ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Interim Director

DEPARTMENT OF ENVIRONMENTAL HEALTH
LOCAL OVERSIGHT PROGRAM (LOP) FOR
HAZARDOUS MATERIALS RELEASES
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June 6, 2017

East Bay Asian Local Development
1825 San Pablo Avenue, Suite 200
Oakland, CA 94607-6527
Attention: Mr. Everett Cleveland
(*Sent via electronic mail to: ecleveland@ebaldc.org*)

Subject: Site Cleanup Case No. RO0003153 and GeoTracker Global ID T10000006348, Bekins Redevelopment, 760 22nd Street and 2201 Brush Street, Oakland, CA 94612

Dear Mr. Cleveland:

Alameda County Department of Environmental Health (ACDEH) is providing regulatory oversight of the proposed redevelopment project located at the subject site on Assessor Parcel Number 3-25-10 (760 22nd Street) and APN 3-25-11 (2201 Brush Street) in Oakland, California. The two parcels have historically been developed as residential or commercial properties including but not limited to truck storage and vehicle repair facilities. A 7,000 gallon diesel underground storage tank (UST) and a 2,000 gallon gasoline UST were removed from the northeastern corner of the site and adjacent city sidewalk in 1986. Other vehicle maintenance and fuel related infrastructure remains at the site including (1) a below grade pit, historically used for servicing large vehicles (trucks and buses) and referred to as the oil-changing pit located in the northern portion of an existing shop building (integral with the surrounding concrete floor of the building); (2) a small raised concrete pedestal located at the east-central edge of the site in the location of a former fuel dispenser; and (3) an area of unusually low-density soil and a nearby standpipe indicative of a UST vent pipe identified at the west central edge of the site and referred to as the geophysical anomaly area (presumed to be the former location of a UST possibly used for waste oil). Subsurface investigations conducted at the site between 2005 until 2016 have identified petroleum-related volatile organic compounds (VOCs), non-petroleum-related VOCs, and polynuclear aromatic hydrocarbons (PAHs) in soil, soil gas and groundwater.

ACDEH understands that East Bay Asian Local Development Corporation (EBALDC) plans to redevelop the site with an eight-story mixed-use facility (day care and affordable multi-family) residential development as shown on the preliminary plan set entitled *West Grand & Brush Street 90% Schematic Design Set* prepared by Pyatok Architects and dated February 12, 2015. The project will include a second floor daycare center serving up to 130 children and ground floor offices for EBALDC's social services, daycare offices, two separate elevator lobbies (one for residential entry and another for daycare entry), and an enclosed ground level parking garage with parking for 50 spaces. Two, 3-car high puzzle lifts will be constructed near the center of the property for below grade parking. Higher floors will be used for residential living with up to a maximum of 59 affordable residential units. All units with the exception of the manager's unit will qualify as affordable housing serving residents with incomes at or below 60 percent of the area median income. At the date of this letter, ACDEH understands the 760 22nd Street parcel is developed with a one-story metal shop building, two mobile trailers and associated paved parking areas and is currently rented by O'Neill Trucking as a vehicle storage area. The parcel at 2201 Brush Street is unpaved and is also rented by O'Neill Trucking for vehicle storage.

ACDEH further understands that the processing of the proposed project at the City of Oakland Planning Department is on hold until a determination has been made by ACDEH that historic subsurface contamination at the site does not present a risk to future site occupants of the proposed building.

A review of historic data in the case files and recently collected data and data evaluation indicate that there are three areas of residual contamination from releases associated with historic site use for truck storage and vehicle repair. To mitigate risks to future building occupants, the following engineering and institutional controls have been proposed in the document entitled *Remedial Action Plan, Properties at 760 22nd Street and 2201 Brush Street, Oakland* (RAP), dated October 10, 2016 and prepared by Essel Environmental Engineering & Consulting (Essel) on your behalf:

- **Engineering Controls.** Proposed engineering controls include installation of a vapor mitigation system (VMS) consisting of a passive sub-slab depressurization system and a vapor barrier system. The VMS is proposed to be installed beneath the northeastern portion of the building in the area of the elevators, stairwells, and adjacent lobby and conference room. The RAP states that the VMS is intended to mitigate potential intrusion of residual contamination remaining in the area of former fuel underground storage tanks (USTs).

- **Land Use Covenants.** Land use covenants; activity and use limitations; and codes, covenants, and restrictions are proposed to be developed in consultation with ACDEH and recorded to provide long-term legal and regulatory requirements for the site. To limit contact with impacted media, the documents will at a minimum prohibit alteration, disturbance, or removal of any component of the VMS, prohibit the use of site groundwater for domestic, industrial or irrigation purposes, and prohibit excavation at the site unless performed under the provisions of a site management plan.

The proposed VMS in the RAP appears contradictory to the conclusion in the *Focused Human Health Risk Assessment for Impacts to Indoor Air* (HHRA), dated March 30, 2016 and prepared by The Source Group for the site that the calculated potential adverse noncancer health effects and excess cancer risks for hypothetical future onsite resident receptors potentially exposed to chemical of potential concern in the soil vapor near the former UST and dispenser island areas are below levels considered acceptable for unrestricted or residential land use. However, based on discussions with EBALDC, ACDEH understands that although the HHRA concludes that vapor mitigation is not required, the VMS has been proposed in the RAP as a conservative measure. ACDEH further understands that based on the HHRA conclusions that EBALDC would like flexibility on the decision to incorporate a VMS in the final construction plans for the project.

Based on our review of the HHRA and concerns with specific aspects of the evaluation, as discussed below, ACDEH is of the opinion that implementation of the proposed engineering and institutional controls are prudent measures to reduce potential exposure to contaminants to building occupants in the northeastern portion of the building. ACDEH's review of the HHRA indicates the following:

- The San Francisco Bay Regional Water Quality Control Board (Regional Water Board) Tier 1 residential environmental screening levels (ESLs) for soil vapor were modified by The Source Group through the use of an attenuation factor of 0.001 rather than the Regional Water Boards recommended attenuation factor of 0.002 thus resulting in less conservative screening values for chemicals of potential concern.

- A silty clay loam was selected as the input parameter for the vapor intrusion model. This classification was based on soil property characterization of three out of four soil samples collected at the site in the vicinity of the former UST and dispenser island areas. The fourth sample was classified as sand however the HHRA concludes that based on the other soil samples, this sand zone is not indicative of the predominant silty clay soil type observed during previous investigations. ACDEH notes that this conclusion is contradictory to the conceptual site model presented in the RAP that states that unconsolidated sediments encountered during Essel's three subsurface investigations include near-

surface silt or fill underlain by alternating and interbedded units of clay, silt, sand, and occasionally gravel. Additionally, fill at the locations of the former USTs where the HHRA evaluation was focused on was characterized as having layers of fine-grained sand and fine to coarse-grained sand with gravel to 13 feet below ground surface.

In order for ACDEH to support the option of not installing a VMS, a revised HHRA would need to prepared using the appropriate soil gas screening levels and incorporating a sensitivity analysis to evaluate the effects of using different soil types as input parameters on the vapor intrusion modeling outputs.

The RAP also proposes to screen soil during excavation of the two below ground garage puzzle lifts, three elevators and foundation footings for evidence of petroleum impact to distinguish between uncontaminated soil and hydrocarbon-impacted soil. The screening of the soil is proposed to be performed only to make decisions regarding segregation of soil stockpiles for removal or reuse and not for purposes of identifying residual source material for overexcavation. The depths of the excavations are anticipated to be 9 feet, 7 feet and a maximum of 4 feet below the ground surface, respectively. The excavation for two of the elevators is located immediately adjacent to the former UST pit and the puzzle lift excavations are directly adjacent to the geophysical anomaly area where secondary source material remains at the site. ACDEH is of the opinion that residual or secondary source material will likely be encountered during excavation in these areas and that overexcavation of hydrocarbon impacted soil in these areas is also necessary to reduce chemical concentrations in the subsurface beneath the site.

Based on information presented in the case file, and with the provision that the information provided to this agency is accurate and representative of site conditions, ACDEH conditionally approves of the RAP contingent upon addressing the comments discussed above and submittal and approval of the documents listed in the Technical Report Request section below. Site closure will be granted by ACDEH upon completion and documentation of the remedial action and mitigation measures.

TECHNICAL REPORT REQUEST

1. Prior to the start of site demolition and construction activities the following documents must be submitted to ACDEH for review and approval:

    a. **Remedial Design Field Investigation Work Plan**. A remedial design field investigation work plan describing the proposed scope of work and locations of additional borings to evaluate impacts on the depth and quality of groundwater beneath the site due to the recent extremely wet weather season and methane in soil gas in the areas of residual contamination.

    b. **Project Schedule.** A baseline project schedule providing details of the sequencing of corrective actions and site redevelopment activities on the site. The schedule must incorporate at a minimum the following activities: submittal dates of a revised HHRA, remedial action implementation plan (RAIP), construction soil and groundwater management plan (SGMP), and building permit plans incorporating a VMS; demolition of existing site structures and improvements; remedial soil excavation and completion documentation; site grading, soil import, utility installation and foundation construction; VMS installation, vertical construction and VMS vertical piping installation; VMS installation verification monitoring; VMS record report of construction submittal, and date of expected site occupancy. The baseline schedule must be updated during the project as required to update ACDEH on the status of corrective action implementation and site redevelopment activities. Note: VMS line items may be omitted in the schedule if a revised HHRA is submitted that supports the conclusion that a VMS is not required and EBALDC decides to not incorporate the VMS as a conservative measure.

2. Prior to the start of site grading, utility installation and foundation construction the following reports must be submitted to ACDEH for review and approval:

   a. **Remedial Action Implementation Plan (RAIP).** The RDIP must incorporate the results of the additional remedial design field investigation, provide detailed design drawings and specifications for the VMS and incorporate details for the overexcavation of secondary source material as discussed above during construction of the building. The RDIP must be submitted to ACDEH with the full set of construction drawings prepared for the project at the time the construction package is submitted to the City of Oakland Planning and Building Department. The RDIP must include at a minimum the following elements:

      - Protocols that will be used to overexcavate residual and secondary source material that is impacted with total petroleum hydrocarbons (TPH) as gas, diesel, motor oil and stoddard solvent, other petroleum-related and non-petroleum related VOCs, and PAHs in the former UST pit and the geophysical anomaly areas during excavation to facilitate construction of the puzzle lifts, elevator shafts and foundations.

      - Detailed construction plans and specifications for the selected VMS design. The VMS plans must be incorporated into the full set of construction drawings prepared for the redevelopment project.

      - Construction quality assurance plan describing contractor and inspector qualifications and experience, procedures for VMS construction monitoring and documentation.

      - Construction sequencing plan presenting the sequence of measures that will be used to protect the installed VMS during building construction activities.

      - Operation and maintenance plan describing measures to be implemented during and after installation of the VMS system to ensure integrity and long-term effectiveness of the system.

   b. **Soil and Groundwater Management Plan (SGMP).** A SGMP presenting protocols for groundwater and soil management during site redevelopment relating to removing, handling, characterizing and properly disposing of soil and groundwater; dust control; and site access and security.

   c. **Approved Building Department Plans.** A copy of the City of Oakland approved construction drawings for site redevelopment incorporating the VMS. ACDEH must be notified if the project proponent or the City proposes changes to the site development and first floor building plans presented in the preliminary architectural plans included in the RAP including but not limited to the proposed location and depth of the elevator shafts or changes to the VMS design presented in the RAIP. Any substantial changes made to the plans without review by ACDEH may invalidate the conclusions of the protectiveness of the proposed redevelopment of the site with respect to the residual contamination.

   d. **Soil Excavation Report.** A remedial soil excavation report presenting confirmation soil sampling and analytical results must be submitted prior to the start of construction of the final foundation system. The report must include a description of the sampling methods, scaled figures showing sampling locations, volume of soil excavated and final disposition, waste manifests if disposed of off-site, tabulated analytical results, and laboratory analytical reports.

   Note: Items listed above that pertain to the VMS may be omitted in the RDIP if a revised HHRA is submitted that supports the conclusion that a VMS is not required and EBALDC decides to not incorporate the VMS as a conservative measure.

3. Prior to building occupancy of the new mixed use commercial and residential redevelopment the following documents must be submitted to ACDEH for review and approval:

a. **Institutional Controls (ICs)** – Documentation of ICs providing legal and administrative controls and methods for dissemination of information to minimize risk during property development, future below-ground construction and maintenance, and long-term site use. A Land Use Covenant will be required to be recorded with a description of the requirements and necessary controls dictated by property restrictions or contractual agreements (e.g., leases) including activities to maintain the integrity of the VMS, ongoing O&M, and record compliance with the ICs.

b. **Site Management Plan (SMP)** – A SMP for long-term site management providing details regarding the location and construction of the VMS, precautions should subsurface work be required in the area of installed mitigation measures, precautions for handling potentially impacted groundwater, and notification and documentation procedures should the VMS be damaged. The SMP must include as-built drawings and specifications of the VMS and must be maintained at the site address by the property manager or designated representative and will be recorded at the Alameda County Clerk-Recorder's Office.

c. **VMS Record Report of Construction.** Following construction of the VMS, a completion report shall be submitted to ACDEH for review and approval. The report shall include as-built drawings, copies of permits, and other information relevant to the installation of the VMS.

Note: Items listed above that pertain to the VMS may be omitted if a revised HHRA is submitted that supports the conclusion that a VMS is not required and EBALDC decides to not incorporate the VMS as a conservative measure.

TECHNICAL REPORT/WORK SCHEDULE

Please perform the requested work and submit technical reports to Alameda County Environmental Health Environmental Health (Attention: Dilan Roe) in accordance with Attachment 1.

Thank you for your cooperation. ACDEH looks forward to working with you and your consultants to redevelop the site and advance the case toward closure. Should you have any questions regarding this correspondence or your case, please call me at (510) 567-6767 or send an electronic mail message at dilan.roe@acgov.org.

Sincerely,

Dilan Roe

Dilan Roe, PE
Chief – Land Water Division

Cc: Jared Wright, EBADC, (Sent via E-mail to: jwright@ebaldc.org)
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GeoTracker, Electronic Case File