ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

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ENVIRONMENTAL PROTECTION
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December 17, 2007

Mr. Noel Yi
557 Merrimac LLC
2756 Alvarado Street #A-B
San Leandro, CA 94502-6577

Dear Mr. Yi

Subject: SLIC Case Number RO0002948, 557 Merrimac LLC, 557 Merrimac Avenue, Oakland, CA.

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site and the document entitled, "Work Plan to Conduct Additional Soil and Groundwater Investigation," dated October 2, 2007 prepare by Soma Environmental Engineers Inc. (SOMA). The scope of work in the Work Plan proposes the installation of six soil borings and three soil vapor sampling points. ACEH generally agrees with the proposed scope of work as recommended in the Work Plan, provided the following technical comments are addressed prior to the implementation of the Work Plan.

Based on ACEH staff review of the case file, we request that you address the following technical comments and send us the reports described below. Please provide 72-hour advance written notification to this office (e-mail preferred to steven.plunkett@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Request for Information**. Please provide ACEH with copies of the following reports:

   - All Environmental, Inc., 1995. Underground Storage Tank Removal, Final Report, 554 – 27th Street, Oakland, CA, dated February 22, 1995.
   - All Environmental, Inc., 1995. Overexcavation of Contaminated Soil Report, 554 27th Street, Oakland, CA, dated May 3, 1995.
   - All Environmental, Inc., 1995. Soil and Groundwater Investigation Proposal, 554 27th Street, Oakland, CA, dated May 2, 1995.
   - All Environmental, Inc., 1995. Subsurface Investigation and Quarterly Groundwater Monitoring and Sampling Report, 554 – 27th Street, Oakland, CA, dated August 15, 1995.
   - All Environmental, Inc., 1996. Fourth Quarterly Groundwater Monitoring and Sampling Report, 554 – 27th Street, Oakland, CA, dated June 26, 1996.
   - All Environmental, Inc., 1996. Groundwater Monitoring Well Site Closure, 554 – 27th Street, Oakland, CA, dated January 14, 1997.

2. **Preferential Pathway Study**

The purpose of the preferential pathway study is to locate potential migration pathways and conduits and determine the probability of the NAPL and/or plume encountering preferential pathways and conduits that could spread contamination. Of particular concern is the identification of abandoned wells and improperly-destroyed wells that can act as vertical conduits to deeper water bearing zones, pumping wells near your site, and manmade conduits for shallow migration.

Discuss your analysis and interpretation of the results of the preferential pathway study (including the detailed well survey and utility survey) and report your results in the Revised Preferential Pathway Study requested below. Include an evaluation of the probability of the dissolved phase and NAPL plumes for all constituents of concern encountering preferential pathways and conduits that could spread the contamination, particularly in the vertical direction to deeper drinking water aquifers. The results of your study shall contain all information required by 23 CCR, Section 2654(b).

a) **Utility Survey**

An evaluation of all utility lines and trenches (including sewers, storm drains, pipelines, trench backfill, etc.) within and near the site and plume area(s) is required as part of your study. Submittal of map(s) and cross-sections showing the location and depth of all utility lines and trenches within and near the site and plume area(s) is required as part of your study.

b) **Well Survey**

The preferential pathway study shall include a detailed well survey of all wells (monitoring and production wells: active, inactive, standby, destroyed (sealed with concrete), abandoned (improperly destroyed); and dewatering, drainage, and cathodic protection wells) within a ½ -mile radius of the subject site. Include well data from Alameda County Department of Public work and California Department of Water Resources. Submittal of map(s) showing the location of all wells identified in your study, and the use of tables to report the data collected as part of your survey are required. Please refer to the Regional Board's guidance for identification, location, and evaluation of potential deep well conduits when conducting your preferential pathway study

3. **Soil Vapor Sampling and Proposed Site Redevelopment.** In January 1995, four USTs were removed from the site and approximately 250 cubic yards of soil was over-excavated and disposed of offsite during the UST removal. Residual petroleum hydrocarbon contamination remains in soil beneath your site at concentrations of up to 120 parts per million (ppm) TPHg, 0.059 ppm benzene, 420 ppm TPHd and 6,800 ppm TPH oil and grease. Additionally, dissolved phase petroleum hydrocarbon contamination is present in groundwater beneath your site at concentrations of up to 150 parts per billion (ppb) TPHg and 58 ppb TPHd, while benzene was not detected above laboratory reporting limits. The UST case was granted regulatory closure, with concurrence from the San Francisco Bay Area Regional Water Quality Control Board, in January 1997.

Regulatory closure was based on a commercial/industrial land use scenario; should the land use scenario change ACEH must be notified and the closure must be re-evaluated base on

the proposed land use. The property owner is currently planning to redevelop the site for residential use, and the proposed residential redevelopment requires additional investigation to determine the potential risk associated with the vapor intrusion pathway. ACEH agrees with the proposed soil vapor sampling locations recommended by SOMA, with the addition of one soil vapor sampling point adjacent to the former waste oil UST (see Figure 3). The proposed analytical method (EPA Method TO-17) recommended by SOMA is acceptable. Lastly, please prepare a site map showing the location of the proposed building footprint, location of the former USTs and fuel dispenser, and residential properties to the north and east of the site. Please present the results from soil vapor sampling in the report requested below.

4. **Soil Boring Locations and Soil Sampling.** SOMA has recommended the installation of six soil boring placed near the former USTs and fuel dispenser island. ACEH generally agrees with the proposed soil boring locations with the addition of two supplemental soil borings. Refer to Figure 3 for the location of the additional soil borings. ACEH requests that any interval where staining, odor, or elevated PID readings occur a soil sample is to be collected and submitted for laboratory analysis. If no staining, odor, or elevated PID readings are observed, soil sample are to be collected from each boring at the capillary fringe, where groundwater is first encountered, at changes in lithology, and at approximately 5 foot intervals until the total depth of the boring is reached. ACEH agrees with the proposed laboratory analysis recommend by SOMA. Please present the results from soil sampling in the Soil and Groundwater Investigation Report requested below.

5. **Groundwater Sampling and Analysis**. ACEH agrees with the groundwater sample analysis as recommended in the Work Plan. Please include results from groundwater sampling in the Soil and Groundwater Investigation Report requested below.

6. **Hydrogeologic Cross Sections.** We request that you prepare a minimum of two hydrogeologic cross sections for the site. One of the cross sections should extend from soil boring B1 through soil boring SB2. The cross sections are to depict the lateral and vertical extent of soil layers encountered, the location of the tank pit, where groundwater was first encountered in borings and the static water levels, and grab groundwater samples, staining, odor, and analytical results for soil and groundwater samples. Please present the cross sections in the Soil and Groundwater Investigation Report requested below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Steve Plunkett), according to the following schedule:

- **June 30, 2007** – Soil, Soil Vapor and Groundwater Investigation Report

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) now request submission of reports in electronic form. The electronic copy is intended to replace the need for a paper copy

and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all reports is required in Geotracker (in PDF format). Please visit the State Water Resources Control Board for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, late reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

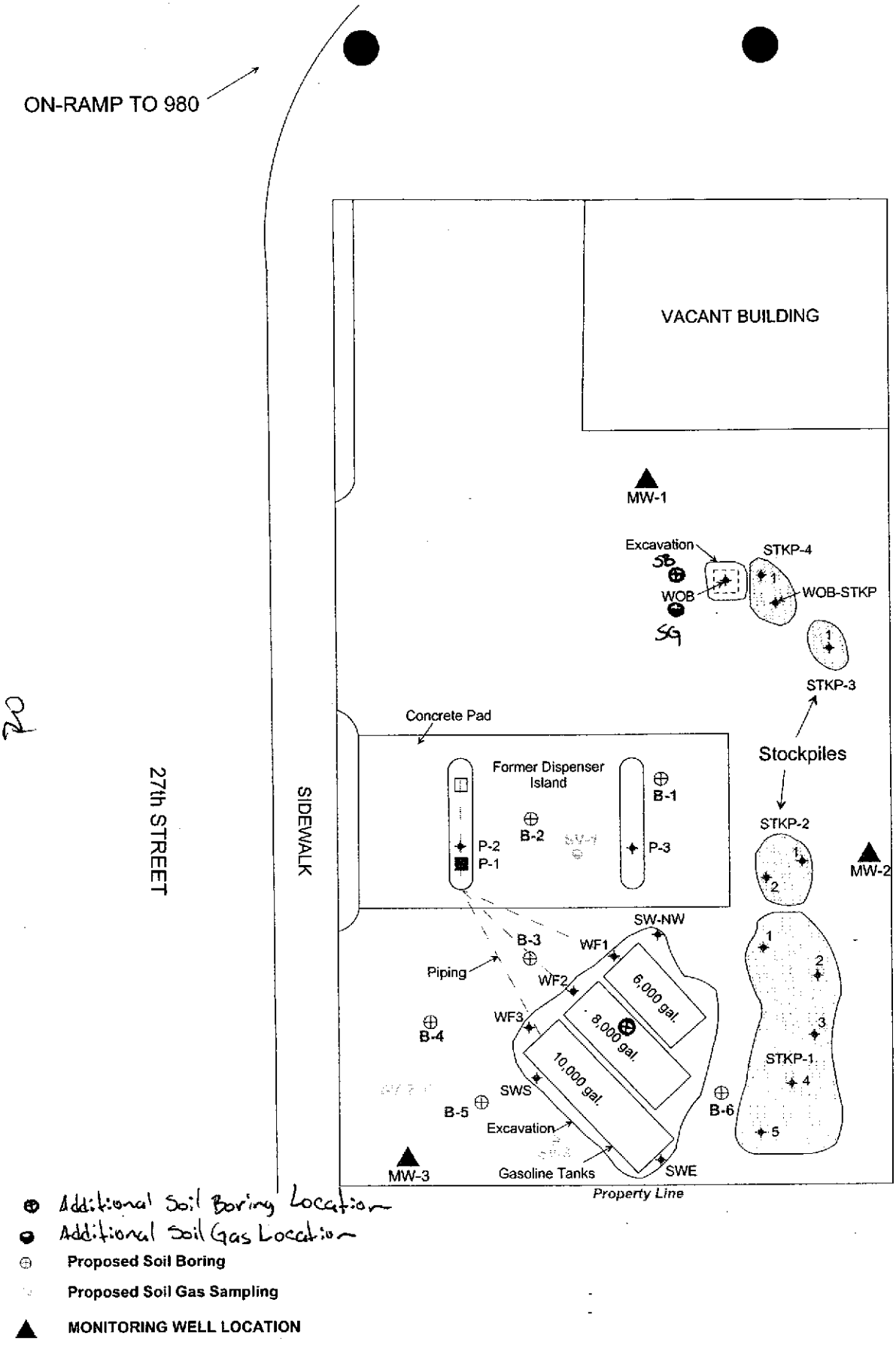
If you have any questions, please call me at (510) 383-1767.

Sincerely,

Steven Plunkett
Hazardous Materials Specialist

cc: Mansour Sepehr
SOMA Environmental Engineering, Inc.
6620 Owens Drive, Suite A
Pleasanton, Ca 94588-3334

Donna Drogos, ACEH, Steven Plunkett, ACEH, File



Note: Stockpiles 2 and 3 contain spoils from the same area. Samples STKP-2, 1 and 2, and STKP-3, 1 were combined to form one lab sample.

Figure 3: Site map showing the locations of the proposed soil and soil gas sampling locations

ENVIRONMENTAL ENGINEERING, INC.