

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2003-0044

ATTACHMENT A
TO
GENERAL ORDER FOR LAND DISPOSAL
OF GROUNDWATER AND SURFACE WATER FROM CLEANUP OF
PETROLEUM FUEL POLLUTION

APPLICATION REQUIREMENTS

A Report of Waste Discharge (Form 200 plus supplemental information) and filing fee must be submitted to the Regional Water Quality Control Board, Central Valley Region (Regional Board) for each proposed discharge. The Report of Waste Discharge shall be prepared by or under the direction of a California Registered Civil Engineer, Registered Geologist, or Certified Engineering Geologist and shall provide at least the following information or, if a Problem Assessment Report (or functional equivalent) has been approved, it may be submitted. Additional data may be requested for specific sites.

A. Wastewater treatment system and characteristics

1. Description of event(s), which caused the waste to be discharged to groundwater pollution, including type and source of the waste constituents and date(s) when the discharge occurred and was discovered.
2. Narrative and schematic descriptions of the proposed extraction, treatment, and disposal systems. The designated disposal area must be shown on a map with an accuracy of plus or minus two feet. If the proposed treatment system uses activated carbon, submit an estimate of the breakthrough time for each carbon treatment unit.
3. Any water supply well, and surface waters, within 0.5 miles of the site shall be identified on a map.
4. A map showing the location of the facility, plume, extraction well(s), monitoring wells, treatment system, disposal facilities and site boundaries.
5. The anticipated average and maximum flows from the treatment system.
6. An operation plan describing general operations and maintenance procedures, process controls, monitoring and pumping rates.
7. Representative data for the following analyses of the groundwater that will be treated and discharged: (note: required quantitation (or reporting) limits are found in Part C.1 of this Order).

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- a. Volatile organic constituents (EPA Method 8021B or 8260B).
- b. Total Petroleum Hydrocarbons in the Gasoline and Diesel ranges (EPA Method 8015B/5030 and 8015B/3510). Additional or alternative TPH analyses may be required if the suspected pollutants contain hydrocarbon fractions outside the range of these tests.
- c. Lead, soluble lead or tetraethyl lead (Graphite Furnace AA or equivalent).
- d. Chlorinated pesticides (EPA Method 8081A).
- e. General mineral analysis, including electrical conductivity, total dissolved solids, chloride, sulfate, nitrate and pH.
- f. Polynuclear Aromatic Hydrocarbons (EPA Method 8310).
- g. Fuel oxygenates (EPA Method 8260B).

B. Site hydrogeology

1. Depth to groundwater, including seasonal variations, if known.
2. Direction and gradient of groundwater flow, if known.
3. Vertical and lateral extent of water quality degradation and pollution, if known, including details on the location, construction, and analytical results from groundwater monitoring wells used to define the plume. (Note: satisfactory plume definition, to be determined by Regional Board staff, must be completed as a condition for compliance with this Order) Also, describe other contaminant source areas or plumes that may be affected by the proposed extraction and discharge.
4. A statement on the potential impact of the wastewater discharge on the containment and rate of movement of the groundwater plume.
5. Effects of the extraction system on the groundwater gradient and the plume.
6. An estimate of the anticipated length the time extraction will be needed.
7. Describe water users; upgradient, downgradient or crossgradient; who could be affected by the extraction of groundwater or the disposal of treated groundwater.

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8. For surface disposal, provide design data that demonstrates that soils are capable of absorbing the proposed discharge, or in the case of injection, provide design data to demonstrate that hydrologic characteristics of the receiving formation are such that discharged waters will be accepted without causing adverse effects such as hydrofracturing or formation plugging.

C. Groundwater Monitoring Program

Discharger shall submit a groundwater monitoring program, which is to assess the nature and extent of the groundwater plume, the effectiveness of remediation activities, and the effect of the discharge. The proposed groundwater monitoring program shall be included with the Report of Waste Discharge.

D. Antidegradation Analysis

The applicant shall submit a report that compares the water quality of the receiving groundwater to the applied, or injected water. If significant degradation is proposed the Regional Board may require individual waste discharge requirements.

E. Public Notice Requirements

1. The applicant shall submit to the Regional Board a list of names and mailing addresses of nearby residents, including all adjacent property owners and all residents within a 500-foot radius of the treatment system and discharge location.
2. The applicant shall send letters, in an approved format, to each of the above interested parties listed in E.1. above, the local County Health Department and the California Department of Fish and Game describing the proposed project and including the following information:
 - a) Describe the cleanup project and the involved chemicals of concern,
 - b) Location of treatment system and discharge (both narrative and on map),
 - c) Explain permit application and project implementation time schedule,
 - d) Describe permit discharge limits and monitoring program,
 - e) State in letter that interested parties have two weeks from date of letter to submit comments to Regional Board office.

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3. The applicant shall submit to the Regional Board a copy of the “Public Notification Letter” described in E.2. above and shall submit a certification on who was sent a copy of the letter.

F. Filing Fee Requirement

The category of discharges applicable for coverage by this Order have been determined to have a Threat To Water Quality (TTWQ) and Complexity (CPLX) of 3B as defined in California Code of Regulations Title 23, Division 3, Chapter 9, Section 2200 (CCR). All permitted discharges covered under this Order are subject to the filing fee, and applicable annual fees, as set forth in the annual fee schedule contained in Section 2200 of the CCR at the time of Report of Waste Discharge submittal or as modified by regulation changes prior to and/or following discharge coverage by this Order.