ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY



DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES ENVIRONMENTAL PROTECTION 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577 (510) 567-6700 FAX (510) 337-9335

FACT SHEET MEHDIZADEH PROPERTY

August 20, 2008

Site Location: Mehdizadeh Property, 5175 Broadway, Oakland, CA 94611

Fuel Leak Case No. RO0000139 and Geotracker Global ID T0600100882

Site Remediation Summary

This fact sheet has been prepared to inform community members and other interested stakeholders regarding the status of a proposed soil and groundwater cleanup at a former service station site located at 5175 Broadway in Oakland, Calfornia. Mr. Gary Feiner, the lead responsible party for the fuel leak case is proposing two possible remediation alternatives depending upon site redevelopment. The two possible site redevelopment scenarios include sub-grade parking with commercial/residential floors at grade and above and another scenario that does not include sub-grade parking. Site remediation alternatives will be selected based on the chosen site redevelopment scenario. Remediation alternative #1 consists of an excavation to approximately 15 feet below the ground surface (bgs) to remove the hydrocarbon impacted soil that lies between approximately 10 to 15 feet bgs and installation of bio-sparge cells should the site redevelopment include sub-grade parking. Remediation alternative #2 consists of insitu dual-phase extraction with air sparging (DPE/AS) if site redevelopment does not involve sub-grade construction. Again, the selection of the site remediation alternative is depending on which site redevelopment option is pursued.

Site Background

The site is located at the southwest corner of the intersection of Broadway and Coronado Avenue, approximately 0.6 miles south-southeast of Highway 24 and approximately 2.3 miles east of Interstate 80 and the San Francisco Bay. The property has been vacant since 1979 and was formerly occupied by an Exxon Service Station used for fuel sales and automobile repair. The site is approximately 13,200 square feet in area with about 10% of the area occupied by a vacant station/garage structure. Environmental compliance work commenced when three 8,000-gallon steel single-walled USTs, associated piping, and a 500-gallon steel single-walled waste oil tank were removed in January 1990.

Alternative 1: Excavation with Bio-Sparging

Should site redevelopment include sub-grade parking, excavation of contaminated soil with the installation of bio-sparge cells is proposed. The excavation will target the contaminated soil that lies between approximately 10 to 15 feet bgs. Bio-sparge cells will be constructed below the base of the sub-grade parking gararge. Biosparging, also known as low-flow air sparging, is a technique used to stimulate degradation of residual contaminants that slowly diffuses out of fine-grained materials at a given site. Biosparging involves the injection of compressed air at low flow rates (generally 1 to 2 cubic feet per minute per injection point) into the saturated zone to oxygenate groundwater and thereby stimulate contaminant biodegradation by microbes present in the subsurface. The low air flow rate is designed to oxygenate groundwater within the well and/or surrounding formation while minimizing the potential for causing any significant migration of contaminants in the vapor phase.

Alternative 2: Dual Phase Extraction with Air Sparging

Should site redevelopment exclude sub-grade parking, DPE/AS is proposed to remediate the soil and groundwater at the site. DPE is a common technique for remediating sites impacted with elevated

FACT SHEET MEHDIZADEH PROPERTY August 20, 2008, Page 2

concentrations of petroleum hydrocarbons and separate-phase hydrocarbons (SPH). This approach targets unsaturated soil, the capillary fringe, and shallow saturated soil. DPE involves the simultaneous extraction of soil vapor and liquid (groundwater/SPH mixture) from site wells using a large above-ground extraction blower. DPE requires a network of extraction and discharge piping to extract, treat and dispose of the extracted soil vapor and groundwater. Long-term DPE applications typically require permanently-installed high-amperage electrical service, as well as natural gas or propane for supplemental fuel for vapor treatment via thermal or catalytic oxidizers. Extracted groundwater requires temporary storage and/or treatment prior to discharge to the sanitary sewer. Air sparging can also be used in conjunction with this technique to accelerate site remediation, to target deeper saturated zone impact, or remediate compounds more responsive to oxidation/biodegradation than extraction. While DPE is most appropriate for sites with moderate permeability, DPE can be used within higher and lower permeability soil with decreased efficiency.

Next Step

Mr. Gary Feiner is working with Alameda County Environmental Health (ACEH) to implement a soil and groundwater cleanup at the site. The proposed alternatives are described in reports prepared by Pangea Environmental Services, Inc. on behalf of Mr. Feiner: "Revised Site Conceptual Model and Corrective Action Plan" dated July 23, 2008 and the "Corrective Action Plan Addendum," dated August 11, 2008. The public is invited to review and comment on the cleanup action proposed in the Reports. These reports are available on the Internet on ACEH's website (http://www.acgov.org/aceh/lop/ust.htm) or the State Water Resources Control Board's GeoTracker website (http://www.geotracker.waterboards.ca.gov/). The reports and case file are also available for review at the ACEH located at 1131 Harbor Bay Parkway in Alameda, California. Please send a fax to 510-337-9335 to request a date and time to review the case file. Please send written comments regarding the corrective action to Paresh Khatri at the address below. All written comments received by October 1, 2008 will be forwarded to the Responsible Party and will be considered and responded to prior to a final determination on the proposed cleanup.

For Additional information, please contact:

Paresh Khatri Alameda County Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

Phone: 510-777-2478

E-mail: paresh.khatri@acgov.org

Bob Clark-Riddell Pangea Environmental Services, Inc. 1710 Franklin Street, Suite 200 Oakland, CA 94612

Phone: 510-435-8664

E-mail: BRiddell@pangeaenv.com