California Regional Water Quality Control Board
San Francisco Bay Region
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ORDER NO. R2-2006-0075
NPDES NO. CAG912002

GENERAL WASTE DISCHARGE REQUIREMENTS FOR: Discharge or Reuse of Extracted and Treated Groundwater Resulting from the Cleanup of Groundwater Polluted by Fuel Leaks and Other Related Wastes at Service Stations and Similar Sites

Table 1. Administrative Information

This Order was adopted by the Regional Water Board on:	**November 13, 2006**
This Order shall become effective on:	**January 12, 2007**
This Order shall expire on:	**January 12, 2012**
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Board have classified the discharges under this General National Pollutant Discharge Elimination System (NPDES) Permit as minor discharges.	
To obtain coverage under this general permit, Dischargers must submit a Notice of Intent (NOI) Form as described in Attachments B and C 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 Board Executive Officer.	
The Dischargers who need to discharge treated groundwater after the expiration date of this Order shall file a complete Notice of Intent (NOI), as a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, and as an application for proposed discharge no later than July 15, 2011, which is 180 days in advance of the Order expiration date, as application for issuance of new waste discharge requirements (see Attachments B and C). The terms and conditions of this Order will be automatically continued after the expiration date of this Order for the Dischargers who submitted a complete NOI and will remain in effect until a new Order is adopted by the Regional Water Board. In order to assure no lapse in NPDES permit coverage for authorized discharges, the Dischargers who submitted a complete NOI will then be subject to the new Order pending receipt of a new discharge authorization.	

IT IS HEREBY ORDERED, that this Order supercedes Order No. 01-100 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder, the Dischargers shall comply with the requirements in this Order.

I, Bruce H. Wolfe, Executive Officer, do hereby certify that this Order, Order No. R2-2006-0075, 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 November 13, 2006.

Bruce H. Wolfe, Executive Officer

California Regional Water Quality Control Board
San Francisco Bay Region

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Table of Contents

List of Tables

List of Attachments

I. FACILITY INFORMATION

The regulated facilities under this Order are normally groundwater treatment facilities located at active or closed service stations or construction sites with the need for short or long term dewatering. These groundwater treatment facilities are in operation to extract and treat groundwater polluted mainly by fuel leaks. Facility information for each discharge shall be included in the Notice of Intent (NOI) Form submitted for that discharge (see Attachments B and C).

II. FINDINGS

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

A. Background. There are 55 underground fuel storage tanks operators, current property owners, or previous property owners (hereinafter current Dischargers) currently authorized to discharge pursuant to Order No. 01-100, NPDES Permit No. CAG912002. Of the current Dischargers, 37 submitted a Report of Waste Discharge and applied for a NPDES permit renewal to discharge up to 150 gallons per minute (gpm) of treated wastewater from their groundwater extraction and treatment facilities, hereinafter Facility or Facilities. The Regional Water Board will complete the review of these applications during the period starting after the adoption date of this Order and ending before effective date of this Order.

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.

B. Facility Description. Most Dischargers authorized under this general permit use aeration and/or granular activated carbon (GAC) systems to treat their pollutants of concern. Treated wastewaters are normally discharged through storm drain systems, rivers, and/or creeks to the Bay. A complete description of the treatment system installed at each facility is required to be completely documented in the Notice of Intent submitted by each Discharger (Attachments B and C).

C. 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 (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to

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 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, the USEPA, Region 9, approved the State Water Board's request and granted authorization for the State to issue general NPDES permits.

D. **Background and Rationale for Requirements**. The Regional Water Board developed the requirements in this Order based on information submitted as part of the applications, 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 through I are also incorporated into this Order.

E. **California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

F. **Technology-based Effluent Limitations.** Title 40 of the Code of Federal Regulations (Hereinafter 40 CFR) at section 122.44(a) requires that permits include applicable technology-based limitations and standards. This Order includes technology-based effluent limitations based on Best Professional Judgment (BPJ) in accordance with 40 CFR Section 125.3. A detailed discussion of the technology-based effluent limitations development and BPJ is included in the Fact Sheet (Attachment F).

G. **Water Quality-based Effluent Limitations.** 40 CFR Section 122.44(d) requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) 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 section 122.44(d)(1)(vi).

H. **Water Quality Control Plans.** The Regional Water Board adopted a Water Quality Control Plan for the San Francisco Bay Basin (hereinafter Basin Plan) on June 21, 1995, and amended this plan on January 2, 2004, and November 16, 2005. This later amendment will be final after approval from the State Water Board and Office of Administrative Law. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan at Page 2-5 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 may identify present and potential uses for the downstream water body, to which the receiving water, via an intermediate water body, is 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.

The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan.

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

J. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the

Basin Plan. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005, that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

K. Compliance Schedules and Interim Requirements. (Not applicable)

L. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 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.

M. Antidegradation Policy. 40 CFR Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet, the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

N. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.

O. Monitoring and Reporting. 40 CFR Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP) establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

P. **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 section 122.42 and as modified for this general permit, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Dischargers. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

Q. **Provisions and Requirements Implementing State Law.** The provisions/requirements in subsections IV.B, IV.C, V.B, and VI.C 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.

R. **Notification of Interested Parties.** The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

S. **Consideration of Public Comment.** The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

III. DISCHARGE PROHIBITIONS

A. The discharge of extracted and treated groundwater polluted by fuel leaks and other related wastes at service stations and similar sites and related wastes to surface waters is prohibited unless an NOI application for proposed discharge has been submitted and the Executive Officer has provided the Discharger with an authorization to initiate the discharge.

B. The discharge shall be limited to extracted and treated groundwater and those added treatment chemicals approved by the Executive Officer which do not adversely affect the environment and comply with the requirements of this Order.

C. The discharge of extracted and treated groundwater from a specific site in excess of the flow rate specified in the authorization to discharge by the Executive Officer is prohibited.

D. The discharge shall cause no scouring or erosion at the point where the storm drain discharges into the receiving waters.

E. 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.

F. Bypass or overflow of untreated or partially treated groundwater polluted by fuel leaks or other wastes 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.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations (Surface water discharges only)

1. **Organic Pollutants:** The discharge of the effluent shall maintain compliance with the following effluent limitations at a discharge point after full treatment but before it joins or is diluted by any other waste stream, body of water, or substance:

Table 2. Effluent Limitations for Toxics Pollutants

No.	Compound	CAS Number	Column A: Discharge to Drinking Water Areas (see Note 2)		Column B: Discharge to Other Surface Water Areas	
			Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)	Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)
1	Benzene	71432		1		5
2	Carbon Tetrachloride	56235	0.25 (see Note 1)	0.50	4.4	5
3	Chloroform	67663		5		5
4	1,1-Dichloroethane	75343		5		5
5	1,2-Dichloroethane	107062	0.38 (see Note 1)	0.5		5
6	1,1-Dichloroethylene	75354	0.057 (see Note 1)	0.11 (see Note 1)	3.2	5
7	Ethylbenzene	100414		5		5
8	Methylene Chloride (Dichloromethane)	75092	4.7	5		5
9	Tetrachloroethylene	127184	0.8	1.6		5
10	Toluene	108883		5		5
11	Cis 1,2-Dichloroethylene	156592		5		5
12	Trans 1,2-Dichloroethylene	156605		5		5
13	1,1,1-Trichloroethane	71556		5		5
14	1,1,2-Trichloroethane	79005	0.6	1.2		5

No.	Compound	CAS Number	Column A: Discharge to Drinking Water Areas (see Note 2)		Column B: Discharge to Other Surface Water Areas	
			Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)	Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)
15	Trichloroethylene	79016	2.7	5		5
16	Vinyl Chloride	75014		0.5		1
17	Total Xylenes	1330207		5		5
18	Methyl Tertiary Butyl Ether (MTBE)	1634044		5		5
19	Total Petroleum Hydrocarbons (as Gasoline or as Diesel)			50		50
20	Ethylene Dibromide (1,2-Dibromoethane)	106934		0.05 (see Note 1)		5
21	Trichloro-trifluoroethane	76131		5		5

Notes:
1) If reported detection level is greater than effluent limit, then a non-detect result using a 0.5 ug/L detection level will not be deemed to be out of compliance.
2) Drinking water areas are defined as surface waters with the existing or potential beneficial uses of "municipal and domestic supply" and "groundwater recharge" (the latter includes recharge areas to maintain salt balance or to halt salt water intrusion into fresh water aquifers).

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 (EPA-821-R-02-012 Test method 2019.0) of the discharge 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. Land Discharge Specifications. (Not applicable)

C. Reclamation Specifications – Water Reuse

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 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 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 as applied shall meet the requirements in Section B- Effluent Limitations.
   b. The water reclamation activities shall be described in the Discharger's NOI, including method of any additional treatment and location and type of water reuse.
   c. 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.
   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 Section 13050(m) of the California Water Code.
   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 supply and piping containing treated groundwater intended for reuse.
   i. Water reclamation consisting of recharge or reinjection is not authorized under this Order.

V. RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in surface receiving waters:

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 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, then the discharge shall not cause further reduction in ambient dissolved oxygen concentrations.

   b. 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.

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 Regional Water Board or the State Water Board as required by the Clean Water Act and regulations adopted there under. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Regional Water Board will revise and modify this Order in accordance with such more stringent standards.

B. Groundwater Limitations

The discharge shall cause no violation of the Basin Plan water quality standards for receiving groundwaters.

VI. PROVISIONS

A. Standard Provisions.

The Dischargers shall comply with all Federal and all Standard Provisions for General Permits Standard Provisions included in Attachment D of this Order.

B. Monitoring and Reporting Program Requirements.

1. The Dischargers shall comply with the Monitoring and Reporting Program (MRP), and future revisions thereto, in Attachment E of this Order.

2. Dischargers authorized under this permit, especially the Dischargers with flow rate exceeding 10 gpm, may be required to comply with additional monitoring requirements. The Executive Officer will specify such additional monitoring requirements in the authorization letter. Examples of additional monitoring that could be required are listed below:

    a. Monitoring Required to Respond to a Complaint received about a Facility authorized to discharge under this permit,
    b. Storm Water Monitoring,
    c. Dioxins and Furans Monitoring,
    d. Regional Monitoring Program 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:

    a. If present or future investigations demonstrate that the discharge(s) governed by this Order will, or cease to, have adverse impacts on water quality and/or beneficial uses of the receiving waters;

    b. As new or revised WQOs 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;

    c. If translator or other water quality studies provide a basis for determining that a permit condition(s) should be modified;

    d. An administrative or judicial decision on a separate NPDES permit or WDR that addresses requirements similar to this discharge; and

e. as authorized by law.

The Dischargers may request permit modification based on the above. The Dischargers shall include in any such request an antidegradation and antibacksliding analysis.

2. Notice of Intent (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 Notice of Intent Form 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 general permit. The application package shall document that:

   a. The proposed discharge results from the cleanup of groundwater polluted by fuel leaks and other related wastes at service stations and similar sites with similar wastes;
   b. The proposed Discharger has met the provisions of Resolution No. 88-160; and
   c. 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: 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. This discharge authorization may be terminated by the Executive Officer at any time.

5. Non-Compliance As 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 Clean Water Act and the California Water Code 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 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 constituent is necessary. If any constituent in the effluent of a discharge exceeds the

corresponding trigger as listed in the Table 3 below, then the Discharger shall take three additional samples (three influent and three effluent) for each exceeded constituent during the following calendar quarter and conduct activities as explained in the Provisions VI.C.7, VI.C.8, or VI.C.9. If this monitoring activity has already been completed in the past, then summarize the results including the design of any installed treatment unit.

Table 3. Trigger Compounds or Constituents

Compound	CAS Number	Trigger (ug/L)
Antimony	7440360	6
Arsenic	7440382	10
Beryllium	7440417	1
Cadmium	7440439	0.07
Chromium (total)	18540299	11 (See Note 1)
Chromium (VI)	18540299	11
Copper	7440508	3.1
Lead	7439921	2.0
Mercury	7439976	0.025
Nickel	7440020	8.2
Selenium	7782492	5.0
Silver	7440224	1.9
Thallium	7440280	0.1
Zinc	7440666	35
Cyanide	57125	1.0
Asbestos	1332214	7 MFibers/L
2,3,7,8-TCDD (Dioxin)	1746016	0.000000013
Acrylonitrile	107131	2.0
Bromoform	75252	4.3
Chlorodibromomethane	124481	0.401
Dichlorobromomethane	75274	0.56
1,2-Dichloropropane	78875	0.50
1,3-Dichloropropylene	542756	0.2
1,1,2,2-Tetrachloroethane	79345	0.1
Pentachlorophenol	87865	0.28
2,4,6-Trichlorophenol	88062	2.1
Benzidine	92875	0.00012
Benzo(a)Anthracene	56553	0.0044
Benzo(a)Pyrene	50328	0.004
Benzo(b)Fluoranthene	205992	0.0044
Benzo(k)Fluoranthene	207089	0.0044
Bis(2-Chloroethyl)Ether	111444	0.031
Bis(2-Ethylhexyl)Phthalate	117817	1.8
Chrysene	218019	0.0044
Dibenzo(a,h)Anthracene	53703	0.0044
3,3'-Dichlorobenzidine	91941	0.04
2,4-Dinitrotoluene	121142	0.11
1,2-Diphenylhydrazine	122667	0.04

Compound	CAS Number	Trigger (ug/L)
Hexachlorobenzene	118741	0.00075
Hexachlorobutadiene	87683	0.44
Hexachloroethane	67721	1.9
Indeno(1,2,3-cd)Pyrene	193395	0.0044
N-Nitrosodimethylamine	62759	0.00069
N-Nitrosodi-n-Propylamine	621647	0.005
Aldrin	309002	0.00013
alpha-BHC	319846	0.0039
beta-BHC	319857	0.014
gamma-BHC	58899	0.019
Chlordane	57749	0.00057
4,4'-DDT	50293	0.00059
4,4'-DDE	72559	0.00059
4,4'-DDD	72548	0.00083
Dieldrin	60571	0.00014
alpha-Endosulfan	959988	0.0087
beta-Endosulfan	33213659	0.0087
Endrin	72208	0.0023
Endrin Aldehyde	7421934	0.76
Heptachlor	76448	0.00021
Heptachlor Epoxide	1024573	0.0001
Polychlorinated biphenyls (PCBs) total	1336363	0.00017
Toxaphene	8001352	0.0002
1,4-Dioxane	123911	3
Perchlorate	14797730	5
Freon 12 (Dichlorodifluoromethane)	75718	0.19
Other Oxygenates (Other than MTBE)	-	5
Other VOCs	-	5
Other SVOCs	-	5
Turbidity (Units)	-	5
Odor-Threshold (Units)	-	3
Total Petroleum Hydrocarbons other than Gasoline and Diesel	-	50 (See Note 2)
Sulfate	-	250,000
Foaming Agents	-	500
Color (Units)	-	15

Legend:
CAS = Chemical Abstract System or Service
Notes:
1) If total chromium concentration exceeds 11 then Chromium (VI) analysis shall also be done.
2) If a Discharger is reporting monitoring data with a detection level higher than 50 ug/l, the reason for a higher detection level shall be fully explained in the monitoring report.

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

8. Triggers Case 2: If the results of **any one of the three** additional samples

exceed the triggers, the Discharger has two options. Option one is submitting a rationale for not doing the special studies as described in the last paragraph of VI.C.9. Option two is performing the following three tasks listed below:

a. Calculate the median and maximum concentration values for the exceeded trigger constituent, 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 exceeded trigger constituent. Report the results in grams per day and in kilograms per year, using the average discharge 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.

9. Triggers Case 3: If the results of **two or three** of the additional samples exceed the triggers, the Discharger shall perform the following:

a. Calculate median and maximum concentration values and mass load for the constituent, as described in Case 2 above.

b. Explain or identify source(s) of the trigger constituent. If the trigger constituent is a byproduct of a decomposed compound, list all of the byproduct components and when each of these components will be formed during the decomposition process.

c. Define the properties of the exceeded trigger constituent and, if applicable, the decomposing compound with all of its byproduct components. Attach Material Safety Data Sheets, if available or applicable.

d. Document what standard or customized EPA approved test methods are used to detect this compound.

e. List and evaluate all available technologies for treatment or pre-treatment of this exceeded trigger constituent and, if applicable, the decomposing compound with all of its byproduct components. This evaluation may include the cost of increased treatment to reduce the exceeded trigger constituent and any applicable the decomposing compound with all of its byproduct components and the amount of reduction in terms of concentration.

f. Discuss any proposed plan for pilot bench scale and field tests for treatment of this exceeded trigger constituent and, if applicable, the

decomposing compound with all of its byproduct components and associated timetable.

g. Determine the best available technology economically achievable for treatment of this exceeded trigger constituent and, if applicable, the decomposing compound with all of its byproduct components, or propose the next step after obtaining the results of the pilot tests.

h. If the results of the evaluation indicate that the additional treatment of the discharge does not appear to be a feasible option, then:

1) 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. For inorganic compounds (also known as metals), include discussions regarding effects related to total or dissolved fraction (i.e., metals translators) and hardness 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.

2) If the receiving water study finds that the discharge has potential to cause adverse impacts to beneficial uses of the receiving water, then 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.

i. Within 180 days of the Discharger receiving results of the confirmation sampling, report the results of tasks (a) through (h) above to the Executive Officer, including a proposed method to eliminate or minimize future exceedances, or provide a rationale for why no change to the existing treatment program should take place. The Discharger may be required to perform additional evaluations or take additional actions, as deemed necessary by the Executive Officer. The Discharger may apply or may be required to apply for an individual NPDES permit. If the Executive Officer determines that additional numeric limits are necessary for a particular compound or constituent (including but not limited to a VOC), these limits will be calculated using the procedures specified in the SIP, Basin Plan, and applicable USEPA regulations.

As an alternative, the Discharger may submit a specific technical rationale for not conducting the above special studies, subject to the Executive Officer's approval. Examples of acceptable rationales to the Executive Officer could be submitting a copy of a technical report prepared previously or if the

Discharger is contributing funds for a joint special studies addressing the same questions discussed above for this exceeded trigger constituent and, if applicable, the decomposing compound with all of its byproduct components.

10. Exceedance of the same Triggers: If an exceedance of the same trigger in Table 3 occurs less than 60 months after completion of the required tasks in Provisions VI.7, VI.8 or VI.9, then the Executive Officer may waive the evaluation required above. This waiver will not apply if a different constituent or compound exceeds the triggers set in Tables 3. In that case, the Discharger shall perform an evaluation for that constituent or compound. During and after any additional monitoring, the Discharger shall continue the required schedule of sampling and analysis as required in the MRP (Attachment E).

11. Individual NPDES Permit May Be Required: The USEPA Administrator may request the Regional Water 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 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 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 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. II.C, are not met.

12. Treatment Reliability: The Dischargers shall, at all times, retain a professional engineer certified in 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 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 Regional Water Board for at least five years. Additional requirements for compliance with this provision are explained in Attachments B and C of the Order.

13. **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.

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

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

Maximum Daily Effluent Limitation (MDEL) 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.

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 APPLICATION FORM
To Receive
Authorization to Discharge Treated Groundwater under the Requirements of
ORDER NO. R2-2006-XXXX
NPDES PERMIT NO. CAG912002 (FUEL)

For Groundwater Treatment Facility located at:

_____

Type or Print Facility Address above the line
File No: 1210.44

This is an application for discharge or reuse of extracted and treated groundwater resulting from the cleanup of groundwater polluted by fuel leaks and other related wastes at service stations and similar sites. Please mark one of the applicable lines:

Table 1. Mark only one as applicable

1	Notice of Intent for an Existing Discharge (for Permit Reissuance)	
2	Notice of Intent for a previously regulated Discharge (provide the Order and NPDES permit numbers here in this row)	
3	Notice of Intent for a New Discharge	
4	Modified Notice of Intent (if modified, complete all sections in this Form and indicate information on which item(s) below are modified):	
	Discharger's Certification	
	Administrative Information	
	Condition 1	
	Condition 2	
	Condition 3	
	Condition 4	
	Condition 5	
	Condition 6	
	Condition 7	
	Condition 8	
	Condition 9	
	Condition 10	
	Condition 11	
	Condition 12	
	Attachment 1	
	Attachment 2	
	Attachment 3	
	Attachment 4	
	Attachment 5	

Discharger's 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 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

Complete Table 2. Facility Information

1	Discharger's Name	
2	Name of Facility	
3	Facility Address	
4	Facility Contact, Title, and Phone	
5	Authorized Person to Sign & Submit Reports	
6	Mailing Address	
7	Billing Address	
8	Type of site or project. For example: Active Service Station, Closed Service Station, Short Term Dewatering Project, Long Term	

	Dewatering Project, or other (please explain if "Other")	
9	Watershed	
10	Receiving Water	
11	Receiving Water Type. For example, eenclosed bay, estuary, inland surface water, or Sacramento-San Joaquin Delta	

I understand that if this discharge is eligible under the requirements of Order No. R2-2006-xxxx (Order), authorization to discharge treated groundwater from the above facility will be granted providing the following conditions are met:

1. I must comply with all applicable requirements of the Order and the associated Self-Monitoring Program (SMP). The effluent shall not contain constituents in excess of the limits listed under:

Complete Table 3. Mark only one as applicable

1	Discharge to Drinking Water Areas (Column A, Table 2, Page 7 of the Order)	
2	Discharge to Other Surface Water Areas (Column B, Table 2, Page 7 of the Order)	

2. A treatment system including the elements described in Table 4 below and the schematic shown in Attachment 1 will treat the extracted groundwater.

Complete Table 4. Treatment System Description

	Unit	Number	Size, or capacity (e.g. pounds of GAC), Further Description (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	Advanced Treatment Unit(s) for Oxygenates such Tertiary Butyl Alcohol, Ethanol, and Methanol		
11	Advanced Treatment Unit(s)		
12	Liquid-phase Granular Activated Carbon (GAC) vessel(s) in series		
13	GAC vessel(s) in parallel		
14	Effluent reuse Infrastructure (If so, provide additional detail)		

3. I understand that I shall, at all times, retain a professional engineer certified in the State of California to oversee the design, and proper operation and maintenance of the treatment system, including all facilities necessary to achieve compliance with the Order. I also understand that proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures and all of these procedures shall be described in an Operation and Maintenance (O&M) Manual. Table 5 includes the names of all professionals who will keep the treatment system - including all facilities necessary to achieve compliance with the conditions of the Order - in a state of readiness. All treatment system components, both those in service and those in reserve, shall be inspected and maintained on a regular basis.

4. Attachment 2 is a report certifying the adequacy of each component of the proposed treatment system, and including the table of contents of the associated O&M manual. This certification report contains an item-by-item analysis, based on accepted engineering practice, of how the process and physical design of the treatment system will ensure compliance with the Order. This report also certifies that:

   i. All treatment facility startup and operation instruction manuals are adequate and available to operating personnel.

   ii. Adequate treatment facility maintenance and testing schedules are included in the treatment facility O&M Manual.

   iii. Influent and effluent sampling locations or ports are located in areas where samples representative of the waste stream to be monitored can be obtained.

   iv. The residual concentration of any chemical additive or additives used in the treatment process is designed to be zero and will never exceed the No Adverse Effect Concentration (NOEC) as documented in the ecological section of the applicable Material Safety Data Sheet (MSDS). A copy of the MSDS for every chemical used is provided as an attachment in the O&M Manual.

   v. If any chemical used in the treatment process may cause pH variances in the effluent, the frequency of pH monitoring in the effluent will be increased as explained in the Legends for Table E.2 of Attachment E – Monitoring and Reporting Program.

   vi. The design engineer has affixed his/her signature and engineering license number to this certification report in Attachment 2.

Complete Table 5. Professional Engineer(s) and Other Information

1	Design Engineer's Name, California License Number, address, and phone number	
2	Operation and Maintenance Responsible Engineer's Name, California License Number, address, and phone number	
3	Name, phone number, and email of the Discharger's 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 error (applicable if any monitoring data for the sample(s) taken on or after January 1, 2006, were claimed to be invalid)	

5. The maximum discharge rate from the groundwater treatment system shall not exceed _____ gallons per minute (gpm). The groundwater treatment system is designed for _____ gpm. I understand this discharge shall not cause pollution, contamination, or nuisance. For example, the discharge shall cause no scouring or erosion at the point where the storm drain or outfall-pipe discharges into the receiving water(s).

6. Treated water will be discharged through a storm drain to the receiving water(s) described in Table 6 below and shown on the aerial map in Attachment 3.

Complete Table 6. Discharge Location

Discharge Point Location	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
Storm-Drain Location:			Storm-Drain
Outfall Location:			

7. A copy of the Order, a complete copy of this Notice of Intent, documentation of the authorization to discharge received from the Regional Water Board, a full copy of the O&M Manual, and any other documents recommended by the engineer or the QA officer shall be stored at or near the treatment facility. These documents shall be made available to Regional Water Board staff during inspections. No O&M Manual shall be submitted to the Regional Water Board office, unless requested.

8. Self-Monitoring Reports shall be submitted by uploading it on Geo-Tracker on a quarterly calendar basis, no later than 45 days following the last day of the quarter. The laboratory results shall be summarized in tabular form, but the laboratory data sheets need not be included in the reports (unless requested). The reports shall summarize the monitoring data and include information such as the sample location (extraction well(s), influent, effluent, or receiving water); the constituents analyzed; the analytical methods used; the laboratory reporting limits in micrograms per liter (ug/l); the sample results (ug/l); the date sampled; and the date samples were analyzed. A summary of quality assurance/quality control data such as field, trip, and laboratory blank results shall be reported for each analyzed constituent or group of constituents. These reports shall also include a description of the operation and maintenance of the groundwater extraction and treatment system. An annual report summarizing system operation and maintenance for the last four quarters shall be prepared and submitted no later than February 15 of the following year. The last calendar quarter monitoring report may be combined with the annual report. The annual report shall document that the annual fee has been paid.

9. I understand that it is the responsibility of any person proposing to discharge to a storm drain system or other watercourses to obtain authorization to discharge from the agency having jurisdiction over the use of the storm drain system or watercourse. I also understand any discharge authorization granted by the Regional Water Board is conditional and may be terminated at any time.

10. A Check for $5,688 is attached.

11. Tables ___ through _____ in Attachment 5 of this NOI list all pollutants of concern in each extraction well, influent or projected influent, and effluent or projected effluent including the data suggested in Table 7. Unless requested, no laboratory reports have been included in this NOI.

Table 7. Suggested format for listing pollutants

	Pollutant 1	Pollutant 2	Pollutant 3	Add Columns and/or tables as needed
Number of Samples				
Maximum Concentration				

	Pollutant 1	Pollutant 2	Pollutant 3	Add Columns and/or tables as needed
Average Concentration				
Median Concentration				
Minimum Concentration				
Number of Non-Detects				
Lowest Reporting Limit				
Highest Reporting Limit				
Number of Samples with Lowest Reporting Limit				
Sample Date 1, Method Number				
Sample Date 2, Method Number				
Sample Date 3, Method Number				
Add rows as needed				

12. Any other relevant information about this project that may be necessary to evaluate the eligibility of this discharge under the Order is included in Attachment 6.

13. Add the following five attachments to this form:

    Attachment 1: Flow Schematics
    Attachment 2: Engineering Certification Report
    Attachment 3: Aerial Map (highlight the discharge path)
    Attachment 4: Check for $5,688
    Attachment 5: Tables listing Pollutants of Concern at this Site
    Attachment 6: Other Information (If applicable)

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 - INSTRUCTIONS FOR COMPLETING NOTICE OF INTENT (NOI) FORM

to Receive Authorization to Discharge Treated Groundwater under the Requirements of
ORDER NO. R2-2006-XXXX
NPDES PERMIT NO. CAG912002 (FUEL)

Facility Address: Please include Zip code and County for the Groundwater Treatment Facility Address.

Table 1. Please mark only one as is applicable:

	Table 1.	Explanation
1	Notice of Intent for An Existing Discharge authorized under this Order (For Permit Reissuance)	If you need to discharge after November 13, 2011, you need to submit this NOI no later than May 13, 2011.
2	Notice of Intent for a previously regulated Discharge	Provide the Order and NPDES permit numbers if this Discharge is currently or was previously regulated under this general permit, another general permit, or regulated under an individual NPDES permit.
3	Notice of Intent for a New Discharge	If this Discharge was never authorized under any of the Regional Water Board permits.
4	Modified Notice of Intent (if modified, submit NOI Form all sections completed and indicate which item(s) modified)	If this Discharge is currently regulated under this Order and you need to modify one or more items in the NOI.

Discharger's Certification

This form must be signed by an appropriate corporate officer, general partner, principal executive officer, or ranking elected official. In no case should the consultant sign the forms.

Administrative Information

Complete Table 2. Facility Information

1	Discharger's Name	
2	Name of Facility	Please use the Facility address as the name of the Facility and then add the name that Discharger prefers. For example: 123 Main Street, San Jose Oilco No. 987
3	Facility Address	
4	Facility Contact, Title, and Phone	
5	Authorized Person to Sign & Submit Reports	
6	Mailing Address	
7	Billing Address	
8	Type of site or project.	For example: Active Service Station, Closed Service Station, Short Term Dewatering Project, Long Term Dewatering Project, or other (please explain if "Other")
9	Watershed	If you do not know, you may check web sites such as "San Francisco Bay Area Creek & Watershed Finder", at

		http://www.museumca.org/creeks/resc.html.
10	Receiving Water	
11	Receiving Water Type	<enclosed bay, estuary, inland surface water, or Sacramento-San Joaquin Delta>

Condition 1. Unless you have specific information to select otherwise, select discharge to source of drinking water because most discharges of treated groundwater regulated under this Order are to storm drain systems that discharge to creeks and streams. Many of these creeks and streams are dry during the summer months. Therefore, for many months of the year, these discharges may represent all or nearly all of the flow in some portions of the receiving creeks or streams. These discharges therefore have the potential to recharge groundwaters that are normally protected as drinking waters. There are surface waters in the Region that serve beneficial uses such as groundwater recharge and municipal and domestic, industrial process and service, or agricultural water supplies. A few examples are most creeks in Santa Clara County, Napa River, Alameda Creek, San Mateo Creek, and San Lorenzo Creek.

Condition 2. The treatment system shall be fully described. The reuse of the effluent shall be in compliance with Specification IV.C of the Order.

Complete Table 2. Treatment System Description

	Unit	No.	Size, or capacity (e.g. pounds of GAC), Further Description (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	Advanced Treatment Unit(s) for Oxygenates such Tertiary Butyl Alcohol, Ethanol, and Methanol		
11	Other Advanced Treatment Unit(s)		
12	Liquid-phase Granular Activated Carbon (GAC) vessel(s) in series		
13	GAC vessel(s) in parallel		
14	Effluent reuse Infrastructure (If so, provide additional detail such as producer and user name and address, rate, volume, and frequency of reuse)		

Condition 3. This permit requires a professional engineer (PE) certified in the State of California to oversee the design, and proper operation and maintenance of the treatment system. If you reported any invalid monitoring data for the sample(s) taken on or after

January 1, 2006, the name, phone number, and email of the 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 error shall be documented in this Form.

Condition 4. A PE shall certify the adequacy of each component of the proposed treatment system. Other relevant information such as the reason(s) if any chemical additive or additives are needed to be used in the treatment system, method of application and disposal shall also be fully explained in the PE certification. Please note that the design engineer has the authority to reject usage of any chemical which has an inadequate MSDS or may cause an adverse effect on most sensitive residents of the receiving water.

Condition 5. If you have a batch discharge, provide the frequency, volume, and maximum flow rate.

Condition 6. Some of this information may be obtained from the municipalities. The discharge path shall be highlighted from the facility to the final receiving water.

Condition 7. All documents needed by your technicians to properly operate or maintain the treatment facility shall be at or near the facility.

Condition 8. Late Self-Monitoring Reports are considered in violation of the permit's requirements and are subject to mandatory minimum penalty if more than 30 days late.

Condition 9. Prepare a contact List.

Condition 10. No application will be considered complete without the applicable fee.

Condition 11. No application will be considered complete without complete delineation of pollutants of concern. The NOI shall include analytical results, including the date the samples were taken, for influent (except for mercury, this may be a weighted average of individual extraction wells for non-operating facilities) and effluent (not required for proposed discharges with no prior operating experience). In case of detecting mercury in any well in excess of 0.025 microgram per liter, the Discharger shall install a dedicated treatment unit for that well and check with Regional Water Board staff if an application for an individual NPDES permit shall be submitted. Table below lists the suggested analytical methods.

Follow the instruction in Table 3.

Analyses	Method of Analysis (See Note 1)
MTBE, Benzene, Toluene, Ethylbenzene, and Total Xylenes	USEPA Method 8020

Analyses	Method of Analysis (See Note 1)
Petroleum Hydrocarbons	Modified USEPA Method 8015
Volatile Organic Compounds	USEPA Method 8260
Polynuclear Aromatic Hydrocarbon	USEPA Method 610
Semi-Volatile Organic Compounds(See Note 2)	USEPA Method 8270
Ethylene Dibromide (See Note 2)	USEPA Method 504
Perchlorate (See Note 3)	USEPA Method 314
Mercury	USEPA Method 1631
Cadmium, Silver, Antimony, Beryllium, Chromium, Copper, Lead, Nickel, Selenium, Thallium, Zinc, Arsenic, and Cyanide.	USEPA Methods (various)
Others (if there is evidence of a release or being present)	USEPA Methods (various)
Notes: 1: All chemical analyses shall be performed according to the appropriate USEPA Methods by a certified laboratory and copies of laboratory analytical reports must be submitted (equivalent methods are accepted). 2: Not required if no evidence of this release. 3: Not required if no evidence of solid rocket fuel release or other Perchlorate use.	

Condition 12. Other information such as vicinity to a highly polluted site shall be provided. For example, if this is a dewatering project of a site adjacent to a site with documented groundwater pollution, then the information about how the engineer in charge of this dewatering project will manage the risk of moving the contaminated groundwater plume from that site into the treatment facility.

Condition 13. All attachments are mandatory.

Please upload the completed NOI Form and all attachments on Geo-Tracker and send a confirmation email with a PDF copy of the package attached to the email to the responsible staff member at the Regional Water Board office. At this time, the responsible staff member is Lourdes Gonzales and her email address is lgonzales@waterboards.ca.gov

New Dischargers may obtain access rights to Geo-Tracker from:
http://www.waterboards.ca.gov/ust/cleanup/electronic_reporting/index.html

Note: The Regional Water Board may modify this instruction at any time as needed.

ATTACHMENT D –STANDARD PROVISIONS

Table of Contents

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 uncontaminated 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.

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 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 five (5) 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); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 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 and State 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 uploaded on GeoTracker 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).

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.

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

Table of Contents

List of Tables

ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

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

I. GENERAL MONITORING PROVISIONS

A. 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 Water Board's Resolution No. 73-16 and the Environmental Protection Agency's Discharge Monitoring Report (Form 3320-1).

B. 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 the Regional Water 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.

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

D. Written reports, strip charts, calibration and maintenance records, and other records shall be maintained by the Discharger and accessible 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 Water Board or Regional Administrator of the U.S. Environmental Protection Agency, Region IX. Such records shall show the following for **each** sample:

1. Identity of sampling and observation stations by number.
2. Date and time of sampling and/or observations.
3. Method of sampling.
4. Full report for rainbow trout bioassay test (96-hour static bioassay).
5. Date and time that analyses are started and completed, and name of personnel performing the analyses.
6. Complete procedure used, including method of preserving sample and identity and volumes of reagents used. A reference to a specific section of

Standard Methods (SM) or the standard USEPA method number is satisfactory.

7. Calculations of results.
8. Results of analyses and/or observations.

E. Monthly discharge flow volume shall be recorded, as well as totalized quarterly and annual flow.

F. A tabulation reflecting bypassing and accidental waste spills shall be maintained.

G. A copy of this Order, a complete copy of the Notice of Intent filed, documentation of the authorization to discharge received from the Regional Water Board, a full copy of the 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. These documents help the Dischargers' staff responsible for compliance assurance activities and shall be made available to Regional Water Board staff during inspections. The Dischargers' staff responsible for compliance assurance activities shall inspect the Facility as frequent as required by the O&M Manual. No O&M Manual shall be submitted to the Regional Water Board office, unless requested.

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	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.
	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 reused reclaimed water is the same as effluent or reclamation is in place.

III. INFLUENT MONITORING REQUIREMENTS

The Discharger shall perform sampling and analyses according to the schedule in Table E-2 and no Influent samples shall include any treatment system recirculation.

IV. EFFLUENT MONITORING REQUIREMENTS

The Discharger shall perform sampling and analyses according to the schedule in Table E-2 in accordance with the following conditions:

A. Samples of effluent shall be collected on days coincident with influent sampling.

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.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

The Discharger shall perform sampling and analyses according to the schedule in Table E-2 in accordance with the following conditions:

A. Fish bioassay samples shall be collected on days coincident with effluent sampling.
B. Bioassay tests should be performed on effluent samples after chlorination-dechlorination.
C. Total ammonia nitrogen of the effluent shall be analyzed and un-ionized ammonia calculated whenever fish bioassay test results fail to meet the specified percent survival.
D. 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.

TABLE E.2 - Schedule for Sampling, Measurements, and Analysis

Sampling Station	Minimum Sampling Frequency for Influent INF-001	Minimum Sampling Frequency for Effluent EFF-001 or Effluent for Reuse REU-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D	Required Analytical Test Method Number, Technique, SM, USEPA Report Number, 40 CFR Part (or equivalent)
Unit is "µg/L" and Type of Sample is "Grab" unless noted otherwise	**Grab**	**Grab**	**Grab**	
Fish Toxicity, 96-hr (% survival)		Q/Y		EPA-821-R-02-012 Test, Method

Sampling Station	Minimum Sampling Frequency for Influent INF-001	Minimum Sampling Frequency for Effluent EFF-001 or Effluent for Reuse REU-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D	Required Analytical Test Method Number, Technique, SM, USEPA Report Number, 40 CFR Part (or equivalent)
Unit is "µg/L" and Type of Sample is "Grab" unless noted otherwise	**Grab**	**Grab**	**Grab**	
				2019.0
All Applicable Standard Observations (No Unit)		M	V	
Benzene	D/Q	D/M	V	8020
Toluene	D/Q	D/M	V	8020
Ethyl benzene	D/Q	D/M	V	8020
Total Xylenes	D/Q	D/M	V	8020
Methyl Tertiary Butyl Ether (MTBE)	D/Q	D/M	V	8020
Total Petroleum Hydrocarbons as Gasoline	D/Q	D/M	V	8015 Modified
Total Petroleum Hydrocarbons as Diesel	D/Q	D/M	V	8015 Modified
Total Petroleum Hydrocarbons other than Gasoline and Diesel (required if Petroleum Hydrocarbons other than Gasoline and Diesel present in the soil and groundwater)	D/Q	D/M	V	8015 Modified
Polynuclear Aromatic Hydrocarbons (PAHs)	Q	Q	V	8310
Ethylene Dibromide (EDB)	Y	Y	V	504
Volatile Organic Compounds	Y	Y	V	8260b
Tertiary Amyl Methyl Ether (TAME)	Y	Q See Note1		8260b
Dilsopropyl Ether (DIPE)	Y	Q See Note1		8260b
Ethyl Tertiary Butyl Ether (ETBE)	Y	Q See Note1		8260b
Tertiary Butyl Alcohol (TBA)	Y	Q See Note1		8260b
Ethanol	Y	Q See Note1		8260b
Methanol	Y	Q See Note1		8260b
Semi Volatile Organic Compounds except PAHs	Y	Y		8270c
Antimony Total (See Note 2)	D/Y	D/Y		204.2
Arsenic Total (See Note 2)	D/Y	D/Y		206.3
Beryllium Total (See Note 2)	D/Y	D/Y		GFAA or ICPMS
Cadmium Total (See Note 2)	D/Y	D/Y		GFAA or ICPMS
Chromium Hexavalent and Total Chromium (See Note 2)	D/Y	D/Y		Standard Method (SM) 3500
Copper Total (See Note 2)	D/Y	D/Y		200.9
Cyanide Total (See Note 2)	D/Y	D/Y		SM 4500-CN⁻ C or

Sampling Station	Minimum Sampling Frequency for Influent INF-001	Minimum Sampling Frequency for Effluent EFF-001 or Effluent for Reuse REU-001	Minimum Sampling Frequency for Receiving Surface Water RSW-001U and RSW-001D	Required Analytical Test Method Number, Technique, SM, USEPA Report Number, 40 CFR Part (or equivalent)
Unit is "µg/L" and Type of Sample is "Grab" unless noted otherwise	**Grab**	**Grab**	**Grab**	
				I
Lead Total (See Note 2)	D/Y	D/Y		200.9
Mercury Total (See Note 2)	D/Y	D/Y		1631
Nickel Total (See Note 2)	D/Y	D/Y		249.2
Selenium Total (See Note 2)	D/Y	D/Y		SM 3114B or C
Silver Total (See Note 2)	D/Y	D/Y		272.2
Thallium Total (See Note 2)	D/Y	D/Y		279.2
Zinc Total (See Note 2)	D/Y	D/Y		200 or 289
Flow Rate (gpm & gpd)		Continuous		
Turbidity		D/Q/Y		
pH	D/M/Q/Y	D/M/Q/Y	V	
Dissolved Oxygen (mg/L)			V	
Total Dissolved Solids (mg/L) (construction and dewatering projects)		D/M		
Temperature (°C)	D	D/M/Q/Y		
Electrical Conductivity	D	D/M/Q/Y		
Hardness (mg/L as $CaCO_3$)			T	SM
Salinity (parts per thousand)			T	SM

Notes for Table E2-

Note 1: If not detected at 5 ug/l, annual sampling is sufficient

Note 2: Inorganic compounds samples shall be analyzed for total (unfiltered) constituents with the reporting levels not exceeding the following: 0.002 ug/l for Mercury; 0.25 ug/l for Cadmium and Silver; 1 ug/l for Nickel, Thallium, and Zinc; 2.0 ug/l for Arsenic and Selenium; 1 ug/l for Cyanide; and 0.5 ug/l for Antimony, Beryllium, Total Chromium, Copper, and Lead (SIP Appendix 4 Minimum Levels http://www.waterboards.ca.gov/iswp/docs/final.pdf). If the Discharger exceeds the trigger for mercury of 0.025, the Discharger may consider re-sampling and re-analyzing another sample using ultra-clean techniques as described in USEPA methods 1669 and 1631 to eliminate the possibility of artifactual contamination of the sample.

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.

Legends

D Once during the first and fifth day of start up.
M Once each month.
Y Once during the first week of start up; annually thereafter.
D/M Once during the first and fifth day of start up; monthly thereafter.
D/Q Once during the first and fifth day of start up; quarterly thereafter.
D/Y Once during the first and fifth day of start up; annually thereafter.
Q/Y Quarterly for first year of operation, annually thereafter.
D/Q/Y Once during the first and fifth day of start up; quarterly for first year of operation, annually thereafter.
D/M/Q/Y Once during the first and fifth day of start up; monthly for first year of operation, quarterly for the second year, and annually thereafter. In case of pH analysis, this monitoring requirement is only for facilities with a treatment process that would cause no pH variances in the effluent. If any chemical used in the treatment process may cause pH variances in the effluent, the

frequency of pH monitoring in the effluent shall be increased to twice per week for the first month of operation and weekly thereafter if pH monitoring data for the first month of operation demonstrate compliance with pH effluent limits.
V Sampling should be performed within 24 hours after an effluent limit violation is confirmed in E-001.
T Sampling should be performed when Cadmium, Chromium (total), Copper, Lead, Nickel, Silver, or Zinc triggers are exceeded.

VI. LAND DISCHARGE MONITORING REQUIREMENTS. (NOT APPLICABLE)

VII. RECLAMATION MONITORING REQUIREMENTS

The same as effluent and see section IX-E.

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER AND GROUNDWATER

The Discharger is required to perform sampling and analyses according to the schedule in Table E-2 in accordance with the following conditions:

A. Receiving Waters sampling should be performed within 24 hours after an effluent limit violation is confirmed in the effluent.

B. Receiving water 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 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.

IX. OTHER MONITORING REQUIREMENTS

A. Start Up Phase Monitoring. During the original start up for the treatment system, sampling of the effluent must occur on the first day and fifth day of operation.

1. 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 as authorized by the Executive Officer. 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.

2. 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 during the fifth day. 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 72 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 72 hours during the original start up (awaiting analyses results, etc.), the original start up procedures and sampling must be repeated.

B. **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.

C. **Standard Observations for Receiving 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. Evidence of beneficial water use: presence of waterfowl or wildlife, people fishing, and other recreational activities in the vicinity of the site.
5. Hydrographic condition, if relevant:
    a. Time and height of corrected high and low tides (corrected to nearest National Oceanic and Atmospheric Administration (also known as NOAA) 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 previous five days and on the day of observation.

E. **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.

F. Standard Observations for Groundwater Treatment 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 in Attachment D and in this document related to monitoring, reporting, and recordkeeping.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Dischargers to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site, and will also provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Dischargers shall upload an electronic copy of the SMR on GeoTracker (http://www.geotracker.swrcb.ca.gov).

2. The Dischargers shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Dischargers shall submit quarterly SMRs, uploaded on GeoTracker, no later than 45 days after end of each calendar quarter, including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

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

Table E.3 - Monitoring Periods and Reporting Schedule

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

Quarterly	**Closest of January 1, April 1, July 1, or October 1 following (or on) the last day of the start up date**	**January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31**	**See Note 1**
Semiannually	**Closest of January 1 or July 1 following (or on) the last day of the start up date**	**January 1 through June 30 July 1 through December 31**	**See Note 1**
Annually	**January 1 following (or on) the last day of the start up date**	**January 1 through December 31**	**See Note 1**
Note 1: A report on the start up phase shall be submitted to the Regional Water Board by uploading it on GeoTracker no more than fifteen (15) days after the end of the start up phase. Quarterly Self-Monitoring Reports shall also be submitted the Regional Water Board by uploading it on GeoTracker on a quarterly calendar basis, no later than forty five (45) days following the last day of the quarter. Annual Reports shall be uploaded on GeoTracker by February 15 of each year, 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.			

4. Reporting Protocols. 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 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.

5. The Discharger shall upload SMRs on GeoTracker in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the facility is operating in compliance with the effluent limitations.

   b. The Discharger shall attach a cover letter to the monitoring reports. The information contained in the cover letter shall clearly identify violations of the permit; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

   c. Monitoring reports 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
      Attn: NPDES Wastewater Division
      Fuel General NPDES NO. CAG912002

   d. The monitoring reports 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. The monitoring reports 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 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 ug/l; the sample results (ug/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 annual reports shall contain tabular summary of the monitoring data obtained during the previous year. In addition, the annual reports 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. The annual report shall document that the annual fee has been paid.
8. If, during any calendar quarter, a Discharger becomes aware that any monitoring data obtained for compliance with this Order are invalid, the Discharger shall submit a claim of invalid monitoring data, as uploaded on GeoTracker 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 Operation and Maintenance 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.

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 Provisions – 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. The Discharger shall upload

these reports on GeoTracker.

2. Start Up Notification Report: The Discharger shall notify the Executive Officer by uploading on GeoTracker the completed Form provided in Attachment G - Notice of Startup or Re-Startup Form. no later than 14 days before planned start up date.

3. Start-up Report: A report on the start up phase shall be uploaded on GeoTracker no more than fifteen days after the end of the start up phase. This report shall include a certification that a professional engineer certified in the State of California oversees the treatment system operation and maintenance activities including the start up work.

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 Water Board, at (510) 622-2300 on weekdays during office hours from 8 a.m. to 12 p.m. and 1 p.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 uploaded on GeoTracker, 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.

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 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 GeoTracker with a confirmation email to 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 and contained, 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, 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 Regional Water Board within five days of shut down and a written submission through GeoTracker 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 Regional Water Board at least 15 days before start up.

ATTACHMENT F – FACT SHEET

Table of Contents

List of Tables

ATTACHMENT F – FACT SHEET

This Order is intended to cover discharges of extracted and treated groundwater resulting from the cleanup of groundwater polluted by fuel leaks and other related wastes at service stations and similar sites.

This Fact Sheet includes the legal basis and technical rationale for the requirements of the Order. This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to the Dischargers.

In 1991, the Regional Water Board issued a National Pollutant Discharge Elimination System (NPDES) General Permit for allowing the discharge of extracted and treated groundwater resulting from the cleanup of groundwater polluted by fuel leaks and other related wastes at service stations and similar sites. The permit was reissued twice in 1996 and 2001.

The 2001 permit expired on September 19, 2006, and needs to be reissued because approximately 9,700 sites with underground fuel storage tanks within the San Francisco Bay Region are known to be leaking or have leaked in the past. Fuel is also discharged to groundwater from other sources (surface spills, pipeline breaks or leakages, etc.). Within the next five years, approximately 300 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, approximately 75 of these sites will require Waste Discharge Requirements from the Regional Water Board for discharge to surface water. These cleanups will exceed the capacity of available 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 numerous requests. The renewal of the fuel general NPDES permit will expedite the processing of requirements, enable the Regional Water Board to better utilize limited staff resources, and permit cleanups to begin promptly.

The following fuel-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). A fuel-cleanup discharger that combines extracted groundwater with stormwater before treatment is normally not eligible for coverage under this Order because amount of rainwater varies and may exceed the treatment system capacity.

I. PERMIT INFORMATION

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 Notice of Intent (NOI) Form, in the Attachment B, that each Discharger enrolled under this Order must initially complete and submit as part of the NOI.

Table F-1. Facility Information

WDID	A waste discharge identification number will be assigned to a facility when the Executive Officer issues the authorization to discharge
Discharger	Row 1 of Table 2 of NOI Form in Attachment B
Name of Facility	Row 2 of Table 2 of NOI Form in Attachment B
Facility Address	Row 3 of Table 2 of NOI Form in Attachment B
Facility Contact, Title and Phone	Row 4 of Table 2 of NOI Form in Attachment B
Authorized Person to Sign and Submit Reports	Row 5 of Table 2 of NOI Form in Attachment B
Mailing Address	Row 6 of Table 2 of NOI Form in Attachment B
Billing Address	Row 7 of Table 2 of NOI Form in Attachment B
Type of Facility	Row 8 of Table 2 of NOI Form in Attachment B
Major or Minor Facility	Minor
Threat to Water Quality	Category 2 (based on three categories 1, 2, and 3)
Complexity	Category B (based on three categories A, B, and C)
Pretreatment Program	Not Applicable
Reclamation Requirements	Producer (See Row 14 of Table 4 of NOI in Attachment B)
Facility Permitted Flow	Condition 4 of NOI Form in Attachment B (in gallons per minute (gpm))
Facility Design Flow	Condition 4 of NOI Form in the Attachment B (in gpm)
Watershed	Row 9 of Table 2 of NOI Form in the Attachment B
Receiving Water	Row 10 of Table 2 of NOI Form in the Attachment B
Receiving Water Type	Row 11 of Table 2 of NOI Form in the Attachment B

A. Site Owners or Operators who will apply for an authorization to discharge under this Order and who may be 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 currently regulated under the previous general NPDES permit, Order No. 01-100, discharge wastewater to different receiving waters of the United States, mainly in Santa Clara County. Order No. 01-100, which was adopted on September 19, 2001, expired on September 19, 2006. The terms and conditions of the previous Order were automatically continued in effect until new Waste Discharge Requirements and NPDES permit are adopted pursuant to this Order. During the life of the previous Order, 114 facilities were authorized to discharge treated groundwater to the receiving water documented in the NOI submitted for each discharge.

C. As of June 2006, 37 Dischargers filed a report of waste discharge by submitting an NOI application for renewal of their discharge authorization under this General Waste Discharge Requirements (GWDRs), NPDES permit. At least 38 more NOIs may be submitted during the next five years. 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 the Dischargers to submit monitoring data per Attachment E. A few Dischargers authorized under this Order may be required to apply for an individual NPDES permit if monitoring data indicate significant contamination by metals, pesticides, or other conservative pollutants.

II. FACILITY DESCRIPTION

The regulated facilities under this Order are normally groundwater treatment facilities located at active or closed service stations or construction sites with the need for short or long term dewatering. These groundwater treatment facilities are in operation to extract and treat groundwater polluted mainly by fuel leaks.

A. Description of Wastewater Treatment

Dischargers authorized under this Order typically use aeration and/or granular activated carbon (GAC) systems to treat their pollutants of concern. The most common pollutants contained in the influent of these treatment systems are benzene, ethylbenzene, toluene, total xylenes, Methyl Tertiary Butyl Ether (MTBE), and other petroleum hydrocarbons collectively named as total petroleum hydrocarbons (TPH). Less commonly inorganic compounds may also be present in the influent and effluent. Other volatile or semi volatile organic compounds may also be present in the influent of a subset of facilities regulated under this permit. Approximately 75% of the 37 facilities that applied for permit re-issuance designed their treatment facilities for a flow rate less than 10 gpm.

Except for some inorganic compounds and oxygenates other than MTBE, the concentrations of organic pollutants in the effluents of the discharges are usually below detectable levels. The reported detection limit for benzene, ethylbenzene, toluene, total xylenes, and most volatile organic compounds (VOCs) is 0.5 microgram per liter (ug/l); for MTBE the reported detection limit ranges from 0.5 to 5.0 ug/l; for TPH the reported detection limit is mostly 50.0 ug/l; and the reported detection limits for semi volatile organic compounds are mostly 5.0 or 10.0 ug/l.

B. Discharge Points and Receiving Waters

Condition No. 6 of the NOI Form (Attachment B) requires the Discharger to provide discharge location data and a map with the discharge path highlighted.

C. Summary of Existing Requirements

With two exceptions, the effluent limitations contained in the previous Order have been continued into this Order as summarized in Table F-4. These exceptions are: MTBE reduced from 13 ug/l to 5 ug/l, and Vinyl Chloride reduced from 5 ug/l to 1 ug/l, for Discharge to Other Surface Water Areas.

D. Compliance Summary

In order to collect compliance history information, the Regional Water Board staff reviewed the 37 permit renewal applications submitted, and the annual reports from those same 37 facilities, from the previous permit period, 2001-2006. Except for Total Petroleum Hydrocarbon as diesel (TPHd), the Dischargers have reported almost a 100% compliance rate with the effluent limitations in the permit. In the case of TPHd, the Dischargers reported 15 TPHd exceedances in the cover letter to the annual reports. These same Dischargers reported 52 TPHd exceedances in the NOI applications submitted in March 2006. The Dischargers reported 46 of those 52 TPHd exceedances (about 90%) were due to false positives - in other words, sampling and reporting errors of various nature. A number of oil companies also reported some of the TPHd exceedances were due to false positive results caused by sampling errors and problems with EPA method 8015 for diesel. These false positive concerns were summarized in an August 18, 2003, report titled "Diesel False Positives and Related Regulatory Policy for NPDES Effluent Dischargers," prepared by Tim Utterback and Richard Weiss for Wetern States Petroleum Association (WSPA). This report summarizes the WSPA members' concerns about the potential for enforcement actions based on invalid monitoring data, and finds it beneficial to the Regional Water Board and Dischargers to have a standardized procedure to prevent, identify, and report diesel false positives. This Order provides the Dischargers with requirements to prevent, identify, and report diesel false positives as explained in the following sections of the Order:

1. Section X.B.5.e.3 of Attachment E requires the reporting of quality assurance/quality control activities data such as field, travel, and laboratory blanks for each analyzed constituent or group of constituents,

2. Table E.2 of Attachment E requires the Dischargers to monitor TPH other than gasoline and diesel separate from TPHd which will minimize TPHd false positives,
3. Section X.B.5.e.8 of Attachment E requires the Dischargers to report every discovered invalid monitoring data, including TPHd false positives,
4. Section X.B.5.e.8 of Attachment E provides the Dischargers with additonal time, 45 days instead of 15 days in the 2001 permit, to identify, verify, and report any monitoring errors, and
5. Table 5 of Attachment B and Section X.B.5.e.8 of Attachment E require the Dischargers to assign a specific person to investigate the cause(s) of errors and implement corrective actions.

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 (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to 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 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:

1. result from similar operations (all involve extraction, treatment, and discharge of groundwater),
2. are the same types of waste (all are groundwater containing petroleum hydrocarbons and other related wastes due to leaks and spills from service stations and similar sites),

3. 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),
4. require similar monitoring, and
5. are more appropriately regulated under a general permit rather than individual permits.

This Order shall become effective about two months after the date of its adoption provided the Regional Administrator, USEPA, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

B. **California Environmental Quality Act (CEQA).** Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

C. State and Federal Regulations, Policies, and Plans

a. **Water Quality Control Plans.**
The Regional Water Board adopted a Water Quality Control Plan for the San Francisco Bay Basin (hereinafter Basin Plan) on June 21, 1995, and amended this plan on January 2, 2004, and November 16, 2005. The 2005 amendment will be final after approval from the State Water Board and Office of Administrative Law. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. The Basin Plan (Page 2-5) 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. 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.

All beneficial uses listed in the Order are from Basin Plan, Tables 2-1 through 2-7 (pages 2-11, 2-13, 2-15, 2-17, 2-19, 2-21, and 2-23, respectively). The tributary rule is explained on Page 2-5. The beneficial uses for the groundwater basins are listed in Table 2-9 (page 2-28). Requirements of this Order implement the Basin Plan.

b. **Thermal Plan.**
The Regional Water Board has included this Plan in Page 3-4 of the Basin Plan.

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

d. 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.

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

f. **Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16. Discharges regulated by this Order should not lower water quality if the terms and conditions of this Order are met. Therefore the permitted discharges are consistent with the antidegradation provision of 40 CFR Section 131.12 and State Water Board Resolution No. 68-16.

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

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

On June 6, 2003, the USEPA approved a revised list of impaired water bodies prepared by the State (hereinafter referred to as the 303(d) list). 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 the Code of Federal Regulations: section 122.44(a) requires that permits include applicable technology-based limitations and standards; and section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water. Where reasonable

potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) 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 section 122.44(d)(1)(vi).

The proposed effluent limitations are required to protect Beneficial Uses of the surface waters and ground waters of the San Francisco Bay Region. The Clean Water Act (CWA) requires technology-based effluent limits (Section 301) unless more stringent limits are required in order to achieve water quality objectives. Section 301 of the CWA also requires that technology-based effluent limits include the application of best available technology economically achievable (BAT) for the pollutants being discharged. Technology based effluent limits were developed for the suite of volatile organic compounds (VOCs) to be regulated, and then water quality based effluent limits were developed for those VOCs whose lowest value from the CTR and Basin Plan was less than the respective technology based effluent limit.

A. Discharge Prohibitions

The proposed prohibitions are required to protect beneficial uses of the surface waters and ground waters of the San Francisco Bay Region.
Prohibition III.A, no unauthorized discharge of extracted and treated groundwater, is the same as in the previous permit and is based on CWC Section 13260, which requires filing of a report of waste discharge (ROWD) before discharges can occur. The Dischargers submitted a ROWD for the discharges described in this Order; therefore discharges not described in this Order are prohibited.
Prohibition III.B, no discharge other than the one approved by the Executive Officer which do not adversely affect the environment and comply with the requirements of this Order, is based on the same rationale documented for Prohibition A.1.
Prohibition III.C, no discharge of extracted and treated groundwater in excess of the authorized flow rate, is based on the same rationale documented for Prohibition A.1. The Dischargers submitted a ROWD for the discharges which included a treatment facility designed for a specific maximum flow rate by a professional engineer certified in the State of California, therefore flow rates exceeding the designed/authorized flow rates are prohibited.
Prohibition III.D, no scouring or erosion due to discharge of extracted and treated groundwater, is based on Basin Plan (page 4-40) goal of reducing and preventing (human-caused) erosion.
Prohibition III.E, no pollution, contamination, or nuisance, is based on the Basin Plan (page 2-1).

Prohibition III.F, no bypass or overflow of untreated or partially treated polluted groundwater, is based on 40 CFR 122.41(m)(ii)(4).

B. Technology-Based Effluent Limitations

1. Scope and Authority

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

- Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and 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 industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

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

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

2. Applicable Technology-Based Effluent Limitations

BPJ was used in developing technology-based effluent limits 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 a NPDES permit. The authority for BPJ is contained in Section 402(a)(1) of the CWA.

In the treatment systems regulated by this permit, organic compounds are typically removed from groundwater through either aeration processes or through adsorption processes (e.g. granular activated carbon). When properly designed and operated, most aeration and/or granular activated carbon (GAC) systems can lower the concentration of petroleum pollutants and VOCs to below detection limits. Limits established in the tentative order for the petroleum pollutants and VOCs can be met if GAC/air stripper treatment systems are properly operated.

In 1986, U.S. EPA Region 9 in a document titled "NPDES Permit Limitations for Discharge of Contaminated Groundwater: Guidance Document" (USEPA 1986) concluded that the cost of attaining effluent levels to non-detect (5 ug/l detection levels except 1 ug/l for Vinyl Chloride) for all organic compounds that are commonly detected in contaminated groundwater is considered economically achievable. This permit was originally issued in 1991. The suite of pollutants to be regulated with effluent limits in this permit was selected by reviewing USEPA 1986 and the 1989 State of California document titled "Leaking Underground Fuel Tank Field Manual" and using the compounds called out by those documents as most likely to be detected at a fuel or groundwater cleanup site and for which a Maximum Contaminant Level (MCL) has been promulgated. In addition, the Regional Water Board staff, using BPJ, added Trichlorotrifluoroethane (Freon 113) in a previous permit reissuance, and Methyl Tertiary Butyl Ether (MTBE) in the 2001 permit reissuance.

MTBE has a secondary MCL of 5 ug/l. The discharges regulated under this permit have the potential to recharge groundwaters designated as drinking waters. The Basin Plan requires these groundwaters to be protected to both the primary and secondary MCLs. Therefore, it is appropriate to limit discharges that may recharge these groundwaters to secondary MCL levels. In 2001, the previous permit was re-issued with two MTBE effluent limits: one 5 ug/l limit for discharging to drinking water areas and another 13 ug/l limit (based on MTBE primary MCL) for discharging to other surface water areas. Data collected over 18 months, ending in 2001, showed that out of 443 effluent samples analyzed for MTBE during that period, 432 were "non-detect" and one sample detected MTBE above 5 ug/l, suggesting that a limit of 5 ug/L would be reasonably achievable. Additionally, the MTBE monitoring data provided by the Dischargers during the 2001-2006 period, confirm the limit of 5 ug/l for MTBE is

technologically feasible and economically achievable. Most Dischargers authorized under this permit were already required to comply with the 5 ug/l limit and almost all MTBE monitoring data confirm the Dischargers' ability to comply with the 5 ug/l technology-based limit. Therefore, consistent with the USEPA 1986 guidance, the maximum daily effluent limitation for MTBE for discharge to other surface water areas is changed from 13 ug/l to 5 ug/l.

Similarly, consistent with the USEPA 1986 guidance, the maximum daily effluent limitation for Vinyl Chloride for discharge to other surface water areas is corrected from 5 ug/l to 1 ug/l.

Even though information exists to show that the reporting limit and removal technology for many of the effluent constituents is now lower (0.5 ug/l), USEPA Region 9 has not updated its original guidance to adjust limits downward. The Regional Water Board staff's BPJ, at this time, is to remain consistent with EPA's original limits. The technology-based effluent limits in this permit are consistent with, or more stringent than, the USEPA 1986 guidance.

This Order has also effluent limits for Total Petroleum Hydrocarbons (TPH) as gasoline or as diesel. USEPA 1986 guidance has no mention of TPH as gasoline or as diesel. The expired permit had a limit of 50.0 ug/l for TPH and a monitoring requirement for TPH as Gasoline and Diesel. TPH does not have an MCL and typically has a reporting limit of 50 ug/l.

In 1991, the most significant group of pollutants in the groundwater cleanup facilities regulated under this permit were the pollutants associated with gasoline and diesel fuels. However, since 2001, Dischargers have submitted groundwater treatment facilities influent and effluent monitoring data that indicate petroleum hydrocarbons other than gasoline and diesel fuel have contaminated groundwater. For example, the West Base Realignment and Closure Program Management Office of the Department of Navy (Navy) reported detected levels of TPH Bunker-C in the influent and non-detect TPH Bunker-C monitoring data with a reporting level as high as 300 ug/l in the effluent.

In this case, the Regional Water Board staff do not have sufficient information to require a reporting limit of 50 ug/l for TPH Bunker C. In addition, even if a reporting limit of 50 ug/l is achieved, the Navy may need additional time to improve its groundwater treatment system to remove TPH Bunker-C to a non-detect level of 50 ug/l.

In general, the Regional Water Board staff need to gather information regarding the detection and treatment limitations for those TPH components other than Gasoline and Diesel. For this reason, instead of setting a new limit, a trigger (called TPH other than Gasoline and Diesel) and a monitoring requirement has been added in the permit. This trigger and monitoring requirement would allow Dischargers such as the Navy to continue their groundwater cleanup while improving their reporting levels to 50 ug/l and/or upgrading their treatment facility to remove TPH other than Gasoline and Diesel category to a 50 ug/l non-detect level. By the next permit reissuance in 2011, the Regional Water Board staff should have a better understanding of the range of constituents included in this new TPH other than Gasoline and Diesel category and whether a new effluent limit would be appropriate at that time.

Table F-2 shows that the technology based effluent limits for discharge to drinking water areas were derived by picking the lowest limit from the State promulgated MCL, Federal promulgated MCL, and USEPA 1986 guidance for each of the listed compounds. The last column of Table F-2 shows that the technology based effluent limits for discharge to other surface water areas are the same as USEPA 1986 BAT.

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

No.	Compound	SMCL ug/L	FMCL ug/L	USEPA 1986 BAT ug/L	Technology-based Effluent Limitations for Discharge to Drinking Water Areas ug/L	Technology-based Effluent Limitations For Discharge to Other Surface Water Areas ug/L
1	Benzene	1	5	5	1	5
2	Carbon Tetrachloride	0.5	5	5	0.5	5
3	Chloroform	80	80	5	5	5
4	1,1-Dichloroethane	5	-	5	5	5
5	1,2-Dichloroethane	0.5	5	5	0.5	5
6	1,1-Dichloroethylene	6	7	5	5	5
7	Ethylbenzene	300	700	5	5	5
8	Methylene Chloride (Dichloromethane)	5	5	5	5	5
9	Tetrachloroethylene	5	5	5	5	5
10	Toluene	150	1000	5	5	5
11	Cis 1,2-Dichloroethylene	6	70	5	5	5
12	Trans 1,2-Dichloroethylene	10	100	5	5	5
13	1,1,1-Trichloroethane	200	200	5	5	5
14	1,1,2-Trichloroethane	5	5	5	5	5
15	Trichloroethylene	5	5	5	5	5
16	Vinyl Chloride	0.5	2	1	0.5	1
17	Total Xylenes	1750	10000	5	5	5
18	Methyl Tertiary Butyl Ether (MTBE)	5	-	5	5	5
19	Total Petroleum Hydrocarbons (TPH) as Gasoline or as Diesel	-	-	-	50 (proposed)	50 (proposed)
20	Ethylene Dibromide (1,2-Dibromoethane)	0.05	0.05	5	0.05	5
21	Trichlorotrifluoroethane	1200	-	5	5	5

LEGEND: FMCL - Federal Maximum Contaminant Level and MCL - California Maximum Contaminant Level

Effluent Limitations A.2 for pH is based on Table 4-2 (Page 4-69) of the Basin Plan.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

As specified in section 122.44(d)(1)(i), permits are required to include WQBELs for pollutants (including toxicity) that are or may be discharged at levels that cause, have reasonable potential to cause, or contribute to an in-stream excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

If any extracted and treated groundwater receive less than proper treatment, the Benzene, Carbon Tetrachloride, Chloroform, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethylene, Ethylbenzene, Methylene Chloride (Dichloromethane), Tetrachloroethylene, Toluene, Cis 1,2-Dichloroethylene, Trans 1,2-Dichloroethylene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, Total Xylenes, Methyl Tertiary Butyl Ether (MtBE), Total Petroleum Hydrocarbons, Ethylene Dibromide (1,2-Dibromoethane), and/or Trichloro-trifluoroethane concentration in the effluent of those discharges do cause, have a reasonable potential to cause, or contribute to an exceedance of any applicable criterion established by the USEPA pursuant to CWA Section 303.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

The water quality criteria applicable to the discharge(s) regulated under the Order are based on protecting the beneficial uses described in Section III of the Order. The WQOs/WQC applicable to the receiving water bodies of these discharges are from the Basin Plan, CTR, and NTR.

(1) 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 water, and lead, mercury, nickel, silver, zinc, and total polynuclear aromatic hydrocarbons (PAHs) in salt water. The narrative toxicity objective states in part "[a]ll 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 in part "[c]ontrollable 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.

(2) 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 inland surface waters and enclosed bays and estuaries such as San Francisco Bay, except where the Basin Plan's Tables 3-3 and 3-4 specify numeric objectives for certain of these priority toxic pollutants. The Basin Plan's numeric objectives apply over the CTR (except in the South Bay south of the Dumbarton Bridge).

(3) The NTR established numeric aquatic life criteria for selenium, numeric aquatic life and human health criteria for cyanide, and numeric human health criteria for 34 toxic organic pollutants for waters of San Francisco Bay upstream to, and including, Suisun Bay and the Sacramento-San Joaquin Delta. This includes the receiving water for this Discharger.

3. Determining the Need for WQBELs

The CWA requires water quality based effluent limits if technology based effluent limits are not sufficiently stringent to meet water quality objectives. In the suite of VOCs regulated by the Order, several VOCs have water quality criteria (WQC) in the CTR that are below the respective technology based effluent limit. The effluent limit for those VOCs is set to be the CTR WQC as shown in Table F-3. A blank cell in Table F-3 denotes that no California Toxics Rule criterion is available for that pollutant.

4. WQBEL Calculations

No dilution credit is given in establishing effluent limits in this permit because all discharges of treated groundwater regulated under this Order are to storm drain systems that discharge to rivers, creeks, and streams. Many of these creeks and streams are dry during the summer months. Therefore, for many months of the year, these discharges may represent all or nearly all of the flow in some portions of the receiving creeks or streams. These discharges therefore also have the potential to recharge groundwaters protected as drinking waters.

In explanation of the procedure for WQBEL calculations: if the detection limit for the VOC is greater than the CTR WQC then the effluent limit is set at the CTR WQC. Pursuant to SIP 2.4.5, the Regional Water Board will deem a discharge out of compliance if a sample result is above the reporting level. There should be no significant adverse impact on water quality from those VOCs whose detection limit is above the CTR WQC because these are low volume discharges and because the treatment used, aeration or GAC, reduces concentrations of VOCs to non-detectable levels.

For the pollutants that have a water quality objective less than the 5 ug/l technology based limit, monthly average effluent limit and maximum daily effluent limits have been included consistent with the SIP. Monthly average effluent limits for discharge to areas of drinking water usage utilize CTR criteria for consumption of water and organisms. Monthly average effluent limits for discharge to other surface water areas utilize CTR criteria for consumption of organisms. For those pollutants that have water quality objectives less than 5 ug/l, the maximum daily effluent limit was computed according to SIP Procedure 1.4B, Step 6, without dilution, utilizing a multiplier of 2.01 times the monthly average effluent limit. In cases where the value of the maximum daily effluent limit is equivalent to the monthly average effluent limit, no monthly average effluent limit is necessary.

For the effluent limits for "Discharge to Other Surface Water Areas," the rationale for these limits is the same as for the effluent limits for "Discharge to Drinking Water Areas".

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

No.	Compound	CTR Criteria Water and Organisms	CTR Criteria Organisms Only	Discharge to Drinking Water Areas (See Note 1)		Discharge to Other Surface Water Areas	
		(ug/L)	(ug/L)	Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)	Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)
1	Benzene	1.2	71	1.2	2.4	71	142.7
2	Carbon Tetrachloride	0.25	4.4	0.25	0.5	4.4	8.8
3	Chloroform	-	-	-	-	-	-
4	1,1-Dichloroethane	-	-	-	-	-	-
5	1,2-Dichloroethane	0.38	99	0.38	0.8	99	199
6	1,1-Dichloroethylene	0.057	3.2	0.057	0.1	3.2	6.4
7	Ethylbenzene	3100	29000	3100	6231	29000	58290
8	Methylene Chloride (Dichloromethane)	4.7	1600	4.7	9.4	1600	3216
9	Tetrachloroethylene	0.8	8.85	0.8	1.6	8.85	17.8
10	Toluene	6800	200000	6800	13668	200000	402000
11	Cis 1,2-Dichloroethylene	-	-	-	-	-	-
12	Trans 1,2-Dichloroethylene	700	140000	700	1407	140000	281400
13	1,1,1-Trichloroethane	-	-	-	-	-	-

No.	Compound	CTR Criteria Water and Organisms	CTR Criteria Organisms Only	Discharge to Drinking Water Areas (See Note 1)		Discharge to Other Surface Water Areas	
		(ug/L)	(ug/L)	Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)	Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)
14	1,1,2-Trichloroethane	0.6	42	0.6	1.2	42	84.4
15	Trichloroethylene	2.7	81	2.7	5.4	81	162.8
16	Vinyl Chloride	2	525	2	4	525	1055
17	Total Xylenes	-	-	-	-	-	-
18	Methyl Tertiary Butyl Ether (MTBE)	-	-	-	-	-	-
19	Total Petroleum Hydrocarbons (TPH)	-	-	-	-	-	-
20	Ethylene Dibromide (1,2-Dibromoethane)	-	-	-	-	-	-
21	Trichlorotrifluoroethane	-	-	-	-	-	-

Note 1: Drinking water areas are defined as surface waters with the existing or potential beneficial uses of "municipal and domestic supply" and "groundwater recharge" (the latter includes recharge areas to maintain salt balance or to halt salt water intrusion into fresh water aquifers).

5. Whole Effluent Toxicity (WET)

The basis for Effluent Limitations A.3 (toxicity) is Table 4-4 (Chapter 4, Page 70) of the Basin Plan. The basis for using rainbow trout and 96-hour static renewal bioassays is in Chapter 4, Page 9, of the Basin Plan. The basis for repeating the toxicity testing if the percentage of surviving test organisms is less than the required survival percentage, and the requirements to investigate the cause of mortality is based on 40 CFR 122.41(d), which is needed to minimize adverse impacts from discharges in violation of requirements. Non-compliance is also a cause for termination of the authorization to discharge (40 CFR 122.64).

D. Final Effluent Limitations

For both drinking water and non-drinking water areas of discharge, the final effluent limitations were derived by picking the most protective value, between the technology based effluent limits and WQBELs, in situations where both exist. The technology based effluent limits together with the water quality based effluent limits are sufficiently stringent to protect water quality and beneficial uses. The summary of the final effluent limitations is included in the Table F-4 below:

Table F-4. Summary of Final Effluent Limitations

		Technology-based Effluent Limitations		Water Quality-based Effluent Limitations				Final Effluent Limitations			
No.	Compound	Discharge to Drinking Water Areas (See Note 2)	Discharge to Other Surface Water Areas	Discharge to Drinking Water Areas (See Note 2)		Discharge to Other Surface Water Areas		Discharge to Drinking Water Areas (See Note 2)		Discharge to Other Surface Water Areas	
	See Note 1	ug/L	ug/L	Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)	Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)	Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)	Average Monthly Effluent Limitation (ug/L)	Maximum Daily Effluent Limitation (ug/L)
1	Benzene	1	5	1.2	2.4	71	142.7	-	1	-	5
2	Carbon Tetrachloride	0.5	5	0.25	0.5	4.4	8.8	0.25 (See Note 3)	0.50	4.4	5
3	Chloroform	5	5	-	-	-	-	-	5	-	5
4	1,1-Dichloroethane	5	5	-	-	-	-	-	5	-	5
5	1,2-Dichloroethane	0.5	5	0.38	0.8	99	199	0.38 (See Note 3)	0.5	-	5
6	1,1-Dichloroethylene	5	5	0.057	0.1	3.2	6.4	0.057 (See Note 3)	0.11 (See Note 3)	3.2	5
7	Ethylbenzene	5	5	3100	6231	29000	58290	-	5	-	5
8	Methylene Chloride (Dichloromethane)	5	5	4.7	9.4	1600	3216	4.7	5	-	5
9	Tetrachloroethylene	5	5	0.8	1.6	8.85	17.8	0.8	1.6	-	5
10	Toluene	5	5	6800	13668	200000	402000	-	5	-	5
11	Cis 1,2-Dichloroethylene	5	5	-	-	-	-	-	5	-	5
12	Trans 1,2-Dichloroethylene	5	5	700	1407	140000	281400	-	5	-	5
13	1,1,1-Trichloroethane	5	5	-	-	-	-	-	5	-	5
14	1,1,2-Trichloroethane	5	5	0.6	1.2	42	84.4	0.6	1.2	-	5
15	Trichloroethylene	5	5	2.7	5.4	81	162.8	2.7	5	-	5
16	Vinyl Chloride	0.5	1	2	4	525	1055	0.5	0.5	-	1
17	Total Xylenes	5	5	-	-	-	-	-	5	-	5
18	Methyl Tertiary Butyl Ether (MTBE)	5	5	-	-	-	-	-	5	-	5
19	Total Petroleum Hydrocarbons (TPH)	50 (proposed)	50 (proposed)	-	-	-	-	-	50	-	50
20	Ethylene Dibromide (1,2-Dibromoethane)	0.05	5	-	-	-	-	-	0.05 (See Note 3)	-	5
21	Trichlorotrifluoroethane	5	5	-	-	-	-	-	5	-	5

LEGEND: FMCL - Federal Maximum Contaminant Level & SMCL - California Maximum Contaminant Level

Notes for Table F-4:

Note 1: A blank cell in this Table denotes no criterion for that compound.

Note 2: Drinking water areas are defined as surface waters with the existing or potential beneficial uses of "municipal and domestic supply" and "groundwater recharge" (the latter includes recharge areas to maintain salt balance or to halt salt water intrusion into fresh water aquifers).

Note 3: If reported detection level is greater than effluent limit, then a non-detect result using a 0.5 ug/L detection level is deemed to be in compliance.

Some organic and inorganic compounds, other than pollutants with effluent limitations in Table F-4, may also be detected in the effluent of some of the treatment systems. While this permit does not establish effluent limits for these compounds (summarized as "Trigger Pollutants") Dischargers are required to monitor for them, and follow procedures outlined in Provision VI.6.

The following paragraphs provide additional information regarding these pollutants.

Some organic compounds such as Tertiary Butyl Alcohol (TBA), Ethanol, and Methanol have been detected in the effluent of a few facilities exceeding the 5 ug/L expected treatment level. At this time, these pollutants have no water quality objective or criteria below 5 ug/L. Also, many Dischargers are actively involved in pilot testing innovative treatment technologies for removal of these compounds. For example, one Discharger added two bioreactors to its treatment systems that contain the TBA-degrading bacteria. Although this method has been proven to successfully degrade TBA, the Discharger reported these bioreactors are sensitive to various factors and need fine-tuning. The Trigger provisions of this Order allow for data to be collected on the prevalence of these compounds, while allowing Dischargers to develop a body of available technologies for their removal. Since the main objective of this permit is to allow the Dischargers to cleanup petroleum-related pollutants from groundwater, the trigger system allows treatment to move forward while additional information about relatively minor pollutants is being collected.

Some inorganic compounds such as antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc (hereinafter called inorganic compounds) are sometimes present in fuel-cleanup discharges, primarily due to background concentrations in the shallow groundwater being cleaned up. The discharge volume and effluent concentrations of inorganic compounds discharges from facilities regulated by this permit are low. In the Regional Water Board staff's BPJ, the Bay-wide loading of inorganic compounds from fuel cleanup discharges -- representing a very small portion of total inorganic compounds loadings from sources within the Region (including municipal and industrial point-source discharges and stormwater discharges) -- shall cause no impairment of beneficial uses or potential exceedances of inorganic compounds objectives in receiving waters. Facilities where inorganic compounds have adversely impacted groundwater are not eligible for coverage under this Order.

In conclusion, as discussed in detail in section VII.C.6 of this Fact Sheet, the Dischargers with detected pollutants with concentrations exceeding 5 ug/L or the most stringent water quality criteria, shall comply with the Special Study Provisions VI.C.6 through VI.C.10 of the Order.

E. Interim Effluent Limitations. (Not Applicable)

F. Land Discharge Specifications. (Not Applicable)

G. Reclamation Specifications

Basis for Water Reclamation Specifications is the Regional Water Board Resolution No. 88-160.

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

The proposed receiving water limitations are intended to protect beneficial uses of the surface waters and ground waters of the San Francisco Bay Region and are based on the Basin Plan.

A. Surface Water: These limitations are based on the narrative/numerical objectives contained in Chapter 3 of the Basin Plan as explained below:

The basis for V.A.1.a is on page 3-3 of the Basin Plan;
The basis for V.A.1.b is on page 3-2 of the Basin Plan;
The basis for V.A.1.c is on pages 3-3 and 3-4 of the Basin Plan
The basis for V.A.1.d is on page 3-3 of the Basin Plan;
The basis for V.A.1.e is on pages 3-2, 3-3, and 3-4 of the Basin Plan;
The basis for V.A.2.a is on page 3-3 of the Basin Plan;
The basis for V.A.2.b is on page 3-3 of the Basin Plan;
The basis for V.A.2.c is on page 3-3 of the Basin Plan;
The basis for V.A.2.d is on pages 3-4 of the Basin Plan; and
The basis for V.A.3 is on pages 3-5 of the Basin Plan.

B. Groundwater: These limitations are on Page 3-6 of the Basin Plan.

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

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

A. Influent Monitoring

The purpose of influent monitoring is to provide documentation that the pollutants loadings are below the level that the treatment system was designed for and provide warnings should one or more new pollutants being extracted that the as built treatment system was not designed to remove them. Except PAHs, the influent monitoring has been reduced in this permit. PAHs monitoring frequency

has been changed to quarterly because a few PAHs have been detected in the influent of a few facilities.

B. Effluent Monitoring

The purpose of effluent monitoring is to provide documentation that the treatment system adequately removed all pollutants of concern in compliance with the limits in the permit. These effluent monitoring data also provide warnings should one or more pollutants detected, even though below the limits, that may be a sign of poor maintenance or other unexpected problems. Except PAHs, the effluent monitoring has been reduced in this permit. PAHs monitoring frequency has been changed to quarterly because a few PAHs have been detected in the effluent of a few facilities.

C. Whole Effluent Toxicity Testing Requirements

The selected test species and frequency of testing are the same as previous permit and appropriately cost effective for these discharges.

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.

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 storm water 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. Additional Quality Assurance/Quality Control Requirements

As explained in section II.D of this Fact Sheet, the purpose of the additional quality assurance/quality control requirements is to prevent generation and reporting of invalid monitoring data, such as TPHd false positives, that the Dischargers reported discovering during the term of the previous permit. Although everyone involved in the compliance assurance activities including the Discharger's staff and PE shall pay close attention to quality assurance/quality control activities, Table 5 of Attachment B and Section IV.C of Attachment E require the Dischargers who claim invalid monitoring data to assign a specific person to investigate the cause(s) of errors, to lead the required corrective

actions development, and to implement the Discharger's proposed measures to prevent future invalid monitoring data.

The Tentative Order before its final revision required a "Quality Assurance Officer" – meaning, a qualified individual who was not otherwise involved in sample collection, transport, or analysis (please refer to the following web site for a more detailed description: http://www.waterboards.ca.gov/swamp/docs/swampqapp_template032404.doc) to investigate the cause of data error. This Order has no Quality Assurance Officer" requirement so that a Discharger's staff person involved in generating monitoring data could also oversee quality assurance/quality control aspects of data generation. If, however, a Discharger were to continue to generate invalid monitoring data, the Regional water Board Executive Officer may require that Discharger to assign an individual independent from those generating the data, to oversee the data generation process.

VII. RATIONALE FOR PROVISIONS

A. Standard Provisions.

Standard Provisions provided in Attachment D are in accordance with section 122.41 and additional conditions applicable to the discharges under this permit are in accordance with section 122.42. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Monitoring and Reporting Program Requirements.

The basis for "Monitoring and Reporting Program Requirements" Provision is 40CFR 122.41, 122.48, 122.62, 122.63, and 124.5, CWC Sections 13267 and 13383, and BPJ.

C. Special Provisions.

1. **Basis for Reopener Provisions.** The Basis for "Reopener Provisions" is 40CFR122.41(f).

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

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

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

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

6. **Basis for Provisions VI.C.6 through VI.C.10.** The Dischargers authorized under this Order are expected to use BAT and treat their volatile organic pollutants to non-detectable levels. However, some compounds, other than pollutants with effluent limitations, may be detected in the effluent of some of the treatment 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 F-3. 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 constituent is necessary. The Table F-3 concentration-based triggers are set at the lowest value of the State Maximum Contaminant Level, Federal Maximum Contaminant Level, State Public Health Goal in Drinking Water, California Toxics Rule lowest criterion, or Basin Plan water quality objective but mostly not exceeding 5 ug/l as referenced in Table F-3 below. The reason for this approach is explained in section IV.D of this Fact Sheet, and further 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) are present in fuel-cleanup discharges, primarily due to background concentrations in the shallow groundwater being remediated. The discharge volume and effluent inorganic compounds concentrations are low before the effluent is discharged into the storm drain system. In staff judgment, Bay-wide inorganic compounds loading from fuel cleanup discharges, represent 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. Facilities where inorganic compounds have adversely impacted groundwater are not eligible for coverage under this Order. Each Discharger shall submit, as part of the application 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 F-3. 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. For example, if the results of two or three of the

additional samples exceed the triggers, then the Discharger shall investigate the toxicity and treatment of the constituent of concern. Dischargers who cannot comply with these provisions will lose their authorization to discharge under this Order. The Table F-3 "concentration-based triggers" are set at the lowest value of the State Maximum Contaminant Level, Federal Maximum Contaminant Level, State Public Health Goal in Drinking Water, California Toxics Rule lowest criterion, or Basin Plan water quality objective, except for Arsenic and Chromium. The median of reported maximum Arsenic levels in the effluent of all authorized discharges is non-detect with a 5 ug/L reporting limit. The total Chromium trigger is to trigger additional testing for Chromium (VI) when the total Chromium concentration exceeds 11 as referenced in the Table F-3. The expired Order had inorganic mass-based triggers. The mass-based triggers are replaced with concentration based triggers to make this Order consistent with the Regional Board Order No. R2-2004-0055, 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. A few other parameters were also added to the triggers list to accommodate special cases that may occur during a dewatering project authorized under this Order.

b. **Triggers for Organic Compounds.** Dischargers authorized under this Order are expected to use BAT and treat their volatile organic pollutants to non-detectable levels. Sites where pesticides or other conservative pollutants have adversely impacted groundwater are not eligible for coverage under this Order. Each Discharger shall submit, as part of the application for proposed discharge, analytical results including volatile and semi volatile organic compounds concentrations in the influent and effluent if available or maximum concentrations in any individual extraction wells, if not operating yet. In addition, each Discharger shall submit a report, to the satisfaction of Executive Officer, certifying the adequacy of the proposed treatment system in removal of all organic pollutants of concern. Based on these data and information, the Discharger may receive a discharge authorization letter. However, some organic compounds, other than pollutants with effluent limitations, may be detected in the effluent of some of the treatment systems. This could be due to the movement of the contaminated groundwater from a neighboring site into the capture zone of the treatment facility authorized under this permit. Table F-3 contains concentration-based triggers for conducting additional activities for a list of pollutants reported by Dischargers or listed in the CTR. This provision would allow Dischargers to continue groundwater cleanup while investigating the toxicity and ability to treat any detected volatile or semi volatile organic compounds, in excess of Table F-3 triggers.

Table F-5. Basis for Table 3 Trigger Compounds

Compound	CAS Number	State MCL ug/L	Federal MCL ug/L	State PHG in Drinking Water ug/L	CTR Lowest Criterion unless noted ug/L	Trigger (ug/L)
Antimony	7440360	6	6	20	14	6
Arsenic	7440382	50	10	NA	36	10
Beryllium	7440417	4	4	1	NA	1
Cadmium	7440439	5	5	0.07	2.2	0.07
Chromium (total)	18540299	50	100	-	180	11 (See Note 1)
Chromium (VI)	18540299	-	-	-	11	11
Copper	7440508	1000	1000	170	3.1	3.1
Lead	7439921	15	15	2	2.5	2.0
Mercury	7439976	2	2	1.2	0.025 (See Note 2)	0.025
Nickel	7440020	100	-	12	8.2	8.2
Selenium	7782492	50	50	-	5.0	5.0
Silver	7440224	100	100	-	1.9	1.9
Thallium	7440280	2	2	0.1	1.7	0.1
Zinc	7440666	5000	5000	-	81	81
Cyanide	57125	200/150	200	-	1	1.0
Asbestos	1332214	7 MFL	7 MFL	-	7 MFL	7 MFibers/L
2,3,7,8-TCDD (Dioxin)	1746016	0.00003	0.00003	-	1.3E-08	0.000000013
Acrylonitrile	107131	-	-	-	0.059	2.0
Bromoform	75252	100/80	100/80	-	4.3	4.3
Chlorodibromomethane	124481	100/80	100/80	-	0.401	0.401
Dichlorobromomethane	75274	100/80	100/80	-	0.56	0.56
1,2-Dichloropropane	78875	5	5	0.5	0.52	0.50
1,3-Dichloropropylene	542756	0.5	-	0.2	10	0.2
1,1,2,2-Tetrachloroethane	79345	1	-	0.1	0.17	0.1
Pentachlorophenol	87865	1	1	0.4	0.28	0.28
2,4,6-Trichlorophenol	88062	-	-	-	2.1	2.1
Benzidine	92875	-	-	-	0.00012	0.00012
Benzo(a)Anthracene	56553	-	0.1	-	0.0044	0.0044
Benzo(a)Pyrene	50328	0.2	0.2	0.004	0.0044	0.004
Benzo(b)Fluoranthene	205992	-	-	-	0.0044	0.0044
Benzo(k)Fluoranthene	207089	-	-	-	0.0044	0.0044
Bis(2-Chloroethyl)Ether	111444	-	-	-	0.031	0.031
Bis(2-Ethylhexyl)Phthalate	117817	-	-	-	1.8	1.8
Chrysene	218019	-	-	-	0.0044	0.0044
Dibenzo(a,h)Anthracene	53703	-	-	-	0.0044	0.0044
3,3'-Dichlorobenzidine	91941	-	-	-	0.04	0.04
2,4-Dinitrotoluene	121142	-	-	-	0.11	0.11
1,2-Diphenylhydrazine	122667	-	-	-	0.04	0.04
Hexachlorobenzene	118741	1	1	0.03	0.00075	0.00075
Hexachlorobutadiene	87683	-	-	-	0.44	0.44
Hexachloroethane	67721	-	-	-	1.9	1.9
Indeno(1,2,3-cd)Pyrene	193395	-	-	-	0.0044	0.0044
N-Nitrosodimethylamine	62759	-	-	-	0.00069	0.00069

Compound	CAS Number	State MCL ug/L	Federal MCL ug/L	State PHG in Drinking Water ug/L	CTR Lowest Criterion unless noted ug/L	Trigger (ug/L)
N-Nitrosodi-n-Propylamine	621647	-	-	-	0.005	0.005
Aldrin	309002	-	-	-	0.00013	0.00013
alpha-BHC	319846	-	-	-	0.0039	0.0039
beta-BHC	319857	-	-	-	0.014	0.014
gamma-BHC	58899	0.2	0.2	-	0.019	0.019
delta-BHC	319868	-	-	-	-	5.0
Chlordane	57749	0.1	2	0.03	0.00057	0.00057
4,4'-DDT	50293	-	-	-	0.00059	0.00059
4,4'-DDE	72559	-	-	-	0.00059	0.00059
4,4'-DDD	72548	-	-	-	0.00083	0.00083
Dieldrin	60571	-	-	-	0.00014	0.00014
alpha-Endosulfan	959988	-	-	-	0.0087	0.0087
beta-Endosulfan	33213659	-	-	-	0.0087	0.0087
Endrin	72208	2	2	1.8	0.0023	0.0023
Endrin Aldehyde	7421934	-	-	-	0.76	0.76
Heptachlor	76448	0.01	0.4	0.008	0.00021	0.00021
Heptachlor Epoxide	1024573	0.01	0.2	0.006	0.0001	0.0001
Polychlorinated biphenyls (PCBs) total	1336363	0.5	0.5	-	0.00017	0.00017
Toxaphene	8001352	3	3	0.03	0.0002	0.0002
1,4-dioxane	123911	3 (See Note 4)	-	-	-	3
Perchlorate	14797730	-	-	6	-	5
Freon 12 (Dichlorodifluoromethane)	75718	-	-	-	0.19 (See Note 3)	0.19
Other Oxygenates (Other than MTBE)	-	-	-	-	-	5
Other VOCs	-	-	-	-	-	5
Other SVOCs	-	-	-	-	-	5
Turbidity (Units)	-	5	5	-	-	5
Odor-Threshold (Units)	-	3	3	-	-	3
Total Petroleum Hydrocarbons other than Gasoline and Diesel	-	-	-	-	-	50 (see Note 5)
Sulfate	-	250,000	250,000	-	-	250,000
Foaming Agents	-	500	500	-	-	500
Color (Units)	-	15	15	-	-	15

Legend:
CAS = Chemical Abstract System
PHG = Public Health Goal
CTR = California Toxics Rule
NA = Not Applicable
MCL = Maximum Contaminant Level
BPJ = Best Professional Judgment

Notes:
1 If total chromium concentration exceeds 11 then Chromium (VI) analysis shall also be done
2 Basin Plan
3 USEPA National Recommended Ambient Water Quality Criteria
4 California Department of Health Services Action Level for Drinking Water
5 The 50 ug/l trigger is based on BPJ. If a Discharger is reporting monitoring data with a detection level higher than 50 ug/l, the reason for a higher detection level shall be fully explained in the monitoring report.

7. **Basis for Individual NPDES Permit may be Required.** Provision VI.C.11, Individual NPDES Permit may be Required, is based on 40 CFR 122.28(b)(3).

8. **Basis for Treatment Reliability Requirement.** Provision VI.C.11, Treatment Reliability, is mostly based on 40 CFR 122.41. The basis for the requirement for a certified engineer to oversee the treatment and operation of the treatment system is to ensure that qualified professionals perform this work. Service stations operators are generally not qualified for this technical level of oversight.

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 National Pollutant Discharge Elimination System (NPDES) permit. As a step in the GWDR adoption process, the Regional Water Board staff 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 waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification was provided through a legal notice published in the Recorder.

B. Written Comments

The 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 Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments should be received at the Regional Water Board offices by 5:00 p.m. on October 2, 2006.

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:	November 13, 2006
Time:	10:00 AM
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

The Report of Waste Discharges (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the address above 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 WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

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

ATTACHMENT G - NOTICE OF STARTUP OR RE-STARTUP

A PDF electronic copy of this Form shall be uploaded on GeoTracker

A Groundwater Treatment System authorized to Discharge under the Requirements of
ORDER NO. R2-2006-XXXX
NPDES PERMIT NO. CAG912002 (FUEL)

Submitted by:
Name and Title: _____ Phone &Email: _____

For Groundwater Treatment Facility located at:

_____ _____

Type or Print Facility Address above the line
File No: 1210.44

WDID No.
Please refer to Authorization Letter

Please mark one of the applicable lines:

Table 1. Mark only one as applicable

No.	Action	Date
1	Initial Startup. Are you providing at least two weeks notification? If not, change the date to provide at least two weeks notification.	
2	Re-Startup (Shut Down occurred more than 120 Hours before re-start date) and start up phase monitoring requirements in Section IX.A of the Attachment E will be repeated	
3	Re-Startup (Shut Down occurred less than 120 Hours before re-start date)	No need to file this notice

Table 2. Please explain if answer is "No" to any questions listed in the Check List below:

No.	Question	Yes or No	Comments
1	Is a copy of the Order and SMP kept at the facility?		
2	Is a copy of the Authorization kept at the facility?		
3	Is a copy of the Operation and Maintenance (O&M) Manual kept at the facility?		

No.	Question	Yes or No	Comments
4	Is this O & M Manual certified by a California registered engineer?		
5	Does the O&M Manual include names of the operators and those who take sample at this facility?		
6	Are adequate treatment facility maintenance and inspection schedules and procedures included in the O & M Manual?		
7	Are sampling procedures described in the O & M Manual?		
8	Does discharger maintain a log of all sampling events?		
9	Are the operators familiar with the O&M Manual?		
10	Does O&M Manual include procedures for receiving water sampling? Are they followed?		
11	Do O&M Manual sampling procedures include quality assurance activities?		
12	Do the sampling procedures include field and trip blanks?		
13	Can operator explain what will happen in case of a power outage?		
14	Can operator explain what will happen in case of a pump failure?		
15	Is there an automatic shut down system in case of any component's failure?		
16	Are the sampling procedures followed during a sampling event?		
17	Is the influent sample being collected at a point in the extraction system immediately prior to inflow to the treatment unit?		
18	Is the effluent sample being collected at a point immediately following the treatment facility?		
19	Are influent and effluent sampling ports properly marked?		
20	Is the treatment facility adequately fenced and gated?		
21	Is receiving water accessible for inspection? If so, did you conduct standard observations? (see page 5 of the SMP or the other side of this sheet)		

ATTACHMENT H - NOTICE OF TEMPORARY SHUT DOWN

A PDF electronic copy of this Form shall be uploaded on GeoTracker and after GeoTracker upload a confirmation email shall be sent to the responsible staff member at this office, currently Lourdes Gonzales, at lgonzales@waterboards.ca.gov.

This form is for the Groundwater Treatment Facility located at:

Type or Print Facility Address above the line File No: 1210.44	WDID No. Please refer to Authorization Letter

This Groundwater Treatment System is authorized to Discharge under the Requirements of
ORDER NO. R2-2006-XXXX
NPDES PERMIT NO. CAG912002 (FUEL)

Please explain the following:

1) Temporary Shut Down Date?
2) Expected Re-Start Date?
3) Is the difference between 1 and 2 above more than 120 business hours?
   If so, do you understand that start up phase monitoring requirements in Section IX.A of the Attachment E shall be repeated?
4) If the difference between 1 and 2 above is not more than 120 business hours, no need to file this notice.

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

ATTACHMENT I - NOTICE OF TERMINATION

A PDF electronic copy of this Form shall be uploaded on GeoTracker and after GeoTracker upload a confirmation email shall be sent to the responsible staff member at this office, currently Lourdes Gonzales, at lgonzales@waterboards.ca.gov.

For Facilities Permitted to Discharge Treated Groundwater under the Requirements of
ORDER NO. R2-2006-XXXX
NPDES PERMIT NO. CAG912002 (FUEL)
For Groundwater Treatment Facility located at:

_____ _____

Type or Print Facility Address above the line
File No: 1210.44

WDID No.
Please refer to Authorization Letter

Table 1. Mark only one as applicable

1	Groundwater cleanup works have been completed	
2	Method of groundwater cleanup has been changed with no need to discharge treated groundwater	
3	Extract and treat method of groundwater cleanup will be stopped for a while and only groundwater will be monitored at this site. In this case, documentation shall be attached to this Notice that the cleanup overseeing agency has no objection to have this authorization rescinded. Otherwise complete Notice Temporary Shut Down (Attachment H)	
4	Dewatering cleanup project has been completed	
5	Other reasons such as discharge to POTW has been granted	

Table 2. If you have marked number one in Table 1, please add the name, address, and phone number of the agency and agency staff finding the clean up work to be complete and you have also provided a copy of this termination notice:

	Name, address, and phone number of the agency and agency staff finding your clean up work to be complete	Have you provided a copy of this termination notice to this staff? (Yes/No. If No, please explain the reason)
1		
2		

I certify under penalty of law that this notice is prepared under my direction or supervision and the effective termination date of this Discharge is _____. I am aware that discharging without a discharge authorization is in violation of California Water Code.

_____ _____

Name (print) Signature and Date

_____ _____

Title/Organization Address

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