

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING ORDER NO. R5-2013-0800

CALIFORNIA WATER CODE SECTION 13267
FOR
OCCIDENTAL CHEMICAL COMPANY,
J.R. SIMPLOT COMPANY, AND PUREGRO COMPANY
1904 CHARTER WAY, STOCKTON
SAN JOAQUIN COUNTY

This Order is issued to Occidental Chemical Company, J.R. Simplot Company, and PureGro Company (hereafter collectively referred to as 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 Discharger operated an agricultural chemical distribution facility between 1955 and 1993 at 1904 Charter Way in Stockton (Site). The property is currently owned by Occidental Chemical Company.
2. The Discharger stored and distributed fertilizers, pesticides, herbicides and fumigants. Site activities resulted in the release of some of these products to soil and have contaminated groundwater, which is encountered at approximately 6 to 11 feet below ground surface. This pollution has impaired the beneficial use of groundwater resources at the Site.
3. In 1986 and 1990, the Discharger removed underground fuel tanks, and in 2001 and 2002 excavated and treated about 2,900 tons of pesticide-contaminated soils with low-temperature thermal desorption. In 2003, the Discharger planted about 1,500 eucalyptus trees, which has created a hydraulic containment zone and is removing nitrate from soil and groundwater. In 2011, the Discharger implemented an insitu pilot study using HRC primer and a vegetable oil formulation to degrade chlorinated organic compounds in groundwater.
4. This Monitoring and Reporting Order 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 nitrate, ammonium, 1,2-dichloropropane, 1,2,3-trichloropropane, atrazine, and other agricultural chemicals emanating from the property under control of the Discharger, and resulting from the Discharger's past operations. The Discharger is

responsible for the discharge because it operated an agricultural chemical distribution facility at the Site.

6. The Discharger shall not implement any changes to this Order unless and until a revised Order is issued by the Executive Officer. This Monitoring and Reporting Order replaces the requirements listed in Order No. R5-2002-0831, which was issued on 30 August 2002.
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 monitoring wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule provided under the 'Required Actions' section.

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.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that Monitoring and Reporting Order No. R5-2002-0831 is rescinded and, pursuant to California Water Code section 13267, Occidental Chemical Company, J.R. Simplot Company, and PureGro Company shall conduct monitoring and reporting in compliance with the new Monitoring and Reporting Program No. R5-2013-0800 according to the following:

Monitoring Specifications

1. The Discharger shall implement monitoring according to the schedules shown in Table 1 and Table 2. There are 18 monitoring wells in the A-zone (MW-1, -2, -3, -4, -5B, -6, -7, -8, -10, -11, -16, -23, -25, -26, -27, -28, -29, and -30), as shown in Figure 1, and 7 monitoring wells in the B-zone (MW-9, -15, -17, -18, -19, -22, -24), as shown in Figure 2. A-zone monitoring wells MW-3 and MW-4 are scheduled to be destroyed. This Monitoring Order applies to the remaining 23 monitoring wells and any monitoring wells installed for routine groundwater monitoring subsequent to the issuance of this Order. Some of the B-zone wells listed above may also be scheduled to be destroyed, and at that time will not be subject to this Order. The Discharger shall collect samples using standard Environmental Protection Agency (EPA) protocol.
2. As of the date of this Order, there are additional monitoring wells at this facility associated with a pilot study remediation project, which is regulated under Waste Discharge Requirements No. R5-2008-0149-027 and its associated Monitoring and Reporting Program. These Waste Discharge Requirements are independent of this Order. If there are any duplication of sampling requirements between the two Orders, one analysis may satisfy both requirements. It is not the intent of this Order to duplicate analyses.

Table 1. A-Zone Groundwater Monitoring Schedule¹

	Water Levels	General Minerals (Nitrate, Chloride, Sulfate, TDS)	Ammonium	Volatile organic compounds	Chlorinated herbicides	Fumigants (DBCP)	Carbamate/Urea pesticides	Triazine Compounds	1,2,3-trichloropropane
MW-1	A								A
MW-2	S	S	S	S					
MW-5B	S	S	S	S	S	S	S	S	S
MW-6	S	S	S	S		S	S		S
MW-7	S	S	S	S			S	S	S
MW-8	S	S	S	S	S	S	S	S	S
MW-10	S	S	S	S	S		S		S
MW-11	S	S	S				S		
MW-16	S	S	S						
MW-23	S	S							
MW-25	A								
MW-26	S	S	S	S					
MW-27	S	S	S	S					S
MW-28	A								
MW-29	S	S	S						
MW-30	A								

¹ S = Semi-annually, in the 1st and 3rd quarters (January-March, and July-September).
 A = Annually in the 3rd quarter (July-September).

Table 2. B - Zone Monitoring Schedule²

	Water Levels	General Minerals (Nitrate-N, Chloride, Sulfate, TDS)	Ammonium	Volatile organic compounds	Chlorinated herbicides	Fumigants (DBCP)	Carbamate/Urea pesticides	Triazine Compounds	1,2,3-trichloropropane
MW-9	A	A	A						A
MW-15	A	A	A	A					A
MW-17	A	A	A						
MW-18	A	A	A	A				A	A
MW-19	A								
MW-22	A								
MW-24	A								

² A = Annually in the 3rd quarter (July-September).

- The Discharger shall collect samples according to standard Environmental Protection Agency (EPA) protocol and analyze the samples using the methods shown in Table 2 or equivalent methods that meet the specified practical quantitation limit for undetected compounds.

Table 3. Analytical Suites

Constituents	Analytical Method	Practical Quantitation Limit ³
General Minerals (Nitrate-N, Chloride, Sulfate)	EPA 300	10 mg/L
Ammonium	SM 4500, EPA 350	0.1 mg/L
Total Dissolved Solids	EPA 160	10 mg/L
Volatile Organic Compounds	EPA 8260B	0.5 - 10 ug/L
Chlorinated Herbicides ⁴	EPA 8151A	0.5 - 5.0 ug/L
Fumigants (dibromochloropropane)	EPA 504.1	0.02 ug/L
1,2,3-Trichloropropane ⁵	SLR 524M EPA 504.1 EPA 8260B	0.005 ug/L 0.02 ug/L 5 ug/L
Carbamate/Urea Pesticides	EPA 8321	1 - 10 ug/L
Triazine Compounds	EPA 8141 CRA	0.5 ug/L

Footnotes on following page.

Footnotes to Table 3.

³ If the maximum practical quantitation limit is exceeded for a non-detectable result, the Discharger shall provide an explanation in the report text. All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

⁴ The reporting limit for MCPP and MCPA is 500 ug/L.

⁵ The method to analyze 1,2,3-Trichloropropane shall be selected such that the reporting limit is below the expected concentrations, based on recent monitoring results.

4. Monitoring wells with free product or a visible sheen (if applicable) shall be monitored at a minimum for product thickness and depth to water.

Reporting Specifications

5. When reporting data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible and shall summarize the data in such a manner as to illustrate clearly the compliance with this Order.
6. 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 shall be signed by the registered professional.
7. **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 Resources Control Board Geotracker database system by **1 May and 1 November**, or as otherwise indicated by Central Valley Water Board staff, until such time as the Executive Officer determines that the reports are no longer necessary.
8. **Semi-annual** paper copy reports shall be submitted to this Central Valley Water Board office by **1 May and 1 November**, or as otherwise indicated by Central Valley Water Board staff, until such time as the Executive Officer determines that the reports are no longer necessary. Each 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. Older data may be provided on electronic media, or provided in hardcopy in the report. The Central Valley Water Board may request additional data as necessary.
 - (h) A copy of the laboratory analytical data report, which may be provided on electronic media and included in the 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.
9. **Annual** electronic reports (summarizing first and third quarter data for a given calendar year), 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 Resources Control Board Geotracker database system by **1 November**, or as otherwise specified by Central Valley Water Board staff, until such time as the Executive Officer determines that the reports are no longer necessary. The Annual electronic report may substitute for the corresponding semi-annual electronic data report.
10. An Annual Report shall be submitted to the Central Valley Water Board by **1 November** 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 fourth quarter or semi-annual report is included along with the following minimum information:
- (a) Both tabular and graphical summaries of all data obtained during the year.
 - (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 applicable, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.

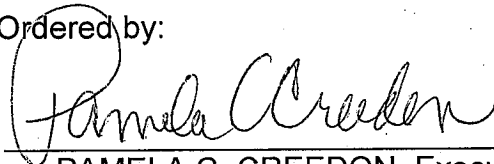
11. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Order also shall be reported to the Central Valley Water Board.

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

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control 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 Resources Control 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.

This Order is effective upon the date of signature.

Ordered by:



PAMELA C. CREEDON, Executive Officer

1-23-2013

(Date)

FIGURE 1. A-ZONE MONITORING WELLS

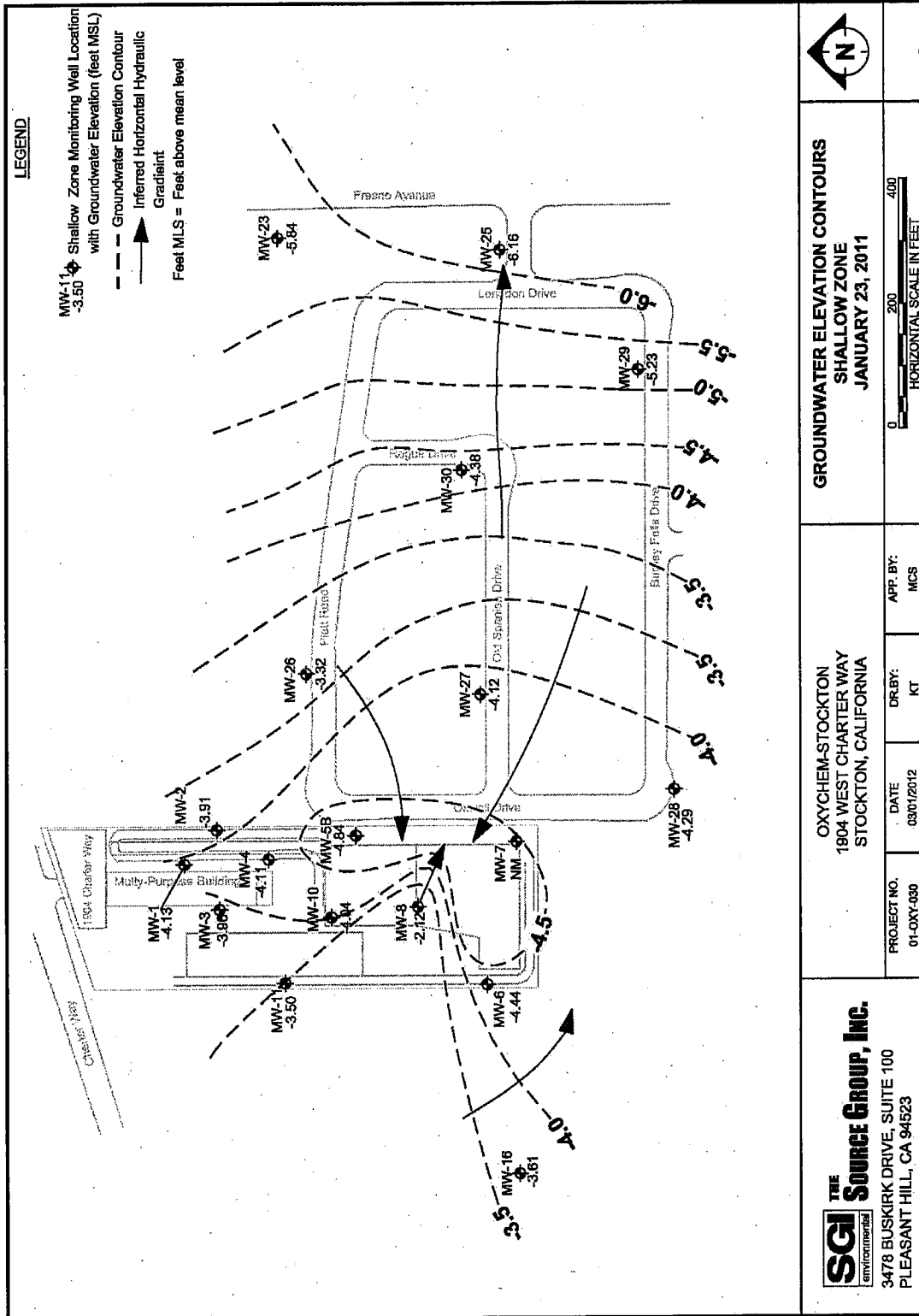
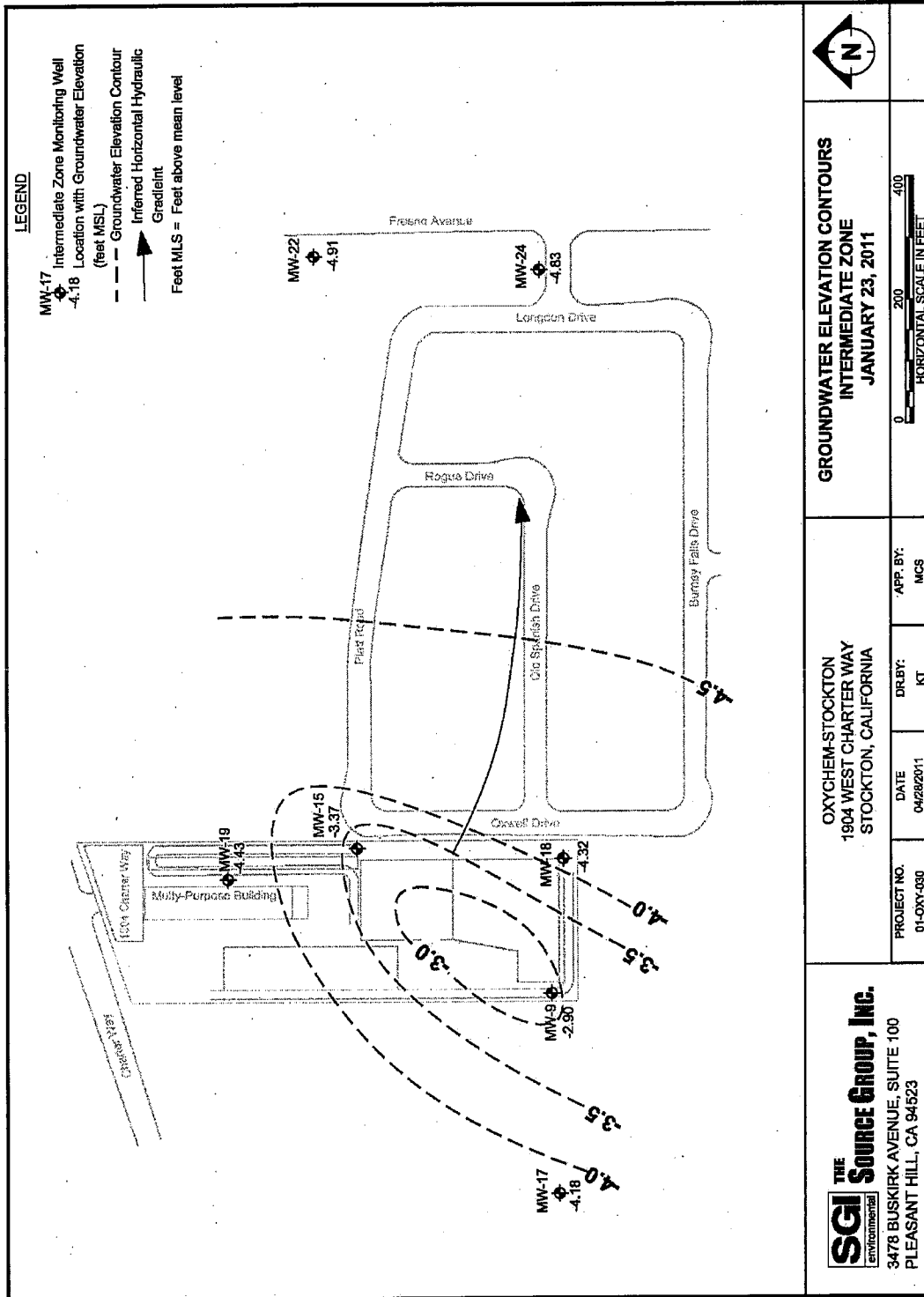


FIGURE 2. B-ZONE MONITORING WELLS



<p>THE SOURCE GROUP, INC. 3478 BUSKIRK AVENUE, SUITE 100 PLEASANT HILL, CA 94523</p>		<p>GROUNDWATER ELEVATION CONTOURS INTERMEDIATE ZONE JANUARY 23, 2011</p>	
PROJECT NO.	DATE	DRBY:	APP. BY:
01-OXY-030	04/28/2011	KT	MCS