City and County of San Francisco
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH SECTION

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November 14, 2013

Ms. Vivian Gomez-Latino State
State Water Resources Control Board
1001 I Street, P.O. Box 2231
Sacramento CA 95814

Mr. Ben Heningburg
Division of Water Quality
State Water Resources Control Board
1001 I Street, P.O. Box 2231
Sacramento CA 95814

UPDATED COMMENT LETTER – ARCO 6185 Proposed Case Closure

Subject: Objection to Intent to Close Case -Updated
5898 Mission Street, San Francisco,
ARCO 6185, LOP 10056

Dear Mr. Heningburg:

The San Francisco Local Oversight Program (LOP) reviewed the file for 5898 Mission San Francisco, ARCO station 6185, and recent submittals by Arcadis on behalf of ARCO. These documents include Amended Request for Low-Threat Closure, dated August 23, 2013, first and Third Quarter 2013 groundwater monitoring reports and the description of an additional subsurface investigation conducted in June 2013.

DPH LOP objects to the closure of the case based on the Low Threat Closure Policy Checklist reviews by both the State Water Resources Control Board (SWRCB) and the DPH LOP which conclude that the site does not meet the criteria of the Low Threat Closure Policy adopted as SWRCB Resolution 2012-0016, effective August 17, 2012 (LTCP). The case LTCP Checklist validation completed by SWRCB contractor also concluded that the site is not eligible for closure and that the project is not progressing based on a lack of responsiveness by Arcadis/ARCO to repeated specific requests from the LOP.

Summary of Data from March 2013

Groundwater monitoring results for the first quarter of 2013 (1Q13) indicate that dissolved petroleum hydrocarbons continue to be found in monitoring wells A-1R, A-2R and S-15. Dissolved petroleum hydrocarbons were additionally measured in wells A-3 and A-4 this quarter. Total Petroleum Hydrocarbons as gasoline (GRO) concentrations measured in 1Q13 ranged from 62 micrograms per liter (ug/L) (S-15) to 7100 ug/L in A-1R; an increase over the previous maximum of 3500 ug/L in A-1R.

Benzene measured in 1Q13 ranged from below detection limits (ND) (A-3, A-4) to 2600 ug/L (A-1R). Well S-16 contained 1700 ug/L benzene. The maximum benzene concentrations increased over the previous maximum benzene value of 792 ug/L (A1-R).

Methyl tert butyl ether (MTBE) concentrations ranged from ND as <1.0 ug/L in most wells, except the ND as <25 ug/L in well A1-R, which contained 7100 ug/L GRO. The highest reported MTBE concentration was 8 ug/L a decrease from the previous maximum of 11.6 ug/L (A-2R).

Summary of Data from June 2013 Subsurface Investigation

An additional subsurface investigation was performed in June 2013 in an effort to further evaluate petroleum hydrocarbon impacts in groundwater at the site. The objectives were to collect additional data to evaluate the extent of contamination is a shallow groundwater zone (15-23 feet below ground

surface (ft bgs)), and "further substantiate/confirm the conceptual site model . . . in support of closure by providing additional data for the deeper water bearing zone (approximately 40 feet bgs). Four borings were installed and sampled; two to 25 ft bgs and two to 40 ft bgs. Shallow and deep borings were co-located at the northeast of the site, in the downgradient direction, and by the former pump island closer to Sickles Avenue. The shallow borings were dry, the shallow water zoned observed by Mission Street was not observed in these more westerly locations. Soil samples were collected from the deeper borings at 2 or 5 and 10 ft bgs only. Soil samples were not collected from the co-located shallow borings.

Analyses of the June 2013 samples showed low levels of contamination in shallow soils and elevated concentrations in one groundwater location. The deep boring near the former pump island (HP-2) has the maximum groundwater concentration found on the site this year at GRO 110,000 ug/L and benzene 19,000 ug/L.

Additional Data Supporting Objection to Closure from September 2013

The Third Quarter 2013 (3Q13) groundwater monitoring data for 5898 Mission, San Francisco further supports the SF LOP objection to closure. Total Petroleum Hydrocarbons as gasoline (GRO) concentrations measured 3Q13 ranged from <100 micrograms per liter (ug/L) (A-3) to 18,000 ug/L in A-1R; an increase over the previous two event maximums of 7100 ug/L and 3500 ug/L, both in A-1R. Benzene concentrations measured in 3Q13 ranged from below detection limits (ND) (A-2R, A-4) to 5770 ug/L (A-1R). Well S-16 contained 1700 ug/L benzene. The maximum benzene concentrations increased over the previous two event maximum values of 2600 ug/L (A-1R) and 792 ug/L (A1-R).

The 3Q13 concentrations of GRO increased over the reported concentrations for 1Q13. The GRO concentration in A-1R is the highest since 2005. Increasing concentrations were again observed this quarter for benzene. The current benzene concentration in A-1R is the historical high value for the site.

Discussion

DPH LOP opposes the closure of the LOP case for the ARCO 6185 site, 5898 Mission Street. San Francisco. The site does not meet the groundwater specific criteria of the LTCP per the analysis of the LOP and the SWRCB. The general criteria have not been met in that an additional secondary source may have been identified and the plume has not been defined towards Sickles Avenue. The secondary source identified in June 2013 in the HP-2 area appears to be located along Sickles Avenue with elevated concentrations in Wells A1-R (GRO 7100 ug/L to 18,000 ug/L, benzene 2600 ug/L to 5770 ug/L) and well S-16 (GRO 2700 ug/L, benzene 1700 ug/L). Data for the April and September 2013 shows that GRO and benzene concentrations in secondary source area wells are increasing.

The Shell Station across Mission Street at 5897 Mission, contains free product on the groundwater and is being assessed under the LOP program. It is possible that some of the measured contamination on 5898 Mission may originate at 5897 Mission. However, the high groundwater concentrations around HP-2 and Well A1-R suggest an onsite source is also contributing to the observed concentrations.

DPH LOP respectfully requests that the case not be closed at this time and that SWRCB support additional investigation in Sickles Avenue to define the plume. Additional remediation is recommended at this site to address increasing concentrations in groundwater and the identification of a potential additional secondary source area during the June 2013 subsurface investigation. DPH LOP again requests that the consultant/RP re-assess the previous remediation system design in light of the new subsurface information.

Should you have any questions, please contact me at (415) 252-3885 or by email at elyse.heilshorn@sfdph.org.

Thank you for your consideration in this matter.

Sincerely,

Elyse D. Heilshorn, PE
Senior Environmental Health Inspector

cc: Megan Smoley, Arcadis
Cheryl Prowell, RWQCB Oakland