

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION**

**MONITORING AND REPORTING PROGRAM NO. R5-2009-0817  
CALIFORNIA WATER CODE SECTION 13267**

**FOR  
MR. HAROLD MOSKOWITE  
6000 STEELE CANYON ROAD  
NAPA, NAPA COUNTY**

This Order is issued to Mr. Harold Moskowitz (hereafter Discharger) pursuant to California Water Code section 13267, which authorizes the Executive Officer of the California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board) to issue a Monitoring and Reporting Order (Order).

The Executive Officer finds:

**INTRODUCTION**

1. Mr. Harold Moskowitz (Discharger) owns the land and facility, formerly known as Jeri's Got Gas Station, located at 6000 Steele Canyon Road in Lake Berryessa, Napa County (Site).
2. The facility, formerly known as Jeri's Got Gas Station, operated an underground storage tank (UST) system from the 1970's until removal in 1995. A waste oil UST was located at the Site from the 1970's until 1991. An above ground storage tank (AST) operated from 1995 to 2003.
3. The site is southwest and up-gradient from a residential trailer park, and a petroleum impacted groundwater plume extends under the trailer park.
4. Depth to groundwater has ranged from ground surface (bgs) to 24 feet bgs. Groundwater samples have contained petroleum hydrocarbon constituents at maximum concentrations of: total petroleum hydrocarbons as gasoline (TPH-G) 41,000 micrograms per liter (ug/l), benzene 1,400 ug/l, toluene 2,700 ug/l, ethylbenzene 2,500 ug/l, xylenes 7,300ug/l, methyl tert butyl ether (MTBE) 63,000 ug/l, tert amyl methyl ether (TAME) 690 ug/l, tert butyl alcohol (TBA) 420 ug/l, and naphthalene 3.4 ug/l.
5. During the fourth quarter 2008 groundwater monitoring event, concentrations of petroleum constituents were detected at maximum concentrations of: TPH-G 850 ug/l, benzene 25 ug/l, toluene 100 ug/l, ethylbenzene 8.1 ug/l, xylenes 36 ug/l, MTBE 3,300 ug/l, TAME 180 ug/l, TBA 35 ug/l. This pollution has impaired the beneficial uses of the groundwater resource.
6. Approximately 1,200 cubic yards of soil was excavated and removed from the Site during the UST removal in 1995. During UST system removal approximately 40,000 gallons of impacted groundwater was pumped from the UST excavation. Soil over-excavation and groundwater extraction from the tank pit removed an unknown amount of contamination. An ozone pilot test was conducted from August to September 2004. A soil vapor extraction pilot test was conducted in November 2006. SVE pilot testing was performed to evaluate

the effective vapor extraction radius of influence for control of sparged ozone and introduction of oxygen in subsurface soils; mass removed was not calculated.

7. This Monitoring and Reporting Program (MRP) is issued by the Executive Officer of the Central Valley Water Board, pursuant to California Water Code (CWC) section 13267 and is necessary to delineate groundwater pollutant plumes and determine whether remediation efforts are effective.
8. Existing data and information about the site show the presence of various chemicals, including TPH-G, benzene, and MTBE, emanating from the property under the control of the Discharger, and resulting from the past operations at the Site. Based on the available data the Discharger is responsible for the discharge because he owned the property at the time petroleum hydrocarbons were discharged/released, and because he is the current owner of the property.
9. The California State Water Resources Control Board (State Water Board) Resolution No. 2009-0042 requires reduction from quarterly groundwater monitoring to semi-annual or less frequent monitoring at all sites, unless site-specific needs warrant otherwise, and requires notification to all responsible parties and the State Water Board of the new requirements by 1 August 2009. MRP R5-2009-0819 complies with State Water Board Resolution No. 2009-0042.

### **LEGAL PROVISIONS**

10. CWC section 13267 states, in part:

- (b)(1) In conducting an investigation, the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or, discharging, or who proposes to discharge waste within its region . . . shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The reports required herein are necessary for the reasons described in this Order, to assure protection of waters of the state, and to protect public health and the environment.

11. CWC section 13268 states, in part:

- (a)(1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267 . . . or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).
- (b)(1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 for a violation of subdivision (a) in an

amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

Failure to submit the required reports to the Central Valley Water Board according to the schedule detailed herein may result in enforcement action(s) being taken against you, which may include the imposition of administrative civil liability pursuant to CWC section 13268. Administrative civil liability of up to \$1,000 per violation per day may be imposed for non-compliance with the directives contained herein.

12. Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday (including mandatory furlough days), the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: [http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality) or will be provided upon request.

### **REQUIRED ACTIONS**

**IT IS HEREBY ORDERED** that, pursuant to California Water Code section 13267, the **Discharger** shall:

1. Conduct monitoring and reporting in compliance with the following specifications.
2. As shown on Figure 1, there are 19 monitoring wells, two observations wells, one injection well, and one extraction well. Sensitive receptors in the vicinity of the Site include: private water supply wells, the closest of which is allocated at 1098 Capell Valley Road, approximately 1,750 feet northwest (down-gradient) from the Site, Oak Moss Creek approximately 500 feet north (down-gradient) from the Site, and an irrigation well at the vineyard approximately 400 feet east (cross-gradient) from the Site. The groundwater monitoring program for the 19 monitoring wells, the domestic, and irrigation well, and any wells installed subsequent to the issuance of this MRP, shall follow the schedule in the table below.
3. If sampling requirements for elimination of constituents have already been met, the Discharger is not required to sample for those constituents again based on the requirements in this MRP.
4. Monitoring wells with free phase petroleum product or visible sheen shall be monitored, at a minimum, for product thickness and depth to water.

5. Sample collection and analysis shall follow standard Environmental Protection Agency (EPA) protocol. The volume of extracted groundwater also shall be provided in semi-annual monitoring reports.
6. Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Discharger shall submit plans and specifications to the Central Valley Water Board for review and approval. Once installed, all new wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule below.

Well	Analysis Frequency <sup>1</sup>				
	TPH-D	TPH-G	BTEX	Fuel Oxygenates <sup>2</sup>	Other Parameters <sup>3</sup>
MW-1	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-2	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-3	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-4	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-5	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-6	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-7	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-8	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-9	Annually	Annually	Annually	Annually	Annually
MW-10	Annually	Annually	Annually	Annually	Annually
MW-11	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-12	Annually	Annually	Annually	Annually	Annually
MW-13	Annually	Annually	Annually	Annually	Annually
MW-14	Not Analyzed <sup>4</sup>	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-15	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-16	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-17	Not Analyzed <sup>4</sup>	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually
MW-18	Annually	Annually	Annually	Annually	Annually
MW-19	Not Analyzed <sup>4</sup>	Not Analyzed <sup>4</sup>	Not Analyzed <sup>4</sup>	Semi-Annually	Semi-Annually
OB-2	Annually	Annually	Annually	Annually	Annually
Domestic & Irrigation Wells	Annually	Annually	Annually	Annually	Annually
New Wells	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually	Semi-Annually

1 Sample semi-annually in the first and third quarters, and annually in the third quarter

2 Fuel Oxygenates = MTBE, TBA, DIPE, ETBE, and TAME

3 Other Parameters = Dissolved Lead, ethanol, methanol, PAHs, and Naphthalene

4 Not analyzed for the listed constituent, unless requested by Central Valley Water Board staff

Constituents <sup>5</sup>	EPA Analytical Method	Maximum Practical Quantitation Limit <sup>6</sup> (ug/l)
Depth to Groundwater	---	0.01 ft
TPH as Gasoline <sup>8</sup>	8015M or 8260B	50
TPH as Diesel <sup>8</sup>	8015M	50
BTEX <sup>8</sup>	8020 or 8260B	0.5
Dissolved Lead <sup>7</sup>	7421	10
MTBE	8260B	0.5
TBA	8260B	5
TAME	8260B	0.5
DIPE	8260B	0.5
ETBE	8260B	0.5
Ethanol <sup>7</sup>	8260B	50
Methanol <sup>7</sup>	8260B	100
PAH <sup>7</sup>	8270 or 8310	0.5
Naphthalene <sup>7</sup>	8260B or 8310 or 8270	0.5

5 Report all discrete peaks identified during the normal course of analysis for chemicals of concern.

6 All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

7 Analysis may be discontinued with Central Valley Water Board staff concurrence, after 2 consecutive monitoring events with non-detectable results.

8 Analysis may be reduced to annually during the first quarter with Central Valley Water Board staff concurrence, after 2 consecutive monitoring events with non-detectable results.

## REPORTING

7. When reporting data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with this Order.
8. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional or their subordinate and signed by the registered professional.
9. The Discharger shall submit a paper copy of the semi-annual reports to this Central Valley Water Board office and submit the semi-annual electronic data reports, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30, electronically over the internet to the State Water Board's Geotracker database system. Both the paper copy and the electronic submittal are due by the 1st day of the second month following the end of each half of the year; **1 August** (1<sup>st</sup> half of the year), **and 1 February** (2<sup>nd</sup> half of the year), until such time as the Executive Officer determines that the reports are no longer necessary. Each semi-annual report shall include the following minimum information:
  - (a) A description and discussion of the groundwater sampling event and results, including trends in the concentrations of pollutants and groundwater elevations in the wells, how and when samples were collected, and whether the pollutant plume(s) is delineated.

- (b) Field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, etc.
  - (c) Groundwater contour maps for all groundwater zones, if applicable.
  - (d) Concentration contour maps for all groundwater zones for TPH-G, benzene, MTBE, and TBA, as applicable.
  - (e) A table showing well construction details such as well number, groundwater zone being monitored, ground surface elevation, screen interval, bentonite interval, filter pack interval, and total depth of the well.
  - (f) A table showing historical lateral and vertical (if applicable) down-gradient directions and gradients.
  - (g) Cumulative data tables containing the water quality analytical results and depth to groundwater.
  - (h) A copy of the laboratory analytical data report.
  - (i) If applicable, the status of any ongoing remediation, including cumulative information on the mass of pollutant removed from the subsurface, system operating time, the effectiveness of the remediation system, and any field notes pertaining to the operation and maintenance of the system.
  - (j) If applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions.
10. The Second Semi-Annual Groundwater Monitoring Report, due **1 February** of each year, shall contain an evaluation of the effectiveness and progress of the investigation and remediation. This shall be an expanded semi-annual report and will include the following additional information/items:
- (a) Tabular summaries of all data obtained during the year.
  - (b) Graphical summaries, of TPH-G, benzene, MTBE, and TBA concentrations, groundwater elevation data, and remediation system operation versus time for site wells.
  - (c) A rose diagram presenting groundwater flow direction and magnitude data.
  - (d) Contaminant concentration contour maps for TPH-G, benzene, MTBE, and TBA, if applicable, for each quarter from the previous year, as applicable.

- (e) A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells.
  - (f) An analysis of whether the pollutant plume is being captured by an extraction system or is continuing to spread.
  - (g) A description of all remedial activities conducted during the year, an analysis of their effectiveness in removing the pollutants, and plans to improve remediation system effectiveness.
  - (h) The anticipated date for completion of cleanup activities;
  - (i) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
  - (j) If desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.
11. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.
12. The results of any monitoring done more frequently than required at the locations specified in the MRP also shall be reported to the Central Valley Regional Board. The Discharger shall implement the above monitoring program as of the date of this Order.





Ordered by: original signed by  
PAMELA C. CREEDON,  
Executive Officer

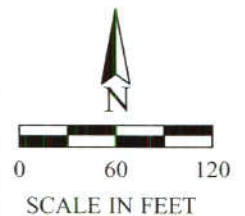
9 July 2009  
(Date)





**Legend:**

-  Monitoring well
-  Observation well
-  Injection well
-  Boring (encountered auger refusal at 2 to 3 feet below ground surface)
- UST      Underground storage tank



**SITE PLAN**  
 6000 STEELE CANYON ROAD  
 Napa County, California

**FIGURE 2**

DRAWN BY	HCS
CHECKED BY	EKM
PROJECT MGR	MEN
DATE	7/08
<b>WKA NO. 5880.03</b>	