

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

TECHNICAL REPORTING ORDER R5-2009-0841
CALIFORNIA WATER CODE SECTION 13267
FOR
SUTTER COUNTY SHERIFF'S STATION
1077 CIVIC CENTER BOULEVARD
SUTTER COUNTY

This Order is issued to Sutter County (hereafter Discharger) pursuant to California Water Code (CWC) section 13267, which authorizes the Executive Officer of the California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board or Board) to issue an Order requiring the submittal of technical reports.

The Executive Officer of the Central Valley Water Board finds:

INTRODUCTION

1. The Discharger owns the property that included a fueling station for Sheriff's Department vehicles at 1077 Civic Center Boulevard in Yuba City in Sutter County (hereafter referred to as the Site).
2. On 21 and 22 April 1988, a routine tank integrity test was attempted on a 4,000-gallon gasoline underground storage tank (UST). The test could not be completed because the tank was found to be leaking at a rate of approximately 4.8 gallons per hour. The UST was repaired and it passed a tank integrity re-test on 30 April 1988. However, the Sheriff's Department discontinued use of the tank, and it was removed from the Site in January 1990.
3. Soil and groundwater results from two soil borings and three monitoring wells completed on-site in September 1988 indicated that both soil and groundwater were impacted by petroleum hydrocarbons. One recovery well and four more monitoring wells were installed between August and October 1989. The maximum groundwater concentrations reported in the Problem Assessment Report (PAR) of December 1989 were 26,600 micrograms per liter (ug/l) of total petroleum hydrocarbons as gasoline (TPHg), 2,100 ug/l of benzene, 320 ug/l of ethyl benzene, 1,260 ug/l of toluene, and 1,610 ug/l of xylenes.
4. A groundwater extraction and treatment system that consisted of one recovery well began operation in June 1990. Following treatment through an air-stripping tower, the water was discharged into the Yuba City sanitary sewer. A planned soil vapor extraction (SVE) system was not placed on-line due to safety concerns of extracting gasoline vapors greater than 10,000 parts per million by volume (ppmv).
5. No groundwater monitoring occurred, nor was the remediation system in operation from approximately July 1991 to March 1994.
6. In July 1994, the groundwater extraction system was restarted, and in October 1994, the SVE system began drawing vapors from four monitoring wells and a vapor extraction well.

Also in October 1994, a second groundwater extraction well was added to the remediation system.

7. Groundwater monitoring stopped in April 1995 and the remediation system (groundwater extraction and SVE) was shut down in August 1995. Intermittent groundwater monitoring occurred between 1997 and 2002.
8. In June 2003, the Central Valley Water Board approved the Corrective Action Work Plan to implement a high vacuum dual phase extraction (HVDPE) system. Four additional extraction wells were installed, and three monitoring wells were reconstructed for use as extraction wells. The HVDPE system began continuous operation in November 2004.
9. The HVDPE system was shut down in December 2007 due to electrical and mechanical problems. During the three year period of operation, approximately 816 pounds of petroleum hydrocarbons were removed from the vapor phase and approximately 6.3 pounds were removed from groundwater. Currently, groundwater is extracted from two wells and is routed through carbon canisters before being discharged to the sanitary sewer.
10. In a 25 March 2008 letter, the Central Valley Water Board conditionally approved a Work Plan for a soil vapor survey, a sensitive receptor survey, the installation of two additional monitoring wells, and a reduction in sampling frequency for some monitoring wells. The results of this work have not been submitted.
11. On 8 June 2009, the Central Valley Water Board approved, via e-mail communication to the Discharger's consultant, a change in the scope of work for the conditionally-approved Work Plan. Instead of installing two monitoring wells, twelve direct-push boreholes would be advanced to obtain groundwater samples to determine the best location for the monitoring wells.
12. State Water Board Resolution No. 2009-0042 directs the Regional Water Boards to reduce monitoring requirements for UST cleanup sites to semi-annually or less frequent, unless site-specific needs warrant otherwise. Currently three monitoring wells are sampled quarterly, two wells semi-annually, and the remaining ten wells are sampled annually. Because of the continuing petroleum hydrocarbon impacts, sampling from the three wells must continue quarterly. The new monitoring wells to be installed must be sampled quarterly for the first year. Thereafter, a reduction to semi-annual sampling may be requested by the Discharger. Groundwater monitoring results are evaluated with each submitted report to determine if additional reductions and/or cessation of monitoring is appropriate.

LEGAL PROVISIONS

13. CWC section 13267 reads, 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.

14. CWC section 13268 reads, 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) or 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 (\$5000) 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 additional 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.

15. The California Code of Regulations, title 23, section 2720, defines a responsible party as one or more of the following:

(1) Any person who owns or operates an underground storage tank used for the storage of any hazardous substance; (2) In the case of any underground storage tank no longer in use, any person who owned or operated the underground storage tank immediately before the discontinuation of its use; (3) Any owner of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred; and (4) Any person who had or has control over a underground storage tank at the time of or following an unauthorized release of a hazardous substance.

A responsible party has a legal obligation to investigate and remediate contamination. The Discharger is subject to this Order because it owns the property and operated the fueling station where an unauthorized release of a hazardous substance from a UST has

occurred. Petroleum products and/or their constituents are considered a hazardous waste under Title 22, section 66261.126, Appendix X. Therefore, the Discharger is a "person who has discharged ... waste" within the meaning of CWC section 13267.

16. Compliance with Central Valley Water Board directives is mandatory in order to be eligible for reimbursement of corrective action costs from the State's Underground Storage Tank Cleanup Fund according to California Code of Regulations, title 23, section 2812.2. All work should be performed according to the *Tri-Regional Recommendations for Preliminary Investigation and Evaluation of Underground Storage Tank Sites*, and permits required by State, County, and Local agencies. All reports must be submitted to the Central Valley Water Board.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, pursuant to CWC section 13267, the Discharger shall submit the following technical reports:

1. **Evaluation Report by 30 September 2009** on the results of the soil vapor survey and direct push groundwater samples. The evaluation is to include a cross-section using soil logging results from the continuously cored boreholes. The evaluation is to include a determination of the most appropriate locations for additional monitoring wells and a rationale for using a 25-foot long screen interval. The Evaluation Report is also to include the results of a sensitive receptor survey and work completed on infrastructure upgrades.
2. **Site Management Plan Report (SMP) by 30 September 2009.** The SMP technical report is to include a project management schedule (such as a Gantt Chart) showing all major tasks (including the items listed above) required to complete the environmental work at this site. The SMP must at a minimum (1) include adequate time for subcontractor scheduling, permitting, fieldwork, report preparation, regulatory review, etc, (2) discuss the current and future uses of the property, and (3) consider that properties may be subject to land use covenants or deed restrictions if remaining contaminants do not allow for unrestricted use.
3. **Human Health Risk Assessment by 30 October 2009** that evaluates all exposure pathways for on and off-site exposure scenarios.
4. **Groundwater Monitoring Reports**, both paper copies to this office and electronic copies to the State Water Resources Control Board's (State Water Board) GeoTracker database (see Reporting Section below).

As shown on Figure 1, which is attached hereto and made part of this Order, there are currently 10 groundwater monitoring and extraction wells associated with the Site (MW-1, MW-2/RW-1, MW-3/RW-4, MW-4, MW-5, MW-6, MW-7, RW-2, RW-3, and RW-5). The groundwater monitoring program for the 10 wells and any wells installed subsequent to the issuance of this Order shall follow the schedule below.

Wells with free phase petroleum product or a visible sheen shall be monitored, at a minimum, for product thickness and depth to water, and the volume of extracted free

phase product and groundwater shall be documented in the monitoring reports. Sample collection and analysis shall follow standard EPA protocol.

Monitoring/Recovery Well	Frequency	Constituents Analyzed
Depth to Groundwater	Quarterly	
RW-3	Quarterly	TPH-g, BTEX, MTBE
RW-4	Quarterly	TPH-g, BTEX, MTBE
MW-5	Quarterly	TPH-g, BTEX, MTBE
MW-6	Semi-annually	TPH-g, BTEX, MTBE
RW-6	Semi-annually	TPH-g, BTEX, MTBE
RW-1	Annually	TPH-g, BTEX, MTBE
RW-2	Annually	TPH-g, BTEX, MTBE
RW-4	Annually	TPH-g, BTEX, MTBE
RW-5	Annually	TPH-g, BTEX, MTBE
MW-4	Annually	TPH-g, BTEX, MTBE
MW-5	Annually	TPH-g, BTEX, MTBE
MW-6	Annually	TPH-g, BTEX, MTBE

Constituents	EPA Analytical Method	Maximum Practical Quantitation Limit ¹ (µg/l)
Total Petroleum Hydrocarbons as gasoline and diesel	8015M	50
Benzene	8020 or 8260B	0.5
Toluene	8020 or 8260B	0.5
Ethylbenzene	8020 or 8260B	0.5
Xylene	8020 or 8260B	0.5
MTBE	8260B	0.5
Naphthalene	8260B	0.5

¹ For nondetectable results. All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

REPORTING

- When reporting 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.
- 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.
- The Discharger shall submit quarterly hard-copy monitoring reports to the Central Valley Water Board by the **30th day of the first month following the end of each quarter (i.e. by 30 January, 30 April, 30 July and 30 October)** until such time as the Executive

Officer determines that the reports are no longer necessary. Semi-annual and annual data reporting is to be included with the applicable quarterly report. In addition, concurrently with the hard-copy reports, the Discharger shall submit electronic copies of the reports and electronic data reports, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30, over the Internet to the State Water Board's Geographic Environmental Information Management System (Geotracker) database system at <https://geotracker.waterboards.ca.gov>. Electronic submittals shall comply with GeoTracker standards and procedures as specified on the State Water Board's web site. All reports must follow the *Appendix A - Reports, Tri-Regional Recommendations for Preliminary Investigation and Evaluation of Underground Storage Tank Sites* (Appendix A - Reports), which is attached and made a part of this Order. Each quarterly 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, 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 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.

This Order is effective upon the date of signature.

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 (or mandatory furlough day), 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.

Ordered by:

original signed by

PAMELA C. CREEDON
Executive Officer

28 August 2009

(Date)