

From: Mary Rose Cassa [MCassa@waterboards.ca.gov]
Sent: Wednesday, January 07, 2009 8:06 AM
To: Wickham, Jerry, Env. Health
Cc: Drogos, Donna, Env. Health; Cherie MCcaulou
Subject: Re: Review of case RO0092 ABI Foundry 7825 San Leandro, Oakland

Thank you for the summary, Jerry. The Water Board concurs with the directive to address chlorinated VOCs and potential residual fuel source.

Regards,

Mary Rose

----- Mary Rose Cassa, PG Senior
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>>> "Wickham, Jerry, Env. Health" <jerry.wickham@acgov.org> 1/6/2009
6:46 PM >>>
Mary Rose,

This email summarizes discussions during a January 6, 2009, telephone conference call between you, Donna Drogos, and me regarding your review of a leaking underground storage tank (UST) case at the AB&I Foundry site, 7825 San Leandro Street, Oakland. USTs were removed from five areas of the site between approximately 1982 and 1992. Soil and groundwater contamination from unauthorized releases have been detected in each of the five UST areas.

ACEH requested technical assistance on the case from the San Francisco Bay Regional Water Quality Control Board (Water Board) in response to a request by AB&I Foundry and their consultant, The Source Group. The Source Group requested Water Board review of the technical comments contained in an ACEH directive letter dated November 4, 2008. AB&I and The Source Group have proposed a risk management plan and deed restriction to address potential human health risks at the site. ACEH does not concur with the AB&I recommendation for a risk management plan and deed restriction and requested corrective action in the Former 8,000-gallon mineral spirits/1,1,1-TCA UST area and Three Former 10,000-gallon USTs area. Specifically, the November 4,

2008, ACEH directive letter contained the following technical comments:

- 1) ACEH concurred with the recommendation in the September 25, 2008 Site Investigation Report prepared by The Source Group to conduct additional soil vapor sampling in the area of the former office building.
- 2) A plume of chlorinated VOCs extends approximately 500 feet northwest from the Former 8,000-gallon mineral spirits/1,1,1-TCA UST (solvent tank). VOCs detected in the plume include 1,1,1-TCA and breakdown products, 1,1-dichloroethane (DCA), 1,1-dichloroethene (DCE), and vinyl chloride. Although 1,1,1-TCA appears to be breaking down to 1,1-DCA, 1,1-DCE, and vinyl chloride, further breakdown to ethene may be limited under current conditions within the aquifer. As noted in the discussion of geochemical data and natural attenuation parameters, methane was detected in eight of nine groundwater samples at concentrations greater than 1 mg/L, which could promote the accumulation of vinyl chloride. Nutrient addition may be necessary to completely reduce vinyl chloride to ethene. Based on the apparent recalcitrance of the chlorinated VOCs to further breakdown and the potential for accumulation of vinyl chloride, remediation of chlorinated VOCs is required for the site. ACEH requested a Work Plan for pilot testing of potential remedial technologies.
- 3) A plume of groundwater containing TPH as gasoline extends approximately 550 feet northwest of the former fuel dispenser islands and three 10,000-gallon USTs. Groundwater containing benzene extends approximately 250 feet west of the former fuel dispenser islands and three 10,000-gallon USTs. TPH as gasoline and diesel have been detected in groundwater samples collected downgradient from the former dispenser islands and three 10,000-gallon USTs at concentrations up to 19,000 and 37,000 µg/L, respectively. In addition, TPH as gasoline was detected at a concentration of 190 µg/L in a grab groundwater sample collected in the area of the water supply well. The former dispensers and USTs were reportedly removed in 1982 or 1983. Therefore, the fuel release apparently occurred more than 26 years ago. Based on the extent of the TPH plume, the elevated concentrations of TPH remaining in groundwater, and concentrations of residual fuel hydrocarbons in soil, a significant mass of fuel hydrocarbons likely remains at the site. If a significant mass of residual fuel hydrocarbons was not present, the TPH plume would be expected to be less extensive and the concentrations of fuel hydrocarbons in soil and groundwater would be expected to be significantly lower. The mass of residual fuel hydrocarbons below the water table constitutes an ongoing source of groundwater contamination. Due to the presence of an ongoing source of groundwater contamination, the

area of the former fuel dispensers and three 10,000-gallon USTs does meet the criteria for a "Low-Risk Fuel Site," as described in the San Francisco Bay Regional Water Quality Control Board document entitled, "Regional Board Supplemental Instructions to State Water Board December 8, 1995, Interim Guidance on Required Cleanup at Low-Risk Fuel Sites."

Therefore, ACEH requested cleanup to reduce the mass of residual fuel hydrocarbons in the source area for the Former Fuel Dispensers and Three 10,000-Gallon UST Area

Based upon our January 6, 2009 discussion, no changes to the November 4, 2008 ACEH technical directive letter appear to be necessary as a result of your technical review. Therefore, AB&I Foundry must move forward in accordance with the ACEH directive letter dated November 4, 2008.

Thank you for your technical assistance on this case.

Regards,
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