

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

ORDER NO. 86-16

WASTE DISCHARGE REQUIREMENTS

SOLVENT SERVICE INC.
SAN JOSE, SANTA CLARA COUNTY

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

1. Solvent Service Inc., (hereinafter called the discharger) owns a 3.2 acre site at 1021 Berryessa Road, San Jose. Since the 1970's, the discharger has been operating an industrial solvent reclamation facility at the above location.
2. Subsurface investigations initiated in early 1983 revealed significant levels of organic chemical pollution in both soil and groundwater beneath the site and extending beyond the site boundary, apparently caused primarily by spills and leaking tanks. Chemicals identified included trichloroethylene, trichloroethane, perchloroethylene, xylene, ethylbenzene, dichlorobenzene, acetone and butanone.
3. The discharger has undertaken investigations to define the extent of pollution and implement onsite remedial measures. The remedial measures include installation of onsite groundwater extraction wells, an infiltration trench, and removal of underground tanks and sumps. Removal of polluted soil beneath the facility is not feasible without major disruption of the existing operations, but groundwater extraction is expected to effectively contain and cleanup the pollution.
4. On December 10, 1985, the discharger submitted proposed work plans to install approximately 15 monitoring wells and deep soil borings into the B, C and D aquifers at the onsite and offsite areas to further define the lateral and vertical extent of the groundwater pollution. The discharger has agreed to complete the pollution plume definition by May 30, 1986. A comprehensive cleanup program will be developed based on the results of the investigative program.
5. The groundwater pollution from the facility is of particular concern because of the high toxicity and high concentrations of chemicals and because of the potential for the continued migration of pollutants to usable groundwaters.

6. Further investigation and interim remedial action are necessary to prevent the continued migration of pollutants to unaffected groundwaters and to preclude loss of existing and potential beneficial uses of said waters. The Board intends to require the development of final remedial action plan and intends to establish final cleanup objectives for the site after review of the results of actions required by this Order.
7. The Regional Board adopted a revised water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for groundwater.
8. The existing and potential beneficial uses of the groundwater underlying and contiguous to the facility include:
 - a. Municipal Water Supply
 - b. Domestic Water Supply
 - c. Agricultural Water Supply
 - d. Industrial Service and Process Water Supply
9. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
10. This project constitutes a minor modification to land and such activity is thereby exempt from the provisions of the California Environmental Quality Act (CEQA) in accordance with Section 15304 of the Resources Agency Guidelines.
11. The Board, in a public meeting, heard and considered all comments pertaining to the discharger.

IT IS HEREBY ORDERED, that Solvent Service Inc., in order to meet the provisions contained in Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. Prohibitions

1. The discharge of waste or hazardous materials in manner which will degrade the water quality or adversely affect beneficial uses of the waters of the State is prohibited.
2. Further migration of pollutants through subsurface transport to usable water of the state is prohibited.

3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of pollutants or adversely spread any pollutants from other sites is prohibited.

B. Specifications

1. The treatment or disposal of waste shall not create a nuisance as defined in Section 13050 (m) of the California Water Code.
2. The discharger shall conduct monitoring activities as needed to define the current local hydrogeologic conditions, and the lateral and vertical extent of soil and groundwater pollution in and contiguous to the zone of known pollution. Should monitoring results show evidence of plume migration, additional plume characterization shall be required.

C. Provisions

1. The discharger shall submit to the Board technical reports on self-monitoring work performed according to a program approved by the Executive Officer.

2. ONSITE PLUME:

With respect to the onsite portion of the pollutant plume, the discharger shall comply with the above Prohibitions and Specifications in accordance with the followings task and time schedule.

Compliance Deadline

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| a. Submit a technical report documenting the lateral and vertical extent of the onsite soil and groundwater pollution and defining the geohydrology of the site. | March 31, 1986 |
| b. Submit a detailed proposal for additional onsite remedial measures to contain and cleanup the onsite pollutant plume. | March 31, 1986 |
| c. Complete the installation of necessary hydraulic control facilities to contain and clean up the onsite portions of the pollutant plume. | April 30, 1986 |

Compliance Deadline

- d. Commence operation of containment and cleanup facilities. May 30, 1986
- e. Submit a technical report which describes the work completed to accomplish the tasks described in Provision C.2.c. May 30, 1986
- f. Submit a technical report which evaluates the effectiveness of the hydraulic control facilities. August 19, 1986

The report shall evaluate the adequacy of the system to contain the pollutant plume and to achieve the efficient removal of pollutants from the subsurface environment. Such an evaluation shall include, but need not be limited to, an estimation of the flow capture zones of the wells, establishment of the cones of depression by field measurements, and presentation of monitoring data from adjacent and downgradient monitoring wells. Specific modifications to the system shall be proposed in the event that the system is demonstrated not to be effective in containing and cleaning up the pollutant plume.

3. OFFSITE PLUME:

With respect to the offsite portion of the pollutant plume, the discharger shall comply with the above Prohibitions and Specification B.2 according to the following task and time schedule:

Compliance Deadline

- a. Submit a technical report documenting the lateral and vertical extent of the offsite groundwater contamination and defining offsite geohydrology. May 30, 1986
- b. Submit a detailed proposal for offsite interim remedial measures to contain and cleanup the pollutant plume. The proposal shall include a completed application to discharge to surface waters, if such discharge is an element of the proposal. June 30, 1986

Compliance Deadline

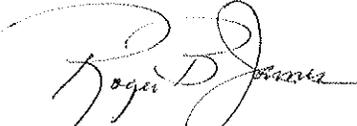
- c. Complete the installation of extraction wells, or other necessary hydraulic control structures, to contain and cleanup the pollutant plume. August 18, 1986
- d. Complete the installation of treatment facilities, as necessary, capable of reducing concentrations of organic pollutants in extracted groundwater to acceptable levels prior to discharge to waters of the State. September 29, 1986
- e. Commence operation of containment and cleanup facilities. October 30, 1986
- f. Submit a technical report which describes the work completed to accomplish the task described in Provision C.3.c and C.3.d. November 17, 1986
- g. Submit a technical report which evaluates the effectiveness of the extraction system, and/or other hydraulic control structures, necessary to control and clean up the polluted groundwaters. January 31, 1987

The report shall demonstrate the adequacy of the system to contain the pollutant plume and to achieve the efficient removal of pollutants from the subsurface environment. Such an evaluation shall include, but need not be limited to, an estimation of the flow capture zones of the wells, establishment of the cones of depression by field measurements, and presentation of monitoring data from adjacent and downgradient monitoring wells. Specific modification to the system shall be proposed in the event that the system is demonstrated not to be effective in containing and cleaning up the pollutant plume.

4. Reports submitted pursuant to Specification B.2 and Provisions C.1, C.2 and C.3 of this Order shall include, but need not be limited to, the following elements:
 - a. Appropriately scaled groundwater gradient contour maps.
 - b. Appropriately scaled and detailed base maps to show the location of all monitoring wells and extraction wells, and identify adjacent facilities and structures.
 - c. Updated cross-sections and/or fence diagrams correlating specific geological units to more precisely define the affected aquifer zones.
 - d. Where appropriate, the results of capture zone modeling for extraction well(s) and/or injection/recovery systems, shall be compared with field measurements to update and calibrate the model.
 - d. Is-contour maps to graphically depict the distribution of pollutants at various depths.
5. The discharger shall submit monthly progress reports to the Regional Board on status of compliance with the Prohibitions, Specifications, and Provisions of the Order. In the event of non-compliance, the discharger shall clarify the reasons for non-compliance and shall propose specific measures to be taken to achieve compliance with an implementation time schedule.
6. All samples shall be analyzed by State certified laboratories using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/ quality control records for Board review.
7. The discharger shall permit the Board or its authorized representative, in accordance with Section 13267 (c) of the California Water Code:
 - a. Entry upon premises where any pollution source exists, or may potentially exist, or in which any required records are kept;
 - b. Access at reasonable times to copy any records required to be kept under terms and conditions of this order;

- c. Inspection of any monitoring equipment or methods required by this Order.
 - d. Sampling of any groundwater or soil which is accessible, or may become accessible as part of any investigation or remedial action program, to the discharger.
8. The discharger shall file a report on any material changes in the nature, quantity, or transport of polluted groundwater associated with the pollution described in this Order.
9. The discharger shall maintain in good working order and operate, as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.
10. The Board will review this Order periodically and may revise the requirements when necessary.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on March 19, 1986.



ROGER B. JAMES
Executive Officer