

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM ORDER NO. R5-2009-0823  
CALIFORNIA WATER CODE SECTION 13267

FOR

JULIUS AND KLARA JUHASZ, AND THE THOMAS AND JOSEPHINA KALAPURAYIL  
FAMILY TRUST, MR. GEORGE M. PUTHENPURAYIL, AND MS. SHYLIMOL P. ABRAHAM

FOR

FORMER FERG'S MARKET  
3735 47<sup>TH</sup> AVENUE, SACRAMENTO  
SACRAMENTO COUNTY

This Order is issued to Mr. Julius and Mrs. Klara Juhasz, The Thomas and Josephina Kalapurayil Family Trust, Mr. George M. Puthenpurayil, and Ms. Shylimol P. Abraham (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**

1. The Former Ferg's Market at 3735 47<sup>th</sup> Avenue in Sacramento, Sacramento County (Site), is situated on the northwest corner of 47<sup>th</sup> Avenue and Martin Luther King Jr. Boulevard. The Site is currently an unpaved, vacant lot. A petroleum discharge from past underground tanks occurred while the property was owned and operated by Mr. Julius and Mrs. Klara Juhasz. The Thomas and Josephina Kalapurayil Family Trust, Mr. George M. Puthenpurayil, and Ms. Shylimol P. Abraham currently own the property.
2. Fruitridge Vista Water Company Well #11 is located approximately 400 feet south of the Site. Well #11 is 452 feet deep, was impacted by methyl tertiary butyl ether (MTBE) from this Site, and taken out of service in 1998.
3. Groundwater is first encountered at approximately 40 feet below ground surface (bgs). Initial investigations showed petroleum hydrocarbon constituents in soil at maximum concentrations of: total petroleum hydrocarbons (TPH-G) 18,000 milligrams per kilogram (mg/kg), benzene 39 mg/kg, toluene 900 mg/kg, ethylbenzene 420 mg/kg, xylenes 2,200 mg/kg, MTBE 50 mg/kg, ethyl tert butyl ether (ETBE) 0.041 mg/kg, tert amyl methyl ether (TAME) 0.61 mg/kg, and tert butyl alcohol (TBA) 8.2 mg/kg. Groundwater samples have contained petroleum hydrocarbon constituents at maximum concentrations of: TPH-G 15,000 micrograms per liter (ug/l), benzene 4,000 ug/l, toluene 1,900 ug/l, ethylbenzene 410 ug/l, xylenes 2,800 ug/l, MTBE 110,000 ug/l, ETBE 120 ug/l, TAME 150 ug/l, TBA 1,900 ug/l, and 1,2-dichloroethane (1,2-DCA) 5.1 ug/l.
4. During the first quarter 2009 groundwater monitoring event, concentrations of petroleum constituents were detected at maximum concentrations of: TPH-G 1,510 ug/l, MTBE

9,260 ug/l, and TBA 154 ug/l. This pollution has impaired the beneficial uses of the underlying water resource.

5. Approximately 550 cubic yards of petroleum hydrocarbon impacted soil was excavated and removed from the Site in June 2000. A soil vapor extraction (SVE) system operated from 31 December 2003 to 1 September 2007, and removed approximately 7225 pounds (lbs) of TPH-G. An interim groundwater extraction and treatment (GWE) system operated from 26 May 2006 to 26 July 2006 and removed approximately 4.5 lbs of MTBE. A permanent GWE system began operation on 13 March 2007 and has removed approximately 0.33 lbs of TPH-G, 0.88 lbs of MTBE, and 1.85 lbs of TBA. An ozone injection system operated on-site from 4 November 2007 to 10 September 2008, and an off-site ozone system began operation on 10 September 2008.
6. This Monitoring and Reporting Program (MRP) is issued pursuant to Section 13267 of the California Water Code and is necessary to delineate waste discharged from the former Ferg's Market site, 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 currently own the property.
8. 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.
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 R5-2009-0823 complies with State 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 Dischargers shall:

1. Conduct monitoring and reporting in compliance with the following specifications.
2. As shown on Figure 1, there are 28 groundwater monitoring wells, MW-1, MW-2, MW-3, MW-4B, MW-5, MW-6, MW-7C, MW-7E, MW-8B, MW-8D, MW-9A, MW-9B, MW-9D, MW-10B, MW-11C, MW-11E, MW-12A, MW-12B, MW-12D, MW-12E, MW-13B, MW-14B, MW-15A, MW-15B, MW-16A, MW-16B, MW-17A, and MW-17B, and 2 groundwater extraction wells EW-1A (formerly MW-4), and EW-1B associated with the former Ferg's

Market site. The groundwater monitoring program for the 30 existing site wells and any wells installed subsequent to the issuance of this MRP, shall follow the schedule below.

- 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>	Gauge Only
<b>Wells</b>	MW-4B MW-12B MW-15A MW-15B MW-16A MW-16B MW-17A MW-17B EW-1A EW-1B New Wells	MW-1 MW-2 MW-3 MW-8B MW-12A MW-13B	MW-5 MW-6 MW-9A MW-9B MW-10B MW-14B	MW-7C MW-7E MW-8D MW-9D MW-11C MW-11E MW-12D MW-12E

- All wells shall be monitored quarterly for water levels and the presence and thickness of free product.
- Wells shall be sampled semi-annually during the first and third quarters.
- Wells shall be sampled annually during the third quarter.

Constituents <sup>4</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
TBA	8260B	5.0
DIPE	8260B	0.5
ETBE	8260B	0.5
TAME	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

- 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.

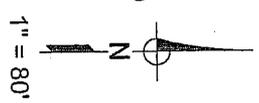
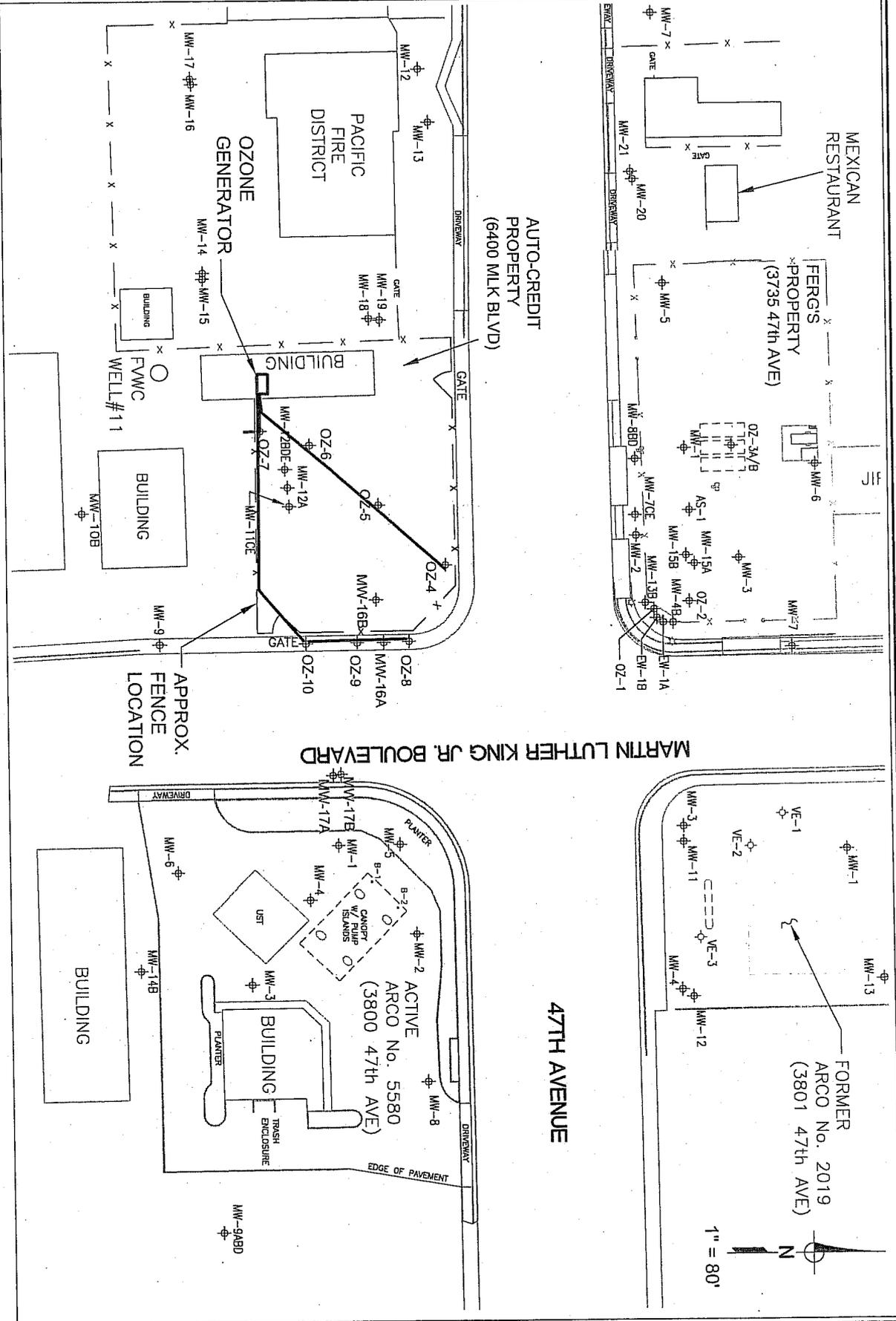
5. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional or their subordinate and signed by the registered professional.
6. The Dischargers shall submit a paper copy of the quarterly report to this Central 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.

The Discharger shall implement the above monitoring program as of the date of the Order.

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

\_\_\_\_\_ *4 August 2009*  
(Date)



47TH AVENUE

**FIGURE 1**  
**SITE PLAN**

FERG'S UST SITE  
AUTO CREDIT PROPERTY



SIERRA WEST  
CONSULTANTS, INC.