STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF DECEMBER 1, 2006

Prepared on November 7, 2006

ITEM NUMBER:

8

SUBJECT:

Responsible Party's Request for Case Closure for the Former Fenn Dry Cleaners, 201 East Figueroa Street, Santa Barbara,

Santa Barbara County

KEY INFORMATION

Responsible Parties:

Mr. Gordon Wells, Mr. E. Jerald Haws, and The Fenn Trust

Location:

201 East Figueroa Street in Santa Barbara

Type of Discharge:

Unauthorized Release of Tetrachloroethene (PCE)

Existing Orders:

Monitoring and Reporting Program (MRP) Order No. R3-2006-0104

This Action:

Board Direction

SUMMARY

This item summarizes information regarding tetrachloroethene (PCE) contamination at 201 E. Figueroa Street in Santa Barbara, and responds to the responsible party's request for site closure. Based on the available evidence. Central Coast Water Board recommends against site closure at this time, and recommends that groundwater monitoring continue as required in Monitoring and Reporting program No. R3-2006-0104.

DISCUSSION

Site Location and Background

The subject site is located at 201 E. Figueroa Street in Santa Barbara. The Fenn Dry Cleaners operated at this location from 1947 to 1973 and used PCE for approximately 15 years (1958 to 1973). The former owner and operator of Fenn Dry Cleaners dismantled the dry cleaning equipment in 1973 and discharged water containing PCE to the gravel parking lot.

Law offices have occupied the property for the past 33 years (1973 to present).

Groundwater flow is predominantly in a southeasterly direction beneath the site. Three sites with documented petroleum hydrocarbon releases to soil and groundwater are located in the immediate vicinity of the subject site: the City of Santa Barbara Police Station (Police Station), the Santa Barbara County Courthouse (Courthouse) and the Culligan Soft Water (Culligan) facility is located adjacent to the former Fenn Dry Cleaner site as shown on Figure 1.

In 1992, the Santa Barbara County Public Works Department first discovered PCE in Courthouse groundwater monitoring well CC-6 located downgradient of the former Fenn Dry Cleaner site (Figure 1). The maximum concentration of PCE detected in Courthouse well CC-6 was 850 micrograms per liter (µg/L) during the July 1998 groundwater-sampling event. County decommissioned Courthouse well CC-6 2001. in but prior decommissioning the well, Santa Barbara

County staff sampled groundwater and PCE was detected at 200 µg/L.

Water Board staff could not find the historic dry cleaner operators and property owners for the former Fenn Dry Cleaners site until March 2000. The responsible parties Water Board staff identified for the former Fenn Dry Cleaners site are the Fenn Trust, former dry cleaner operator, and Mssrs. Haws and Wells, current property owners.

COMPLIANCE HISTORY

Only the current property owners have responded to Central Coast Water Board directives to investigate and cleanup PCE impacted soil and groundwater. The current property owners have complied with and have met all Central Coast Water Board requirements issued for this site to date.

ENVIRONMENTAL SUMMARY

Previous Investigations - Soil

From 2001 to 2005, 18 soil borings were drilled at the subject facility, with 20 soil vapor and 62 soil samples analyzed for PCE and other chlorinated solvents. PCE was detected in three soil vapor samples (DP-1, DP-5, DP-10). PCE was detected in 14 soil samples (MW-1-15, MW-1-40, B1-25, B2-45, B4-8, B4-18, B4-33, B5-25, B5-35, DP5-3, DP5-8, DP9-3, DP10-7, and MW3-45) ranging from 10 micrograms per kilogram (µg/kg) to 284 µg/kg. PCE was detected in soil samples adjacent and under the northeast corner of the building (where the dry cleaning equipment used to be), and in the reported location of the PCE discharge to the gravel parking lot. There is no direct or indirect evidence of the presences of nonaqueous-phase PCE in the soil, soil gas, or groundwater samples collected to date.

In March 2004, approximately 25 cubic yards of PCE-impacted soils were excavated and transported to a licensed disposal facility. The PCE-impacted soils

were excavated down to 10 feet below ground surface near the location of the former dry cleaning equipment as shown on Figure 1. Confirmation soil samples collected from the excavation bottom and sidewalls did not contain detectable concentrations of chlorinated solvents. Therefore, the excavation removed a majority of the impacted soil identified by the soil sampling.

Previous Investigations - Groundwater

In July 2001, PCE was detected in two onsite groundwater grab samples, B2 and B3, at 1,500 μ g/L and 440 μ g/L, respectively. B2 is adjacent to and B3 downgradient of the reported PCE parking lot spill. A summary of the PCE concentrations in groundwater in on-site monitoring wells MW-1, MW-2, and MW-3 follows:

Well	Date	PCE in µg/L
MW-1	11/19/01	170
	11/30/01	99
	5/16/05	21.5
	10/18/05	94.2
	3/22/06	112
MW-2	11/19/01	18
	11/30/01	16
	5/16/05	194
	10/18/05	18.7
	3/22/06	23.2
MVV-3	5/16/05	173
	10/18/05	80.2
	3/22/06	80.0

Note: MW-1 and MW-2 are cross-gradient and upgradient of the dry cleaning operations and reported PCE spill area. MW-3, installed in 2005, is downgradient of the dry cleaning operations and reported PCE spill area.

With the exception of Courthouse well CC-6, PCE in groundwater at the Courthouse and Police Station have been significantly lower than the concentrations detected in on-site wells MW-1, MW-2, and MW-3. Historical and current upgradient and

crossgradient PCE concentrations in wells at neighboring properties are less 20 µg/L.

POTENTIAL UPGRADIENT SOURCES

Other upgradient businesses that may have discharged PCE to groundwater in the past are Bartlett Awning, U-Neat Cleaners, and Schauer Printing. Based on available information, Bartlett Awning operated from the early 1930's to approximately 1948, U-Neat Cleaners operated from approximately 1951 to 1975, and Schauer Printing operated from the early 1930's until 1973. The locations of the above mentioned businesses relative to the subject site are shown on Figure 3. On October 23, 2006, Central Coast Water Board staff issued a requirement letter pursuant to Section 13267 of the California Water Code to the current property owner of the former U-Neat Cleaners and Schauer Printing properties to conduct a soil and groundwater investigation.

CONCLUSIONS

Available groundwater monitoring results indicate that an upgradient source of PCE is possible. However, the potential for PCE in on-site soils to impact groundwater still exists. PCE is known to migrate via preferential pathways as it travels through the unsaturated zone. The responsible party has successfully identified and removed soil contamination near the former dry cleaning equipment at the site. Nevertheless, low concentrations of PCE have been identified at various depths from the limited number of soil borings and soil samples that have been collected at the site. Therefore, there is a possibility that PCE contamination in soils remains on-site, and that it is contributing to groundwater contamination. Grab groundwater sample and monitoring well sample results also indicate PCE levels above background levels in the vicinity of the subject site. If PCE in groundwater originated from the site, then closure of this site is inconsistent with the PorterCologne Water Quality Control Act and State Water Board Resolution No. 92-49.

Currently, PCE continues to be detected in groundwater downgradient of the site. Concentrations of PCE are approximately 80 µg/L downgradient of the site. The maximum contaminant level (MCL) for PCE is 5 µg/L. Therefore, unless directed otherwise by the Central Coast Water Board, staff is requiring the current property owners to continue monitoring on-site wells MW-1, MW-2, and MW-3 on an annual basis to monitor for decreasing trends in accordance with Monitoring and Reporting Program Order No. R3-2006-0104. This monitoring will continue until the results of a groundwater investigation is available that identifies that PCE detected at the subject site is from an upgradient source.

If there are no upgradient sources of PCE identified and PCE concentrations greater than the MCL remain in groundwater, staff will require additional remediation of soil and groundwater at the site and a deed restriction.

RECOMMENDATION

Staff does not recommend site closure. We recommend continued monitoring of the site plume until an upgradient source has been identified and to ensure that groundwater concentrations continue to decrease over time.

ATTACHMENTS

Figure 1 – Site Vicinity Map

Figure 2 – Former Fenn Dry Cleaners Map

Figure 3 –Other Potential PCE Sources Location Map

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