

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER 95 - 083

SITE CLEANUP REQUIREMENTS AND RESCISSION OF ORDERS 89 - 046, 90 - 015 AND 91 - 019  
FOR

CHEVRON U.S.A. INC,  
CHEVRON FUEL TERMINAL 1001272, SAN JOSE, SANTA CLARA COUNTY.

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

1. Facility Location Chevron USA, Inc. (hereinafter called the discharger) owns and operates a refined petroleum transfer station, (hereinafter called the facility or Terminal 1001272) located at 1020 Berryessa Road in San Jose, Santa Clara County.
2. Facility Operation The facility delivers refined motor fuels throughout the San Francisco Bay Area. The terminal has been in operation since the mid-1960's. The site has 15 above-ground storage tanks and two below-ground storage tanks holding a variety of fuels and oils including regular, unleaded and supreme gasoline, diesel, heating fuel, motor oil, fuel additive and transmix. A large fueling island and several oil/water separators exist onsite.
3. Facility Wastewater Discharge The Facility's waste water generation consist of stormwater, groundwater and surface runoff. Storm water run off from the tank farm and loading, roof draws and treated pipeline hydrotest water are collected in an impoundment, inspected and discharged to nearby Coyote creek. Groundwater generated could be treated onsite before discharge as irrigation water. Waste Discharge Requirement Order No. 90 - 113 regulates the discharge of groundwater.
4. REGULATORY STATUS Chevron is a discharger because of their ownership and occupancy of the site during which releases of petroleum hydrocarbons (HCs) have occurred. The HCs have affected the groundwater beneath the site and have migrated offsite. This Order supersedes Cleanup and Abatement Order No. 89-046, Site Cleanup Requirements 90 - 015 and 91 - 019 previously adopted for this site.
5. Purpose of Order. The purpose of this order is to revise and update the requirements of Orders, 90 -015 and 91 -019. This order directs the process of groundwater characterization, implementation and evaluation of remedial actions for onsite and offsite pollution, and proposed implementation and evaluation of final cleanup actions. These tasks are necessary to alleviate the threat to the environment posed by the migration of the groundwater plume of pollutants and to provide a substantive technical basis for designing and evaluating the effectiveness of final cleanup alternatives. Adoption of this order rescinds Order 89-046, 90 -015, and 91 - 019 previously adopted for this Site.
6. Facility Description. The facility is bounded to the west and northwest by Berryessa Road and Mabury Road to the south. Structures contained in the facility include the loading rack and nearby above ground fuel tanks farm, the soil vapor recovery units, and the office building. Figure 1 attached shows the facility plan view.
7. Spill History Several spills and leaks were reported for this site between February 1984 and July, 1986. Reports of these spills and leaks were based on observation or detection of

hydrocarbons (HCs) in soil and groundwater monitoring wells. The storage tanks and oil water separators may be sources for the leaks. Site Cleanup requirements were adopted for this site in January 1990 and 1991. The Order included tasks for onsite investigation and remediation, offsite investigation and remediation, and final cleanup criteria for both onsite and offsite facility. Investigation of the extent of the problem and installation of onsite remedial actions has been ongoing.

8. Hydrogeology Subsurface investigations have identified two water-bearing zones beneath the site. The upper zone consists of sandy deposits from about 18 to 30 feet below the ground surface and is underlain by 25 to 50 feet of clay. Groundwater levels in this zone were approximately 17 feet below the ground surface in 1986, and currently range from about 18 to 21 feet below ground surface. Groundwater in the upper water-bearing zone flows generally to the west. The deeper zone consists of sandy deposits from 3 to 20 feet thick, based on information from a single deeper well (B-1). The groundwater level in this well was approximately 23 feet below the ground surface in 1986, and was approximately 27 feet below ground surface in 1988. The direction of flow in the deeper zone is presumed to move in a westerly direction (based on regional drainage patterns and water levels recorded at the adjacent Solvent Service, Inc. (SSI) site). A channel deposit of coarse-grained sand and gravel extends beneath Berryessa Road to the west and along the southwestern perimeter of SSI. The channel appears to have acted and still may be acting as a conduit for the HC plume due to its high permeability. Current water levels in this zone are below the base of the channel.
9. Adjacent Site Solvent Service Inc. (SSI) operates a treatment facility at 1021 Berryessa Road, San Jose, Santa Clara County. The facility treats and reclaims industrial solvents and corrosive liquids. This site is a State Superfund site, proposed for the Federal National Priorities List, and is involved in the remedial investigation/feasibility study process. Subsurface investigations at this site have revealed the presence of volatile organic chemicals (VOCs) in soil and groundwater beneath the site. Dissolved and separate-phase HCs which appear to have migrated from Chevron have also been detected at SSI and are commingled with the VOCs along SSI's southwest property boundary and offsite to the southwest. Several interim remedial actions for the VOCs at SSI's site have been completed or are currently being implemented.
10. Groundwater Contamination Groundwater samples from monitoring wells installed in the vicinity of the facility have been analyzed for contaminants and the results are documented in various technical reports, including the self monitoring program reports. A summary of contaminant concentrations and subsurface investigation in the vicinity of the facility as documented in the reports are as follows:
  - a. Subsurface investigations were conducted at the Site, beginning in 1983, and included the following activities: installation of 38 groundwater monitoring wells, drilling of several soil borings, subsurface sampling and analyses, aquifer testing, a soil gas survey, and soil vent performance testing. Six of the monitoring wells became useless due to dewatering and were properly destroyed by Chevron under supervision of the Santa Clara Valley Water District. The results of these investigations indicate that HCs have been released from and are present beneath this Site.
  - b. Separate-phase HCs have repeatedly been detected in groundwater monitoring wells onsite since 1984 and offsite since 1987. Dissolved HCs have been repeatedly detected in groundwater monitoring wells onsite since 1984 and offsite since 1986. Prior to 1989 benzene was detected up to the following concentrations: 18,000 ppb in groundwater onsite, 6,100 ppb in groundwater offsite, and 290 ppm in soil onsite. Current Benzene concentrations in onsite groundwater range from <0.5 ppb to 13000 pbb. Other petroleum constituents including volatile organics and total petroleum hydrocarbons as gasoline were detected.

11. Off site Contamination Based on available information the Board believes that the discharger is responsible for the plume of petroleum based pollutants along the southwest boundary of SSI and offsite to the southwest of SSI. This revised Site Cleanup Requirements shall require continued investigation and remediation of pollutants from Chevron at the SSI site as necessary. The Board encourages the discharger and SSI to continue with their cooperative efforts toward investigation and remedial measures. However, if a cooperative approach cannot be arranged the discharger is still expected to comply with this Order.
12. Remedial Actions; The discharger has complied with most provisions as specified in previous orders 90 -015 and 91 - 019. The provisions included investigations and remedial action which were carried out by the discharger. Past, ongoing and future anticipated remedial action are summarized as follows:
- a. Past remedial actions included the removal of underground tanks, interim skimming of free phase hydrocarbon, installation and operation of onsite groundwater (total fluids) extraction systems, insitu soil venting to remediate the vadose zone and treatment of recovered groundwater before disposal. Treated groundwater was used for onsite irrigation. The groundwater extraction system (GWE) was used for contaminant plume withdrawal and migration control. Relatively small amounts of free product / dissolved phase hydrocarbon were recovered. In March of 1994, the discharger discontinued all on site groundwater extraction as approved in a July 27, 1994 letter from the Board.
  - b. In place of the groundwater extraction, the discharger proposed to expand its soil vapor extraction (SVE) system on site. This proposal was accepted due to the discharger's contention that more hydrocarbon is being withdrawn from the SVE as opposed to the GWE system. This installation is in progress and this order requires a report of certification of construction. Order 90 - 015 required the complete implementation of modifications to offsite interim remedial action. An SVE system is currently in place offsite at SSI property and the discharger intends to expand the existing system. This order will require a report of proposal and certification of construction.
  - c. A dissolved and free phase hydrocarbon plume has migrated across discharger's property boundary in the past and may be migrating presently. The danger of offsite migration may be heightened given the discontinuation of the GWE system which is intended to provide some plume control and migration control. This order requires the resumption of migration controls to capture plumes leaving site if trigger levels are exceeded. In addition, the possibility of shallow and intermittent contaminated groundwater withdrawal shall be investigated.

## **GENERAL FINDINGS**

13. Chemicals of Concern. Soil and ground water contaminants and parameters consist of total petroleum hydrocarbons as gasoline, diesel, and total oil and grease, benzene, toluene, ethylbenzene, xylene and other volatile and semi volatile organic compounds. Metals, including antimony, barium, arsenic, chromium, lead, nickel and selenium were detected in soil or groundwater. The laboratory analytical log results continue to indicate the presence of uncharacterized constituents. The identity shall be investigated and included in the constituents of concern.
14. Water Quality Goals / Protection Standard. Pursuant to California Water Code Section 13000 the Board may regulate activities which affects the quality of waters of the state to obtain the highest water quality. Article 5 of Chapter 15 specifies the water quality monitoring and response programs for waste units and could be used as a guideline. Background water quality shall be established as goals, if feasible, for the source area, boundary and offsite area

pursuant to San Francisco Bay Region Water Quality Control Plan. The discharger proposed site water quality goals which has been reviewed by staff. Discussions with the discharger will continue. However a compliance deadline for the water quality protection standard / goal plan shall be required in this order and alternatives to background level may be proposed for consideration.

- a. The background water quality is considered non - detectable for total petroleum hydrocarbons, total oil and grease, and benzene, toluene, ethylbenzene, xylene, and other volatile organic and semi volatile organic compounds according to test methods specified in the attached Self Monitoring Program.
- b. Concentrations of inorganic constituents and parameters have been detected in soil and groundwater. Further study, including evaluation of previously collected data, will be needed to determine the appropriate water quality protection standards for inorganics at the facility.

15. Cost Reimbursement. Pursuant to Section 13304 of the Water Code, the Discharger is hereby notified that the Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action required by this Order.

16. Beneficial Uses.

- a. Surface Waters. The potential and existing beneficial use of the Coyote creek include:
  - i. Industrial Process and Service Supply and;
  - ii. Wild Life, Marine and Warm Fresh Water Habitat;
  - iii. Water Contact Recreation;
  - iv. Preservation of areas of special biological significance;
  - v. Fish Migration.
- b. Groundwater. The potential and existing beneficial uses of groundwater in the vicinity of the facility in both deep and shallow aquifers are:
  - i. Industrial Process and Service Supply;
  - ii. Municipal and Domestic water supply, and;
  - iii. Agricultural supply.

17. Basin Plan. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986 and amended it August 19, 1987, July 18, 1989, December 11, 1991 and August 1994. The Basin Plan contains water quality objectives and beneficial uses for San Francisco Bay and contiguous surface and ground water including the water bodies identified in "Finding 16" of this Order. This Order implements the water quality objectives for the San Francisco Bay Region as stated in the Basin Plan.

18. California Environmental Quality Act. This action is exempt from the provisions of the California Environmental Quality Act pursuant to Section 15308, Title 14 of the California Code of Regulations

19. Notification. The Board has notified the discharger and interested agencies and persons of its intent to prescribe Site Cleanup Requirements for the discharge and has provided them with the opportunity to submit their written views and recommendations.

20. Hearing. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, that the discharger or its agents, successors or assigns, in order to meet the provisions of Division 7 of the California Water Code, shall comply with the following:

A. PROHIBITIONS

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect the beneficial uses of the waters of the State of California is prohibited.
2. Further significant migration of pollutants through subsurface transport to waters of the State of California is prohibited. Significant migration shall be deemed to occur if:
  - a. Constituent concentrations exceed or equal established water quality protection standards at points of compliance.
  - b. Incidents, activities directly or indirectly caused by Discharger, which is deemed or suspected to cause further migration of contaminants at existing discharge areas or currently applied discharge.
3. Activities, associated with the subsurface investigation and site cleanup, that cause significant adverse migration of pollutants are prohibited, except as approved by the Executive Officer of the Board.
4. Wastes shall not be disposed of in any way, where they can be carried from the disposal site and discharged into waters of the State or of the United States.
5. The treatment, discharge, or storage of wastes or materials which may impact the beneficial uses of ground and surface water shall not be allowed to create a condition of pollution or nuisance as defined in sections 13350 of the California Water Code.
6. Elimination of required information existing in previous Self Monitoring Reports is prohibited unless approved by the Board.

B. SPECIFICATIONS

1. General Specification \_ The Discharger shall abide by the following specifications:
  - a. The storage, handling, treatment or disposal of soil or groundwater containing pollutants shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
  - b. The discharger shall carry out investigative and remedial actions at the site in a manner acceptable to the Executive Officer. The dischargers shall conduct site investigation, monitoring and remediation activities as needed to define the current local hydrogeologic conditions, to define the lateral and vertical extent of soil and groundwater pollution, and to remediate soil and groundwater pollution. Should monitoring results show evidence of pollutant migration, additional characterization and remediation of pollutant extent may be required.
  - c. If groundwater extraction and treatment is considered as part of remedial activity, the feasibility of water reuse, reinjection, and disposal to the sanitary sewer must be evaluated. Based on the Regional Board Resolution 88-160,

the discharger shall optimize, with a goal of 100%, the reclamation or reuse of ground water extracted. The discharger shall not be found in violation of this Order if documented factors beyond the discharger's control prevent the discharger from attaining this goal, provided the discharger has made a good faith effort to attain this goal. If reuse or reinjection is part of a proposed alternative, an application for Waste Discharge Requirements may be required. If discharge to waters of the State is part of a proposed alternative, an application for an NPDES permit must be completed and submitted, and must include the evaluation of the feasibility of water reuse, reinjection, and disposal if groundwater quality standards are exceeded to the sanitary sewer. Previous but relevant feasibility studies could be submitted for approval in lieu of this request.

- d. The discharger shall operate the facility so as not to cause a significant difference to exist between water quality at the compliance points and Water Quality Protection Standards / goals to be established for the following applicable parameters. Article 5 of chapter 15 shall be used as guidelines. The discharger shall establish water quality protection standards / goals as approved by the Executive Officer, according to the requirements of this Order and the San Francisco Bay Basin Plan for the following minimum parameters :

pH;  
Electrical conductivity;  
Total dissolved solids;  
Chloride;  
Total petroleum hydrocarbons as gasoline;  
Total petroleum hydrocarbons as diesel;  
Total petroleum hydrocarbons as kerosene;  
Total oil and grease or Recoverable hydrocarbons;  
Metal Contaminants;  
Volatile and semi volatile Organics, and;  
As yet uncategorized constituents as necessary.

- e. The concentrations of indicator parameters or waste constituents in waters passing through points of compliance, (as defined in the Self Monitoring Program) , shall not exceed the Water Quality Protection Standards, established by the provisions of this Order.
- f. The contaminated areas shall not cause migration of contaminants to adjacent geologic materials, groundwater, or surface water, throughout the operation, remediation, and post remedial periods.
- g. Observation stations including wells, borings and monitoring or required systems shall not be abandoned without the approval, in writing, of the Executive Officer or representative of the Board.

#### C. PROVISIONS

1. The discharger shall, in a timely manner, submit work descriptions and draft technical reports to Board staff for all technical reports required in these Provisions. The discharger may be assessed monetary penalties for late or incomplete technical reports required by these Provisions.
2. The discharger shall be liable , pursuant to Section 13304 of the Water Code, to the Board for all reasonable costs actually incurred by the Board to investigate

unauthorized discharges and to oversee cleanup of such discharge, abatement of the effects thereof, or other remedial action, required by this Order. If the site addressed by this order is enrolled in a state Board managed reimbursement program, reimbursement shall be made pursuant to this order and according to the procedures established in that program. Any disputes raised by the discharger over the reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures of that program.

3. The discharger shall comply with the Prohibitions and Specifications above, in accordance with the following time schedule and tasks as acceptable to the Executive Officer:

a. Remedial Action. The Board approved a request to enhance the existing soil vapor extraction system (SVE) within the site as well as deactivation of the groundwater extraction system (GWE). Though hydraulic control was pursued with the GWE system, an excessive amount of groundwater was pumped relative to the minimal hydrocarbon recovery. Offsite, the discharger has continued to operate an SVE system. Modifications to the offsite SVE system were required pursuant to order 90 - 015. The following specific reports shall be submitted to the Board in accordance with the following schedule:

- (1) Submit a plan detailing the intended expansion and modification of onsite / offsite SVE system. The plan shall include proposed design specifications, drawings and crosssections.

**Report Due: No later than July 24, 1995**

- (2) The discharger shall submit a certification of construction report as acceptable to the Executive Officer. The report must contain detailed as - built design, plan and section views, specifications and a description of all working parts of the SVE system (onsite / offsite). The system must be capable estimating the volume and mass contributions from each SVE station. The report shall contain an evaluation of the performance of the system as well as analysis of extracted gas samples.

**Report Due: No later than December 20, 1995.**

- (3) Soil vapor shall be continuously withdrawn without intentional interruption except as approved by the Board. In addition, sampling / analysis, volume and mass of recovered contaminants as well as a summary performance evaluation of the SVE system shall be reported in conjunction with the quarterly self monitoring reports.

b. Migrating Pollution Perimeter Control. Historically, hydrocarbons have migrated beyond the facility boundary and have a potential for continued migration with the discontinuance of the GWE operation depending on the effectiveness of the SVE system and plume stability. Monitoring data has indicated a preferred offsite migration path from the facility. Perimeter control is therefore necessary at potential and identified pathways. The discharger shall resume the operation of the GWE systems or install other perimeter control systems if trigger levels are exceeded and submit technical reports as follows:

- (1) The Discharger shall resume the operation of the deactivated GWE system if water quality protection standards for "downgradient

boundary" areas are exceeded pursuant to the Provisions C.3.e of this Order. A workplan and schedule of resumption of operation shall be submitted to the Board for approval.

- (2) Within 6 months of operation the discharger shall evaluate the effectiveness of the groundwater perimeter pollution control system. The report shall include but not be limited to, evaluation of the dissolved plume recovery rate and gradient control.

c. Groundwater Monitoring System & Extraction Wells Review. A number of groundwater monitoring and extraction wells have been installed since 1990. A review of the well construction details and well locations are appropriate to optimize the monitoring system, identify if all wells are necessary to be in the program and to insure that wells kept in the monitoring / extraction well program are designed and located properly. Of particular concern is the use of longer screened wells for groundwater monitoring / extraction purposes and the potential for extraction of greater quantities of water than necessary from these wells. The discharger shall evaluate the groundwater monitoring / extraction system and submit technical reports acceptable to the Executive officer as follows:

- (1) The discharger shall conduct a review of the current ground water monitoring system and extraction wells. The review shall include a study to determine if the existing wells provide adequate data to measure remediation progress and plume management. The review shall verify adequate protection of the aquifer, proper location of wells and screen length, identification of concentrations and contaminated intervals in the soil, constituents for sampling & analysis and, sampling frequency. The review shall propose appropriate changes to the system and provide workplan if necessary, for installation of probes and borings to delineate these intervals, for well replacements, abandonment and modifications to sampling frequency and analysis.

**Report Due: No later than July 24, 1995.**

- (2) A report documenting the completion of approved recommendations pursuant to Provision 3.c.(1). The report shall give details of subsurface conditions and include information such as hydrogeology, chemical analysis of samples, lithological cross sections and boring logs.

**Report Due: No later than December 12, 1995.**

d. Post Earthquake Inspection and Corrective Action Plan. The discharger shall submit a detailed Post Earthquake Inspection and Corrective Action Plan for the remedial systems installed to be implemented in the event of any earthquake generating ground shaking of Richter Magnitude 5.3 or greater at or near the facility. The report shall describe the potential impact of seismic deformation on ground water monitoring system. The plan shall provide for preliminary reporting of the post earthquake inspection to the Board within 18 hours of the occurrence of the earthquake. Immediately after an earthquake event causing damage to the facility, the corrective action plan shall be implemented and this Board shall be notified of any damage.

**Report Due: No later than the workplan due dates for the facility as**

**indicated in Provisions 3.c. or 3.b.**

- e. Ground Water Quality Protection Standards / Goals: The discharger proposed on and off site cleanup objectives in a February 28, 1994 letter pursuant to the requirement Provision C.1.d.1 of Order 91 - 019. The letter was preliminarily reviewed by staff and additional considerations have been given to the proposals. Of concern are the issues of compliance areas and points, compliance concentrations, and final remedial action. Staff shall continue discussions with the discharger. A revised report (or addendum) acceptable to the Executive officer shall be due as explained in Provision C.3.e.1 below.
- (1) The discharger shall submit a revised report on the groundwater quality protection standards / goals at the site. The report shall propose facility water quality protection standards / goals for the constituents listed in the Specifications of this Order. The report shall include offsite and onsite water quality goals for "inner boundary areas" and water quality protection standards for "downgradient boundary areas". The plan shall include a decision making procedure for resumption of operation of the groundwater perimeter control system. Resumption of operation shall be required if trigger levels are exceeded. The report shall use as guidelines, the provisions of Article 5 of Chapter 15 and Chapter IV of San Francisco Bay Water Quality Control Plan,

**Report Due: No later than December 12 ,1995**

4. The discharger shall maintain a copy of this order at the project field office so as to be available at all times to project personnel.
5. The discharger's technical reports under subparagraph 3.a, 3.b and 3.c hereof shall consider the guidance provided by the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California".
6. Technical reports, submitted by the discharger, in compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted to the Board on the schedule specified herein. These reports shall consist of a letter report that includes the following:
- a. A summary of work completed since submittal of the previous report and work projected to be completed by the time of the next report;
- b. Identification of any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles;
- c. In the event of non-compliance with any Prohibition, Specification or Provision of this Order, written notification which clarifies the reasons for non-compliance and which proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion, and shall identify the impact of non-compliance on achieving compliance with the remaining requirements of this Order, and;
7. All submittal of hydrogeological plans, specifications, reports, and documents (except quarterly progress and self-monitoring reports), shall be signed by and stamped with the seal of a California registered geologist, registered engineering geologist, or

registered professional California civil engineer.

8. All samples shall be analyzed by State certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.
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. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order, submitted by the discharger, shall also be provided to the agencies stated below.
  - a. City of San Jose;
  - b. Santa Clara County Health Department,
  - c. Santa Clara Valley Water District and;
  - d. California EPA, DTSC.
11. The discharger shall permit the Board or its authorized representative, in accordance with Section 13267(c) of the California Water Code, the following:
  - a. Entry upon premises in which any pollution sources exist, or may potentially exist, or in which any required records are kept, which are relevant to this Order;
  - b. Access to copy all records required to be kept under the terms and conditions of this Order;
  - c. Inspection of any monitoring equipment or methodology implemented in response to this Order; and,
  - d. Sampling of any ground water or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the discharger.
12. The discharger shall file with this Board a report of any material change or proposed change in the character, location, or quantity of this discharge. For the purpose of these requirements, this includes any proposed change in the boundaries, contours, or ownership of the contaminated site area if ground water quality standards are exceeded.
13. The Board considers the discharger, Chevron USA Inc. the property owner and site operator to have a continuing responsibility for correcting any problems within their reasonable control which arise in the future as a result of this contaminant discharge or water applied to this property during subsequent use of the land for other purposes.
14. These requirements do not authorize the commission of any act causing injury to the property of another or of the public, do not convey any property rights, do not remove liability under federal, state or local laws, and do not authorize the discharge of waste without the appropriate federal, state or local permits, authorizations, or determinations.
15. If hazardous substances or designated waste is discharged in or on any waters of the state, or discharged and deposited in any place where it may be carried off to, or probably will be discharged in or on any waters of the state, the discharger shall report

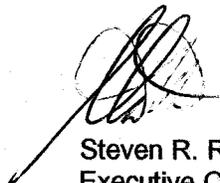
such discharge / incidents to the following:

- a. This Regional Board at (510) 286-1255 on weekdays during office hours from 8 a.m. to 5 p.m.; and,
- b. The Office of Emergency Services at (800) 852- 7550.

Hazardous and designated substances include wastes and chemicals as defined in Title 22 and Title 23 of the California code of Regulation and the California Water Quality control Act. A written report shall be filed with the Regional Board within five working days and shall contain information relative to the following:

- c. The nature of waste or pollutant;
  - d. The quantity involved and the duration of incident;
  - e. The cause of spill;
  - f. The estimated size of affected area;
  - g. The corrective measures that have been taken or planned, and a schedule of these measures; and,
  - h. The persons/agencies notified.
16. This Order supersedes Order Nos. 90 - 015 and 91 -019. Order Nos. 91 - 019 and 90 - 015 are therefore rescinded.
  17. If, for reasons beyond the control of the discharger, the discharger is delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the discharger shall promptly notify the Executive Officer and the Board may consider revision to this Order.
  18. This Order is subject to Board review and updating, as necessary, to comply with changing state or Federal Laws, regulations, policies, or guidelines; changes in the Board's Basin plan; or changes in the discharge characteristics.

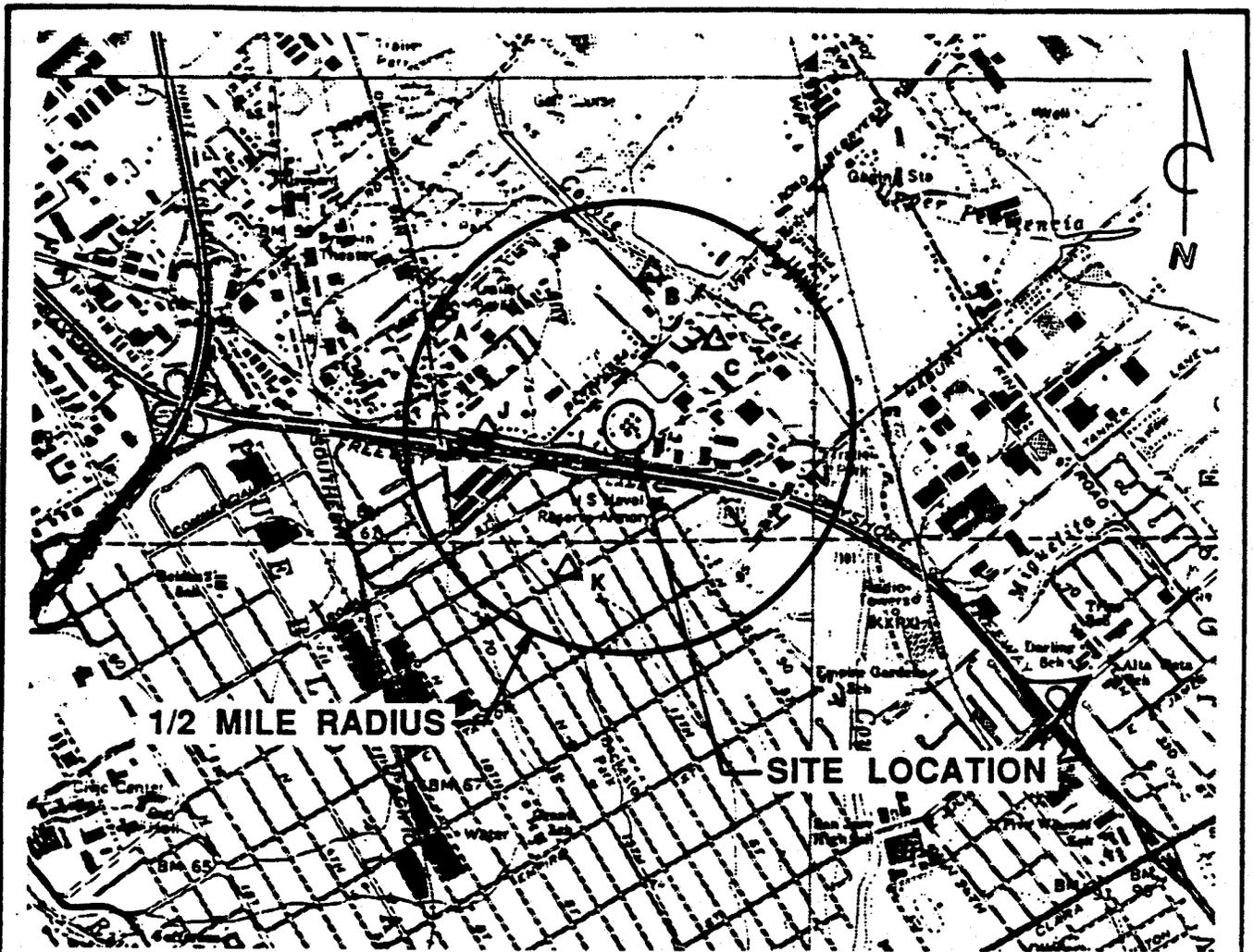
I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on April 19, 1995.

  
Steven R. Ritchie  
Executive Officer

**Attachments:**

Figure 1: Site Location Map, Chevron USA Fuel Terminal 1001272

Figure 2: Extended Site Map, Chevron USA Terminal  
Self Monitoring Program



1/2 MILE RADIUS

SITE LOCATION



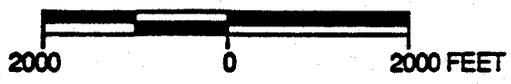
QUADRANGLE LOCATIONS

**LEGEND**

 WATER SUPPLY WELL LOCATION

**REFERENCE:**  
 USGS 7.5 MIN. TOPOGRAPHIC MAP  
 TITLED: SAN JOSE WEST, CALIFORNIA  
 DATED: 1961 REVISED: 1980  
 TITLED: SAN JOSE EAST, CALIFORNIA  
 DATED: 1961 REVISED: 1980  
 TITLED: MILPITAS, CALIFORNIA  
 DATED: 1961 REVISED: 1980  
 TITLED: CALAVERAS RESERVOIR, CALIFORNIA  
 DATED: 1961 REVISED: 1980

**SCALE**



PACIFIC ENVIRONMENTAL GROUP, INC.

CHEVRON USA FUEL TERMINAL  
 1020 Berryessa Road  
 San Jose, California

SITE LOCATION MAP

FIGURE:  
 1

PROJECT NUMBER

DRAWN BY  
DATE/NUMBER

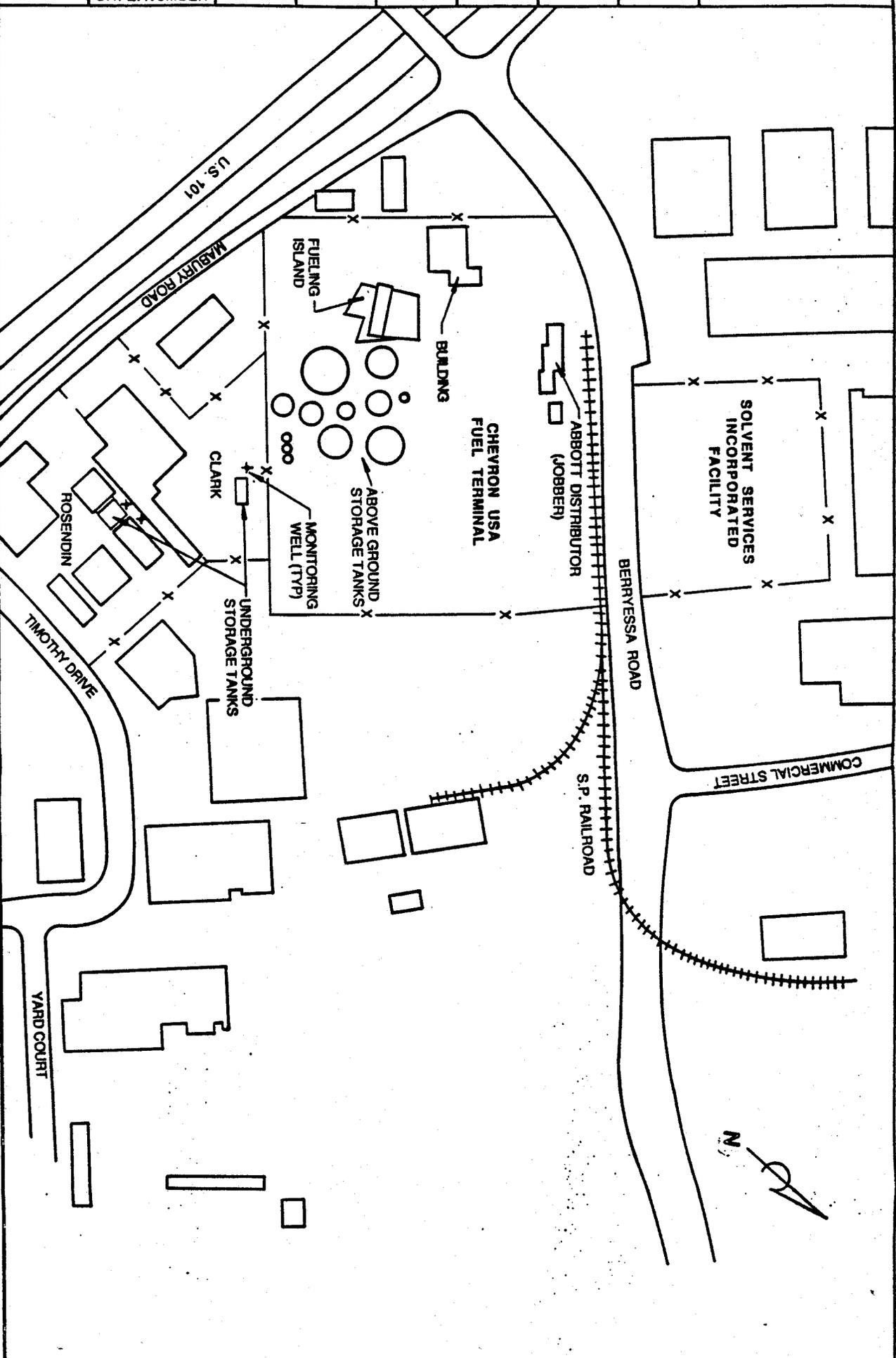
REVISIONS



PACIFIC ENVIRONMENTAL GROUP, INC.



SCALE



CHEVRON USA FUEL TERMINAL  
1020 Berryessa Road  
San Jose, California

FIGURE 2

EXTENDED SITE MAP

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

CHEVRON U.S.A INC., FUEL TERMINAL 1001272

1020 berryessa Road.,

SAN JOSE, SANTA CLARA COUNTY

SITE CLEANUP REQUIREMENTS  
ORDER NO. 95 - 083

CONSISTS OF

PART A

AND

PART B

## PART A

### A. General

1. Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.
2. The principal purposes of a self-monitoring program by a waste discharger are the following:
  - a. To document compliance with Waste Discharge Requirements and prohibitions established by the Board;
  - b. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge;
  - c. To develop or assist in the development of standards of performance, toxicity standards and other standards; and,
  - d. To prepare water and wastewater quality inventories.

### B. Sampling And Analytical Methods

1. Sample collection, storage, and analyses shall be performed according to the most recent version of Standard Methods for the Analysis of Wastewater, and Test Methods for Evaluating Solid Waste EPA Document SW-846, or other EPA approved methods and in accordance with an approved sampling and analysis plan.
2. Vapor and soil waste analysis shall be performed by a laboratory approved for these analyses by the State Department of Toxic Substances Control Division. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.
3. All monitoring instruments and equipment shall be properly calibrated and maintained to ensure accuracy of measurements.
4. Free phase hydrocarbons shall be measured in terms of thickness or sample for analysis at all sampling periods
5. Access to observation stations shall be inspected and cleared no later than 7 days prior to the beginning of sampling for each quarter. Board's staff shall be notified if maintaining access is deemed infeasible.

### C. Definition Of Terms

1. A grab sample is a discrete sample collected at any time.
2. A duly authorized representative may thus be either a named individual or any

individual occupying a named position such as the following:

- a. Authorization is made in writing by a principal executive officer; or,
- 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.

**D. Schedule Of Sampling, Analysis, And Observations**

1. The discharger is required to perform sampling, analysis, and observations according to the schedule specified in Part B.
2. A statistical analysis shall be performed and reported annually as described in the current revision of Appendix II of Chapter 15.

**E. Records To Be Maintained By The Discharger**

1. Written reports shall be maintained by the discharger for ground water monitoring and treated wastewater sampling, and shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Board. Such records shall show the following for each sample:
  - a. Identity of sample and sample station number;
  - b. Date and time of sampling;
  - c. Method of composite sampling (See Section C-Definition of Terms);
  - d. Date and time that analyses are started and completed, and name of the personnel performing the analyses;
  - e. Complete procedure used, including method of preserving the sample, and the identity and volumes of reagents used. A reference to a specific section of a reference required in Part A Section B is satisfactory;
  - f. Calculation of results;
  - g. Results of analyses, and detection limits for each analyses; and,
  - h. Chain of custody forms for each sample.

**F. Reports To Be Filed With The Board**

1. Ground water monitoring results shall be filed quarterly or semi annually as approved in part B of this SMP. Written self-monitoring reports shall be filed no later than 45 calendar days following the end of the report period. In addition an annual report shall be filed as indicated. The reports shall be comprised of the following:
  - a. Letter of Transmittal - A letter transmitting the essential points in each self-monitoring report should accompany each report. The letter shall state conclusions from relative comparison of quarterly test datas. Such a letter shall include a discussion of any requirement violations found during the last report period, and actions taken or planned for correcting the violations, such as,

operation and/or facilities modifications. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. If no violations have occurred in the last report period this shall be stated in the letter of transmittal. Monitoring reports and the letter transmitting the monitoring reports shall be signed by a principal executive officer at the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct. The letter shall contain the following certification:

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

- b. Each monitoring report shall include a compliance evaluation summary sheet. Until the Order's amended to specify ground water protection standards, the following shall apply and the compliance sheet shall contain:
  - i. The method and time of water level measurement, the type of pump used for purging, pump placement in the well, method of purging, pumping rate, equipment and methods used to monitor field Ph, temperature, and conductivity during purging, calibration of the field equipment, results of the Ph, temperature conductivity and turbidity testing, well recovery time, and method of disposing of the purge water; and,
  - ii. Type of pump used, pump placement for sampling, a detailed description of the sampling procedure; number and description of equipment, field and travel blanks; number and description of duplicate samples; type of sample containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations; the chain of custody record.
- c. A summary of the status of any remediation work performed during the reporting period. This shall be a brief and concise summary of the work initiated and completed as follows:
  - i. As interim corrective action measures; and,
  - ii. To define the extent and rate of migrations of waste constituents in the soil and ground water at the site.

- d. The discharger shall describe, in the quarterly report, the reasons for significant increases in a pollutant concentration at a well on site. The description shall include the following:
  - i. The source of the increase;
  - ii. How the discharger determined or will investigate the source of the increase; and,
  - iii. What source removal measures have been completed or will be proposed.
- e. A map or aerial photograph showing observation and monitoring station locations, and plume contours for selected chemical in each aquifer shall be included as part of the quarterly Self-Monitoring Report.
- f. Laboratory statements of results of analyses specified in Part B must be included in each report. The director of the laboratory whose name appears on the laboratory certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Board. The following information shall be provided:
  - i. The methods of analyses and detection limits must be appropriate for the expected concentrations. Specific methods of analyses must be identified. If methods other than EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review; and,
  - ii. In addition to the results of the analyses, laboratory quality control/quality assurance (QA/QC) information must be included in the monitoring report. The laboratory QA/QC information should include the method, equipment and analytical detection limits; the recovery rates; an explanation for any recovery rate that is less than 80%; the results of equipment and method blanks; the results of spiked and surrogate samples; the frequency of quality control analysis; and the name and qualifications of the person(s) performing the analyses.
- g. By March 31 of each year the discharger shall submit an annual report to the Board covering the previous calendar year. This report shall contain:
  - i. Tabular and graphical summaries of the monitoring data obtained during the previous year;
  - ii. 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 Site Cleanup Requirements; and,
  - iii. A written summary of the ground water analyses indicating any change in the quality of the ground water.

G. In the event the discharger violates or threatens to violate the conditions of the Site Cleanup Requirement and prohibitions due to:

1. Maintenance work, power failures, or breakdown of waste treatment equipment, or;
2. Accidents caused by human error or negligence, or;
3. Other causes, such as acts of nature.

The discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within 7 working days of the telephone notification. The written report shall include time and date, duration and estimated volume of waste discharged, 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.

In addition, the waste discharger shall promptly accelerate his monitoring program to analyze the discharge at least once every day. Such daily analyses shall continue until bypassing stops or until such time as the Executive Officer determines to be appropriate. The results of such monitoring shall be included in the regular Self-Monitoring Report.

## Part B

### A. Description Of Observation Stations And Schedule Of Observations

1. The observation stations shall consist of the ground water monitoring wells, sampling points on the SVE system and such stations as may be indicated by the Board. The siting, location and number of the observation stations shall be approved by the Executive Officer. Proposed observation station shall be included in the technical reports pursuant to Provision C.3.c.(2). of this Order.
2. The schedule of observations and grab sampling shall be conducted quarterly within the months of January, April, July and October or as approved in a proposed groundwater monitoring program.

### B. Observations and Test Procedures

1. The observations for groundwater wells and other points shall consist of the following as applicable:
  - a. Water elevation reported to the nearest 0.1 inch for both depth to water from the ground surface and the elevation of the ground water level;
  - b. Groundwater temperature measured at the time of sampling and reported in degrees Fahrenheit;
  - c. Groundwater electrical conductivity measured at the time of sampling as per Standard Methods 205 using potentiometric methodology;
  - d. Groundwater pH measured at the time of sampling as per Standard Methods 423 using potentiometric methodology; and,
  - e. Groundwater turbidity measured at the time of sampling.
2. Analytical test procedures for the ground water samples, vapor and soil samples shall consist of the following as applicable:
  - a. Volatile aromatic compound analysis using the EPA Method 5030/8020;
  - b. Total dissolved solids using a gravimetric method;
  - c. Total Petroleum Hydrocarbons and Fuel Hydrocarbons using the EPA Method 5030/8015 (Modified); and,
  - d. Total Oil and Grease using Standard Methods 418.1, infrared analysis.
  - e. Metals using EPA approved methods.
  - f. Salinity, Alkalinity and chloride using standard approved methods

I, Steven R. Ritchie, Executive Officer, hereby certify that the foregoing Self-Monitoring Program is as follows:

1. Developed in accordance with the procedures set forth in this Board's Resolution No. 73-16;
2. Effective on the date shown below; and,
3. May be reviewed or modified at any time subsequent to the effective date, upon written notice from the Executive Officer, or request from the discharger.

April 19, 1995  
Date Ordered



Steven R. Ritchie  
Executive Officer