# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

#### MONITORING AND REPORTING PROGRAM ORDER NO. R5-2009-0836 CALIFORNIA WATER CODE SECTION 13267 FOR MR. AND MRS. ROGER AND LAURA JOHNSON, NEW WEST PETROLEUM, AND MR. GIL MOORE FOR EXPRESS LANE MARKET 301 PINE STREET, GALT SACRAMENTO COUNTY

This Order is issued to Mr. and Mrs. Roger and Laura Johnson, New West Petroleum, and Mr. Gil Moore (hereafter Dischargers) 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

- The Express Lane Chevron at 301 Pine Street in Sacramento, Sacramento County (Site), is an operating gasoline station and convenience store. A petroleum discharge from past underground tanks occurred while the property and station was owned and operated by Mr. and Mrs. Roger and Laura Johnson. Mr. Gil Moore purchased the property in February 1997, and a second release occurred from the new tank system, while he owned the property, and New West Petroleum, operated the station. Mr. Gil Moore owns New West Petroleum. The new tank system was installed after he purchased the property. Mr. Amrik Sing and Mr. Amritpal Kaur purchased the property in March 2008, and are the current property owners.
- The Executive Officer issued Cleanup and Abatement Order (CAO) No. R5-2005-0717 on 17 November 2005, which names Mr. and Mrs. Roger and Laura Johnson, and Mr. Gil Moore as Dischargers. The CAO requires investigation and cleanup of the petroleum release.
- 3. Groundwater is first encountered at approximately 58 feet below ground surface (bgs). During the first quarter 2009 groundwater monitoring event, free product was detected in two site wells at thicknesses up to 0.11 feet, and concentrations of petroleum constituents were detected at maximum concentrations of: total petroleum hydrocarbons (TPH-G) 700 ug/l, methyl tert butyl ether (MTBE) 3,200 ug/l, and tert amyl methyl ether (TAME) 14 ug/l. This pollution has impaired the beneficial uses of the underlying water resource.
- 4. A soil vapor extraction (SVE) system operated from 3 July 2002 to 4 January 2006, and removed approximately 26,468 pounds (lbs) of TPH-G. A groundwater extraction and treatment (GWE) system operated from 4 November 2002 to 24 August 2006 and removed approximately 1,030 pounds of TPH-G. An air sparge system operated from February 2002 to August 2006. Free product removal by hydrocarbon-selective socks and bailing began in February 2009.

- 5. Eleven water supply wells were identified within 2,000 feet of the Site. Four wells, including one well used for domestic water supply, were destroyed due to petroleum hydrocarbon impacts. The dischargers provided a replacement water source to the owners of the impacted domestic water supply well. Two domestic supply wells remain threatened, and, as such, monitoring of key wells more frequently then semi-annually is warranted.
- 6. This Monitoring and Reporting Program (MRP) is issued by the Central Valley Water Board, pursuant to California Water Code (CWC) section 13267 and is necessary to delineate waste discharged from the Express Lane Market, characterize groundwater pollutant plumes and determine whether remediation efforts are effective.
- 7. Existing data and information about the Site show the presence of various chemicals, including TPH-G; benzene, toluene, ethylbenzene, and xylenes (BTEX); MTBE; ETBE; TAME; TBA; and 1,2-DCA, emanating from the property resulting from past operations. Based on the available data the Dischargers are responsible for the discharge because they owned the property at the time of the release, or subsequent to the release. At this time, the current property owners, Mr. Amrik Sing and Mr. Amritpal Kaur are not named as Dischargers.
- 8. The Dischargers shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer of this Central Valley Water Board. This MRP replaces the requirements listed in MRP No. R5-2007-0819, which was issued on 22 August 2007. This Monitoring and Reporting Program (MRP) supersedes the groundwater monitoring requirements of CAO No. R5-2005-0717, and compliance with this MRP or any subsequent MRP will satisfy the monitoring requirements in CAO No. R5-2005-0717.
- 9. Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Dischargers 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.
- 10. The California State Water Resources Control Board (State Water Board) adopted Resolution No. 2009-0042 in May 2009, which requires a reduction from quarterly groundwater monitoring to semi-annual or less frequent monitoring at all sites, unless site-specific needs warrant otherwise. Site specific conditions, including monitoring the effectiveness of remedial efforts and potential impacts to domestic water supply wells, necessitates more frequent monitoring of key wells and reporting. MRP R5-2009-0836 complies with State Board Resolution No. 2009-0042.

## **LEGAL PROVISIONS**

- 11. 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.

- 12. 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.

13. 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 or will be provided upon request.

## **REQUIRED ACTIONS**

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

- 1. Conduct monitoring and reporting in compliance with the following specifications.
- As shown on Figure 1, there are 27 wells: 17 groundwater monitoring wells (MW-1 through MW-13, MW-14S, MW-14I, MW-15S, and MW-15I), one recovery well (RW-1), one injection well (IW-1), 3 dual completion wells (DW-1 through DW-3), 3 vapor extraction wells (VEW-1 through

VEW-3), and 2 domestic wells (Beekman Well and LeVan Well) associated with the Site. The groundwater monitoring program for the 27 existing Site wells and any wells installed subsequent to the issuance of this MRP, shall follow the schedule below.

3. Sample collection and analysis shall follow standard Environmental Protection Agency (EPA) protocol. The volume of extracted groundwater also shall be provided in quarterly monitoring reports.

	SAMPLING FREQUENCY <sup>1</sup>		
	Quarterly	Semi-annually <sup>2</sup>	Annually <sup>3</sup>
Wells	RW-1 MW-1 MW-3 MW-5 MW-9 MW-10 MW-11 MW-12 MW-13 MW-15i Beekman Well New Wells	MW-2 MW-4 MW-7 MW-8 MW-14s MW-14i MW-15s IW-1	MW-6 DW-1 DW-2 DW-3 VEW-1 VEW-2 VEW-3 LeVan Well

All wells shall be monitored quarterly for water levels and the presence and thickness of free product.

<sup>2</sup> Wells shall be sampled semi-annually during the first and third quarters.

<sup>3</sup> Wells shall be sampled annually during the third quarter.

Constituent <sup>5</sup>	EPA Analytical Method	Maximum Practical Quantitation Limit
		(ug/l) <sup>5</sup>
Depth to Groundwater		0.01 feet
TPH-G	8015M or 8260B	50
Benzene	8020 or 8260B	0.5
Toluene	8020 or 8260B	0.5
Ethylbenzene	8020 or 8260B	0.5
Total Xylenes	8020 or 8260B	0.5
MTBE	8260B	0.5
ТВА	8260B	5.0
DIPE	8260B	0.5
ETBE	8260B	0.5
ТАМЕ	8260B	0.5
1,2-Dichloroethane	8260B	0.5
Hexavalent Chromium	7199	1.0

<sup>4</sup> Report all discrete peaks identified during the normal course of analysis for contaminants of concern.

<sup>5</sup> All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

#### REPORTING

- 4. When reporting the data, the Dischargers 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.
- 5. 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, and submitted under penalty of perjury.

- 6. The Dischargers shall submit a paper copy of the quarterly report to this Central Valley Water Board office and submit the quarterly 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 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 calendar quarter by **1 February, 1 May, 1 August, and 1 November**, until such time as the Executive Officer determines that the reports are no longer necessary. Each quarterly 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, the following: 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.
  - (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 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) The status of 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) The reasons for and duration of all interruptions in the operation of remediation system(s), and actions planned or taken to correct and prevent interruptions.
- 7. The Fourth Quarter Groundwater Monitoring Report, due **1 February** of each year shall be an expanded 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, BTEX, MTBE, and TBA concentrations, groundwater elevation data, and remediation system operation versus time for wells MW-1, MW-2, MW-3, MW-4, MW-4B, MW-5, MW-6, MW-12B, and MW-13B, and additional wells as request by Central Valley Water Board staff.
- (c) A rose diagram presenting groundwater flow direction and magnitude data for each water bearing zone.
- (d) Contaminant concentration contour maps for TPH-G, benzene, MTBE, and TBA 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) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
- (i) If desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.
- 8. 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 Water Board.

This Order is effective upon the date of signature.

Ordered by: <u>original signed by</u> PAMELA C. CREEDON, Executive Officer

> <u>17 August 2009</u> (Date)

