CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING ORDER NO. R5-2014-0813

CALIFORNIA WATER CODE SECTION 13267 FOR

Continental Grain Company French Camp Grain Elevator French Camp, San Joaquin County

This Order is issued to Continental Grain Company (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 French Camp Grain Elevator is at 9504 Harlan Road, French Camp (site), approximately five miles south of Stockton. French Camp Grain Elevators, LLC, currently owns and operates the grain elevator facility. Continental Grain Company (Discharger), a former owner and operator of the site, is conducting groundwater investigation and remediation.
- 2. The granary used fumigants on the stored grain, which led to the release of carbon tetrachloride and other volatile organic compounds to groundwater. Investigations have shown that the first and second water-bearing zones at about 25 feet and about 70 feet below ground surface both contain the pollutants. This pollution impaired the beneficial use of groundwater resources at the site.
- 3. In 2005, the Discharger injected zero-valent iron into the source areas pursuant to Waste Discharge Requirements R5-2004-0160, and in 2007 began a pilot study to evaluate recirculation of groundwater through the iron injections. In 2010, the recirculation system was expanded and currently operates pursuant to Waste Discharge Requirements General Order R5-2008-0149-005 (General Order). The Discharger monitors the remediation system pursuant to Monitoring and Reporting Program No. R5-2008-0149-005 Revision 1 associated with the General Order, which supplements this Monitoring and Reporting Order.
- 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 determine whether remediation efforts are effective.
- 5. Existing data and information about the Site show the presence of various chemicals, including carbon tetrachloride and chloroform, emanating from the property and resulting from the Discharger's current or past operation. The

Continental Grain Company (Discharger) is responsible for the discharge because they are a former owner and operator of 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. R5-2007-0826, which was issued on 5 December 2007.
- 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 of this Order.

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.
 - (c) Any person discharging hazardous waste, as defined in Section 25117 of the Health and Safety Code, who knowingly fails or refuses to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267, or who knowingly falsifies any information provided in those technical or monitoring program reports, is

guilty of a misdemeanor, may be civilly liable in accordance with subdivision (d), and is subject to criminal penalties pursuant to subdivision (e).

(d)(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 (c) in an amount which shall not exceed five thousand dollars (\$5,000) 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 \$5,000 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. R5-2007-0826 is rescinded and, pursuant to California Water Code section 13267, Continental Grain Company shall conduct monitoring and reporting in compliance with new Monitoring and Reporting Order No. R5-2014-0813 according to the following:

Monitoring Specifications

1. The Discharger shall implement monitoring according to the schedule shown in Table 1. There are 17 monitoring wells, 2 extraction wells and 2 injection wells associated with the site wells as shown on Figure 1. This Monitoring Order applies to the monitoring wells and extraction wells listed in Table 1, and any monitoring wells installed subsequent to the issuance of this Order. The Discharger shall collect samples using standard Environmental Protection Agency (EPA) protocol. When sampling required by this Order is duplicative of sampling required by another Order issued to the Discharger, one sample and analysis may satisfy the requirements of both Orders.

	MW-1A	MW-2A	MW-3A	MW-4A	MW-5A	MW-7A³	MW-1B	MW-2B ³	MW-3B	MW-4B	MW-5B	MW-7B ³	MW-8B	MW-9B	MW-10B	MW-13B	MW-3C	EW-11B	EW-12B
Volatile Organic Compounds	А	Α	А	В	В		В	В	S	Α	S	В	Α	S	S	S	S	Α	А
1,2,3- Trichloropropane		А	А	В	В		В	В	S	А	s	В	А	S	S	S	S	Α	·Α
Water Elevation	5	5	S	ς	ς	Δ	S	S	S	S	S	S	S	S	S	S	S	S	S

Table 1. Monitoring Frequency¹ and Analytical Suites²

Semi-Annual sampling (S) is to occur in the 1st and 3rd quarters (January-March, July-September); Annual sampling (A) is to occur in the first quarter (January-March), Biennial sampling (B) is to occur in the first quarter of even-numbered years.

² Analytical Methods are presented in Table 2.

Wells to be destroyed at a date yet to be determined.

2. The Discharger shall analyze samples according to standard Environmental Protection Agency (EPA) protocol using the methods shown in Table 2.

Table 2. Analytical Methods

Constituents	Analytical Method	Maximum Practical Quantitation Limit ⁴				
Volatile Organic Compounds	EPA 8260B	0.5 ug/L				
1,2,3-Trichloropropane (1,2,3-TCP) ⁵	EPA 8260B, EPA 504.1, or SRL 524M-TCP	0.5, 0.02, or 0.005 ug/L				

⁴ 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.

Reporting Specifications

- 3. 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.
- 4. As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional Civil Engineer or Geologist or their subordinate and shall be signed by the registered professional.
- 5. **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 June and 1 December**, 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.
- 6. **Semi-annual** reports shall be submitted to this Central Valley Water Board office by **1 June and 1 December** 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 may be submitted on electronic media and 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

If 1,2,3-TCP is expected to exceed 0.5 ug/L, then Method 8260B may be used, and if it is expected to exceed 0.02 ug/L, then Method 504.1 may be used. If 1,2,3-TCP is not detected greater than 0.02 ug/L, then SRL 524M-TCP must be used in the next regularly scheduled sampling event.

- 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.
- 7. An Annual Report shall be submitted in paper copy to the Central Valley Water Board by **1 December** 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) 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) An analysis of whether the pollutant plume is being captured by an extraction system or is continuing to spread.
- (d) 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.
- (e) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
- (f) If applicable, 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 Monitoring and Reporting Order also shall be reported to the Central Valley Water Board.
- 9. 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:

FIGURE 1. LOCATION OF MONITORING, INJECTION, AND EXTRACTION WELLS CONTINENTAL GRAIN COMPANY

