



Aqua Science Engineers, Inc. 55 Oak Court, Suite 220, Danville, CA 94526  
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**RECEIVED**

1:08 pm, Aug 20, 2007

Alameda County  
Environmental Health

August 15, 2007

Mr. Jerry Wickham  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

**SUBJECT:           ADDENDUM TO MARCH 9, 2007 REMEDIAL ACTION PLAN**  
Albany Hill Mini Mart  
800 San Pablo Avenue  
Albany, California

Dear Mr. Wickham:

This document presents an addendum to Aqua Science Engineer's (ASE's) Remedial Action Plan (RAP) for the site dated March 9, 2007. This addendum was requested by the Alameda County Health Care Services Agency (ACHCSA) in their letter dated July 5, 2007.

## **1.0       SAFETY FOR BREATHING ZONE IN ADJACENT BUILDINGS**

### 1.1       Sampling point installation

Monitoring points will be installed in the adjacent property located at 810 San Pablo Avenue and in the site building at 800 San Pablo Avenue. These points will be installed by coring through the concrete surface using a diamond-bit coring machine. A boring will then be drilled to 2-feet below ground surface (bgs) using a hand auger. A 1-inch diameter PVC casing will be placed into the boring. The bottom foot of the casing will be factory slotted with 0.010-inch slots and the top foot of the casing will be blank. A 2/12 filter pack sand will be placed around the slotted section of screen, followed by a 0.5-foot thick layer of bentonite pellets. The bentonite will be hydrated with water prior to placing the cement sanitary seal. The well head will be protected with a locking well plug beneath an at-grade, traffic-rated well box.

### 1.2       Background Sampling

Prior to the ozone sparging system startup, ASE will monitor the breathing zone of both buildings daily for a period of one week using an ozone detector with a minimum detection limit of 0.10 ppm. Ozone concentrations will also be measured from both sampling points. A background air sample will also be collected for analysis of total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylene, and total xylenes (collectively known as BTEX) and methyl tertiary butyl ether (MTBE) one time prior to system startup. These samples will be contained in Tedlar bags. A slip cap with a fitting will be placed over the sampling point



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casing. The hand pump will be attached to the fitting and the pump will be purged of air. The Tedlar bag will then be attached to the hand pump and will then be filled. The air samples will then be kept out of the sun and transported to a state-certified analytical laboratory under chain-of-custody. The samples will be analyzed by the analytical laboratory for TPH-G, BTEX and MTBE.

### 1.3 Sampling Following System Startup

Approximately 24 hours following the ozone sparging system startup, ASE will once again monitor the breathing zone of both buildings using an ozone detector with a minimum detection limit of 0.10 ppm. Oxygen levels will also be monitored in the building's breathing zone. Ozone concentrations will also be measured from both sampling points to determine sub-slab ozone concentrations. Air samples for VOC analysis will also be collected in the same manner as described in section 1.2. The air samples will then be kept out of the sun and transported to a state-certified analytical laboratory under chain-of-custody. The samples will be analyzed for TPH-G, BTEX and MTBE.

Ozone and oxygen levels in both the breathing zone and subslab sampling points in the on-site and adjacent building will be monitored daily for the first week of operation, and then one month after the system startup. Periodic ozone monitoring will follow if deemed necessary. Air samples for VOC analysis will be collected from the sampling points one month after system startup. VOC sampling in subslab air after this point will be conducted only as deemed necessary (such as if odors are noted in the buildings or if elevated hydrocarbon concentrations are detected during the initial air sampling).

### 1.4 Reporting

Results for this sampling will be included in a remediation system operation report for the site to be prepared after the first 6 months of system operation. However, if ozone concentrations in the subslab samples are detected, ASE will notify the ACHCSA immediately, and if ozone is detected in the breathing zone in either building above the OSHA permissible exposure limit (PEL) of 0.1 ppm, ASE will shut off the system immediately and will contact the building owners, building tenants and ACHCSA. Likewise, if oxygen levels fall below normal levels in the buildings breathing zone, ASE will immediately notify the ACHCSA as well as the buildings owners and tenants.

## **2.0 REMEDIATION EFFECTIVENESS**

The effectiveness of the remediation will be gauged using analytical data from the monitoring wells. As outlined in the March 9, 2007 RAP, in addition to the normal quarterly groundwater monitoring, groundwater samples will be collected and analyzed from the site monitoring wells one month after the system startup, 2 months after the system startup, and one additional sampling event in the period between regularly scheduled monitoring periods (approximately 4.5



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months after system startup). Results of the interim sampling will be reported in the normal quarterly monitoring reports and will be addressed in detail in a report to be completed after 6 month of system operation.

Should you have any questions, please feel free to call me at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

A handwritten signature in black ink that reads "Robert E. Kitay".



Robert E. Kitay, PG, REA  
Senior Geologist

cc: Joginder Sikand, 1300 Ptarmingan Drive #1, Walnut Creek, CA 94595

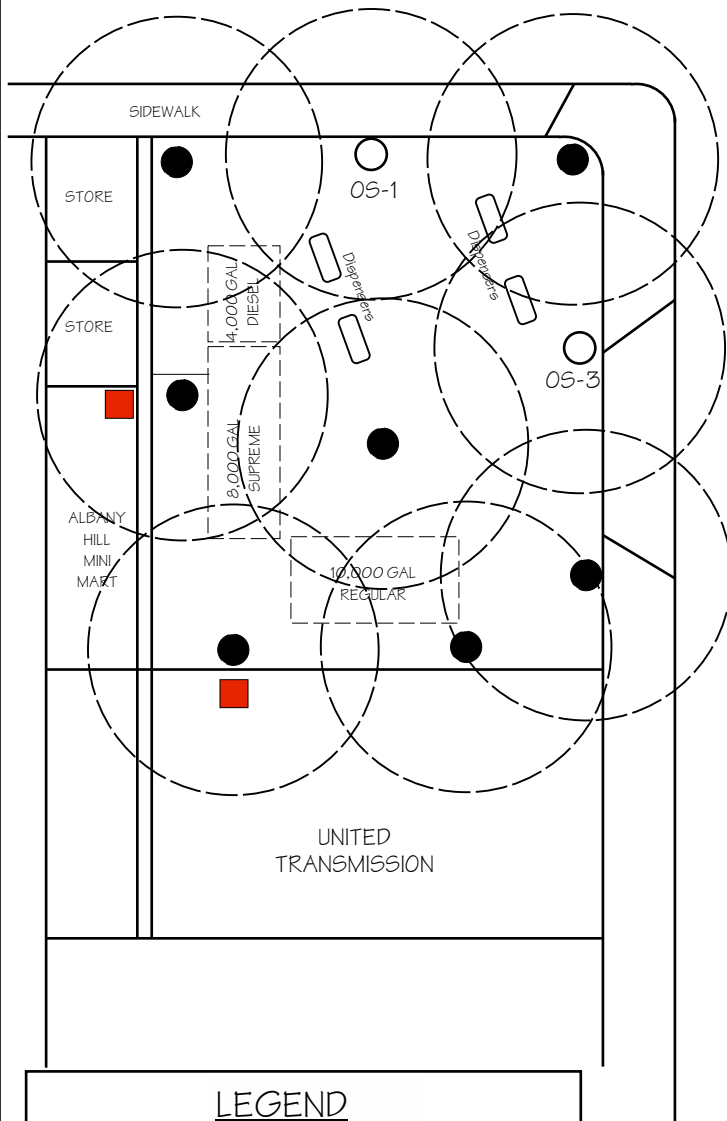


NORTH

SCALE: 1" = 20'

WASHINGTON AVENUE

SAN PABLO AVENUE



LEGEND

- 05-1 ○ EXISTING AIR-SPARGING WELL
- PROPOSED AIR-SPARGING WELL
- PRESUMED RADIUS OF INFLUENCE
- SUB-SLAB VAPOR SAMPLING POINT

PROPOSED SUB-SLAB  
VAPOR SAMPLING  
POINT MAP

ALBANY HILL MINI MART  
800 SAN PABLO AVENUE  
ALBANY, CALIFORNIA