific translators (0.85 acute, 0.65 chronic) for the Central Bay.

[9] Criterion based on the Basin Plan marine WQO for nickel and the site-specific translators (0.57 acute, 0.27 chronic) for Suisun and San Pablo Bay.

[10] Criterion based on the Basin Plan marine SSO for cyanide.

e. Constituents with Limited Data

In some cases, Reasonable Potential cannot be determined because effluent data are limited, or ambient background concentrations are unavailable. When additional data become available, further RPA will be conducted to determine whether numeric effluent limitations are necessary.

f. Pollutants with No Reasonable Potential

WQBELs are not included in this Order for constituents that do not demonstrate Reasonable Potential; however, monitoring for those pollutants is still required. If concentrations of these constituents are found to have increased significantly, the Discharger will be required to investigate the sources of the increases. Remedial measures are required if the increases pose a threat to receiving water quality.

g. RPA Determination for Sediment Quality Objectives

Pollutants in some receiving water sediments may be present in quantities that alone or in combination are toxic to benthic communities. Efforts are underway to identify stressors causing such conditions. However, to date there is no evidence directly linking compromised sediment conditions to the discharges subject to this Order; therefore the Regional Water Board cannot draw a conclusion about Reasonable Potential for the discharges to cause or contribute to exceedances of the sediment quality objectives. Nevertheless, the Regional Monitoring Program (RMP) conducted by the San Francisco Estuary Institute continues to monitor San Francisco Bay sediment and seeks to identify stressors responsible for degraded sediment quality. Thus far, the monitoring has provided only limited information about potential stressors and sediment transport. The Regional Water Board is exploring appropriate requirements to impose on dischargers in the region, to obtain additional information that may inform future RPAs.

4. WQBEL Calculations

a. Development of WQBELs for Specific Pollutants.

For the CTR pollutants, no Reasonable Potential was determined as described above so no WQBEL is necessary.

5. Whole Effluent Toxicity (WET)

The Basin Plan requires dischargers to either conduct flow-through effluent toxicity tests or perform static renewal bioassays (Chapter 4, Acute Toxicity) to measure the toxicity of wastewaters and to assess negative impacts upon water quality and beneficial uses caused by the aggregate toxic effect of the discharge of pollutants. This Order retains the effluent limitation for whole effluent acute toxicity. Compliance evaluation with these limitations is based on 96-hour static-renewal bioassays. All bioassays shall be performed according to the USEPA-approved method in 40 CFR Part 136, currently *"Methods for Measuring the Acute Toxicity of Effluents and Receiving Water, 5th Edition."*

6. Anti-Backsliding and Antidegradation

Effluent limitations in this Order comply with anti-backsliding and antidegradation requirements because all effluent limitations are as least as stringent as the limitations contained in the previous General Permit.

E. Reclamation Specifications

Reclamation Specifications are retained from the previous General Permit. Reclamation specifications are required because reuse of treated groundwater is a preferred method of disposal. The basis for these requirements is Resolution No. 88-160.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on the narrative and numerical objectives contained in Chapter 3 of the Basin Plan and as identified in Section V.A of this Order. The receiving water limit for turbidity has been made more stringent relative to the previous order for consistency with the Municipal Regional Stormwater Permit R2-2009-0074, Provision C.15.b.(2).

B. Groundwater Limitations

Not Applicable.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

The principal purposes of a monitoring program are to:

- Document compliance with waste discharge requirements and prohibitions established by the Regional Water Board,
- Facilitate self-policing by the Discharger in the prevention and abatement of pollution arising from waste discharge,
- Develop or assist in the development of limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and
- Prepare water and wastewater quality inventories.

The Monitoring and Reporting Program is a standard requirement in almost all NPDES permits issued by the Regional Water Board, including this Order. It contains definitions of terms and sets out requirements for reporting of routine monitoring data in accordance with NPDES regulations, the CWC, and State and Regional Water Board policies. The Monitoring and Reporting Program also defines the sampling stations and frequency, the pollutants to be monitored, and additional reporting requirements. Pollutants to be monitored include all parameters for which effluent limitations are specified. Monitoring for additional constituents, for which no effluent limitations are established, is also required to provide data for future completion of RPAs.

The following provides the rationale for the monitoring and reporting requirements contained in the Monitoring and Reporting Program for the facilities covered under this Order.

A. Influent Monitoring

No influent monitoring is required by the Order, unless effluent violations or trigger constituent values are exceeded in the previous self-monitoring report. In that event, influent monitoring would be required as an investigatory to determine the cause of the exceedance.

B. Effluent Monitoring

The purpose of effluent monitoring is to determine compliance with effluent limitations and to allow ongoing characterization of discharges to determine potential adverse impacts and to determine continued suitability for coverage under the Order. Effluent monitoring data can also indicate if one or more pollutants are detected at levels less than effluent limits, but greater than trigger levels, which may indicate poor maintenance or other unexpected problems. All effluent monitoring requirements are retained from the previous order. In addition to discharge rate, effluent is monitored for hardness, pH, total suspended solids, total dissolved solids, salinity and turbidity. If chlorine is applied to well water, chlorine monitoring is required to assure that no measurable chlorine residual remains in effluent. Acute toxicity monitoring is required to determine compliance with effluent limitations and as a general measure of effluent quality. Monitoring is also required for the metals and other priority, toxic pollutants which have water quality criteria established by the NTR and CTR.

C. Whole Effluent Toxicity Testing Requirements

The selected test species and frequency of testing are specified in Basin Plan page 4-9 and Table 4-4 and are the same as previous permit and appropriately cost effective for the Dischargers covered under this Order.

D. Receiving Water Monitoring

The purpose of receiving water monitoring is to provide documentation about the condition of the receiving water should any effluent limit violations occur that may harm the life in the receiving water. The receiving water monitoring frequency is the same as previous permit. For a majority of the constituents, monitoring is only required by the Order if effluent violations or trigger constituent values are exceeded in the previous self-monitoring report. The exceptions are flow rate, salinity, and turbidity, which dischargers are required to monitor on a quarterly basis.

E. Other Monitoring Requirements

The purpose of additional monitoring requirements is to investigate complaints, identify the discharges that should be regulated by individual NPDES permits, coordinate stormwater monitoring with municipalities, and quantify potential impacts of extracted and treated groundwater discharge on the receiving water and the ambient conditions of the receiving waters.

F. Reporting Requirements

Reporting requirements are included in the Monitoring and Reporting Program. The reporting requirements establish requirements for report submittal format.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions (Provision VI.A)

Standard Provisions, which in accordance with 40 CFR 122.41and 122.42 apply to all NPDES discharges and must be included in every NPDES permit, are provided in Attachments D of this Order. 40 CFR 122.41(a)(1) and (b) through (n) establish conditions that apply to all state-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. 40 CFR 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. The Regional Standard Provisions (Attachment G) supplement the Federal Standard Provisions. In accordance with 40 CFR 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR 122.41(j)(5) and (k)(2) because the CWC enforcement authority is more stringent. In lieu of these conditions, this Order incorporates by reference CWC Section 13387(e).

B. Monitoring and Reporting Program Requirements (Provision VI.B)

The Discharger is required to monitor the permitted discharge in order to evaluate compliance with permit conditions. Monitoring requirements are contained in the Monitoring and Reporting Program (Attachment E), Standard Provisions (Attachment D), and Regional Standard Provisions (Attachment G). This provision requires compliance with these documents and is authorized by 40 CFR 122.41(h) and (j), and CWC sections 13267 and 13383.

C. Special Provisions (Provision VI.C)

1. **Reopener Provisions.** These reopener provisions are based on 40 CFR 122.63 and allow modification of this Order and its effluent limitations as necessary in response to updated WQOs, regulations, or other new relevant information that may be established in the future and other circumstances allowed by law.

2. **Notice of Intent (NOI) Application.** Provision VI.C.2, Notice of Intent (NOI) Application, is based on 40 CFR 122.28(b).

3. **NOI Review.** Provision VI.C.3, NOI Review, is based on 40 CFR 122.28(b).

4. **Discharge Authorization.** Provision VI.C.4, Discharge Authorization, is based on 40 CFR 122.28(b).

5. **Non-Compliance is a Violation.** Provision VI.C.5, Non-Compliance is a Violation, is based on 40 CFR 122.41(a).

6. **Triggers.** Provision VI.C.6. In general, the Dischargers authorized under this Order are expected to use Best Management Practices (BMPs) to reduce the potential negative impacts of pollutants in their discharges. However, some pollutants may be detected in the effluent of some of the treatment or discharge systems. These pollutants include both organic and

inorganic compounds. The purpose of these provisions is to require Dischargers to do additional activities should any pollutants exceed the triggers in Table 2. These triggers are not effluent limitations and should not be construed as such. Instead, they are levels at which additional investigation is warranted to determine whether a numeric limit for a particular pollutant is necessary. The Table 2, Column A concentration-based triggers for discharges to freshwater bodies are set at the lowest value of the following: Basin Plan Table 3-6 Water Quality Objectives for Agricultural Supply, State Maximum Contaminant Levels, Federal Maximum Contaminant Levels, California Toxics Rule lowest freshwater criterion, or California Toxics Rule criterion for drinking the water and fish consumption. The Table 2, Column B concentration-based triggers for discharges to the Bay/Estuary are set at the lowest value of the following: California Toxics Rule lowest saltwater criterion, California Toxics Rule lowest freshwater criterion, or California Toxics Rule criterion for fish consumption. The reason for this approach is explained below:

a. Triggers for Inorganic Compounds. Antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc (hereinafter called inorganic compounds) may be present in groundwater-dewatering discharges, primarily due to background concentrations in the groundwater being extracted. Water Board staff's best professional judgment is that the loading of inorganic compounds from discharges covered by this Order is negligible when compared to loadings from municipal and industrial point-source discharges and stormwater discharges. Based on an analysis documented in the Fact Sheet for Order No. R2-2001-0100, the Regional Water Board has concluded that Bay-wide inorganic compounds loading from extracted brackish groundwater and reverse osmosis concentrate resulting from the treatment of groundwater by reverse osmosis and discharge or reuse of extracted and treated groundwater resulting from structural dewatering represents a very small portion of total inorganic compounds loadings from sources within the Region (including municipal and industrial point-source discharges and stormwater discharges), and therefore, shall cause no impairment of beneficial uses or potential exceedances of inorganic compounds objectives in receiving waters. Therefore, it is acceptable to utilize the trigger monitoring system for these compounds instead of designating them as effluent limits.

Facilities where inorganic compounds have adversely impacted groundwater are not eligible for coverage under this Order. Each Discharger shall submit, as part of the NOI for proposed discharge, analytical results including inorganic compounds concentrations in the influent and effluent, if available, or maximum concentrations in any individual extraction wells, if not operating yet. Based on these data, the Discharger may receive a discharge authorization letter. In some cases after starting up an extraction and treatment system, the effluent concentration of some inorganic compounds may exceed the triggers listed in Table 2. In this case, the Discharger shall take three additional samples and have them analyzed for the inorganic compound of concern and comply with the Provisions VI.C.7, VI.C.8, or VI.C.9.

Triggers for copper and nickel have been updated in the Order from the previous Order to reflect the recently adopted SSOs and SSTs for copper throughout San Francisco Bay, and the SSOs and SSTs for nickel in the South Bay.

b. Triggers for Organic Compounds. Dischargers authorized under this Order are expected to use BMPs. Sites where pesticides or other conservative pollutants, such as mercury that does not readily degrade in the environment, have adversely impacted groundwater are not eligible for coverage under this Order. It is possible that organic compounds may be detected in the effluent of some of the discharge systems. This could be due to the movement of the contaminated groundwater from a neighboring site into the capture zone of the facility authorized under this Order, and may occur after discharge has been authorized, and groundwater is mobilized. Table 2 contains concentration-based triggers for conducting additional activities when the trigger compounds have been detected above the trigger value. This provision would allow Dischargers to continue the discharge while investigating the toxicity and ability to treat any detected volatile or semi-volatile organic compounds, in excess of Table 2 triggers. If a Discharger detects any fuels or solvent-related pollutants in the effluent or any extraction wells, the Discharger shall apply for discharge authorization under general NPDES No. CAG912002 (VOC Fuel General Permit).

Table F-7. Basis for Table 2 Trigger Compounds

Pollutant	CAS Number	Agri-cultural (µg/L) [1]	Minimum State/ Federal MCL (µg/L) [1]	CTR Lowest Freshwater Criterion (µg/L) [1]	CTR Criteria Water & Organisms (µg/L) [1]	Column A Trigger (µg/L) [1],[6]	CTR Lowest Saltwater Criterion (µg/L) [1]	CTR Lowest Freshwater Criterion (µg/L) [1]	CTR Criteria Organisms Only (µg/L) [1]	Column B Trigger for Discharges to Bay/Estuary (µg/L) [1],[6]
Turbidiy (units)	---	---	5	---	---	5	---	---	---	---
Total Dissolved Solids (TDS)	---	10,000,000	500,000	---	---	500,000	---	---	---	---
Conductivity (mmhoms/cm)	---	200	900	---	---	200	---	---	---	---
Chloride	---	142,000	250,000	---	---	142,000	---	---	---	---
Total Solids (TS) – TDS (this trigger is based on BPJ)						30,000				30,000
Antimony	7440360	---	6	---	14	6	---	---	4,300	4,300
Arsenic	7440382	100	10	150	---	10	36	150	---	36
Beryllium	7440417	100	4	---	---	4	---	---	---	---
Cadmium	7440439	---	5	2.2	---	2.2	9.3	2.2	---	2.2
Chromium (Total)	18540299	100	50	180	---	11	---	180	---	11
Chromium (VI)	18540299	---	---	11	11	11[2]	50	11	---	11
Copper[3]	7440508	---	1000	20	---	20	5.9	20	---	5.9
Copper[4]	7440508	---	1000	12	---	12	3.4	12	---	3.4
Copper[5]	7440508	---	1000	17	---	17	4.7	17	---	4.7
Lead	7439921	5,000	15	2.5	---	2.5	8.1	2.5	---	2.5
Mercury	7439976	---	2	0.025	0.050	0.025	0.025	---	0.051	0.025
Nickel[3]	7440020	200	100	193	610	100	30	193	4,600	30
Nickel[4]	7440020	200	100	80	610	80	13	80	4,600	13

Pollutant	CAS Number	Agri-cultural (µg/L) [1]	Minimum State/ Federal MCL (µg/L) [1]	CTR Lowest Freshwater Criterion (µg/L) [1]	CTR Criteria Water & Organisms (µg/L) [1]	Column A Trigger (µg/L) [1],[6]	CTR Lowest Saltwater Criterion (µg/L) [1]	CTR Lowest Freshwater Criterion (µg/L) [1]	CTR Criteria Organisms Only (µg/L) [1]	Column B Trigger for Discharges to Bay/Estuary (µg/L) [1],[6]
Nickel[5]	7440020	200	100	118	610	100	19	118	4,600	19
Selenium	7782492	20	50	5.0	5.0	5.0	71	5.0	---	5.0
Silver	7440224		100	3.4	---	3.4	1.9	3.4	---	1.9
Thallium	7440280	---	2	---	1.7	1.7	---	---	6.3	6.3
Zinc	7440666	2,000	5000	120	---	120	81	128	---	81
Cyanide	57125	---	150	5.2	5.2	5.2	2.9 [7]	5.2	220,000	2.9
Asbestos	1332214	---	7 MFL	---	7 MFL	7 MFibers/L	---	---	---	---
2,3,7,8-TCDD	1746016	---	0.00003	---	1.3E-08	1.3E-08	---	---	1.4E-08	1.4E-08
Acrylonitrile	107131	---	---	---	0.059	0.059	---	---	0.66	0.66
Bromoform	75252	---	80	---	4.3	4.3	---	---	360	360
Chlorodibromomethane	124481	---	80	---	0.401	0.401	---	---	34	34
Dichlorobromomethane	75274	---	80	---	0.56	0.56	---	---	46	46
1,2-Dichloropropane	78875	---	5	---	0.52	0.52	---	---	39	39
1,3-Dichloropropylene	542756	---	0.5	---	10	0.5	---	---	1,700	1,700
1,1,2,2-Tetrachloroethane	79345	---	1	---	0.17	0.17	---	---	11	11
Pentachlorophenol	87865	---	1	15	0.28	0.28	7.9	15	8.2	8.2
2,4,6-Trichlorophenol	88062	---	---	---	2.1	2.1	---	---	6.5	6.5
Benzidine	92875	---	---	---	0.00012	0.00012	---	---	0.00054	0.00054
Benzo(a)anthracene	56553	---	---	---	0.0044	0.0044	---	---	0.049	0.049
Benzo(a)pyrene	50328	---	0.2	---	0.0044	0.0044	---	---	0.049	0.049
Benzo(b)fluoranthene	205992	---	---	---	0.0044	0.0044	---	---	0.049	0.049
Benzo(k)fluoranthene	207089	---	---	---	0.0044	0.0044	---	---	0.049	0.049
Bis(2-chloroethyl)ether	111444	---	---	---	0.031	0.031	---	---	1.4	1.4
Bis(2-ethylhexyl)phthalate	117817	---	---	---	1.8	1.8	---	---	5.9	5.9
Chrysene	218019	---	---	---	0.0044	0.044	---	---	0.049	0.049
Dibenzo(a,h)anthracene	53703	---	---	---	0.0044	0.0044	---	---	0.049	0.049
3,3'-Dichlorobenzidine	91941	---	---	---	0.04	0.04	---	---	0.077	0.077
2,4-Dinitrotoluene	121142	---	---	---	0.11	0.11	---	---	9.1	9.1
1,2-Diphenylhydraz	122667		---	---	0.040	0.040	---	---	0.54	0.54

Pollutant	CAS Number	Agri-cultural (µg/L) [1]	Minimum State/ Federal MCL (µg/L) [1]	CTR Lowest Freshwater Criterion (µg/L) [1]	CTR Criteria Water & Organisms (µg/L) [1]	Column A Trigger (µg/L) [1],[6]	CTR Lowest Saltwater Criterion (µg/L) [1]	CTR Lowest Freshwater Criterion (µg/L) [1]	CTR Criteria Organisms Only (µg/L) [1]	Column B Trigger for Discharges to Bay/Estuary (µg/L) [1],[6]
ine										
Hexachlorobenzene	118741	---	1	---	0.00075	0.00075	---	---	0.00077	0.00077
Hexachlorobutadiene	87683	---	---	---	0.44	0.44	---	---	50	50
Hexachloroethane	67721	---	---	---	1.9	1.9	---	---	8.9	8.9
Indeno(1,2,3-c,d)pyrene	193395	---	---	---	0.0044	0.0044	---	---	0.049	0.049
N-nitrosodimethylamine	62759	---	---	---	0.00069	0.00069	---	---	8.1	8.1
N-nitrosodi-n-propylamine	621647	---	---	---	0.005	0.005	---	---	1.4	1.4
Aldrin	309002	---	---	3	0.00013	0.00013	1.3	3	0.00014	0.00014
alpha-BHC	319846	---	---	---	0.0039	0.0039	---	---	0.013	0.013
beta-BHC	319857	---	---	---	0.014	0.014	---	---	0.046	0.046
gamma-BHC	58899	---	0.2	---	0.019	0.019	---	---	0.063	0.063
Chlordane	57749	---	0.1	0.0043	0.00057	0.00057	0.004	0.0043	0.00059	0.00059
4,4-DDT	50393	---	---	0.001	0.00059	0.00059	0.001	0.001	0.00059	0.00059
4,4-DDE	72559	---	---	---	0.00059	0.00059	---	---	0.00059	0.00059
4,4-DDD	72548	---	---	---	0.00083	0.00083	---	---	0.00084	0.00084
Dieldrin	60571	---	---	0.056	0.00014	0.00014	0.0019	0.056	0.00014	0.00014
alpha-Endosulfan	959988	---	---	0.056	110	0.056	0.0087	0.056	240	0.0087
beta-Endosulfan	33213659	---	---	0.056	110	0.056	0.0087	0.056	240	0.0087
Endrin	72208	---	2	0.036	0.076	0.036	0.0023	0.036	0.81	0.0023
Endrin aldehyde	7421934	---	---	---	0.76	0.76	---	---	0.81	0.81
Heptachlor	76448	---	0.01	0.0038	0.00021	0.00021	0.0036	0.0038	0.00021	0.00021
Heptachlor epoxide	1024573	---	0.01	0.0038	0.00010	0.00010	0.0036	0.0038	0.00011	0.00011
PCBs, sum	1336363	---	0.5	0.014	0.00017	0.00017	0.03	0.014	0.00017	0.00017
Toxaphene	8001352	---	3	0.0002	0.00073	0.0002	0.0002	0.0002	0.00075	0.0002
Turbidity (NTU)	---	---	5	---	---	5	---	---	---	---
Odor-Threshold (Units)	---	---	3	---	---	3	---	---	---	---
Sulfate	---	---	250,000	---	---	250,000	---	---	---	---
Foaming agents	---	---	500	---	---	500	---	---	---	---
Color (units)	---	---	15	---	---	15	---	---	---	---
Aluminum	---	5,000	---	---	---	5,000	---	---	---	---
Boron	---	500	---	---	---	500	---	---	---	---
Cobalt	---	50	---	---	---	50	---	---	---	---
Fluoride	---	1,000	---	---	---	1,000	---	---	---	---
Iron	---	5,000	300	---	---	300	---	---	---	---
Lithium	---	2,500	---	---	---	2,500	---	---	---	---
Manganese	---	200	50	---	---	50	---	---	---	---

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Molybdenum	---	10	---	---	---	10	---	---	---	---
Nitrate (as NO3)	---	---	45,000	---	---	45,000	---	---	---	---
Nitrate + Nitrite (as N) NO3 + NO2 (as N)	---	5,000	10,000	---	---	5,000	---	---	---	---
Nitrite (as N)	---	---	1,000	---	---	1,000	---	---	---	---
Vanadium	---	100	---	---	---	100	---	---	---	---
Combined Radium-226 and Radium-228 (in pCi/l)	---	---	5	---	---	5	---	---	---	---
Gross Alpha Particle (includes Radium-226 but excludes Radon and Uranium) in pCi/l)	---	---	15	---	---	15	---	---	---	---
Tritium (in pCi/l)	---	---	20,000	---	---	20,000	---	---	---	---
Strontium-90 (in pCi/l)	---	---	8	---	---	8	---	---	---	---
Gross Beta Particle Activity (in pCi/l)	---	---	50	---	---	50	---	---	---	---
Uranium (in pCi/l)	---	---	20	---	---	20	---	---	---	---
Fuels and Solvents Related Pollutants	---	---	---	---	---	Apply for NPDES No. CAG912002	---	---	---	Apply for NPDES No. CAG912002

Footnotes for Table F-7:

[1] Unit is µg/L unless noted otherwise right after the name of pollutant

[2] If total chromium concentration exceeds 11 µg/L, then analysis for chromium(VI) shall also be conducted

[3] Applicable to Suisun Bay and San Pablo Bay segments of San Francisco Bay.

[4] Applicable to Central Bay and Lower Bay segments of San Francisco Bay.

[5] Applicable to South San Francisco Bay, south of Hayward Shoals.

[6] If a discharger is reporting non-detect monitoring data with a reporting level higher than the trigger, the reason for the higher detection level shall be consistent with the SIP Appendix 4 required minimum levels (please refer to our web site for the latest version of SIP) and must be explained within the monitoring report.

[7] Basin Plan Table 3-3C marine Site Specific objective

8. **Individual NPDES Permit May Be Required.** Provision VI.C.11 is retained from the previous order and is based on 40 CFR 122.28(b)(3).

VIII. PUBLIC PARTICIPATION

The California Regional Water Quality Control Board, San Francisco Bay Region (Regional Water Board) is considering the reissuance of general waste discharge requirements (GWDRs) that will serve as a General NPDES Permit. As a step in the GWDRs adoption process, the Regional Water Board has developed tentative GWDRs. The Regional Water Board encourages public participation in the GWDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Dischargers and interested agencies and persons of its intent to prescribe GWDRs for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through the Recorder on May 14, 2012.

B. Written Comments

Staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative GWDRs. Comments should be submitted either in person or by mail to the Executive Officer at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on June 12, 2012.

C. Public Hearing

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

Date:	August 8, 2012
Time:	9:00 a.m.
Location:	Elihu Harris State Building (1st Floor auditorium) 1515 Clay Street (Walking distance from City Center 12th Street BART station) Oakland, CA 94612

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

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

D. Waste Discharge Requirements Petitions

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

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

E. Information and Copying

Report of Waste Discharges, related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above during regular office hours, which are generally weekdays from 8:00 a.m. to 5:00 p.m., excluding 12:00 p.m. to 1:00 p.m. lunch hours and holidays. Copying of documents may be arranged through the Regional Water Board by calling (510) 622-2300.

F. Register of Interested Persons

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

G. Additional Information

Requests for additional information or questions regarding this order should be directed to **Farhad Azimzadeh at (510) 622-2310 or by e-mail at fazimzadeh@waterboards.ca.gov.**