February 24, 2021

Mr. Christian Darville
Lisi Aerospace/Hi-Shear Corporation
2600 Skypark Drive
Torrance, California 90509-2975

Certified Mail
Return Receipt Requested
Claim No. 7019 2970 0001 1914 5969

SUBJECT: REVIEW OF TECHNICAL DOCUMENTS PURSUANT TO CALIFORNIA WATER CODE SECTION 13267

SITE: HI-SHEAR, 2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA (SCP ID NO. 2042300; SCP CASE NO. 0218)

Dear Mr. Darville:

The California Regional Water Quality Control Board, Los Angeles Region (Regional Water Board) is the state agency with primary responsibility for the protection of groundwater and surface water quality within major portions of Los Angeles and Ventura counties. To accomplish this, the Regional Water Board oversees the investigation and cleanup of discharges of waste that may affect the quality of waters of the state as authorized by the Porter-Cologne Water Quality Control Act (California Water Code [CWC], Division 7).

The Regional Water Board received the technical documents titled “Soil, Soil Vapor, and Groundwater Delineation – Module I” (Module I Report) and “Additional Soil Vapor Delineation Investigation Scope of Work” (Additional Scope), prepared by Genesis Engineering & Redevelopment (GER) on behalf of Hi-Shear Corporation, dated March 13, 2020 and November 13, 2020, respectively, for the subject site.

Brief summaries of the Module I Report, and Additional Scope followed by Regional Water Board comments and requirements are included below.

SUMMARY OF MODULE I REPORT

The Module I Report documents field work completed to:

1. Delineate the extent of volatile organic compound (VOC) impacts east of Crenshaw Boulevard; and

2. Assess the vapor intrusion potential for buildings east of Crenshaw Boulevard.

The following is a summary of the tasks implemented and the results of the investigations reported in the Module I Report. For the purposes of this letter, the summary is limited to only the primary compounds of potential concern, tetrachloroethylene (PCE) and trichloroethylene (TCE).

1. A total of 17 nested soil vapor probes (VP-56, VP-61, VP-61, VP-63, VP-64, VP-65, VP-66, VP-67, VP-68, VP-69/72, VP-70, VP-71, VP-73, VP-74, VP-75, VP-76, and VP-77) were installed east of Crenshaw Boulevard at depths of between 5 feet below ground surface (ft-bgs) and 85 ft-bgs.

2. New and existing nested soil vapor probes (a total of 90 soil vapor samples) east of Crenshaw Boulevard were sampled and/or resampled for VOCs.

    a. The maximum PCE soil vapor concentration detected was 40,900 microgram per cubic meter (µg/m^3) in VP-27 at 85 ft-bgs

    b. The maximum TCE soil vapor concentration detected was 152,000 µg/m^3 in VP-62 at 15 ft-bgs

3. With respect to lateral delineation, GER determined that PCE in soil vapor has not been delineated and additional delineation across all depths is warranted, while TCE in soil vapor has been delineated (i.e., low to non-detect), at depths 5 ft-bgs, 15 ft-bgs, 45 ft-bgs, and 85 ft-bgs, east of Crenshaw Boulevard.

4. With respect to vertical delineation, GER noted the following trends:

    a. PCE and TCE soil vapor concentrations mostly increased with depth along Crenshaw Boulevard.

    b. PCE and TCE soil vapor concentrations between Crenshaw Boulevard and Pennsylvania Avenue decreased eastward with more elevated concentrations between 45 ft-bgs and 65 ft-bgs.

    c. PCE soil vapor concentrations east of Pennsylvania Avenue are variable with depth. Although TCE soil vapor concentrations at 5 ft-bgs were non-detect above laboratory reporting limits east of Pennsylvania Avenue, soil vapor concentrations appeared to increase with depth.

5. Perched groundwater was encountered at three vapor probe locations (VP-63 [40 ft-bgs], VP-70 [45 ft-bgs], and VP-74 [56 ft-bgs]). Reconnaissance groundwater samples were collected. VOCs were only detected in the VP-63 sample with the following groundwater concentrations:

    a. PCE at 7.3 micrograms per liter (µg/L)

    b. TCE at 812 µg/L

GER made the following recommendations:

1. Implement the Vapor Intrusion Response Plan (VIRP).

2. Delineate the extent of VOCs in soil vapor to the north, south, and east of Crenshaw Boulevard, and

3. Evaluate perched groundwater conditions.

The findings of the Module I Report facilitated the development of the VIRP, dated March 20, 2020, and the designation of response zones. The Regional Water Board conditionally approved the VIRP on June 1, 2020; GER commenced the VIRP implementation on September 14, 2020 and activities are ongoing.

SUMMARY OF ADDITIONAL SCOPE OF WORK

Consistent with one of the recommendations in the Module I Report, GER subsequently prepared the Additional Scope to further delineate the extent of PCE or other chlorinated volatile organic compounds in soil vapor. The Additional Scope proposed the following:

1. Install 16 nested soil vapor probes to the northeast and south of the existing network of soil vapor probes (see Figure 1 – Proposed Soil Vapor Probe Locations)

    a. Six nested soil vapor probes will be installed at 5 ft-bgs and 15 ft-bgs

    b. 10 nested soil vapor probes will be installed at 5, 15, 30, 45, 65, and 85 ft-bgs

2. Install up to 10 additional nested soil vapor probes if another source area(s) may be present.

3. Resample the network of soil vapor probes east of Crenshaw Boulevard using a mobile laboratory.

REGIONAL WATER BOARD COMMENTS AND REQUIREMENTS

The Regional Water Board concurs with the recommendations made in the Module I Report. The Additional Scope is approved with the following comments and requirements:

1. The ongoing implementation of the VIRP has identified the potential presence of low background levels of common tracer gases, such as 2-propanol (aka isopropanol or isopropyl alcohol [IPA]) and 1,1-difluroethane (1,1-DFA). To better assess the potential presence of low background levels of tracer gases, ensure the Additional Scope also analyzes for common tracer gases and compounds (i.e., IPA, 1,1-DFA, helium, etc.).

2. If perched groundwater is encounter during the installation of the deep soil vapor probes, a grab groundwater sample shall be collected at that soil vapor probe

boring and submitted for laboratory analysis of total petroleum hydrocarbons and VOCs.

3. Prior to starting field work, obtain all applicable permits from appropriate regulatory and local agencies, as necessary. Copies of agency-approved permits should be included in the report(s) submitted to Regional Water Board.

4. Notify the Regional Water Board case manager at least seven (7) working days in advance of field work.

5. Submit a technical report for the implementation of the Additional Scope by **June 30, 2021**.

6. Prepare and submit tri-annual soil vapor probe monitoring reports for the network of soil vapor probes east of Crenshaw Boulevard according to the following schedule, with the next report due by **September 15, 2021**:

Monitoring Trimester	Monitoring Period	Report Due Date
First Trimester	January – April	May 15
Second Trimester	May – August	September 15
Third Trimester	September – December	January 15

The above requirement for submittal of technical reports by the due date listed above constitutes an amendment to the requirements of the Water Code section 13267 Order originally dated October 29, 2009. All other aspects of the Order originally dated October 29, 2009, and the amendments thereto, remain in full force and effect. Pursuant to section 13268 of the California Water Code, failure to submit the required technical reports by the specified due dates may result in civil liability administratively imposed by the Regional Water Board in an amount up to one thousand dollars ($1,000) for each day each technical report is not received.

If you have any questions regarding this letter, please contact Mr. Kevin Lin at (213) 576-6781 or via email at kevin.lin@waterboards.ca.gov, or contact Ms. Jillian Ly, Unit IV Chief, at (213) 576-6664 or via email at jillian.ly@waterboards.ca.gov.

Sincerely,

R Purdy Digitally signed by R Purdy Date: 2021.02.25 09:53:48 -08'00'
Water Boards

Renee Purdy
Executive Officer

Attachments:

1. Figure 1 – Proposed Soil Vapor Probe Locations

cc:

Dmitriy Ginzburg, State Water Board Division of Drinking Water
Joseph Liles, Water Replenishment District
Carla Dillon, City of Lomita
Ryan Smoot, City of Lomita
Travis Van Ligten, Rutan & Tucker, LLP
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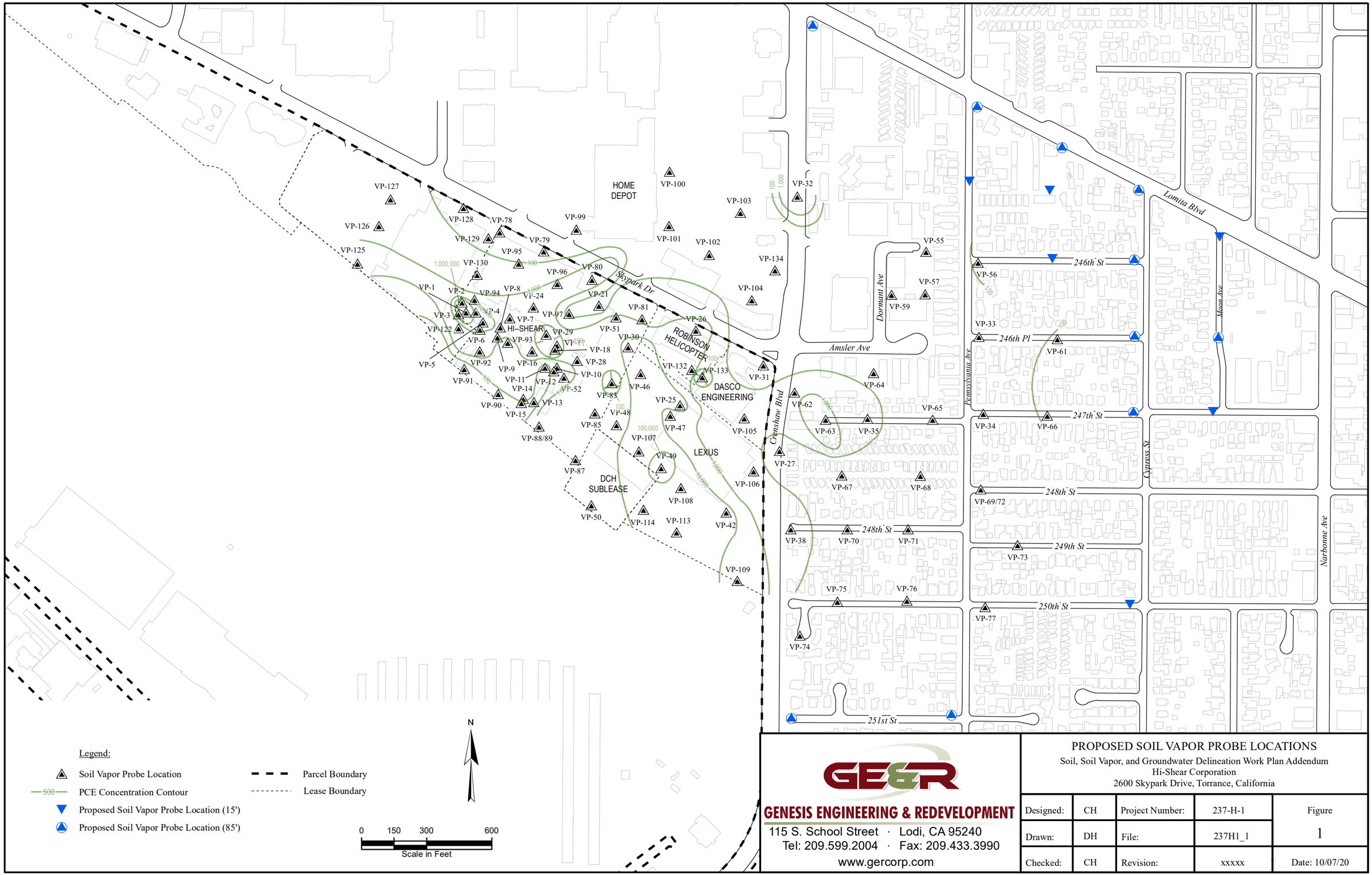
Thomas Schmidt, Hamrick & Evans, LLP
David L. Evans, Hamrick & Evans, LLP
Steve Van der Hoven, Genesis Engineering & Redevelopment

FIGURE 1 - PROPOSED SOIL VAPOR PROBE LOCATIONS



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PROPOSED SOIL VAPOR PROBE LOCATIONS
Soil, Soil Vapor, and Groundwater Delineation Work Plan Addendum
Hi-Shear Corporation
2600 Skypark Drive, Torrance, California

Designed:	CH	Project Number:	237-H-1	Figure
Drawn:	DH	File:	237H1_1	1
Checked:	CH	Revision:	xxxxx	Date: 10/07/20