

Phone: (925) 283-6000

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December 18, 2000

Ms. Eva Chu Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

**Re:** Sensitive Receptor Survey

5865 Broadway Terrace Oakland, California AEI Project No. 4108

Dear Ms Chu:

This letter documents the sensitive receptor survey performed by AEI for the above referenced site. The survey was requested of the property owner in a letter dated October 31, 2000, to assess whether any preferential pathways exist for the lateral migration of petroleum hydrocarbons released at the site and whether any sensitive receptors exist near the site.

The survey consisted of a review of topographic maps, a site vicinity reconnaissance, and a review of well reports provided by the Department of Water Resources.

Well Survey

The Department of Water Resources (DWR) was contacted to provide copies of well driller's logs for any wells within a ½ mile radius of the site. Two site addresses with permanent wells were identified during the wells survey. A third site reportedly had test borings drilled, however, according the DWR records, no wells were installed. The following table summarizes the results of the well survey.

Location	Distance / Direction from site	Well Depth	Well Purpose
360 Mountain Blvd.	>3,000 feet south	190 feet	Irrigation
30 Mandalay Rd.	~ 1,800 feet east	320 feet	Domestic

Based on the distance and direction of these two well site and the estimated groundwater flow direction beneath the subject site, the hydrocarbon release does not pose a threat to either of these wells.

Site Reconnaissance / Map Review

The USGS Oakland East Quadrangle topographic map was reviewed for nearby surface waters, estuaries, and other sensitive receptors, as well as local topography of the site area. The site is

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located approximately 270 feet above mean sea level. The topography slopes moderately to the west / southwest, along Broadway Terrace. No surface creeks, reservoirs, or lakes were shown on the map within 2,000 feet of this site. A channel was observed approximately 500 feet west of the site, within the Claremont Country Club. Heading upstream, this channel runs underground, constructed of concrete, approximately 8 feet below grade nearest the site. The channel runs parallel to Broadway Terrace and approximately 200 feet north of the site. Please refer to Figure 1 for a Site Map showing the location of the channel. Several storm water drains were observed along Broadway Terrace, apparently leading to this channel. Sanitary sewer lines run beneath Clarewood Drive and Broadway Terrace, and their depths are estimated to be between 6 and 8 feet below grade.

Groundwater has been encountered at the site during drilling activities and tank installation work at between 14 and 16 feet below grade, respectively. Total Petroleum Hydrocarbons (TPH) as gasoline, benzene, and methyl tert-butyl ether (MTBE) have been detected up to 2,200  $\mu$ g/l, 7.3  $\mu$ g/l, and 160  $\mu$ g/l, respectively, in the groundwater. Based on local topography, groundwater beneath the site likely flows to the west / southwest.

The man-made channel located north and west of the site is located approximately 8 feet below grade, which is a minimum of 6 feet above the water table. Assuming that seasonal water table fluctuation is not significant, the subsurface utility and drain lines identified would not lie within the water table and would therefore not present a preferential pathway for dissolved hydrocarbon contaminants to migrate from the site. Additionally, with the exception of the drainage channel located west of the site, no other nearby surface water or other sensitive receptors were identified.

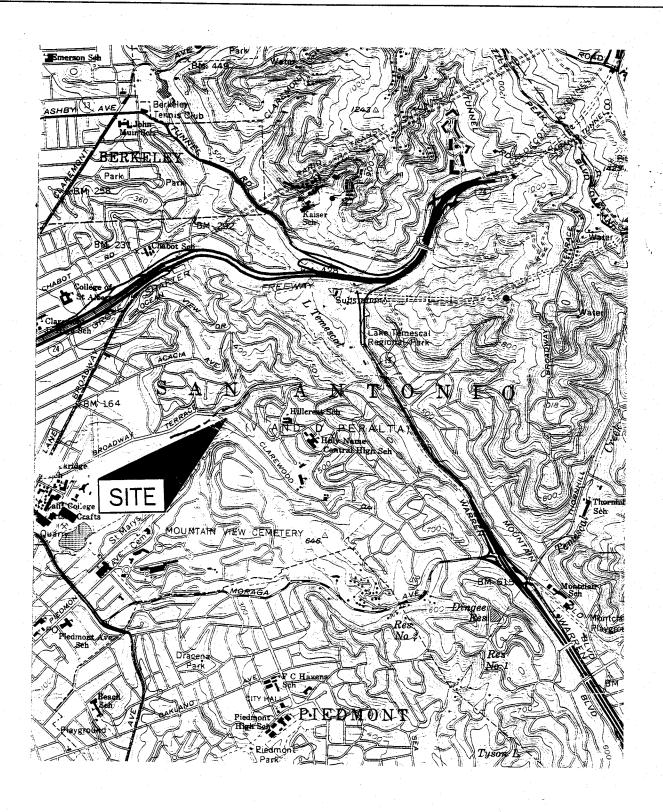
Please call me at (925) 283-6000 if you have any questions.

Sincerely,

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Peter McIntyre Project Geologist

cc. Mr. Mike Gilmore 123 Scenic Drive Orinda, CA 94563





SOURCE: USGS OAQKLAND EAST QUAD SCALE: 1 in = 2,000 ft.

STORM DRAIN CHANNEL (APPROX) DASHED WERE BELOW GRADE

AEI CONSULTANTS
3210 OLD TUNNEL RD, STE B, LAFAYETTE, CA

## SITE LOCATION MAP

5865 BROADWAY TERRACE OAKLAND, CALIFORNIA

FIGURE 1 PROJECT NO. 4108