

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING ORDER NO. R5-2009-0818
CALIFORNIA WATER CODE SECTION 13267
FOR

**CROP PRODUCTION SERVICE AND AGRIUM,
WALNUT GROVE FACILITY
SACRAMENTO COUNTY**

This Order is issued to Crop Production Service and Agrium, (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. Crop Production Service, formerly known as Western Farm Service, is owned by Agrium (Discharger).
2. Crop Production Service operates a retail agricultural chemical distribution facility at 14442 Thornton Road in Walnut Grove (Site). Soil and groundwater contain fertilizer and pesticide compounds, and groundwater is encountered between four and eight feet below ground surface. This pollution impaired the beneficial use of this water resource.
3. Some soil in the source area has been removed, and the Discharger is documenting that some insitu biodegradation is occurring near 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 1,2-dichloropropane, 1,2,3-trichloropropane, ammonium, and other compounds 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 and operates the business that released the pollutants.
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. R5-2004-0834, which was issued on 19 November 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 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, 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, Crop Production Service and Agrium shall:

1. Conduct monitoring and reporting in compliance with the following specifications.
2. As shown on Figure 1, there are eight monitoring wells (WGMW-05, WGMW-06, WGMW-07, WGMW-08, WGMW-09, WGMW-10, WGMW-11, and WGMW-12). The groundwater monitoring program for the eight (8) monitoring wells and any wells installed subsequent to the issuance of this MRP, shall follow the schedule in Table 1 in accordance with analytical methods identified in Table 2.

Table 1. Groundwater Monitoring Schedule¹

	Depth to Water	Volatile Organic Compounds	Total Petroleum Hydrocarbons (as diesel)	Total Oxidizable Nitrogen	Ammonium	Sulfate	Eptam	1,2,3-Trichloropropane
Shallow Groundwater								
WGMW-05	S	A	A	A	A	A		
WGMW-06	S	S ²	S ²	S ²	S ²	A	S ²	A
WGMW-07	S	S ²	S ²	S ²	S ²	A	S ²	
WGMW-08	S	S ²	A	A	A	A	A	
WGMW-09	S	A	A	A	A			
WGMW-12	S	A						
Deeper Groundwater								
WGMW-10	S	A	A	A	A		A	
WGMW-11	S	A						

¹ S = Semi-annually, in the 2nd and 4th quarters (April - June, and October - December).
 A = Annually in the 2nd quarter (April - June).

² Upon the written concurrence of Central Valley Water Board staff, semi-annual sampling and water level measurements may be replaced with Annual Sampling when groundwater obtained from WGMW-06 meets both of the following objectives for two consecutive semi-annual monitoring events:
 1) petroleum hydrocarbon concentration is equal to or below 100 ug/L and
 2) nitrogen concentration (nitrate plus ammonium) is equal to or below 100 mg/L.

Table 2. Analytical Suites

Constituents	Analytical Method	Maximum Reporting Limit ¹
Depth to Groundwater	Field measurement	0.1 feet
Nitrate plus Nitrite (as Nitrogen)	EPA 300 or SM 4500	0.1 mg/L
Ammonium	EPA 300 or SM 4500	0.1 mg/L
Volatile Organic Compounds	EPA 8260B	0.5 - 10 ug/L ²
Total Petroleum Hydrocarbons (as diesel)	EPA 8015B	50 ug/L
1,2,3-Trichloropropane	SLR 524M	0.005 ug/L
Eptam	EPA 8141A M	0.5 ug/L
Sulfate	EPA 300 or SM 4500	1 mg/L

¹ For constituents not detected.

² Maximum Reporting Limit for acetone is 50 ug/L, and for 1-chloropropane is 20 ug/L.

3. 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.
4. 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 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. Field logs may be submitted on electronic media.
 - (c) Groundwater contour maps for all groundwater zones, if applicable.
 - (d) Figures for all groundwater zones with summaries of analytical results posted next to respective monitoring wells, 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 Central Valley Water Board may request additional data as necessary.
 - (h) A copy of the laboratory analytical data reports, 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.
5. 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, provided that all information that must be submitted in the semi-annual report is included along with the following minimum information:
- (a) Tabular summaries of all data, and graphical summaries of groundwater elevations and concentration trends of key constituents.
 - (b) A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells.
 - (c) 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.
 - (d) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
 - (e) 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 at the locations specified in the MRP also shall be reported to the Central Valley Water Board.

REPORTING

7. 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.
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 Technical Report, 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.

This Monitoring and Reporting Order is effective upon the date of Signature.

Ordered by:

/ s /

PAMELA C. CREEDON, Executive Officer

_____ 14 May 2009 _____

