

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 01-023

ADOPTION OF SITE CLEANUP REQUIREMENTS FOR:

AHMAD AND MARISOL AVASH, ALI AND FATEMEH SALKHI, THE AVASH FAMILY TRUST, THE 1993 AVASH FAMILY TRUST AND THE 1993 SALKHI FAMILY TRUST

for the property located at

7474 REDWOOD BOULEVARD
NOVATO
MARIN COUNTY

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

1. **Site Location:** The VIA Station (hereinafter the Site) is located at 7474 Redwood Boulevard in the City of Novato. The Site is located at the southeast corner of the intersection of Olive Street and Redwood Boulevard and is located in an area of primarily commercial and light industrial development. The Site is approximately one-half mile northeast of Novato Creek, one-half mile southwest of Rush Creek, and one-quarter mile west of U.S. Highway 101.
2. **Site History:** The site has been operating a retail service station since approximately 1967. Ahmad and Marisol Avash and Ali and Fatemeh Salkhi bought the property and the station facility in 1989 - 1990. From 1992 until 1996 it was called a BP station, although BP was only the supplier, not the owner or operator dispensing the petroleum fuel at the station. In 1996, the station was renamed VIA station.
3. **Named Dischargers:** Ahmad and Marisol Avash, Ali and Fatemeh Salkhi, the Avash Family Trust, the 1993 Avash Family Trust and the 1993 Salkhi Family Trust are named as dischargers because (a) they are/were the owners of both the service station and the property at the Site starting in 1989 - 1990 and (b) there is substantial evidence that petroleum pollutants, including MTBE, were discharged to soil and groundwater at the Site during their period of occupancy and ownership.

If additional information is submitted indicating that other parties caused or permitted any waste to be discharged on the Site where it entered or could have entered waters of the state, the Board will consider adding those parties' names to this order.

4. **Regulatory Status:** This Site is not currently subject to Board order. However, the Executive Officer has previously required the dischargers to submit remedial investigation and interim remedial action workplans pursuant to Section 13267 of the Water Code.
5. **Site Hydrogeology:** Subsurface conditions beneath the Site consists of a clay bed with minor silty-clay layers that extend from the ground surface to between 9 and 14 feet below ground surface (bgs). A thick gravel layer that contains groundwater consistently underlies the clay layer to a depth of at least 25 feet, the maximum depth of drilling conducted to date at the Site.

The groundwater potentiometric surface at the site is shallow, ranging from 4 feet to 7 feet bgs. The first encountered aquifer under the site is the thick gravel bed described above. The aquifer is confined by the overlying clay bed, except where the clay bed has been removed for the underground storage tank (UST) excavations, and in the vicinity of monitoring well 6 (MW-6) where it appears it has been removed and replaced with fill. Groundwater is typically first encountered in the top of the gravel layer.

Groundwater gradient and flow direction has been relatively consistent since March 1995 and has not shown significant seasonal variation. The groundwater flow direction has ranged from N60°E to N80°E, and the groundwater gradient has ranged from 0.004 ft/ft to 0.008 ft/ft since March 1995.

6. **Remedial Investigation:** Initial site characterization work began as early as 1988, and remedial investigations continue up to the present.

In 1988, high concentrations of TPH-g, TPH-d, & BTEX were first detected in soil and groundwater samples. Free product was also encountered with product thicknesses exceeding 0.5 feet. Later investigations performed in 1989, including the installation of three monitoring wells, showed soil samples containing up to 18,816 ppm of TPH-d, 5,943 ppm of TPH-g, and 153 ppm of benzene, with continuing detections of free product and elevated concentrations of petroleum hydrocarbons in groundwater. To further characterize the site, additional borings and monitoring wells were installed in 1995, 1999, and 2000.

MTBE testing first began at this Site on August 5, 1997. MTBE concentrations have been found to be increasing, reaching up to 53,000 ppb in groundwater in June and September of 2000 in MW-5, located at the Site. Benzene has also been detected in groundwater beneath the Site at up to 11,000 ppb. The primary maximum contaminant levels (MCLs) for MTBE and benzene in drinking water are 13 ppb and 1 ppb, respectively.

Two sensitive receptor surveys, conducted in November 1999 and April/May 2000, identified 15 properties within 2000 feet of the Site as having domestic water wells. Seven of the fifteen properties are located downgradient or transgradient of the Site.

The only known downgradient drinking water well was located about 700 feet to the northeast. This drinking water well, servicing 42 connections at the Redwood Homes trailer park (7530 Redwood Boulevard), was found to be impacted with 92 ppb of MTBE on September 28, 2000. This drinking water well was taken out of service on October 10, 2000. A sample of the drinking water well on October 13, 2000 contained 120 ppb of MTBE. This drinking water well along with an older inactive water well at the trailer park were decommissioned/destroyed on November 1, 2000. The suspected source of the MTBE contamination of the drinking water well is the VIA station.

The other six identified downgradient/transgradient water wells consist of one City of Novato emergency municipal well (inactive for over 20 years and planned to provide irrigation water during periods of water shortages), one dust control well, one industrial supply well, one irrigation well (no longer in service, decommissioned in 2000), and two domestic wells (one of which could not be field located and other which is used for flushing toilets only).

In accordance with an approved workplan, dated November 14, 2000, and an approved workplan amendment, dated December 5, 2000, the dischargers are conducting an investigation to define the horizontal and vertical extent of the pollution emanating from the Site.

7. **Interim Remedial Measures:** In April 1992, four USTs and 450 cubic yards of polluted soil were removed. The wells containing free product have been periodically bailed. In accordance with the approved workplan of November 14, 2000, and per the approved workplan amendment of December 5, 2000, the dischargers are installing one extraction well at the northeast corner of the Site, which will soon begin groundwater extraction to prevent further migration of the polluted groundwater leaving the Site.
8. **Adjacent Sites:** There are several nearby sites with known or suspected gasoline underground and aboveground storage tanks. The Regional Board is currently overseeing three of these nearby leaking underground tank sites. These nearby sites, however, are not currently believed to have played a significant role in affecting the Redwood Homes trailer park. These three sites consist of (1) an existing Shell station (7374 Redwood Boulevard) which has reported leaking waste oil and hydraulic fluids but has not reported any releases of gasoline, (2) a former Unocal station (7455 Redwood Boulevard) with a maximum of 5,000 ppb of MTBE in the groundwater beneath the former Unocal station but with the most downgradient monitoring well for this site (located less than 100 feet upgradient of the VIA Site) consistently containing less than 100 ppb of MTBE, and (3) a

Big4 Rents site (875 Olive Street) that has two dust control water wells which contains less than 10 ppb of MTBE.

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

The potential and/or existing beneficial uses of groundwater underlying and adjacent to the Site include:

- a. Municipal and domestic water supply
- b. Industrial process water supply
- c. Industrial service water supply
- d. Agricultural water supply
- e. Freshwater replenishment to surface waters

The existing and potential beneficial uses of Novato Creek, Rush Creek, and San Pablo Bay include:

- o Commercial and sport fishing
- o Estuarine habitat
- o Industrial service supply
- o Fish migration and spawning
- o Navigation
- o Preservation of rare and endangered species
- o Water contact and non-contact recreation
- o Shellfish harvesting
- o Wildlife habitat

10. **Other Board Policies:** Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible.

Board Resolution No. 89-39, "Sources of Drinking Water," defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally high contaminant levels.

11. **State Water Board Policies:** State Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California," applies to this discharge and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives. Given the Board's past experience with groundwater pollution cases of this type, it is unlikely that background levels of water quality can be restored. This initial conclusion will be verified when a cleanup plan is prepared. This order and its requirements are consistent with Resolution No. 68-16.

State Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," applies to this discharge. This order and its requirements are consistent with the provisions of Resolution No. 92-49, as amended.

12. **Preliminary Cleanup Goals:** The dischargers will need to make assumptions about future cleanup standards for soil and groundwater, in order to determine the necessary extent of remedial investigation, interim remedial actions, and the draft cleanup plan. Pending the establishment of site-specific cleanup standards, the following preliminary cleanup goals should be used for these purposes:
 - a. Groundwater: Applicable water quality objectives (e.g. maximum contaminant levels, or MCLs) or, in the absence of a chemical-specific objective, risk-based levels (e.g. drinking water equivalent levels).
 - b. Soil: 1 mg/kg total volatile organic compounds (VOCs), 10 mg/kg total semi-volatile organic compounds (SVOCs), and background concentrations of metals.
13. **Basis for 13304 Order:** The dischargers have caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.
14. **Cost Recovery:** Pursuant to California Water Code Section 13304, the dischargers are 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.

15. **CEQA:** This action is an order to enforce the laws and regulations administered by the Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.
16. **Notification:** The Board has notified the dischargers and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe site cleanup requirements for the discharge, and has provided them with an opportunity to submit their written comments.
17. **Public Hearing:** The Board, at a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers (or their agents, successors, or assigns) shall cleanup and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous substances in a manner which will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.
2. Further significant migration of wastes or hazardous substances through subsurface transport to waters of the State is prohibited.
3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. TASKS

1. **COMPLETION OF REMEDIAL INVESTIGATION**

COMPLIANCE DATE: March 20, 2001

Submit a technical report acceptable to the Executive Officer documenting completion of the planned remedial investigation identified in Finding 6 of this Order. The technical report should define the vertical and lateral extent of

pollution down to concentrations at or below typical cleanup standards for soil and groundwater.

2. COMPLETION OF ON-SITE INTERIM REMEDIAL ACTION

COMPLIANCE DATE: April 20, 2001

Submit a technical report acceptable to the Executive Officer documenting completion of the planned interim remedial action identified in Finding 7 of this Order. The report should document the start-up of the interim remedial action.

3. GROUNDWATER MONITORING WELL INSTALLATION WORKPLAN

COMPLIANCE DATE: June 15, 2001

Submit a workplan acceptable to the Executive Officer for the installation of additional monitoring wells to confirm the groundwater plume extent. The monitoring wells shall be placed in locations necessary to monitor future plume behavior.

4. COMPLETION OF GROUNDWATER MONITORING WELL INSTALLATION

COMPLIANCE DATE: September 15, 2001

Submit a technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in the Task 3 workplan.

5. OFF-SITE INTERIM REMEDIAL ACTION WORKPLAN

COMPLIANCE DATE: Within 45 days of Executive Officer's written request

Submit a workplan acceptable to the Executive Officer to evaluate off-site interim remedial action alternatives (for groundwater) and to recommend one or more alternatives for implementation. The workplan should specify a proposed time schedule. This task would be required if the Executive Officer concludes that on-site interim remedial actions are not adequate to prevent significant pollutant migration in groundwater.

6. COMPLETION OF OFF-SITE INTERIM REMEDIAL ACTIONS

COMPLIANCE DATE:

According to the schedule in the Task 5 workplan approved by the Executive Officer

Submit a technical report acceptable to the Executive Officer documenting completion of necessary tasks identified in the Task 5 workplan. For ongoing actions, such as groundwater extraction, the report should document start-up as opposed to completion.

7. **PROPOSED FINAL REMEDIAL ACTIONS AND CLEANUP STANDARDS**

COMPLIANCE DATE:

June 15, 2002

Submit a technical report acceptable to the Executive Officer containing:

- a. Results of the remedial investigation
- b. Evaluation of the installed interim remedial actions
- c. Feasibility study evaluating alternative final remedial actions
- d. Risk assessment for current and post-cleanup exposures
- e. Recommended final remedial actions and cleanup standards
- f. Implementation tasks and time schedule

Item c should include projections of cost, effectiveness, benefits, and impact on public health, welfare, and the environment of each alternative action.

Items a through c should be consistent with the guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300), CERCLA guidance documents with respect to remedial investigations and feasibility studies, Health and Safety Code Section 25356.1(c), and State Board Resolution No. 92-49 as amended ("Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304").

Item e should consider the preliminary cleanup goals for soil and groundwater identified in finding 12 and should address the attainability of background levels of water quality (see finding 11).

8. **Delayed Compliance:** If the dischargers are delayed, interrupted, or prevented from meeting one or more of the completion dates specified for the above tasks, the dischargers shall promptly notify the Executive Officer and the Board may consider revision to this Order.

C. PROVISIONS

1. **No Nuisance:** The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in California Water Code Section 13050(m).
2. **Good Operation and Maintenance (O&M):** The dischargers 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.
3. **Access to Site and Records:** In accordance with California Water Code Section 13267(c), the dischargers shall permit the Board or its authorized representative:
 - a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.
 - b. Access to copy any records required to be kept under the requirements of this Order.
 - c. Inspection of any monitoring or remediation facilities installed in response to 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 undertaken by the discharger.
4. **Self-Monitoring Program:** The dischargers shall comply with the Self-Monitoring Program as attached to this Order and as may be amended by the Executive Officer.
5. **Contractor / Consultant Qualifications:** All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.
6. **Lab Qualifications:** 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 (QA/QC) records for Board review. This provision does not apply to analyses that can only reasonably be performed on-site (e.g. temperature).

7. **Document Distribution:** Copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the following agencies:
 - a. Marin County Office of Waste Management
 - b. Marin County Environmental Health Services

The Executive Officer may modify this distribution list as needed.

8. **Reporting of Changed Owner or Operator:** The dischargers shall file a technical report on any changes in site occupancy or ownership associated with the property described in this Order.
9. **Reporting of Hazardous Substance Release:** If any hazardous substance is discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, the dischargers shall report such discharge to the Regional Board by calling (510) 622-2300 during regular office hours (Monday through Friday, 8:00 to 5:00).

A written report shall be filed with the Board within five working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

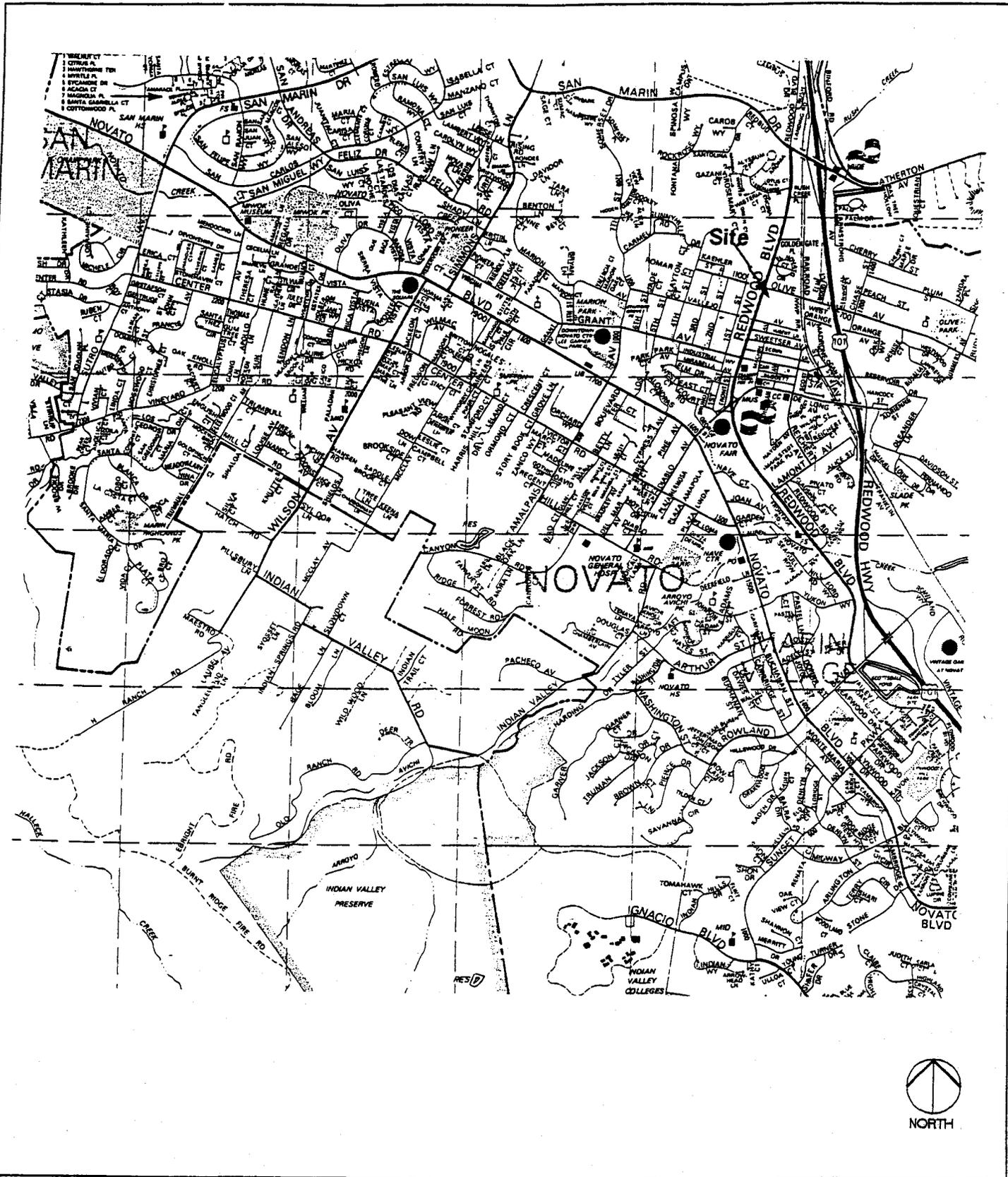
10. **Periodic SCR Review:** The Board will review this Order periodically and may revise it when necessary. The dischargers may request revisions and upon review the Executive Officer may recommend that the Board revise these requirements.

I, Loretta K. Barsamian, 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 February 21, 2001.


Loretta K. Barsamian
Executive Officer

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO: IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTIONS 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY

Attachments: Site Maps
Self-Monitoring Program



EDD CLARK & ASSOCIATES, INC.
 ENVIRONMENTAL CONSULTANTS

Vicinity Map
 VIA/BP Service Station
 7474 Redwood Boulevard
 Novato, California

PLATE

1

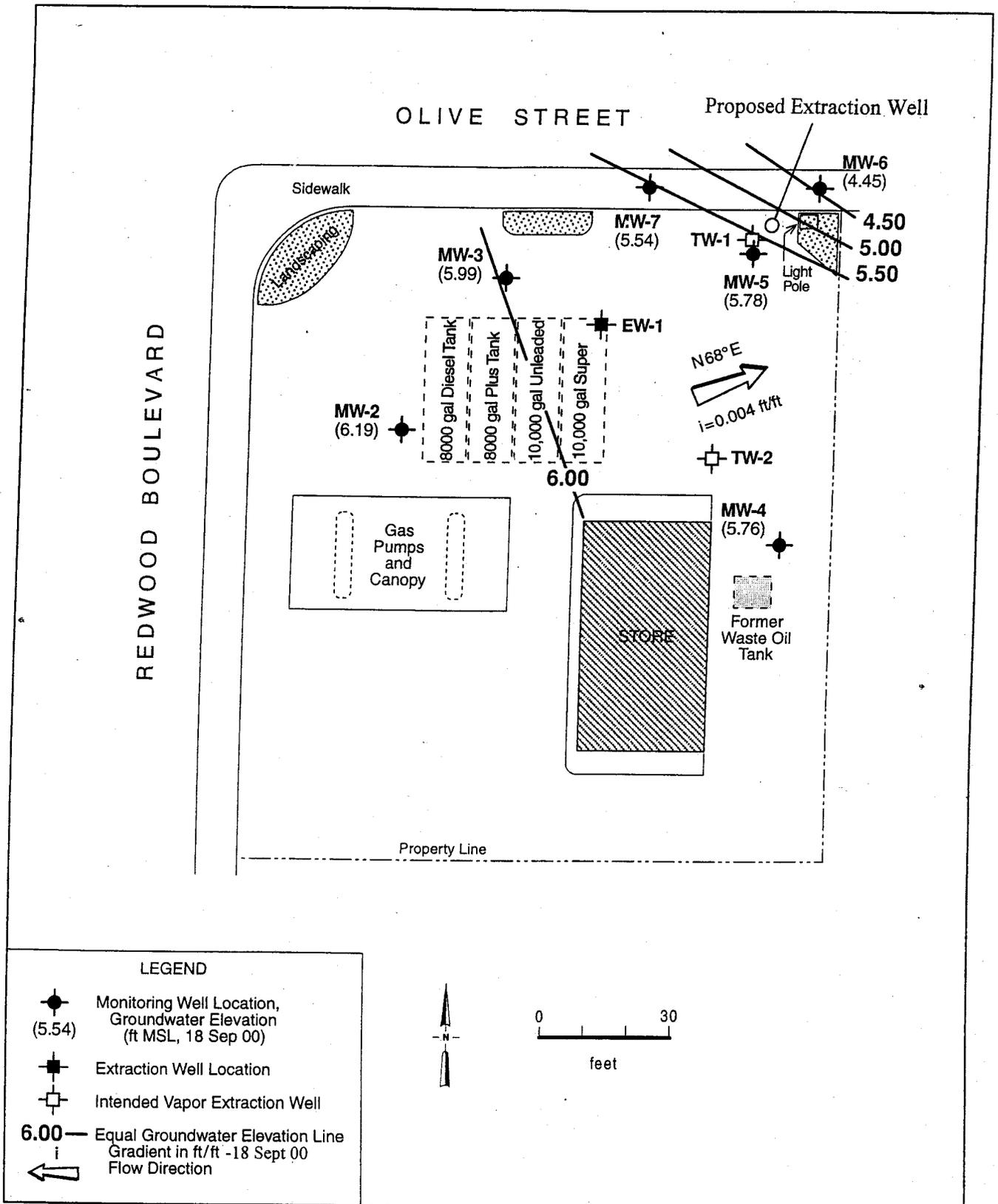
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 ENVIRONMENTAL CONSULTANTS

Site Map
 VIA/BP Service Station
 7474 Redwood Boulevard
 Novato, California

PLATE
3

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TRACE #247/RG/1706000

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

AHMAD AND MARISOL AVASH, ALI AND FATEMEH SALKHI, THE AVASH FAMILY TRUST, THE 1993 AVASH FAMILY TRUST AND THE 1993 SALKHI FAMILY TRUST

for the property located at

7474 REDWOOD BOULEVARD
NOVATO
MARIN COUNTY

1. **Authority and Purpose:** The Board requests the technical reports required in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. 01-023 (site cleanup requirements).
2. **Monitoring:** The dischargers shall measure groundwater elevations quarterly in all monitoring wells, and shall collect and analyze representative samples of groundwater according to the following schedule:

Well #	Sampling Frequency	Analyses
MW-1 thru MW-7, EW-1, EW-2, TW-1, & TW-2	Q	TPH-g, TPH-d, BTEX, and MTBE & other oxygenates
EW-2 and MW-4	A	TPH-k, TPH-mo, VOCs, SVOCs, dissolved metals (Ni, Cd, Cr, Pb, & Zn)

Key: Q = Quarterly
SA = Semi-Annually
A = Annually
TPH-g, TPH-d, TPH-k, TPH-mo by modified EPA Method 8015 or equivalent

BTEX by EPA Method 8020 or equivalent
MTBE and other oxygenates by EPA Method 8260 or equivalent
VOCs by EPA Method 8010 or equivalent
SVOCs by EPA Method 8270 or equivalent

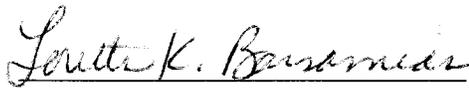
The dischargers shall sample any new monitoring or extraction wells quarterly and analyze groundwater samples for the same constituents as shown in the above table. The dischargers may propose changes in the above table; any proposed changes are subject to Executive Officer approval.

3. **Quarterly Monitoring Reports:** The dischargers shall submit quarterly monitoring reports to the Board no later than 30 days following the end of the quarter (e.g. report for first quarter of the year due April 30). The next quarterly monitoring report shall be due on April 30, 2001. The reports shall include:
 - a. **Transmittal Letter:** The transmittal letter shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the discharger's principal executive officer or his/her duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.
 - b. **Groundwater Elevations:** Groundwater elevation data shall be presented in tabular form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the fourth quarterly report each year.
 - c. **Groundwater Analyses:** Groundwater sampling data shall be presented in tabular form, and an isoconcentration map should be prepared for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall be included in the fourth quarterly report each year. The report shall describe any significant increases in contaminant concentrations since the last report, and any measures proposed to address the increases. Supporting data, such as lab data sheets, need not be included (however, see record keeping - below).
 - d. **Groundwater Extraction:** If applicable, the report shall include groundwater extraction results in tabular form, for each extraction well and for the site as a whole, expressed in gallons per minute and total groundwater volume for the quarter. The report shall also include contaminant removal results, from

groundwater extraction wells and from other remediation systems (e.g. soil vapor extraction), expressed in units of chemical mass per day and mass for the quarter. Historical mass removal results shall be included in the fourth quarterly report each year.

- e. **Status Report:** The quarterly report shall describe relevant work completed during the reporting period (e.g. site investigation, interim remedial measures) and work planned for the following quarter.
4. **Violation Reports:** If the dischargers violates requirements in the Site Cleanup Requirements, then the dischargers shall notify the Board office by telephone as soon as practicable once the dischargers has knowledge of the violation. Board staff may, depending on violation severity, require the dischargers to submit a separate technical report on the violation within five working days of telephone notification.
5. **Other Reports:** The dischargers shall notify the Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further migration of contaminants or which would provide new opportunities for site investigation.
6. **Record Keeping:** The dischargers or his/her agent shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six years after origination and shall make them available to the Board upon request.
7. **SMP Revisions:** Revisions to the Self-Monitoring Program may be ordered by the Executive Officer, either on his/her own initiative or at the request of the dischargers. Prior to making SMP revisions, the Executive Officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.

I, Loretta K. Barsamian, Executive Officer, hereby certify that this Self-Monitoring Program was adopted by the Board on February 21, 2001.


Loretta K. Barsamian
Executive Officer