

County of Santa Clara

Department of Environmental Health

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November 6, 2015

Ms. Andrew Cooper
State Water Resources Control Board
1001 I Street, 16th Floor
Sacramento, CA 95814

Subject: Comment Letter – Chevron #9-4300 Case Closure Summary

Fuel Leak Investigation: Chevron #9-4300, 2790 Homestead Road, Santa Clara, CA; Case No. 03-011, SCVWDID No. 07S1W09G01f

Dear Ms. Cooper:

The Department of Environmental Health (DEH) received the Notice of Opportunity for Public Comment (Notice) prepared by the State Water Resources Board on October 15, 2015. The Notice included the Underground Storage Tank (UST) Case Closure Review Summary Report with rationale for case closure under the Low Threat UST Case Closure Policy (Policy).

The DEH believes that, at this time, the site does not meet the criteria listed in the Policy. Consequently, the site should not be closed. The criteria that have not been met are discussed below.

Technical Comments

PAH Analytical Data

The Notice states that the site meets the Direct Contact and Outdoor Air Exposure scenario.

The DEH believes that the site does not meet this criteria because a waste oil UST had a release and Poly-Aromatic Hydrocarbons (PAHs) have not been analyzed.

- A waste oil UST was located in the south-central portion of the site. A soil sample was collected at a depth of 9 feet below ground surface (bgs) next to the tank and contained several compounds including 0.43 parts per million benzene. The soil detections indicate that the tank had a release. A map showing the location of the former waste oil tank (Groundwater Elevation Map) and the analytical results for the soil sample collected near the former waste oil tank (Table 1) are attached.
- PAHs including the seven carcinogenic compounds listed in the Policy were not included in the list of analytes.
- In 1996, soil near the former waste oil UST was excavated to a depth of 15 feet. The file does not include post excavation confirmation soil samples collected from the base or sidewalls of the excavation. As described in the Policy, when a documented release occurs from a waste oil UST, soil samples must be analyzed for PAHs. If PAHs are detected then the extent of contamination must be defined. In this case the soil sample collected from 9 feet confirms the waste oil tank had a release.

After the sample was collected, contaminated soil was removed to 15 feet. Consequently, the DEH believes that a soil sample should be collected at the base of the former excavation and analyzed for PAHs. If PAHs are detected it will be necessary to define the extent of contamination.

Plume Length, Gradient and Distance to Receptor

The Notice states that Saratoga Creek is located west and in a cross-gradient direction from the site.

The DEH's review of the file determined that the closest stretch of Saratoga Creek is located to the north of the site and that historically groundwater has moved in a northerly direction, which indicates that the creek is located in a downgradient from the site.

- The Groundwater-Specific Criteria listed in the Policy, for sites with plume lengths between 100 and 250 feet, states that the nearest existing water supply well or surface body must be greater than 1,000 feet from the defined boundary of the plume.
- The groundwater plume is approximately 220 feet long and the closest stretch of Saratoga Creek is located approximately 543 feet from the edge of the mapped plume. Measured in a downgradient direction, the mapped plume is approximately 600 feet from the creek. A map showing the location of Saratoga Creek, the site and a calculated plume to creek distance of 543 feet is attached.
- A Groundwater Elevation Map which includes a Groundwater Flow Rose Diagram is attached. The Rose Diagram shows that groundwater flow is to the north to southeast and that at times Saratoga Creek is in the downgradient direction from the site.

Conclusion

- The site fails the Direct Contact and Outdoor Air Exposure criteria because the waste oil UST leaked and PAHs including the seven carcinogenic PAHs listed in the Policy were not analyzed.
- The site fails the Groundwater Specific Criteria because the plume is closer than 1,000 feet to a surface water body (i.e., Saratoga Creek). Saratoga Creek is located in a downgradient direction from the mapped edge of the plume.

If you have any questions, please contact me at (408) 918-1974.

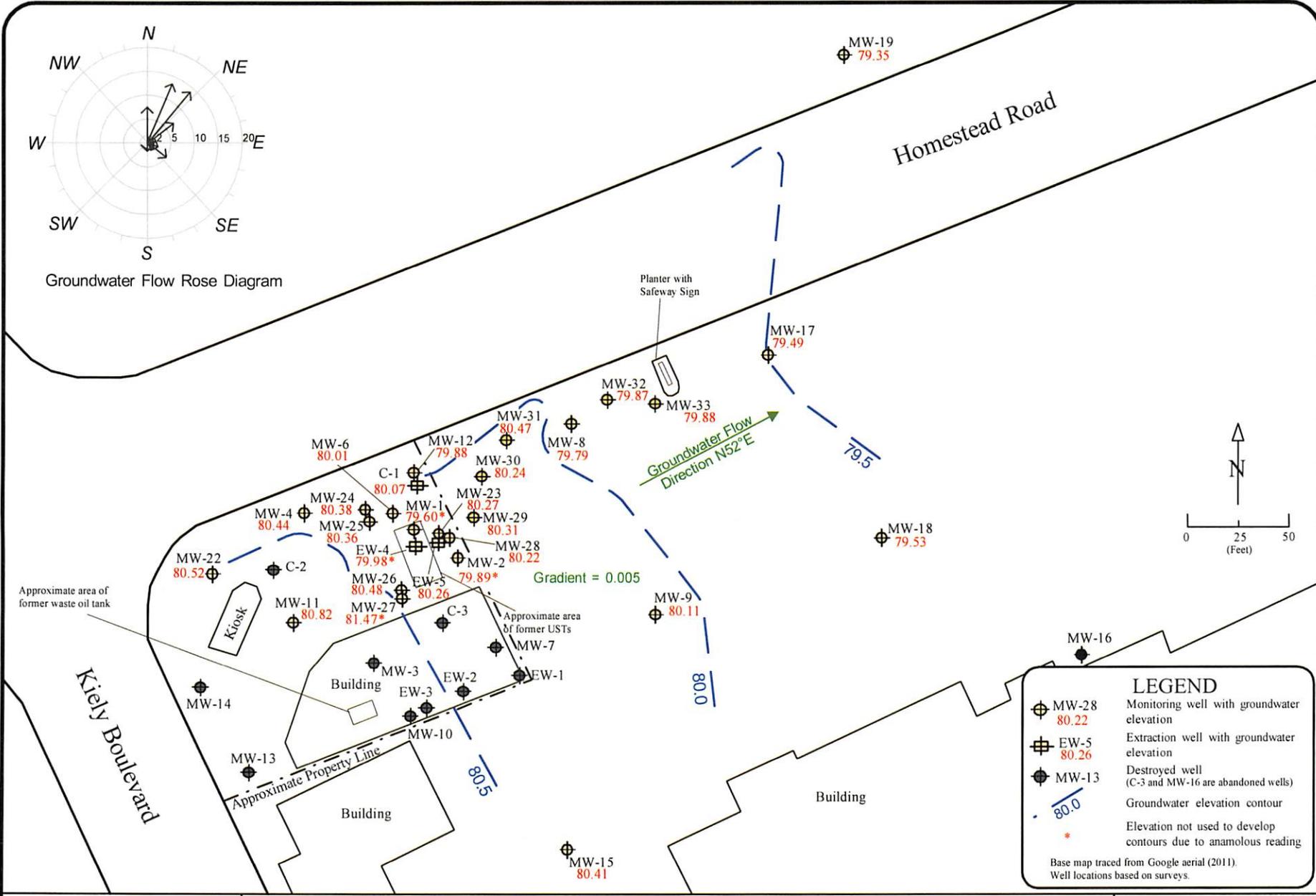
Sincerely,



Gerald O'Regan, PG
Environmental Health Geologist
Local Oversight Program
Gerald.O'Regan@deh.sccgov.org

Attachments: Groundwater Elevation Map (8/12/14, Figure 3) prepared by GeoRestoration
Table 1-Summary of Soil Analytical Results
Google Maps (Showing the location of Saratoga Creek and the site)

cc: Roger Docktor, GeoRestoration, (Dockter@GeoRestoration.com)
File



GeoRestoration, Inc.
15940 Concord Circle
Morgan Hill, CA 95037

Groundwater Elevation Map (8/12/14)

Former Chevron #9-4300
2790 Homestead Road
Santa Clara, California

Figure 3

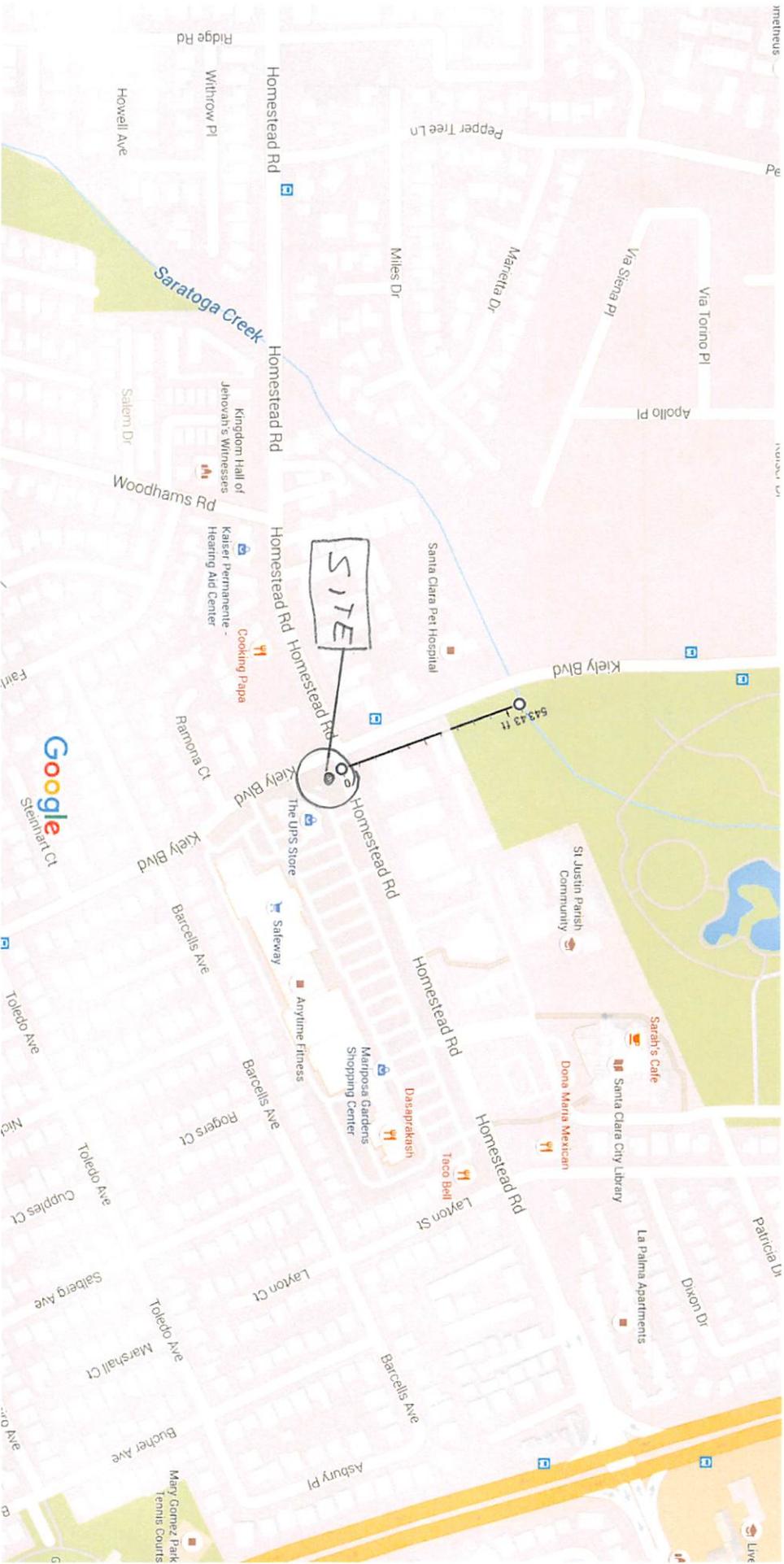
Project: 0661

TABLE 1 – SUMMARY OF SOIL ANALYTICAL RESULTS
2790 Homestead Road, Santa Clara, California

Sample Number	Sample Date	Sample Depth	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	TPH as Gasoline (mg/kg)	TPH as Diesel (mg/kg)	Naphthalene (mg/kg)
SOIL SAMPLES (10/86)									
CO1-34-35.5(1)(C-1)	10/10/86	35	4.7	10		18	190	NA	NA
CO1-34-35.5(1)(C-2)	10/10/86	35	2.7	2.0		1.7	28	NA	NA
CO1-34-35.5(1)(C-3)	10/10/86	35	1.6	1.3		1.0	16	NA	NA
GASOLINE TANK SAMPLES (10/87)									
1-A	10/15/87	14.5	NA	NA	NA	NA	2.6	NA	NA
1-B	10/15/87	14.5	NA	NA	NA	NA	6.5	NA	NA
2-A	10/15/87	14.5	NA	NA	NA	NA	6.5	NA	NA
2-B	10/15/87	14.5	NA	NA	NA	NA	2.0	NA	NA
3-A	10/15/87	14.5	NA	NA	NA	NA	350	NA	NA
3-B	10/15/87	14.5	NA	NA	NA	NA	18	NA	NA
WASTE OIL TANK SAMPLE (10/87)									
4-A	10/15/87	9	0.43	5.5	3.5	4.7	NA	2,600	NA
SOIL SAMPLES (12/87)									
S-25-B1(MW-1)	12/07/87	26	66	87	50	120	1,300	NA	NA
S-35-B1(MW-1)	12/07/87	36	0.6	ND	ND	ND	ND	NA	NA
S-45-B1(MW-1)	12/07/87	46	0.3	1.1	ND	0.06	ND	NA	NA
S-20-B2(MW-2)	12/07/87	21	67	100	57	210	1,900	NA	NA
S-35-B2(MW-2)	12/07/87	36	0.26	0.88	ND	0.90	ND	NA	NA
S-45-B2(MW-2)	12/07/87	46	ND	ND	ND	ND	ND	NA	NA
S-45-B3(MW-3)	12/08/87	46	NA	NA	NA	NA	NA	ND	NA
S-45-B3(2)(MW-3)	12/08/87	46	0.009	0.017	0.003	0.015	NA	NA	NA
S-45-B4(MW-4)	12/02/87	46	ND	ND	ND	ND	ND	NA	NA

ND = Not detected above the test reporting limit.

NA = Not Analyzed.



Measure distance
 Total distance: 543.43 ft (165.64 m)

Map data ©2015 Google 200 ft

