

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING ORDER NO. R5-2009-0860  
CALIFORNIA WATER CODE SECTION 13267  
FOR

**SACRAMENTO AERO SERVICES AND BEAZER HOMES  
NATOMAS AIR PARK, SACRAMENTO  
SACRAMENTO COUNTY**

This Order is issued to Sacramento Aero Services and Beazer Homes (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 Natomas Air Park at 3801 Airport Road consisted of six parcels, two of which are subject to this Monitoring and Reporting Program (APNs 255-0150-030 and 032). These properties are owned by Beazer Homes and Sacramento Aero Services, respectively (collectively Discharger).
2. Releases of petroleum constituents have polluted soil and groundwater which is about 20 feet below ground surface. This pollution impaired the beneficial use of this water resource.
3. Beazer Homes excavated petroleum-contaminated soils and operated a soil vapor extraction/biosparging remediation system in the source area.
4. 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 groundwater pollutant plumes and to determine whether remediation efforts are effective.
5. Existing data and information about the site show the presence of various chemicals, including aviation fuel, gasoline, benzene, and fuel oxygenates 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.
6. 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. R5-2004-0842, which was issued on 31 December 2004.
7. 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 installed for the purpose of routine monitoring shall be added to the monitoring program and shall be sampled and analyzed according to the schedule below.

## LEGAL PROVISIONS

8. 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.

9. 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.

10. 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, Sacramento Aero Services and Beazer Homes shall:

1. Conduct monitoring and reporting in compliance with the following specifications.
2. As shown on Figure 1, there are 12 routine monitoring wells in the shallow zone (MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-12, MW-13, MW-14, MW-15, and MW-211), and 1 routine monitoring well in the deeper zone (MW-11). There are also various vapor extraction and remediation wells that are not subject to this monitoring program. The groundwater monitoring program for the thirteen (13) routine monitoring wells and any routine monitoring wells installed subsequent to the issuance of this MRP, shall follow the schedule in Table 1 and the analytical methods in Table 2.

**Table 1. Monitoring Frequency**

Monitoring Wells	Depth to Ground-water	Total Petroleum Hydrocarbons as aviation gas	Fuel oxygenates, including tert-butanol	Volatile Organic Compounds	Dissolved Lead	Dissolved Arsenic
MW-4	A	A				
MW-5	A	A	A			
MW-6	S	S	S			
MW-7	S	S	S			
MW-8	A	A				
MW-9	A	A	A			
MW-10	S	S	S	S	S	A
MW-11	A	A				
MW-12	S	S				
MW-13	S	S	A			
MW-14	S	S	A			
MW-15	A	A	A			
MW-211	S	S				

S - Wells shall be sampled semi-annually during the second (April-June) and fourth quarters (Oct-Dec).  
 A - Wells shall be sampled annually during the fourth quarter (October-December)

**Table 2. Analytical Methods and Detection Limits**

<b>Analysis</b>	<b>Analytical Method</b>	<b>Maximum Practical Quantitation Limit <sup>1,2</sup></b>
Depth to Groundwater	---	0.01 foot
Total Petroleum Hydrocarbons as aviation gas	EPA 8260B	50 ug/L
Fuel oxygenates, including tert-butanol	EPA 8260B	0.5 ug/L
Volatile organic compounds	EPA 8260B	0.5 ug/L
Dissolved lead	EPA 200.8	1 ug/L
Dissolved arsenic	EPA 200.8	2 ug/L

<sup>1</sup> For non-detectable results.

<sup>2</sup> All results between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

## REPORTING

3. 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.
4. The Discharger shall notify this Central Valley Water Board office within 48 hours of any unscheduled shutdown of any soil vapor and/or groundwater extraction system.
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. Semi-annual electronic reports, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30, shall be submitted electronically over the internet to the State Water Board Geotracker database system by the **1st day of the second month following the end of each respective calendar quarter (i.e., by 1 February and 1 August)**, until such time as the Executive Officer determines that the reports are no longer necessary.
7. Semi-annual paper copy reports shall be submitted to this Central Valley Water Board office by the **1st day of the second month following the end of each respective calendar quarter (i.e., by 1 February, and 1 August)** 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) Isocontour pollutant concentration maps for all groundwater zones and all major constituents of concern, if applicable.
  - (e) A table showing well construction details such as well number, groundwater zone being monitored, coordinates (longitude and latitude), ground surface elevation, reference elevation, elevation of screen, elevation of bentonite, elevation of filter pack, and elevation of well bottom.
  - (f) A table showing historical lateral and vertical (if applicable) flow directions and gradients.
  - (g) Cumulative data tables for all major constituents of concern containing the water quality analytical results and depth to groundwater for all monitoring wells for the past five years, if applicable. Raw laboratory data shall be provided on CD or DVD and included in the report. The Regional Water Board may request additional data as necessary.
  - (h) A copy of the laboratory analytical data report, which may be provided on electronic media.
  - (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.
8. An Annual Report shall be submitted to this Central Valley Water Board by **1 February** of each year. This report shall contain an evaluation of the effectiveness and progress of the investigation and remediation, and may be substituted for the second semi-annual monitoring report. The Annual Report shall contain the following minimum information:
- (a) Both tabular and graphical summaries of all data obtained during the year.

- (b) Groundwater contour maps and pollutant concentration maps containing all data obtained during the previous year.
  - (c) A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells.
  - (d) An analysis of whether the pollutant plume is being captured by an extraction system or is continuing to spread.
  - (e) 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.
  - (f) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
  - (g) If desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.
9. 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:

Original signed by

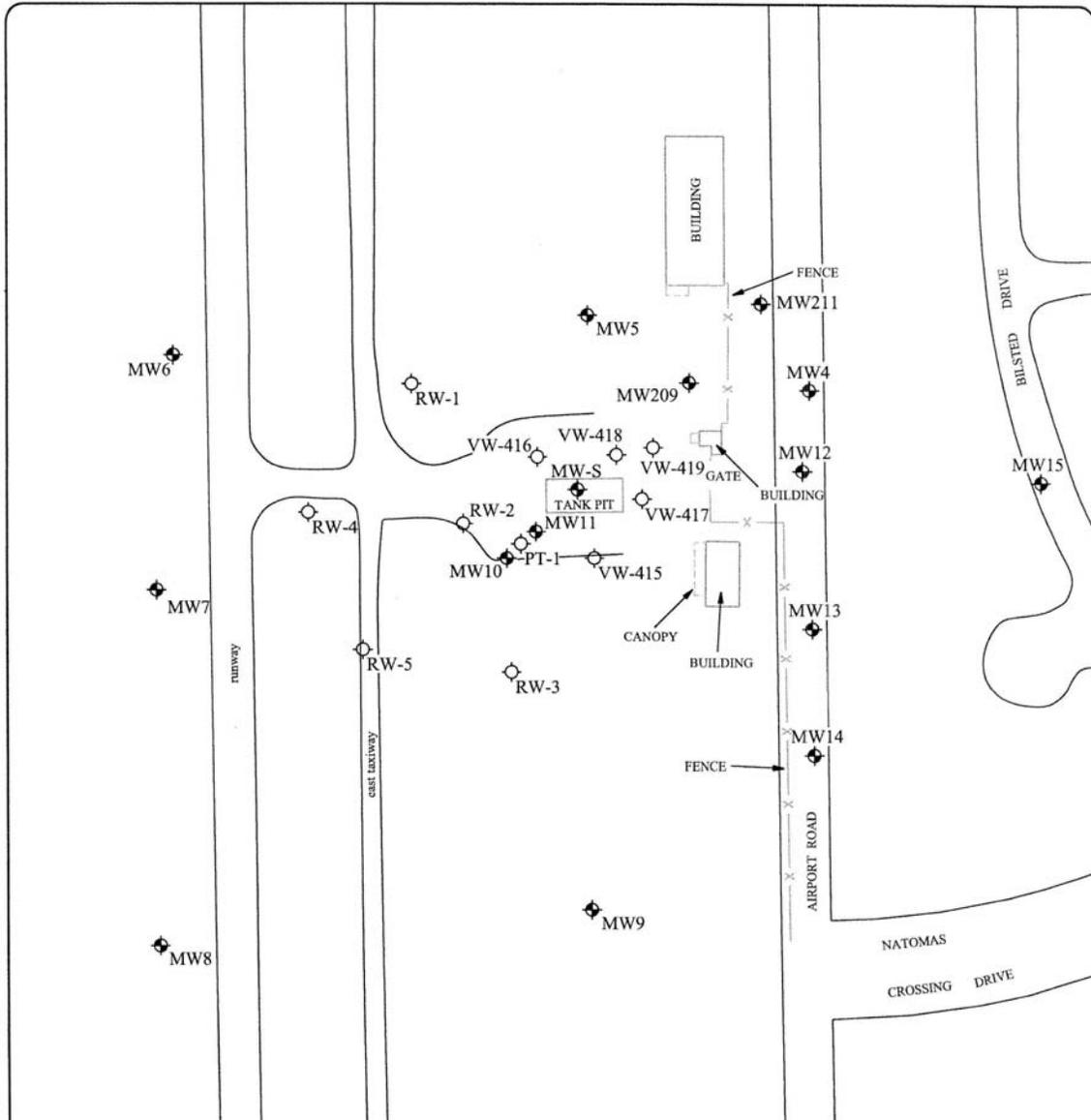
---

PAMELA C. CREEDON, Executive Officer

9 November 2009

---

(Date)

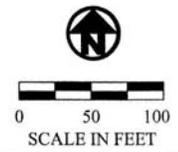


**Legend:**

- ◆ Monitoring well location
- Vapor extraction/remediation well

**Note:**

Adapted from a Natomas Field CAD drawing provided by MRO Engineers, Inc., dated 11/28/05.



WALLACE-KUHL &  
 ASSOCIATES, INC.

**SITE PLAN**  
**NATOMAS AIR PARK**  
 Sacramento, California

**FIGURE 1**

DRAWN BY	iLH
CHECKED BY	DML
PROJECT MGR	DML
DATE	04/06

**WKA NO. 3848.23**

N:\Dgtr - 3 - Geology & Environmental\Active Jobs\3848.23 - Natomas Quarterly GW Monit (Penstemon)\3848.23 Drafting\BASE MAPS\3848.23 Fig. 1 SP.dwg, 4/20/2006 6:51:49 AM, csmh