CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION  
MONITORING AND REPORTING PROGRAM ORDER NO. R5-2009-0835  
CALIFORNIA WATER CODE SECTION 13267  
FOR  
SACRAMENTO HOUSING AND REDEVELOPMENT AGENCY  
FORMER LAWSON MECHANICAL  
58 ARDEN WAY, SACRAMENTO  
SACRAMENTO COUNTY

This Order is issued to the Sacramento Housing and Redevelopment Agency (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. The property at 58 Arden Way, Sacramento (Site) is currently owned by the Sacramento Housing and Redevelopment Agency. (See Figure 1) SRHA purchased the property in January 1991, and intends to redevelop the property.

2. Prior to purchase by SHRA, the former Lawson Mechanical yard operated on the property. The Site is currently a vacant lot and surrounding land use is predominantly industrial and commercial, with residential property located to the northeast. In October 1988, a 5,000 gallon gasoline underground storage tank (UST) was removed, and in August 1989, a 1,000 gallon gasoline UST was removed. A petroleum discharge from a former underground storage tanks has resulted in soil and groundwater pollution.

3. Groundwater is first encountered at approximately 36 feet below ground surface (bgs). During the first quarter 2009 groundwater monitoring event, concentrations of petroleum hydrocarbons were detected at maximum concentrations of: total petroleum hydrocarbons as gasoline (TPH-G) 2,000 micrograms per liter (ug/l), benzene 9.7 ug/l, and 1,2-dichloroethane (1,2-DCA) 47 ug/l. This pollution has impaired the beneficial uses of the underlying water resource.

4. Industrial activities conducted at the Micheletti Property (2147 Barstow Street, Sacramento), a nearby property, have contributed to the local groundwater pollution. During the first quarter 2009 groundwater monitoring event, concentrations of tetrachloroethylene (PCE) and trichloroethylene (TCE) were detected in site wells at maximum concentrations of 70 ug/l and 5,600 ug/l, respectively, and are attributed to past activities at the Micheletti Property.

5. 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 former Lawson Mechanical Yard, characterize groundwater pollutant plumes and determine whether remediation efforts are effective.
6. Existing data and information about the Site show the presence of various chemicals, including TPH-G, benzene, and 1,2-DCA, emanating from the property under the control of the Discharger. Based on the available data the Discharger is responsible for the discharge because the discharger owns the property and has control of the pollutant discharger.

7. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. This MRP replaces the requirements listed in MRP No. R5-2009-0802, which was issued on 12 January 2009.

8. Regional coordination of groundwater monitoring is needed to better understand contribution from adjacent sites to the groundwater pollution plume, and to evaluate and select remedial technologies for restoration of the beneficial uses of this water resource.

9. 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.

10. The California State Water Resources Control Board (State Water Board) adopted Resolution No. 2009-0042 requiring a reduction from quarterly groundwater monitoring to semi-annual or less frequent monitoring at all sites, unless site-specific needs warrant otherwise. This monitoring program 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 Discharger shall:

GROUNDWATER MONITORING

1. Conduct monitoring and reporting in compliance with the following specifications.

2. As shown on Figure 1, there are five wells, MW-1 through MW-5 associated with the former Lawson Mechanical site. The groundwater monitoring program for the five wells and any wells installed subsequent to the issuance of this MRP, shall follow the schedule below.

3. Monitoring wells with free phase petroleum product or visible sheen shall be monitored, at a minimum, for product thickness and depth to water. The volume of extracted groundwater also shall be provided in semi-annual monitoring reports.

4. Sample collection and analysis shall follow standard EPA protocol. All wells shall be monitored semi-annual for water levels and the presence and thickness of free product.
SAMPLING FREQUENCY

<table>
<thead>
<tr>
<th>Wells</th>
<th>MW-1</th>
<th>MW-2</th>
<th>MW-3</th>
<th>MW-4</th>
<th>MW-5</th>
<th>New Wells</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMPLING FREQUENCY</td>
<td>Semi-Annual¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Sample semi-annually during the first and third quarters.

<table>
<thead>
<tr>
<th>Constituents²</th>
<th>EPA Analytical Method</th>
<th>Maximum Practical Quantitation Limit (ug/l)³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth to Groundwater</td>
<td>---</td>
<td>0.01 ft</td>
</tr>
<tr>
<td>TPH-G</td>
<td>8015M or 8260B</td>
<td>50</td>
</tr>
<tr>
<td>Benzene</td>
<td>8020 or 8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>Toluene</td>
<td>8020 or 8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>8020 or 8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>Xylenes</td>
<td>8020 or 8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>1,2-Dichloroethane</td>
<td>8260B</td>
<td>0.5</td>
</tr>
</tbody>
</table>

2 Report all discrete peaks identified during the normal course of analysis.
3 All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

REPORTING

1. When reporting the 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.

2. Groundwater monitoring shall be coordinated between the Former Lawson Mechanical site (58 Arden Way, Sacramento), and the Micheletti Property (2147 Barstow Street, Sacramento). The Sacramento housing and Redevelopment Agency is assisting Mr. Dennis Micheletti in the investigation and cleanup of his property at 2147 Barstow Street. Data generated from each Site is to be shared between Responsible Parties. The monitoring report should include a regional evaluation of the groundwater pollution. All well surveys must be tied to a common datum. Site Maps must show all data from both Sites.

3. 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.

4. The Discharger shall submit a paper copy of the semi-annual report 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 Boards Geotracker database system. Both the paper copy and the electronic submittal are due by the 15th day of the second month following the end of each half of the year; 15 August (1st half of the year), and 15 February (2nd half of the year). Semi-annual reports shall be submitted 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, and volume of water purged.

(c) Groundwater contour maps for all groundwater zones.

(d) Concentration contour maps for all groundwater zones for TPH-G, benzene, and 1,2-DCA.

(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 describing 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.

5. The Second Semi-Annual Groundwater Monitoring Report, due 15 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, benzene, and 1,2-DCA concentrations, and groundwater elevation data 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, and 1,2-DCA for each monitoring event from the previous year.

(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.

6. The results of any monitoring done more frequently than required 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

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21 July 2009
(Date)