

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2012-0803
WATER CODE SECTION 13267

FOR
SFPP, L.P., AN OPERATING PARTNERSHIP OF
KINDER MORGAN ENERGY PARTNERS, L.P.
SFPP CHICO TERMINAL
BUTTE COUNTY

This Order is issued to SFPP, L.P. an operating partnership of Kinder Morgan Energy Partners, L.P. (hereafter "SFPP" or "Discharger"), pursuant to 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 (the "Order") requiring the preparation and submittal of technical monitoring reports.

The Executive Officer finds:

INTRODUCTION

1. The site is a petroleum terminal at 2570 Hegan Lane, a property of approximately 40 acres in Section 1, Township 21 North, Range 1 East, Mount Diablo Baseline and Meridian, Assessor's Parcel No. 039-060-053, Chico, Butte County (the "Site"). The Site stores gasoline, diesel fuel, and trans-mix in a 25-acre tank farm of 33 aboveground storage tanks ("ASTs"), ranging in size from approximately 210,000 to 2.5 million gallons in capacity, with a maximum combined capacity of approximately 23.1 million gallons. In addition, the tank farm has two ASTs of denatured Ethanol (EtOH, denatured with up to 2.5 percent gasoline), with a maximum combined capacity of approximately 660,000 gallons. In addition to large capacity ASTs, the tank farm stores proprietary fuel additives from truck deliveries in nine ASTs with total capacity of approximately 77,100 gallons. The tank farm also has a manifold, underground piping, four overhead loading racks, an oil-water separator, and a storm water management system. Beyond the tank farm, the Site has a buffer zone and further storm water management system. Storm water is regulated separately, under the National Pollution Discharge Elimination System ("NPDES") Program.
2. Investigations have shown petroleum pollutants in shallow and deeper groundwater; these correlate with waste discharges from about 1987 to 1997. On 28 April 1999, the Executive Officer therefore issued Cleanup and Abatement Order 99-711 (the "CAO"), and on 18 March 2002, revised the CAO. The CAO generally requires SFPP to clean up free-phase petroleum, largely oxygenated gasoline, from shallow groundwater, and to clean up dissolved pollutants in

shallow and deeper groundwater. The CAO further requires SFPP to mitigate threats to about 40 private domestic wells in the nearby Skyway Homes Subdivision, which lies about 500 feet south of the Site.

3. Since 1993, SFPP has installed 62 groundwater monitoring wells at the Site. In 2000, the Discharger began sampling three selected private domestic wells in the Skyway Homes Subdivision, and detected sporadic, dilute oxygenate detections, which were below water quality objectives ("WQOs") for taste and odor. On 13 August 2003, SFPP presented a draft Domestic Well Contingency Plan ("draft Contingency Plan") at a public meeting in Chico. The draft Contingency Plan proposed further corrective action based on trigger concentrations of key pollutants in domestic wells, at fractions of WQOs. Interested parties, local well owners, and public agencies, concurred with the draft Contingency Plan. Therefore, the Discharger continued domestic well sampling.
4. Due to requests from interested parties, in 2003 and 2004, Central Valley Water Board, Butte County Environmental Health Division ("BCEHD"), and Department of Toxic Substances Control ("DTSC") staffs sampled most private wells in the Skyway Homes Subdivision. Results showed no fuel oxygenates, but showed that chlorinated ethenes were present. Subsequent investigation found an industrial solvent source east-northeast of the Site at a site where DTSC has been providing lead agency oversight. See:
http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=04880002
5. Based on the chlorinated ethenes detections, as well as monitoring well data, Central Valley Water Board staff finds that deeper local groundwater flows west-southwest from the Site, generally away from the Skyway Homes Subdivision. The greatest potential threat to domestic wells is the southward migration of mobile petroleum pollutants in shallow groundwater. Existing monitoring wells are adequate to detect such a threat.
6. On 16 September 2003, the Discharger began soil vapor extraction ("SVE") near the southwest corner of the tank farm, under Butte County Air Quality Management Permit to Operate No. SPP-03-041. The Discharger continuously ran the SVE system during dry seasons until December 2009, and then ceased operating the system, due to non-detectable vapor phase influent petroleum constituents. As of 27 November 2009, the SVE system had removed 1,836.2 pounds of volatile petroleum pollutants, largely from the lower capillary zone above shallow groundwater. Post-shutdown, shallow groundwater monitoring wells down-gradient have further declined with respect to total petroleum hydrocarbons, aromatics, and fuel oxygenates. Based on electron acceptor data, Central Valley Water Board staff finds that the declines are due in part to bio-degradation.
7. Due to lack of further fuel oxygenate detections, on 17 December 2009 the Discharger submitted a final Domestic Well Monitoring Contingency Plan ("final Contingency Plan") for the Skyway Homes Subdivision. In lieu of further

domestic well sampling, the final Contingency Plan proposes further corrective actions based on trigger concentrations of EtOH, Methyl tert-Butyl Ether ("MtBE"), and Benzene in key monitoring wells. A conservative analytical model of likely worst-case waste discharge, near the oil-water separator and Loading Rack #1, supports the trigger concentrations; therefore Central Valley Water Board staff concurs with the final Contingency Plan.

8. On 10 February 2011, SFPP requested that the Central Valley Water Board rescind the CAO. Based on Findings 4, 5, 6, and 7 above, Central Valley Water Board staff concurs with the Discharger's request. Further groundwater monitoring under this Order will be in lieu of additional cleanup required by the CAO. Any future waste discharges would be regulated separately, under California Health and Safety Code sections 25070.8 and 25070.9, Water Code section 13304, and other sections, as appropriate, in the Aboveground Petroleum Storage Act.

LEGAL PROVISIONS

9. Water Code section 13267 states, in relevant part:

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.

SFPP is responsible for complying with the obligations set forth in this Order because it operates the Site and owns the property. The reports required herein are necessary to continuously monitor remaining pollutants, to determine whether or not natural attenuation is effective, to ensure protection of waters of the state, and to protect public health and the environment.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, pursuant to Water Code section 13304, Cleanup and Abatement Order 99-711 is hereby rescinded. Pursuant to Water Code section 13267, SFPP, L.P. shall:

1. **Continue to monitor and report** in accordance with the approved program dated 24 September 2009, as detailed below.
2. As shown on the attached Map and Table, the Site has 52 remaining active monitoring wells. The groundwater monitoring program for these monitoring wells, and any wells installed subsequent to the issuance of this Order, shall follow the schedule detailed herein.

3. Monitoring wells with free phase petroleum product or visible sheen shall be monitored, at a minimum, for product thickness and depth to water.
4. Prior to either construction or destruction of any new groundwater monitoring or treatment 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 added to the monitoring program, and shall be sampled and analyzed according to the schedule herein (see Required Actions No. 5, below).
5. Sample collection and analysis of monitoring wells shall follow standard EPA protocol, and shall adhere to the following schedule:

SAMPLING FREQUENCY¹

| Quarterly | Semi-annually² | Annually³ | Constituents⁴ |
|--|--|---|---|
| LF-6, LF-9, LF-41, and LF-42. | LF-1A, LF-2, LF-3, LF-4, LF-5R, LF-7, LF-8, LF-17, LF-27, LF-32, and MW-5A, | None | TPHg and TPHd, Benzene, Ethylbenzene, Toluene, Xylenes, and seven fuel oxygenates |
| LF-12, LF-13, LF-29, LF-36A, and MW-6B | LF-11, LF-14, LF-15, LF-16, LF-19, LF-20, LF-21, LF-22, LF-28, LF-36B, LF-37A, LF-37B, LF-37C, LF-38A, LF-38B, LF-38C, LF-39A, LF-39B, LF-39C, LF-40A, LF-40B, and MW-6A | LF-10, LF-18, LF-23, LF-24, LF-25, LF-26, LF-30, LF-31, LF-35, and MW-9 | Benzene, MtBE, and TBA |

¹ All wells shall be monitored quarterly for depth to groundwater.

² Semi-annual sampling shall occur during the first and third quarters.

³ Annual sampling shall occur during the first quarter.

⁴ TPHg and TPHd are Total Petroleum Hydrocarbons as gasoline and diesel. Seven fuel oxygenates are: Methyl tert Butyl Ether (MtBE), tert Amyl Methyl Ether (TAME), tert Butyl Alcohol (TBA), Ethyl tert Butyl Ether (EtBE), Diisopropyl Ether (DIPE), Ethanol (EtOH), and Methanol (MeOH).

| Constituents | EPA Analytical Method | Maximum Practical Quantitation Limit, micrograms/Liter ⁵ |
|--|-----------------------|---|
| Depth to Groundwater (and free product, as observed) | --- | --- |
| TPHg | 8015M | 50 |
| TPHd | 8015M | 50 |
| Benzene | 8260B | 0.50 |
| Toluene | 8260B | 0.50 |
| Ethylbenzene | 8260B | 0.50 |
| Xylenes | 8260B | 0.50 |
| MtBE | 8260B | 0.50 |
| TAME | 8260B | 1.0 |
| TBA | 8260B | 10 |
| EtBE | 8260B | 1.0 |
| DIPE | 8260B | 1.0 |
| EtOH | 8260B | 50 |
| MeOH | 8260B | 100 |

⁵ For non-detectable results, all concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace or estimated.

6. **Continue to implement the final Domestic Well Contingency Plan**, proposed on 17 December 2009, as detailed below. If Benzene, MtBE, or EtOH exceed 230, 230, or 22,500 µg/L respectively, in sentry monitoring wells LF-41 or LF-42, collect confirmation samples **within two weeks**. If confirmation results have relative percent differences ("RPDs") less than 25%, or if any confirmation result exceeds its previous result, **within the following two weeks** sample the domestic well at 2615 Hegan Lane for target analytes. If confirmation results have RPDs greater than or equal to 25% and none exceed the previous results, **within the same calendar year** sample the domestic well. In either case, continue sampling the domestic well **at minimum annually for two years, and every other year for the next 10 years**. If target analytes occur in the domestic well at 2615 Hegan Lane, **within 60 days** submit to the Central Valley Water Board Redding office an appropriate Corrective Action Plan with a time schedule for implementation.
7. However, if any free phase product (including visible sheen) occurs in LF-41 or LF-42, sample the domestic well at 2615 Hegan Lane **within the same quarter** for full range Volatile Organic Compounds ("VOCs") with EPA Method 8260B, **and within 30 days of sampling**, submit to the Central Valley Water Board Redding office an appropriate Corrective Action Plan with a time schedule for implementation.

REPORTING

8. 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 clearly illustrate compliance with this Order.
9. As required by the Business and Professions Code sections 6735, 7835, and 7835.1, all reports shall be prepared by a qualified California Registered Professional Engineer or Geologist or their subordinate, and signed by the registered professional under penalty of perjury under the laws of the State of California.
10. Semi-annual electronic reports, which conform to the requirements of the California Code of Regulations, title 23, sections 3890 through 3895, shall be submitted electronically over the internet to the State Water Resources Control Board's (State Water Board's) Geotracker database system by **1 February and 1 August**, until such time as the Executive Officer determines that the reports are no longer necessary.
11. Semi-annual paper copy reports shall be submitted to the Central Valley Water Board office by **1 February and 1 August** 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, and how and when samples were collected, and a brief discussion of monitoring results versus contingency plan trigger levels.
 - (b) Field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, and volume of water purged.
 - (c) Potentiometric surface maps for all relevant, hydraulically unconfined and confined groundwater zones.
 - (d) Pollutant concentration contour 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), reference elevation (top of casing elevation), depth to screen interval, and elevation of well bottom.
 - (f) Cumulative data tables for all major constituents of concern containing the water quality analytical results and depth to groundwater for all monitoring wells.
 - (g) A copy of the laboratory analytical data report.

- (h) 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.
 - (i) 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.
12. An Annual Report shall be submitted to the 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. The Annual Report shall include all the information required to be in the second semi-annual report and the following additional minimum information:
- (a) Both tabular and graphical summaries of key data obtained during the year.
 - (b) Groundwater contour maps and pollutant concentration maps containing all data obtained during the previous year.
 - (c) A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells.
 - (d) An analysis of pollutant plume stability.
 - (e) 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.
 - (f) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
 - (g) If desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.
13. 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.
14. The Discharger shall implement the above monitoring program as of the effective date of this Order. The Discharger shall not implement any changes to this Order unless and until a revised Order is issued by the Executive Officer.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to \$10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and/or 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

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 Water Code 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.

This Order is effective upon the date of signature.

Ordered by:

Robert A. Crendon
for PAMELA C. CREEDON, Executive Officer

3/28/12
(Date)

Attachments: Site Map
Summary of Monitoring Well Constructions

Table 1

| Active Monitoring Well Construction Details | | | | | | | |
|---|----------------|-----------|----------|------------------|-----------------------|----------------------|----------------------------|
| SFPP, L.P. Chico Terminal | | | | | | | |
| Well | Date Installed | Longitude | Latitude | TOC Elev. (feet) | Well Depth (feet bgs) | Screen Length (feet) | Screen Interval (feet bgs) |
| Shallow Zone Wells | | | | | | | |
| LF-1A | NA | -121.8129 | 39.7077 | 199.27 | 20.37 | NA | NA |
| LF-2 | 08/25/93 | -121.8127 | 39.7070 | 199.41 | 20.00 | 15 | 4.2 - 19.2 |
| LF-3 | 08/25/93 | -121.8134 | 39.7066 | 197.84 | 30.00 | 15 | 14.2 - 29.2 |
| LF-4 | 08/25/93 | -121.8122 | 39.7074 | 197.68 | 20.00 | 14 | 9.3 - 23.3 |
| LF-5R | 08/23/93 | -121.8117 | 39.7077 | 197.25 | 20.00 | 15 | 4 - 19 |
| LF-6 | 08/24/93 | -121.8135 | 39.7068 | 196.36 | 20.00 | 10 | 9 - 19 |
| LF-7 | 08/24/93 | -121.8151 | 39.7096 | 198.28 | 25.00 | 15 | 9.2 - 24.2 |
| LF-8 | 08/24/93 | -121.8147 | 39.7074 | 198.71 | 25.00 | 15 | 9.2 - 24.2 |
| LF-9 | 08/30/93 | -121.8142 | 39.7068 | 198.03 | 23.00 | 15 | 8 - 23 |
| LF-10 | 08/30/93 | -121.8137 | 39.7064 | 198.39 | 20.00 | 15 | 5.6 - 20.6 |
| LF-11 | 05/18/95 | -121.8128 | 39.7066 | 198.35 | 20.00 | 15 | 4.2 - 19.2 |
| LF-12 | 05/16/95 | -121.8121 | 39.7070 | 198.67 | 20.00 | 15 | 4.2 - 19.2 |
| LF-13 | 05/17/95 | -121.8115 | 39.7074 | 198.71 | 20.00 | 15 | 4.2 - 19.2 |
| LF-14 | 05/18/95 | -121.8114 | 39.7083 | 196.91 | 18.00 | 15 | 2.2 - 17.2 |
| LF-15 | 05/15/95 | -121.8156 | 39.7084 | 198.55 | 20.00 | 15 | 4.3 - 19.3 |
| LF-16 | 05/19/95 | -121.8143 | 39.7067 | 198.47 | 20.00 | 15 | 4.2 - 19.2 |
| LF-17 | 05/22/95 | -121.8140 | 39.7059 | 200.97 | 20.00 | 15 | 4.2 - 19.2 |
| LF-18 | 05/16/95 | -121.8140 | 39.7059 | 195.39 | 19.15 | 15 | 4 - 19 |
| LF-19 | 05/23/95 | -121.8140 | 39.7059 | 198.10 | 20.00 | 15 | 4.2 - 19.2 |
| LF-22 | 09/03/99 | -121.8152 | 39.7070 | 198.49 | 25.00 | 15 | 10 - 25 |
| LF-23 | 08/31/99 | -121.8152 | 39.7070 | 198.60 | 25.00 | 15 | 10 - 25 |
| LF-24 | 09/01/99 | -121.8131 | 39.7074 | 198.93 | 25.00 | 15 | 10 - 25 |
| LF-26 | 09/03/99 | -121.8146 | 39.7064 | 197.88 | 25.00 | 15 | 10 - 25 |
| LF-27 | 09/07/99 | -121.8155 | 39.7076 | 200.13 | 25.00 | 15 | 10 - 25 |
| LF-28 | 09/08/99 | -121.8155 | 39.7076 | 198.61 | 25.00 | 15 | 10 - 25 |
| LF-31 | 08/15/00 | -121.8156 | 39.7058 | 198.22 | 25.00 | 15 | 10 - 25 |
| LF-38A | 06/03/02 | -121.8121 | 39.7070 | 196.77 | 40.00 | 3 | 37 - 40 |
| LF-41 | 03/02/05 | -121.8136 | 39.7067 | 195.57 | 22.77 | 10 | 12.8 - 22.8 |
| LF-42 | 03/02/05 | -121.8109 | 39.7077 | 196.25 | 21.19 | 10 | 11.2 - 21.2 |
| MW-9 | NA | -121.8132 | 39.7080 | 196.01 | 26.15 | NA | NA |
| MW-5A | 08/28/03 | -121.8138 | 39.7077 | 196.41 | 20.02 | 15 | 5 - 20 |
| MW-6A | 08/27/03 | -121.8146 | 39.7081 | 199.75 | 23.00 | 15 | 5 - 20 |
| MW-6B | 08/27/03 | -121.8151 | 39.7087 | 199.86 | 37.35 | 7 | 29 - 22 |
| Zone 2 Wells | | | | | | | |
| LF-20 | 10/29/98 | -121.8159 | 39.7097 | 197.32 | 55.00 | 5 | 50 - 55 |
| LF-25 | 09/02/99 | -121.8146 | 39.7064 | 197.84 | 57.00 | 5 | 50 - 55 |
| LF-29 | 09/09/99 | -121.8132 | 39.7080 | 197.54 | 57.00 | 2 | 51 - 53 |
| LF-30 | 08/15/00 | -121.8157 | 39.7058 | 197.32 | 55.00 | 5 | 49.5 - 54.5 |
| LF-32 | 08/15/00 | -121.8145 | 39.7064 | 197.66 | 55.00 | 5 | 50 - 55 |
| LF-35 | 05/15/02 | -121.8136 | 39.7061 | 197.73 | 57.00 | 5 | 51 - 56 |
| LF-37A | 05/28/02 | -121.8128 | 39.7066 | 198.45 | 65.00 | 3 | 62 - 65 |
| LF-38B | 06/03/02 | -121.8121 | 39.7070 | 196.75 | 70.00 | 3 | 67 - 70 |
| LF-39A | 06/05/02 | -121.8116 | 39.7074 | 198.00 | 60.50 | 3 | 57.5 - 60.5 |
| LF-40A | 06/06/02 | -121.8132 | 39.7064 | 198.33 | 69.00 | 3 | 66 - 69 |
| Zone 3 Wells | | | | | | | |
| LF-21 | 08/26/99 | -121.8143 | 39.7094 | 196.63 | 82.00 | 5 | 75 - 80 |
| LF-36A | 05/30/02 | -121.8146 | 39.7064 | 198.51 | 87.00 | 3 | 84 - 87 |
| LF-37B | 05/28/02 | -121.8128 | 39.7066 | 198.57 | 87.50 | 3 | 84.5 - 87.5 |
| LF-38C | 06/03/02 | -121.8121 | 39.7070 | 196.70 | 86.00 | 3 | 83 - 86 |
| LF-39B | 06/05/02 | -121.8135 | 39.7062 | 197.98 | 84.00 | 3 | 81 - 84 |
| LF-40B | 06/06/02 | -121.8136 | 39.7067 | 198.25 | 82.00 | 3 | 79 - 82 |
| Zone 4 Wells | | | | | | | |
| LF-36B | 05/30/02 | -121.8146 | 39.7064 | 198.41 | 110.00 | 3 | 107 - 110 |

Table 1

Active Monitoring Well Construction Details

SFPP, L.P. Chico Terminal

| Well | Date Installed | Longitude | Latitude | TOC Elev. (feet) | Well Depth (feet bgs) | Screen Length (feet) | Screen Interval (feet bgs) |
|---------------------|----------------|-----------|----------|------------------|-----------------------|----------------------|----------------------------|
| Zone 4 Wells | | | | | | | |
| LF-37C | 05/28/02 | -121.8128 | 39.7066 | 198.49 | 106.00 | 3 | 103 - 106 |
| LF-39C | 06/05/02 | -121.8135 | 39.7062 | 197.92 | 106.00 | 3 | 103 - 106 |

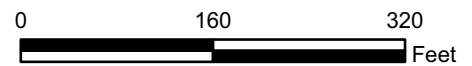
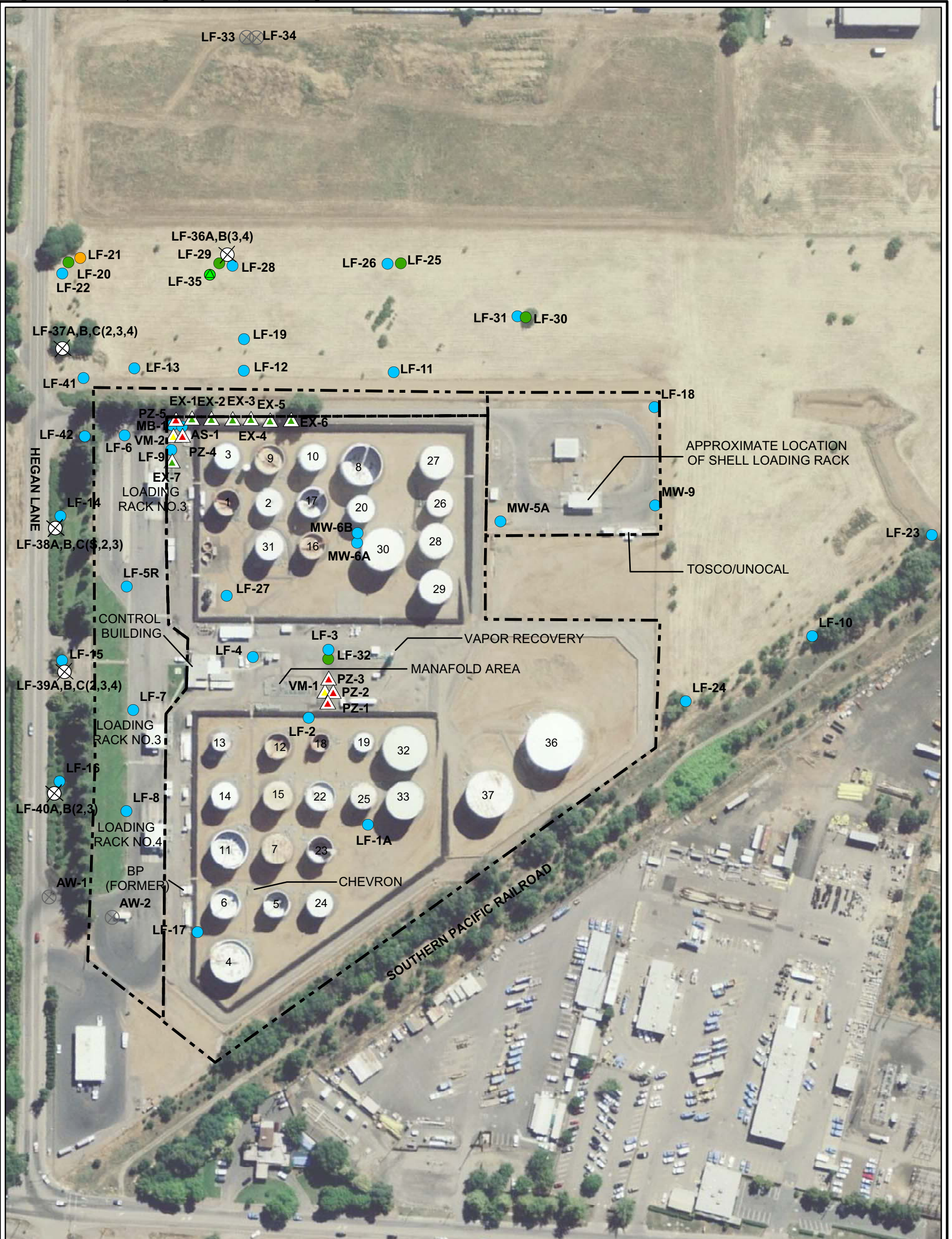
Notes:

Easting and Northings (in feet) reference California State Plane, Zone 2, NAD 83

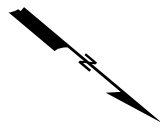
feet bgs = feet below ground surface

TOC = top of casing

NA = not available



| LEGEND | |
|----------|--|
| LF-36A,B | Multiple completion monitoring well (Barcad) |
| LF-35 | Extraction test well (Zone 2) |
| PZ-1 | Piezometer well |
| VM-1 | Vapor monitoring well |
| EX-1 | Vapor extraction well |
| AW-1 | Abandoned well |
| LF-22 | Shallow monitoring well (above 50' bgs) |
| LF-20 | Zone 2 monitoring well (50-70' bgs) |
| LF-21 | Zone 3 monitoring well (80-90' bgs) |
| S | Shallow monitoring well (above 50' bgs) |
| 2 | Zone 2 monitoring well (above 50-70' bgs) |
| 3 | Zone 3 monitoring well (above 80-90' bgs) |
| 4 | Zone 4 monitoring well (above 100-110' bgs) |



SFPP, L.P. CHICO TERMINAL, CHICO, CALIFORNIA

SITE PLAN



FIGURE
1

Central Valley Regional Water Quality Control Board

28 March 2012

Steven J. Osborn
Manager - Remediation
Kinder Morgan Energy Partners, LP
P.O. Box 1318
Rocklin, CA 95677

TRANSMITTAL, MONITORING AND REPORTING PROGRAM, RESCISSION, REVISED CLEANUP AND ABATEMENT ORDER NO 99-711, SCP CASE #2050093, UST CASE #040023, KINDER MORGAN ENERGY PARTNERS, L.P., ("SFPP") CHICO TERMINAL, BUTTE COUNTY

Enclosed is a Monitoring and Reporting Program ("MRP") for the subject facility. As described in the Findings, SFPP has effectively addressed identified pollution in groundwater. Therefore, the enclosed Order rescinds Cleanup and Abatement Order 99-711 (as revised 18 March 2002) and replaces it with an MRP that requires continuous monitoring of the remaining pollutants, and that will help the California Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) determine whether or not natural attenuation is effective. Central Valley Water Board staff is also concerned about potential petroleum spills that may occur in the future, as well as their related impacts to underlying groundwater. As follow-up to all future spill reports, the Central Valley Water Board requests that SFPP provide the following:

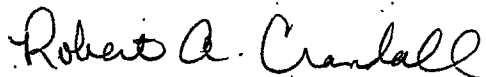
- Map of the spill relative to existing monitoring wells, standing water, secondary containments, and other relevant features.
- Estimated spill volume, with appropriate technical justification for the estimate.
- Assessment of remaining threat to groundwater, at minimum based on current soundings of appropriate nearby monitoring wells, vertical extent of the most mobile constituents in affected soil (volatile and semi-volatile organics, from EPA Methods 8260B and 8270C, as appropriate), and estimated height of capillary zone above the water table. As a default, if the affected soils are largely silt, the current water table is steady, and the near-grade soils are relatively dry, assume the capillary zone extends about five feet above the water table. If default conditions do not apply, for example if near-grade soils are wet or saturated, we request SFPP to provide appropriate alternatives including, but not limited to, surface water and pore water sampling for EPA Methods 8260B and 8270C.

Our requests for information will be case-specific, based on the nature and extent of the reported spill, and will consider substrate, soil permeability, penetration depth of free phase petroleum, and other factors that could potentially affect underlying groundwater quality.

KARL E. LONGLEY SCD, P.E., CHAIR | PAMELA C. CREEDON, EXECUTIVE OFFICER

415 Knollcrest Drive, Suite 100, Redding, CA 96002 | www.waterboards.ca.gov/centralvalley

Contact Eric Rapport of my staff at (530) 224-4998, or the letterhead address with questions or comments.



(for) Pamela C. Creedon
Executive Officer

EJR: jmtm

Enclosure: Monitoring and Reporting Program

cc w/ encl: Peter Reich, US EPA, Region 9, San Francisco
John Paine, Cal-EPA, Sacramento
Duncan Austin, P.E., Central Valley Water Board, Rancho Cordova
Mike Huerta, Butte County Environmental Health Division, Oroville
David Hull, P.G., Arcadis, Roseville

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