

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 99-051
NPDES NO. CAG912003

GENERAL WASTE DISCHARGE REQUIREMENTS FOR:

Discharge or Reuse of Extracted and Treated Groundwater Resulting From the Cleanup of Groundwater Polluted by Volatile Organic Compounds, and Rescission of Order No. 94-087

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

1. General: This National Pollutant Discharge Elimination System (NPDES) general permit regulates discharge or reuse of extracted and treated groundwater resulting from the cleanup of groundwater polluted by volatile organic compounds (VOC). All dischargers eligible for this general permit must submit a Notice of Intent (NOI) described in the attachment and appropriate annual fee to obtain coverage. Written authorization to initiate the discharge will be issued by the Executive Officer.
2. Authority: 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). On June 8, 1989, the State Water Resources Control Board (hereinafter State Board) submitted an application to the United States Environmental Protection Agency (hereinafter U.S.EPA) requesting revisions to its NPDES program in accordance with 40 CFR 122.28, 123.62 and 403.10. The application included a request to add general permit authority to its approved NPDES program. On September 22, 1989, the U.S.EPA, Region IX, approved the State Board's request and granted authorization for the State to issue general NPDES permits.
3. Types of Discharges: 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.
4. Eligibility for General Permit: A general permit for existing and proposed discharges of extracted and treated groundwater to surface waters of the San Francisco Bay Region (except for direct discharges to the Pacific Ocean) from groundwater cleanup projects meets the requirements of 40 CFR 122.28. The discharges and proposed discharges:

- a. result from similar operations (all involve extraction, treatment, and discharge of groundwater),
- b. are the same types of waste (all are groundwater containing volatile organic compounds due to leaks and spills from industries which utilize VOC in manufacturing),
- c. 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),
- d. require similar monitoring, and
- e. are more appropriately regulated under a general permit rather than individual permits.

Therefore, this Order establishes a general permit regulating extracted and treated groundwater discharges resulting from the cleanup of groundwater polluted by VOC and other related wastes. Entities which fall into this category are hereinafter referred to as discharger(s) and may be regulated by this Order. The following VOC-cleanup discharges are normally not eligible for coverage: discharges from cleanups involving significant contamination by metals, pesticides, or other conservative pollutants; discharges from cleanups involving reinjection of treated groundwater; and discharges from sites with other NPDES discharges (e.g. process waste or stormwater).

5. Existing Permit: On July 20, 1994, the Board adopted Order No. 94-087 (NPDES No. CAG912003) allowing the VOC discharge or reuse of extracted and treated groundwater resulting from the cleanup of groundwater polluted by VOC. The expiration date for Order 94-087 was July 20, 1999. During the period July 1994 to July 1999, more than 95 discharges were authorized under Order No. 94-087.
6. Benefits of General Permit: There are hundreds of VOC-contaminated sites within the San Francisco Bay Region. Within the next five years, approximately 100 of these sites will be conducting groundwater cleanups by extracting contaminated groundwater, treating, and discharging treated groundwater, particularly in Santa Clara County. Because some publicly owned treatment works (POTWs) do not accept new discharges from groundwater cleanups, many of these sites will require waste discharge requirements for discharge to surface water. These cleanups will exceed the capacity of available staff to develop and bring individual waste discharge requirements to the Board for adoption. These circumstances create the need for an expedited system to process the anticipated numerous requests. The renewal of the 1994 general NPDES permit would: expedite the processing of requirements; enable the Board to better utilize limited staff resources; and permit cleanups to begin promptly.

7. Annual Fees: California Regulations establish an annual fee schedule dated May 18, 1995 based on the discharges' Threat To Water Quality and Complexity. The dischargers to be regulated under this General Permit are classified as category 2-B:

* Category 2 Threat To Water Quality - Those discharges of waste which could impair the designated beneficial uses of the receiving water, cause short-term violations of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance; and

* Category B Complexity - Any discharger not included in the major discharger category A, but has physical, chemical, or biological treatment system (except for septic systems with subsurface disposal), or any Class II or Class III waste management Units.

8. Basin Plan: The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (hereinafter called Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Board on July 20, 1995 and the Office of Administrative Law on November 13, 1995. The Office of Administrative Law's action is published in Section 3912 of Title 23 of the California Code of Regulations. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters.

9. Beneficial Uses: The Basin Plan defines beneficial uses and water quality objectives for surface waters and groundwaters within the San Francisco Bay Region. Existing and potential beneficial uses are shown in the following table:

Beneficial Uses	Surface waters	Groundwaters
Municipal and Domestic Supply	X	X
Industrial Service Supply	X	X
Industrial Process Supply	X	X
Agricultural Supply	X	X
Freshwater Replenishment		X
Groundwater Recharge	X	
Water Contact and Non-Contact Recreation	X	
Wildlife Habitat	X	

Beneficial Uses	Surface waters	Ground-waters
Cold Freshwater and Warm Freshwater Habitat	X	
Fish Migration and Fish Spawning	X	
Navigation	X	
Marine Habitat	X	
Estuarine Habitat	X	
Shellfish Harvesting	X	
Ocean, Commercial, and Sport Fishing	X	
Areas of Special Biological Significance	X	
Preservation of Rare and Endangered Species	X	

10. Reuse Policy: The 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 Board to authorize the discharge of treated extracted groundwater in accordance with the requirements of this Order.

11. Reuse Allowed: This Order permits reuse or reclamation of extracted treated groundwater in conjunction with the discharge to surface water, except for purposes of recharge or reinjection. Reuse of extracted treated groundwater can take many forms, such as:
 - a. irrigation of landscaping or agriculture
 - b. dust control or soil compaction on construction sites
 - c. decorative pond or fountain supply
 - d. industrial water supply

12. Basin Plan Prohibition: The Basin Plan prohibits discharge of "wastewater which has particular characteristics of concern to beneficial uses": (a) "at any point at which the wastewater does not receive a minimum initial dilution of at least 10:1, or into any nontidal water, dead-end slough, similar confined waters, or any immediate tributaries thereof" and (b) at any point in "San

Francisco Bay south of the Dumbarton Bridge". The Basin Plan allows for exceptions to this prohibition if a discharge is approved as part of a groundwater clean-up project in accordance with Resolution No. 88-160, it has been demonstrated that neither reclamation nor discharge to a POTW 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 also prohibits discharge of "all conservative toxic and deleterious substances, above those levels which can be achieved by a program acceptable to the Board, to waters of the Basin." Prior to discharge under this permit, dischargers must demonstrate to the satisfaction of the Executive Officer that their groundwater extraction and treatment systems and associated operation, maintenance, and monitoring plans constitute acceptable programs for minimizing the discharge of toxic substances to waters of the State.

13. Anti-degradation Policies: Federal Regulations (40 CFR 131.12) and State Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California" requires that any increase in pollutant loading to a receiving water shall be consistent with the following:
 - a. Existing instream water uses and the level of water quality necessary to protect existing beneficial uses shall be maintained and protected; and
 - b. Where the quality of the waters exceeds levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, the quality shall be maintained and protected unless the State finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the State's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.

14. Anti-degradation Results: This permit complies with State and Federal "antidegradation" policies:
 - a. The conditions and effluent limitations established in this Order for discharges of treated groundwater to surface waters in this Region ensure that the existing beneficial uses and quality of surface waters in this Region will be maintained and protected; and
 - b. Discharges regulated by this Order should not lower water quality if the terms and conditions of this Order are met.

15. **No Preemption:** This Order permits the discharge of treated groundwater 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.
16. **Basis for Effluent Limits:** Effluent limitations in this order are based on the existing permit, the Basin Plan, State plans and policies, U.S. EPA guidance, best available treatment technology economically achievable, best management practices, and best professional judgment.
17. **CEQA:** This Order serves as an NPDES Permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (California Environmental Quality Act) pursuant to Section 13389 of the California Water Code.
18. **Notice:** The Board has notified interested agencies and persons of its intent to issue general waste discharge requirements for groundwater dewatering discharges resulting from the cleanup of groundwater polluted by VOC, and has provided them with an opportunity to submit their written views and recommendations.
19. **Hearing:** The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that dischargers of treated groundwater polluted by VOC, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of extracted and treated groundwater polluted by VOC and related wastes to surface waters is prohibited unless an NOI application for proposed discharge for the discharge has been submitted and the Executive Officer has provided the discharger with written authorization to initiate the discharge.
2. The discharge shall be limited to extracted and treated groundwater and added treatment chemicals approved by the Executive Officer which do not adversely affect the environment and comply with the requirements of this Order.

3. The discharge of extracted and treated groundwater from a specific site in excess of the flow rate specified in each discharger's authorization letter from the Executive Officer is prohibited, unless an increase in gallons per day is approved by the Executive Officer.

B. Effluent Limitations (Surface water discharges only)

1. The effluent (at a point after full treatment but before it joins or is diluted by any other waste stream, body of water, or substance) shall not contain constituents in excess of the following:

a. ORGANIC COMPOUNDS - CONCENTRATION LIMITS

	Constituent	Instantaneous Maximum Limit (ug/l)	Method of Analysis
1	1,1,1-Trichloroethane	5.0	US EPA Method 8260*
2	Tetrachloroethylene	5.0	
3	Trichloroethylene	5.0	
4	1,1-Dichloroethylene	5.0	
5	1,2-Dichloroethane	0.5	
6	Vinyl Chloride	0.5	
7	1,2-Dichloroethylene isomers	5.0	
8	1,1-Dichloroethane	5.0	
9	1,1,2-Trichloroethane	5.0	
10	Methylene Chloride	5.0	
11	Chloroform	5.0	
12	Carbon Tetrachloride	0.5	
13	Benzene	1.0	
14	Toluene	5.0	
15	Ethylbenzene	5.0	
16	Total Xylenes	5.0	
17	Any Other VOC	5.0	
18	Total Petroleum Hydrocarbons	50.0	Modified US EPA Method 8015*
19	Ethylene Dibromide	0.05	US EPA Method 504*

	Constituent	Instantaneous Maximum Limit (ug/l)	Method of Analysis
20	Total Polynuclear Aromatic Hydrocarbons (PAHs)	15.0	US EPA Method 610*
21	Semi-VOC	5.0	US EPA Method 625*
* or its equivalent			

b. INORGANIC COMPOUNDS - MASS LIMITS

No.	Constituent	Mass Limit (grams/day) by flow range*:		
		Flows less than 10 gpm	Flows 10 to 100 gpm	Flows over 100 gpm
1	Arsenic	1	3	10
2	Cadmium	1	2	4
3	Chromium (VI)**	2	6	20
4	Copper	3	6	10
5	Lead	5	6	10
6	Mercury	0.01	0.1	0.5
7	Nickel	5	30	40
8	Selenium	2	20	45
9	Silver	1	3	10
10	Zinc	10	70	200
* Based on average flow computed from last 12 months of operation				
** Dischargers, at their option, may meet this limit as total chromium				

2. pH: The pH of the discharge shall not exceed 8.5 nor be less than 6.5.
3. Toxicity: The survival of rainbow trout test fish in 96-hour static renewal bioassays of the discharge shall be a three sample moving median of 90% survival and a minimum value of not less than 70% survival.

C. Receiving Water Limitations

1. Narrative Limits: The discharge 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;
 - c. Alteration of temperature, turbidity, taste, odor, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities that will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. Numerical Limits: The discharge 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
 - For all tidal waters:
 - In the Bay downstream of Carquinez Bridge - 5.0 mg/l minimum
 - Upstream of Carquinez Bridge - 7.0 mg/l minimum
 - For nontidal waters:
 - Waters designated as cold water habitat - 7.0 mg/l minimum
 - Waters designated as warm water habitat - 5.0 mg/l minimum
 - For all inland surface waters:
 - The median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.

 - b. pH: Variation from natural ambient pH by more than 0.5 pH units.

3. More Stringent Standards May Apply: The discharge shall not cause or

contribute to a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Water Reclamation Specifications (water reuse only)

1. Water reclaimed for beneficial reuse as applied shall meet the following requirements:

Constituents	Instantaneous Maximum Limit (ug/l)	Method of Analysis
Benzene	0.5	US EPA Method 8260*
1,2-Dichloroethane	0.5	
Vinyl Chloride	0.5	
All other VOC	5.0	
Total Petroleum Hydrocarbons	50.0	Modified US EPA Method 8015*
Ethylene Dibromide	0.05	US EPA Method 504*
Semi-VOC per constituent	5.0	US EPA Method 625*
* or its equivalent		

2. The water reclamation activities shall be those described in the discharger's NOI, including source of groundwater, method of treatment, and location and type of water reuse.
3. No reclaimed water shall be allowed to escape from the authorized use area by airborne spray, nor by surface flow except in minor amounts associated with good irrigation practice, nor from conveyance facilities.
4. Reclamation involving irrigation shall not occur when the ground is saturated.
5. The use of reclaimed water shall not impair the quality of waters of the State,

nor shall it create a nuisance as defined by Section 13050(m) of the California Water Code.

6. Adequate measures shall be taken to minimize public contact with reclaimed water and to prevent the breeding of flies, mosquitos, and other vectors of public health significance during the process of reuse.
7. 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 labelled.
8. There shall be no cross-connection between the potable water supply and piping containing treated groundwater intended for reuse.
9. Water reclamation consisting of recharge or reinjection is not authorized under this Order.

E. Provisions

1. **NOI Application:** The NOI application for each point of proposed discharge to a storm sewer or storm channel shall contain the information required in attachment of this Order.
2. **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 general permit:
 - a. The proposed discharge results from the cleanup of groundwater polluted by VOC and similar wastes;
 - b. The proposed discharge is to surface waters of the San Francisco Bay Region (except for direct discharges to the Pacific Ocean);
 - c. The proposed discharger has met the provisions of Resolution No. 88-160; and
 - d. 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.
3. **Discharge Authorization:** If the Executive Officer determines that the proposed discharger is eligible to discharge waste under this general permit, the Executive Officer will authorize the proposed discharge. If the Executive Officer authorizes the discharge, a "discharge authorization letter" will be transmitted

to the discharger authorizing the initiation of the discharge subject to the conditions of this Order and any other conditions necessary to protect the beneficial uses of the receiving waters. The discharge authorization letter from the Executive Officer will specify the maximum allowed discharge flow rate. The discharge authorization letter may be terminated or revised by the Executive Officer at any time.

4. **Non-Compliance As A Violation:** Upon receipt of the Executive Officer's discharge authorization letter, the discharger(s) shall comply with all conditions and limitations of this Order and the discharge authorization letter. Any permit noncompliance (violations of requirements in this Order or Self Monitoring Program) constitutes a violation of the Clean Water Act and the California Water Code and is grounds for enforcement action; for permit or authorization letter termination, revocation and reissuance, or modification; the issuance of an individual permit; or for denial of a renewal application.
5. **Self-Monitoring Program:** Dischargers shall comply with the Self-Monitoring Program as adopted by the Board (attached) and as amended by the Executive Officer. Each discharger shall comply with the Self-Monitoring Program specified in the discharge authorization letter.
6. **Proper O&M:** Dischargers 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 dischargers to achieve compliance with the conditions in this Order and in the authorization letters from the Executive Officer.
7. **Order Modification:** This Order may be modified by the Board prior to the expiration date to include effluent or receiving water limitations for toxic constituents determined to be present in significant amounts in discharges regulated by this general permit (through the comprehensive monitoring program included as part of this Order).
8. **Inorganic Limits Exceedance:** If any inorganic effluent limit in Section B is exceeded, then the discharger shall take three additional samples for that constituent(s) during the following quarter.

Case 1 - If the results of the three additional samples for the effluent **do not** exceed the effluent limit(s) the discharger shall report the results to the Executive Officer in the next Self-Monitoring Report, and shall return to the schedule of sampling and analysis in the Self-Monitoring Program.

Case 2 - If the results of **any one of the three** additional samples exceed the

effluent limit(s), the discharger shall perform the following:

- a) Calculate the median and maximum concentration values for the constituent(s) of concern, using the three recent samples **and** all samples collected and analyzed for that constituent in the previous 12 month period.
- b) Estimate the mass load discharged in the previous 12 month period for the constituent(s) of concern. Report the results in grams per day and in pounds per year, using the average flow rate for the previous 12 month period.
- c) Report the results to the Executive Officer in the next Self-Monitoring Report, and return to the schedule of sampling and analysis in the Self-Monitoring Program.

Case 3 - If the results of **two or three** of the additional samples exceed the effluent limit(s), the discharger shall perform the following:

- a) Calculate median and maximum concentration values and mass load for the constituent(s) of concern, as described in Case 2 above.
- b) Perform a cost analysis for treatment of the discharge for the constituent(s) of concern. The analysis should include, but need not be limited to, a discussion of various treatment technologies or pre-treatment filtration options, the cost and technical feasibility of increased treatment to reduce the constituent(s) of concern, and the amount of reduction in terms of concentration and average annual mass load. A joint effort may be undertaken and submitted by more than one discharger to evaluate cost and feasibility of treatment technologies or options.

If the results of the cost analysis indicates that metals treatment of the discharge does not appear to be a feasible option, then:

- c) Perform an evaluation of the potential adverse impacts to the beneficial uses of the receiving water. The evaluation should include, but need not be limited to, description of the beneficial uses specific to the receiving water, physical and chemical characteristics of the water body and sediment, and the physical, chemical, or biological effects from the constituent(s) on the beneficial uses, including effects related to total or dissolved and hardness for metals with hardness-dependent objectives.

If exceedances are only for metals with hardness-dependent objectives, then the discharger may conduct a hardness study prior to completing this task. The hardness study should assess receiving water hardness (as CaCO_3) and compute a "no effect" concentration for affected metals, using (i) the minimum of a statistically significant number of hardness samples, and (ii) hardness-dependent formula for US EPA freshwater criteria. If effluent metals concentrations fall below the computed "no effect" concentration, then the discharger need not complete the remainder of this task.

If the receiving water study finds that the discharge is having potential adverse impacts to beneficial uses of the receiving water, then:

- d) Evaluate control measures other than treatment to reduce the constituent(s) of concern in the discharge, such as re-evaluating options for re-use, discharge to POTW, or alternatives to groundwater extraction.
- e) Within 180 days of the discharger receiving results of the consecutive sampling, report the results of tasks (a) through (d) above to the Executive Officer, including:
 - the proposed method to eliminate or minimize future non-compliance, or
 - provide a rationale for why no change to the existing program should take place, and
 - return to the schedule of sampling and analysis in the Self-Monitoring Program.

The discharger may be required to perform additional evaluations or take additional actions to minimize noncompliance, as deemed necessary by the Executive Officer.

If a violation of the same effluent limit occurs less than 60 months after completion of the required tasks in Cases 1, 2, or 3, then the Executive Officer may waive the evaluation required above. This waiver will not apply if a different inorganic constituent exceeds the effluent limit. In that case, the discharger shall perform an evaluation for that constituent.

9. Individual NPDES Permit May Be Required: The U.S.EPA Administrator may request the Board Executive Officer to require any discharger authorized to discharge waste by the general permit to subsequently apply for and obtain an individual NPDES permit. The Executive Officer of the Board may require any

discharger authorized to discharge waste by a general permit to subsequently apply for and obtain an individual NPDES permit. An interested person may petition the Executive Officer or the Regional Administrator to take action under this provision. 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 the discharge authorization letter from 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 the general NPDES permit;
 - d. A water quality control plan containing requirements applicable to such point sources is approved; or
 - e. The requirements of 40 CFR 122.28(a), as explained in Finding No. 4, are not met.
10. This Order expires on July 21, 2004. Dischargers, who need to discharge treated groundwater after July 21, 2004, must file an application for proposed discharge no later than January 21, 2004 as application for issuance of new waste discharge requirements.
11. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 94-087. Order No. 94-087 is hereby rescinded. Dischargers who (i) were previously subject to Order No. 94-087, (ii) filed a complete NOI before the effective date of this Order, and (iii) have not yet received an Executive Officer authorization letter pursuant to this Order will remain subject to the requirements of Order No. 94-087 pending receipt of a new authorization letter. This provision will assure no lapse in NPDES permit coverage for authorized discharges.
12. This Order shall serve as a general National Pollutant Discharge Elimination System Permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective 10 days after the date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

F. Standard Provisions

1. **No Nuisance:** Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code.
2. **Duty to Comply**
 - a. If a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act, or amendments thereto, for a toxic pollutant which is present in the discharge authorized herein and such standard or prohibition is more stringent than any limitation upon such pollutant in this Order, the discharger must comply with the new standard or prohibition. The Board will revise the Order in accordance with such toxic effluent standard or prohibition and so notify the discharger.
 - b. If more stringent applicable water quality standards are approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the discharger must comply with the new standard. The Board will revise this Order in accordance with such more stringent standards.
 - c. The filing of a request by the discharger for modification or termination of permit coverage, or a notification of planned changes or anticipated non-compliance does not stay any permit condition.
3. **Duty to Mitigate:** The discharger shall take all reasonable steps to minimize or prevent any discharge in violation of this Order which has a reasonable likelihood of adversely affecting public health or the environment, including such accelerated or additional monitoring as requested by the Board or Executive Officer to determine the nature and impact of the violation.
4. The discharger must notify the Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin to use and discharge a pollutant not reported in the permit application, or (2) a discharge of toxic pollutants not limited by this permit has occurred or will occur in concentrations that exceed the limits specified in 40 CFR 122.42(a).
5. The discharge of any radiological, chemical, or biological warfare agent waste is prohibited.

6. **Property rights:** This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the discharger from liabilities under federal, state, or local laws, nor create a vested right for the discharger to continue the waste discharge, nor guarantee the discharger a capacity right in the receiving water.
7. **Inspection and Entry:** The Board or its authorized representatives shall be allowed:
 - a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of the Order;
 - b. Reasonable access to and duplication of any records that must be kept under the conditions of the Order;
 - c. To inspect at reasonable times any facility, equipment, practices, or operations regulated or required under the Order; and
 - d. To photograph, sample, and monitor at reasonable times for the purpose of assuring compliance with the Order or as otherwise authorized by the Clean Water Act any substances or parameters at any locations.
8. **Duty to Provide Information:** The discharger shall furnish, within a reasonable time, any information the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit. The discharger shall also furnish to the Board, upon request, copies of records required to be kept by its permit.
9. **Bypass (the intentional diversion of waste streams from any portion of a treatment facility) is prohibited. The Board may take enforcement action against the discharger for bypass unless:**
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - b. There were no feasible alternatives to the bypass, such as shutting off the system, the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment down time or preventative maintenance;

and

- c. The discharger submitted advance notice of the need for a bypass to the Board. If the discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass date. The discharger shall submit notice of an unanticipated bypass as required elsewhere in the Self Monitoring Program (24-hour reporting).

The discharger may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. In such cases, the above bypass conditions are not applicable.

10. Continuation of Expired Permit: This permit continues in force and effect until a new permit is issued or the Board rescinds the permit. Only those dischargers authorized to discharge under the expiring permit are covered by the continued permit.
11. Treatment Reliability: The discharger shall, at all times, properly operate and maintain all facilities which are used by the discharger 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 manual. The discharger 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 and made available to the Board for at least five years.
12. Errata: Should the discharger discover that it failed to submit any relevant facts or that it submitted incorrect information in any report, it shall promptly submit the missing or correct information.
13. False Reporting: Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall be subject to enforcement procedures as identified in Provision F.16.
14. Transfers: Coverage by this permit is not transferrable to any person except after notice to the Executive Officer. The Executive Officer may require modification of the discharge authorization letter to change the name of the permittee and incorporate such other requirements as may be necessary under

the Clean Water Act.

15. **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.
16. **Enforcement:** The provisions of this section shall not act as a limitation on the statutory or regulatory authority of the Board.
 - a. Any violation of the permit constitutes violation of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act and regulations adopted thereunder, and is the basis for enforcement action, revocation of permit coverage, denial of an application for continued permit coverage, or a combination thereof.
 - b. The Board may impose administrative civil liability, may refer a discharger to the state Attorney General to seek civil monetary penalties, may seek injunctive relief or take other appropriate enforcement action as provided in the California Water Code or federal law for violation of this Order.
 - c. 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.
 - d. A discharger seeking to establish the occurrence of an upset has the burden of proof. A discharger who wishes to establish the affirmative defense of any upset in an action brought for non-compliance shall demonstrate through properly signed contemporaneous operating logs or other relevant evidence that: (i) an upset occurred and the permittee can identify the cause of the upset, (ii) the permitted facility was being properly operated at the time of the upset, (iii) the discharger submitted notice of the upset as required, and (iv) the discharger complied with any remedial measures required.

No determination made before an action for non-compliance, such as during administrative review of claims that non-compliance was caused by an upset, is final administrative action subject to judicial review.

17. **Definitions**

- a. Bypass means the intentional diversion of waste streams from any portion of the treatment facility.

- b. Overflow means the intentional or unintentional spilling or forcing out of untreated or partially treated wastes from a transport system upstream from any part of the treatment facility.
- c. Severe property damage means substantial physical damage to property, damage to the treatment facilities that 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. It does not mean economic loss caused by delays in production.
- d. Toxic pollutant means any pollutant listed as toxic under Section 307(a) of the Clean Water Act or implementing regulations.
- e. Upset means an exceptional incident in which there is unintentional temporary non-compliance with technology-based effluent limits in the Order because of factors beyond the reasonable control of the discharger. It does not include non-compliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.
- f. Waste, waste discharge, discharge of waste, and discharge are used interchangeably in this Order. The requirements of this Order apply to the entire volume of water, and the material therein, which is disposed of to surface and ground waters of the State of California.

I, Loretta K. Barsamian, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on July 21, 1999.



Loretta K. Barsamian
Executive Officer

Attachments:

NOI Application Requirements
Self-Monitoring Program

Notice of Intent Contents

The notice of intent (NOI) must include the following materials for each point of proposed discharge to a storm sewer or storm channel.

1. Reclamation: An effluent reclamation feasibility study for demonstration of compliance with Regional Board Resolution No. 88-160. This resolution requires an effluent reuse or reclamation evaluation to assess the practicality of reclaiming all or a portion of the treated effluent from the site. Reclamation alternatives may include irrigation of landscaping or agriculture, dust control or soil compaction on construction sites, decorative pond or fountain supply, or industrial water supply. If a portion of the extracted and treated groundwater is to be reclaimed, describe the proposed reuse, including:

- * The volume of water planned for reuse;
- * The type of reuse;
- * The reuse location and areal extent;
- * The method of transport and application (e.g. fixed piping and spray application);
- * Schedule of operation (e.g. time of day, days of week, seasonal changes);
- * Precautions planned to minimize runoff and human contact;
- * Duration of reuse activity - temporary or permanent project;
- * Proposed method(s) of monitoring reused groundwater; and
- * Name, address, and telephone number of user(s), if different than supplier.

The reclamation evaluation must demonstrate that an effort was made to notify potential users in the area of the availability of reclaimed water, and that all alternatives were explored. The evaluation must include name, address, and type of businesses contacted and their response.

Note: Reclamation involving engineered recharge or reinjection of treated groundwater will require a separate application to the Regional Board.

If reuse or reclamation is demonstrated to be technically or economically infeasible, then discharge to a Publicly Owned Treatment Works (POTW) is encouraged. If access to the local POTW is denied or is infeasible, you must provide documentation of this fact (i.e. a letter from the POTW or a written summary of your discussions with POTW officials).

2. NPDES Application Forms:

- * Completed U.S.EPA application form 1 (General Information) and
- * Completed U.S.EPA application form 2D (New Sources and New Dischargers). Existing dischargers should use form 2C instead of Form 2D.

All forms must be signed by an appropriate corporate officer, general partner, principal executive officer, or ranking elected official (see page I-4 of form 2D for more information). In no case should the consultant sign the forms.

3. Analytical Results: The NOI shall include analytical results, including the date the samples were taken, for influent, effluent, background groundwater, and receiving water as indicated in the following table:

Analyses	Method of Analysis	Influent ¹	Effluent ²	Groundwater ³	Receiving Water ⁴
Volatile Organic Compounds	US EPA Method 8260 or its equivalent	X	X		
Petroleum Hydrocarbons ⁵	Modified US EPA Method 8015 or its equivalent	X	X		
Ethylene Dibromide ⁵	US EPA Method 504 or its equivalent	X	X		
PAHs ⁵	US EPA Method 610 or its equivalent	X	X		
Semi-Volatile Organic Compounds ⁶	US EPA Method 625 or its equivalent	X	X		
Metals ⁷		X	X	X	X

Analyses	Method of Analysis	Influent ¹	Effluent ²	Groundwater ³	Receiving Water ⁴
Hardness as CaCO ₃		X			X

Notes:

1. May be a weighted average of individual extraction wells, if not operating yet.
2. Not required for proposed discharges with no prior operating experience.
3. From up-gradient or cross-gradient wells; need not be repeated if previously performed as part of a site investigation.
4. To be taken 50 feet downstream from point of discharge to surface waters, or if access is limited, at the first point downstream which is accessible.
5. Not required if no evidence of a fuels release.
6. Not required if no evidence of a semi-volatile organic compounds release.
7. Analyze for total (vs. dissolved) metals, with maximum detection limits as follows: cadmium 2 ug/l, mercury 0.2 ug/l, zinc 10 ug/l, other metals 5 ug/l.

All chemical analyses shall be performed according to the appropriate U.S. EPA Methods by a certified laboratory and copies of laboratory analytical reports must be submitted.

4. Filing Fee: California Regulations has established an annual fee schedule dated May 18, 1995 based on the discharges' Threat To Water Quality and Complexity. The dischargers to be regulated under this General Permit are classified as category 2-B. The fee for category 2-B is currently \$2,000. This fee may change in future. New dischargers should submit a check for \$2,000, which is the fee for processing the application and operation during the remainder of the fiscal year (July 1st through June 30th). The check would be made **payable to the State Water Resources Control Board** and submitted with the application package.
5. Operation and Maintenance (O & M) Manual: Each discharger shall submit, as part of the application for proposed discharge, a report, to the satisfaction of Executive Officer, certifying the adequacy of each component of the proposed treatment facilities along with the associated O & M Manual. This certification report shall contain a requirement-by-requirement analysis, based on accepted engineering practice, of how the process and physical design of the treatment facilities will ensure compliance with this Order. Each report shall also certify that (a) all treatment facility startup and operation instruction manuals are adequate and available to operating personnel, (b) adequate treatment facility maintenance and testing schedules are included in the treatment facility O & M Manual, and (c) influent and effluent sampling locations or ports are located in areas where samples representative of the waste stream to be monitored can be obtained. The design engineer shall affix his/her signature and engineering

license number to this certification report.

Proper Operation and Maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls and appropriate quality assurance procedures. All systems, both those in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the inspection results and maintenance performed and made available to the Board. All of the above procedures shall be described in an O & M Manual. The O & M Manual shall also contain a description of the safeguards to assure that, should there be reduction, loss, or failure of electric power, the dischargers will be able to comply with the terms and conditions of this Order and the authorization letters from the Executive Officer. The O & M Manual shall describe preventive (fail-safe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. These plans shall identify the possible sources of accidental loss, untreated or partially treated waste bypass, and polluted drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes shall be considered. If the O & M Manual would be finalized after start-up of the treatment system, it should be stated so in the NOI cover letter, the final O & M Manual should be submitted no later than 60 days after initiation of this discharge.

6. Other Information: The NOI shall include the following items:

- A brief discussion of the cleanup project, including a description and schematics of the extraction system design;
- The estimated average and maximum daily flow rates, and the maximum capacity of the treatment system;
- Maps indicating extraction well locations, treatment facilities, the point(s) of initial discharge, and the path to the ultimate location of the discharge;
- Documentation that local storm water management agency has been notified of the proposed discharge (new discharge only); and
- Chemical Additives: If use of any chemical in the treatment, operation, and/or maintenance of the treatment units is needed, name(s) of the chemical, method of chemical application and disposal of any chemicals in the treatment, or operation and maintenance of the treatment units, and toxicity data of the chemical should be provided.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

DISCHARGES OF EXTRACTED AND TREATED GROUNDWATER
RESULTING FROM THE CLEANUP OF GROUNDWATER POLLUTED BY
VOLATILE ORGANIC COMPOUNDS

NPDES NO. CAG912003
ORDER NO. 99-051

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383 and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16 and the Environmental Protection Agency's Discharge Monitoring Report (Form 3320-1).

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with waste discharge requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharge prohibitions, national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the 40 CFR 136 or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DOHS) or a laboratory waived by the Executive Officer from obtaining a certification for these analyses by the DOHS. The director of the laboratory whose name appears on the certification or his/her laboratory supervisor who is directly responsible for analytical work performed shall supervise all analytical work including appropriate quality

assurance/quality control procedures in his or her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.

C. DEFINITION OF TERMS

1. A **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 daily maximum limits and **instantaneous maximum** limits. Grab samples represent only the condition that exists at the time the wastewater is collected.
2. A **flow sample** is defined as the accurate measurement of the average daily flow volume using a properly calibrated and maintained flow measuring device.
3. **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.)
4. **Instantaneous maximum** is defined as the highest measurement obtained for the calendar day.
5. **Median** of an ordered set of values is that value below and above which there is an equal number of values, or which is the arithmetic mean of the two middle levels, if there is no one middle value

D. SPECIFICATIONS FOR SAMPLING AND ANALYSES

The discharger is required to perform sampling and analyses according to the schedule in Table A in accordance with the following conditions:

1. Effluent

- a. Samples of effluent and receiving waters shall be collected on days coincident with influent sampling unless otherwise stipulated. The Board or Executive Officer may approve an alternative sampling plan if it is demonstrated to the Board's satisfaction that expected operating conditions for the facility warrant a deviation from the standard sampling plan.
- b. Grab samples of effluent shall be collected during periods of maximum peak flows and shall coincide with influent sample days.
- c. Fish bioassay samples shall be collected on days coincident with effluent sampling. The fish species to be used for compliance in the 96-hour percent survival static or static renewal fish toxicity bioassay shall be rainbow trout.
- d. Verification of analytical results:
 - 1) If analytical results are received showing any instantaneous maximum limit is exceeded for any *organic* constituent, a confirmation sample shall be taken within 24 hours and results known within 24 hours of the sampling.
 - 2) If analytical results indicate any instantaneous maximum limit is exceeded for any *inorganic* constituent, actions shall be taken and reported as stipulated in Provision E.8. of the permit.
- e. If the final or intermediate results of any single bioassay test indicate a threatened violation (i.e., the percentage of surviving test organisms is less than the required survival percentage), a new test will begin and the discharger shall investigate the cause of the mortalities and report the finding in the next self-monitoring report.
- f. When any type of bypass occurs, grab samples shall be collected on a daily basis for all constituents at all affected discharge points which have effluent limits for the duration of

the bypass.

2. Receiving Waters

- a. Receiving water sampling shall be conducted on days coincident with sampling of effluent.
- b. In tidally-influenced receiving waters, samples shall be collected at each station on each sampling day during the period within 1 hour following low slack water. 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 downcurrent of the discharge point so as to be representative, unless otherwise stipulated.
- c. Samples shall be collected within one foot below the surface of the receiving water body, unless water depth is less than one foot, in which case a mid-depth sample shall be taken.

E. DESCRIPTION OF SAMPLING STATIONS

Stations	Description
1. Influent	
I-1	At a point in the extraction system immediately prior to inflow to the treatment unit.
2. Effluent	
E-1	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.
3. Receiving Waters	
RU-1	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.
RD-1	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.

F. START UP PHASE MONITORING AND REPORTING

1. Notification: The Board's Executive Officer shall be notified in writing of the date of start up within 7 to 14 days before start up begins.
2. Monitoring: During the original start up for the treatment system, sampling of the effluent must occur on the first and fifth day.
 - a. On the first day of the original start up, the system shall be allowed to run until at least three to five well volumes are removed and until three consecutive readings for pH, conductivity, and temperature are within five percent of each other; then, the influent and effluent shall be sampled and submitted for analyses. Prior to receipt of the results of the initial samples, all effluent shall be discharged into a holding tank (that is contained, not discharged to the receiving water) or discharged to the sanitary sewer until the results of the analyses show the discharge to be within the effluent limits established in this Order and/or in the authorization letter. The treatment system may be shut down after the first day's sampling to await the analyses results and, thereby, reduce the amount of storage needed. For the stored effluent, if the results of the analyses show the discharge to be in violation, the effluent shall: (1) be retreated until the retreated effluent is in compliance, or (2) be disposed in accord with the provisions of Chapter 15, Title 23, California Code of Regulations.
 - b. If the first day's sampling shows compliance, the treatment system shall be operated for a total of five days with the discharge to the storm sewer or other conveyance system leading to the receiving water, and be sampled again. While the fifth day's samples are being analyzed, the effluent may be discharged to the receiving water as long as the analyses are received within 48 hours of sampling, and then, continue to be discharged to the receiving water if the analyses show compliance. If the treatment system is shut down more than 48 hours during the original start up (awaiting analyses results, etc.), the original start up procedures and sampling must be repeated.
3. Reporting: The discharger shall present the results of the laboratory

analyses, flow rates, chain of custody forms, and descriptions of any changes or modifications to the treatment system in the start-up report.

G. STANDARD OBSERVATIONS

1. Receiving Water

- a. 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.
- b. Discoloration and turbidity: description of color, source, and size of affected area.
- c. Odor: presence or absence, characterization, source, distance of travel, and wind direction.
- d. Evidence of beneficial water use: presence of waterfowl or wildlife, fishermen, and other recreational activities in the vicinity of the sampling stations.
- e. Hydrographic condition, if relevant:
 - 1) Time and height of corrected high and low tides (corrected to nearest NOAA location for the sampling date and time of sample and collection).
 - 2) Depth of water columns and sampling depths.
- f. Weather condition:
 - 1) Air temperature.
 - 2) Wind - direction and estimated velocity.
 - 3) Precipitation - total precipitation during the previous five days and on the day of observation.

2. Reclaimed Water

- a. 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.

- b. Discoloration and turbidity: description of color, source, and size of affected area.
- c. Odor: presence or absence, characterization, source, distance of travel, and wind direction.
- d. Weather condition:
 - 1) Air temperature.
 - 2) Wind - direction and estimated velocity.
 - 3) Precipitation - total precipitation during the previous five days and on the day of observation.
- e. Deposits, discolorations, and/or plugging in the conveyance system which could adversely affect the system reliability and performance.
- f. Operation of the valves, outlets, sprinkler heads, and/or pressure shutoff valves in conveyance system.

3. Waste Treatment Facilities

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

H. REPORTS TO BE FILED WITH THE REGIONAL BOARD

- 1. **Start-up Report:** A report on the start up phase shall be submitted to the Regional Board no more than fifteen days after the end of the start up phase.
- 2. **Self-Monitoring Reports**

Written reports shall be submitted on a calendar quarter basis, not later than 30 days following the last day of the quarter. The reports shall be comprised of the following:

a. **Letter of Transmittal:**

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include:

- 1) Identification of all violations of waste discharge requirements found during the reporting period,
- 2) Details of the magnitude, frequency, and dates of all violations,
- 3) The cause of the violations, and
- 4) Discussion of the corrective actions taken or planned and the time schedule for completion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory.

Monitoring reports and the letter transmitting reports shall be signed by a principal executive officer or ranking elected official of the discharger, or by a ***duly authorized representative*** of that person.

The letter shall contain the following certification:

"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 person or persons who managed 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."

- b. **Compliance Evaluation Summary**
The report format shall be a format that is acceptable to the Executive Officer.

- c. **Map or Aerial Photograph** A map or aerial photograph shall accompany the report showing sampling and observation station locations.

- d. **Results of Analyses and Observations** The report format shall be a format that is acceptable to the Executive Officer.
 - 1) If the discharger monitors any pollutant more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Self-Monitoring Report.
 - 2) Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
 - 3) The report shall also include 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 Board's Executive Officer.
 - 4) Lab results shall be summarized in tabular form but do not need to be included in the report.

- e. **List of Approved Analyses**
 - 1) Listing of analyses for which the discharger is approved by the State Department of Health Services.
 - 2) List of analyses performed for the discharger by another approved laboratory (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).
 - 3) List of "waived" analyses, as approved by the Executive Officer.

- f. **Flow and Mass Removed Data**

- 1) The tabulation pursuant to Section I.2.
 - 2) An estimate of the VOC mass removal in pounds.
- g. **Operation Status** 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.

3. **Annual Reporting**

By January 30 of each year, the discharger shall submit an annual report to the Regional Board covering the previous calendar year. The annual report 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 report for the fourth quarter of a calendar year.

The report shall contain tabular summary of the monitoring data obtained during the previous year. In addition, the report shall contain a comprehensive discussion of the compliance record and the corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements.

4. **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 Board, at (510) 622-2300 on weekdays during office hours from 8 a.m. to 5 p.m., and to the Office of Emergency Services at (800) 852-7550 during non-office hours. A written report shall be filed with the Regional Board 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.

5. 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 exceed 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;

Dischargers shall notify the Board within one day as soon as the dischargers or their agents have knowledge of the incident and confirm this notification in writing 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 INSTANTANEOUS MAXIMUM LIMITS should occur (and be confirmed), the discharge shall be directed to a holding tank and contained, or the extraction and treatment system shall be shut down. The content of the holding tank shall be retreated until the retreated effluent is in compliance, or be disposed in accord with the provisions of Chapter 15, Title 23, California Code of Regulations.

If the treatment system is shut down for more than 120 consecutive hours after the start up period (maintenance, repair, violations, etc.)

the reason(s) for shut down, proposed corrective action(s) and estimated start up date shall be orally reported to the Board within five days of shut down and a written submission shall also be provided within 15 days of shut down.

If feasible, the corrective action(s) taken and the proposed start up procedures shall be reported to the Board at least 15 days before start up.

6. **Construction Projects:** The discharger shall file a written technical report to be received at least 30 days prior to advertising for bid (or 60 days prior to construction) on any construction project which would cause or aggravate the discharge of waste in violation of requirements; said report shall describe the nature, cost, and scheduling of all action necessary to preclude such discharge. In no case will any discharge of wastes in violation of permit and order be permitted unless notification is made to the Executive Officer and approval obtained from the Regional Board.
7. **Chemical Additives:** A report describing the need, method of chemical application and disposal shall be submitted to the Board at least 30 days before the use of any chemicals in the treatment, or operation and maintenance of the treatment units, is to begin. This report shall include toxicity data. The Executive Officer must approve the use of any chemicals prior to the usage of any chemicals in the treatment, operation, and/or maintenance of the treatment units.

I. RECORDS TO BE MAINTAINED

1. Written reports, strip charts, calibration and maintenance records, and other records shall be maintained by the discharger and accessible (at the waste treatment plant), and retained for a minimum of five years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board or Regional Administrator of the U.S. Environmental Protection Agency, Region IX. Such records shall show the following for **each** sample:
 - a. Identity of sampling and observation stations by number.
 - b. Date and time of sampling and/or observations.
 - c. Method of sampling (See Section C - Definition of Terms).

- d. Type of fish bioassay test (96 hour static or flow-through .bioassay)
 - e. Date and time that analyses are started and completed, and name of personnel performing the analyses.
 - f. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to a specific section of **Standard Methods** is satisfactory.
 - g. Calculations of results.
 - h. Results of analyses and/or observations.
2. Weekly discharge flow volume shall be recorded, as well as totalized quarterly and annual flow.
 3. A tabulation reflecting bypassing and accidental waste spills shall be maintained.

I, Loretta K. Barsamian, Executive Officer do hereby certify the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in the Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 99-051.
2. Was adopted by the Board on July 21, 1999.
3. May be revised by the Executive Officer pursuant to U.S. EPA regulations (40 CFR 122.36); other revisions may be ordered by the Board.


Loretta K. Barsamian
Executive Officer

Attachment: Table A

TABLE A - SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	I-1	E-1	RD-1/RU-1
TYPE OF SAMPLE	Grab	Grab	Grab
Flow Rate (gpm)		Continuous ¹	
Bioassay 96-hr % survival		Q/Y	
Turbidity (NTUs)		Q/Y	
pH (units)	M/Q/Y	M/Q/Y	Q/Y-V
Dissolved Oxygen (mg/l and % saturation)			Y
All Applicable Standard Observations ^{2 & 3}		M	Q/Y
Temperature (°C)		M/Q/Y	
hardness = mg/l CaCO ₃		Y	Y
Arsenic (μg/l)		Y ⁴	
Cadmium (μg/l)		Y ⁴	
Chromium VI (μg/l) ⁵		Y ⁴	
Copper (μg/l)		Y ⁴	
Lead (μg/l)		Y ⁴	
Mercury (μg/l)		Y ⁴	
Nickel (μg/l)		Y ⁴	
Selenium (μg/l)		Y ⁴	
Silver (μg/l)		Y ⁴	
Zinc (μg/l)		Y ⁴	
VOC Method 8260 or equivalent	2/Y	D/M	V
Semi-VOC Method 625 ⁶ or equivalent	2/Y	Y	V
Total Polynuclear Aromatic Hydrocarbons Method 610 ⁶ or equivalent	2/Y	Y	V
Ethylene Dibromide Method 504 ⁶ or equivalent	2/Y	Y	V

Sampling Station	I-1	E-1	RD-1/RU-1
Total Petroleum Hydrocarbons Method 8015 ⁶ or equivalent (Modified TPH gasoline and diesel)	2/Y	D/M	V
<p>LEGEND TYPES OF STATIONS I=influent, E=effluent, RU-1 & RD-1 = receiving water</p> <p><u>FREQUENCY OF SAMPLING</u></p> <p>M = once each month, Y = once each year, 2/Y = twice each year, Q/Y = quarterly for first year of operation, once each year thereafter, M/Q/Y = Monthly for first year of operation, quarterly for the second year, and once a year thereafter. In case of pH analysis, only for facilities not performing pH-adjusting chemical addition. D/M = <i>If a new treatment system or a new discharge</i>, once during the first and fifth day of start up; weekly during first month of operation, and monthly thereafter Q-V = Once each quarter and whenever there is a violation V = Sampling should be performed within 24 hours after an exceedance is confirmed in E-1</p> <p>Footnotes</p> <p>1 Dischargers may report weekly flow volume (from flow-totalizers) in lieu of reporting instantaneous flow, provided that the instantaneous flow rate does not exceed the permitted maximum flow rate. If a portion of the effluent is being reclaimed, report the total flow <i>and</i> the volume diverted to reclamation</p> <p>2 See Section G Standard Observations</p> <p>3 Also for reclaimed water, if applicable</p> <p>4 Metal samples shall be analyzed for total (unfiltered) constituents and the maximum method detection limits shall be: cadmium 2 ug/l, mercury 0.2 ug/l, zinc 10 ug/l, and other metals 5 ug/l.</p> <p>5 Or optional <i>total</i> chromium analysis</p> <p>6 If known to be present in the influent</p>			