CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2008-0837 ISSUED PURSUANT TO CALIFORNIA WATER CODE SECTION 13267

FOR MR. SEAN BUCKLEY AND THE UNITED STATES BUREAU OF RECLAMATION STEELE PARK MARINA 1605 STEELE CANYON ROAD NAPA COUNTY

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code (CWC) section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer of the Central Valley Regional Water Quality Control Board (Central Valley Water Board).

BACKGROUND AND LEGAL AUTHORITY

- The Site is located at 1605 Steele Canyon Road in an unincorporated area of Napa County at the southern end and adjacent to Lake Berryessa and is currently used as a marina with a restaurant and retail shop, a boat ramp, and a floating dock. A former UST system operated until it was removed in April 1998.
- 2. Depth to groundwater has ranged from 21.29 feet below ground surface (bgs) to 0 feet bgs (the top of the well casings) in wells adjacent to the lake. Groundwater samples have contained petroleum hydrocarbon constituents at maximum concentrations of: TPH-G 60,000 micrograms per liter (ug/l), benzene 3,700 ug/l, toluene 3,100 ug/l, ethylbenzene 2,400 ug/l, xylenes 13,000 ug/l, MTBE 23,000 ug/l, di-isopropyl ether (DIPE) 16.4 ug/l, and tert amyl methyl ether (TAME) 10.8 ug/l. During the second quarter 2008 groundwater monitoring event, concentrations of petroleum constituents were detected at maximum concentrations of: TPH-G 11,000 ug/l, xylenes 5.0 ug/l, and MTBE 10,600 ug/l. This pollution has impaired the beneficial uses of the groundwater resource.
- 3. CWC section 13267(b)(1) provides that:

In conducting an investigation specified in subdivision (a), 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, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters 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.

4. CWC section 13268 states, in relevant part:

- (a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of Section 13399.2, or falsifying and 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.
- 5. In accordance with California Code of Regulations, title 23, section 2720, which defines responsible parties as including, "...[any] person who owned or operated the underground storage tank immediately before the discontinuation of its use...", Mr. Sean Buckley is a responsible party as the owner and operator of the former UST.
- 6. In accordance with California Code of Regulations, title 23, section 2720, which defines responsible parties as including, "...[a]ny owner of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred...", the United States Bureau of Reclamation is a responsible party because it owned the property at the time petroleum hydrocarbons were discharged/released and because it is the current owner of the property.
- 7. Therefore, Mr. Sean Buckley and the United States Bureau of Reclamation (collectively, the Dischargers) are responsible parties and, are therefore, "person[s] who ha[ve] discharged, discharges, or [are] suspected of having discharged or discharging waste" within the meaning of CWC 13267 and are required to monitor groundwater and submit Reports as required in this MRP.
- 8. Pursuant to CWC section 13268, a violation of this MRP may subject Mr. Sean Buckley to administrative civil liability of up to \$1,000 per violation for each day in which the violation occurs. Pursuant to 33 U.S.C. § 1323 and *U.S. Dept. of Energy v. Ohio*¹, the federal government, including the Bureau of Reclamation, has waived sovereign immunity with respect to all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution, but has not waived sovereign immunity with respect to punitive fines. However, civil penalties arising under federal law or imposed by state court to enforce its order of process may be levied against the federal government. Therefore, to the extent that provisions of the CWC, including section 13268, are interpreted as punitive fines, they are inapplicable to the Bureau of Reclamation. The Central Valley Water Board reserves the right to take any necessary enforcement

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¹ 112 S.Ct. 1627, 503 U.S. 607, 118 L.Ed.2d 255, on remand 965 F.2d 1401.

actions provided by law against the Bureau of Reclamation to enforce the provisions of this MRP.

9. The reports herein required are necessary to delineate waste discharged from the Site, characterize pollutant plumes, and evaluate whether remediation efforts are effective. The waste constituents that are present in soil and groundwater, including total petroleum hydrocarbons as gasoline (TPH G) and methyl tert butyl ether (MTBE) may pose a significant threat to human health and the environment. The costs of the reports herein ordered are justified by the benefit to be derived from such information.

GROUNDWATER MONITORING

10. As shown on Figure 1, there are 4 groundwater monitoring wells, MW-1 through MW-4, and 7 groundwater extraction wells, EW-1 through EW-7, associated with the Steele Park Resort. The groundwater monitoring program for the 4 monitoring wells, 7 extraction wells, and any wells installed subsequent to the issuance of this MRP, shall follow the schedule in the following table. Monitoring wells with free phase petroleum product or visible sheen shall be monitored, at a minimum, for product thickness and depth to water. The volume of extracted groundwater also shall be provided in quarterly monitoring reports. Sample collection and analysis shall follow standard EPA protocol. All wells shall be sampled quarterly for laboratory analysis. All wells shall be monitored quarterly for water levels and the presence and thickness of free product.

| | SAMPLING FREQUENCY | | | | | | | | | | | |
|-------|--------------------|------|------|------|------|------|------|------|------|------|------|-----------|
| | Quarterly | | | | | | | | | | | |
| Wells | MW-1 | MW-2 | MW-3 | MW-4 | EW-1 | EW-2 | EW-3 | EW-4 | EW-5 | EW-6 | EW-7 | New Wells |

| Constituents ¹ | EPA Analytical Method | Maximum Practical Quantitation Limit | | |
|---------------------------|--------------------------|---|--|--|
| | | $(\mu g/l)^2$ | | |
| Depth to Groundwater | | | | |
| TPH-G | 8015M or 8260B | 50 | | |
| Benzene | 8020 or 8260B | 0.5 | | |
| Toluene | 8020 or 8260B | 0.5 | | |
| Ethylbenzene | 8020 or 8260B | 0.5 | | |
| Xylenes | 8020 or 8260B | 0.5 | | |
| MTBE | 8260B | 0.5 | | |
| TBA | 8260B | 5 | | |
| TAME | 8260B | 0.5 | | |
| DIPE | 8260B | 0.5 | | |
| ETBE | 8260B | 0.5 | | |
| Ethanol | 8260B | 50 | | |
| Methanol | 8260B | 100 | | |
| 1,2-Dichloroethane | 8260B | 0.5 | | |

¹ Report all discrete peaks identified during the normal course of analysis for chemicals of concern.

² All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

11. Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Dischargers shall submit plans and specifications to the Central Valley Water Board for review and approval. Once installed, all new wells shall be added to the monitoring program and shall be sampled and analyzed according to the following schedule.

REPORTING

- 12. When reporting data, the Dischargers shall arrange the information in tabular form so that the sampling date, the analyzed constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with this MRP.
- 13. 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.
- 14. The Dischargers shall submit a paper copy of the quarterly report to the Central Valley Water Board's office and shall submit the quarterly electronic data reports, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30, electronically over the internet to the State Water Board's Geotracker database system. Both the paper copy and the electronic submittal are due by the 1st day of the second month following the end of the calendar quarter by 1 February, 1 May, 1 August, and 1 November, until such time as the Executive Officer determines that the reports are no longer necessary. 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) Concentration contour maps for all groundwater zones for TPH-G, benzene, and MTBE, as applicable.
 - (e) A table showing well construction details including at a minimum: well number, groundwater zone being monitored, ground surface elevation, screen interval, bentonite interval, filter pack interval, and total depth of the well.
 - (f) A table showing historical lateral and vertical (if applicable) down-gradient directions and gradients.

- (g) Cumulative data tables containing the water quality analytical results and depth to groundwater for all analytes.
- (h) A copy of the laboratory analytical data report.
- (i) The status of any ongoing remediation, including:
 - i. Site maps indicating the capture zone and lateral and vertical extent of waste plumes.
 - ii. Average extraction rates of all treatment systems.
 - iii. Influent and effluent concentrations of TPH-G, BTEX, MTBE, di-isopropyl ether (DIPE), ethyl tert butyl ether (ETBE), tert amyl methyl ether (TAME), and tert butyl alcohol (TBA), and disposal location.
 - iv. Mass of hydrocarbons treated during the reporting period and cumulative to date.
 - v. The effectiveness of the remediation system, including estimated mass of wastes remaining and predicted time frame for meeting cleanup objectives.
 - vi. System operating time, including running and down time for the remediation system(s).
 - vii. Any field notes pertaining to the operation and maintenance of the system, and a summary of consultant visits to the site.
 - viii. Evaluation of the overall remediation program and recommendations to correct deficiencies or increase efficiency.
- (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.
- 15. The First Quarter Quarterly Groundwater Monitoring Report, due **1 February** of each year shall be an expanded report and will include the following additional information/items:
 - (a) Tabular summaries of all data obtained during the year.
 - (b) Graphical summaries of TPH-G and MTBE concentrations, groundwater elevation data, and remediation system operation versus time for site wells.
 - (c) A rose diagram presenting groundwater flow direction and magnitude data or other groundwater flow direction analysis, including effect due to seasonal fluctuation and time of year, as appropriate.
 - (d) Contaminant concentration contour maps for TPH-G, benzene, and MTBE, as applicable, for each quarter from the previous year, if applicable.
 - (e) A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells.
 - (f) An analysis of whether the pollutant plume is being captured by an extraction system or is continuing to spread.

- (g) 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.
- (h) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
- (i) If desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.
- 16. 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.

The Discharger shall implement the above monitoring program as of the date of the MRP.

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. Copes 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: | | |
|-------------|--------------------|--|
| • | PAMELA C. CREEDON, | |
| | Executive Officer | |
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| | December 16, 2008 | |
| | (Date) | |