October 6, 2023

Mr. Christian Darville
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Mr. Aram Chaparyan
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City of Torrance
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SUBJECT: REVIEW OF SOURCE CONTROL PILOT STUDY WORK PLAN AND AMENDMENT TO CLEANUP AND ABATEMENT ORDER NO. R4-2021-0079, PURSUANT TO CALIFORNIA WATER CODE SECTION 13304

SITE: SKYPARK COMMERCIAL PROPERTIES (ASSESSOR PARCEL NO. 7377-006-906), 24701 – 24777 CRENSHAW BOULEVARD AND 2530, 2540, AND 2600 SKYPARK DRIVE, TORRANCE, CALIFORNIA (SCP NO. 1499)

Dear Mr. Darville, et al.:

The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles 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, including the above-referenced site (Site). To accomplish this, the Los Angeles 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).

On June 18, 2021, the Los Angeles Water Board issued Cleanup and Abatement Order No. R4-2021-0079 (Order) directing you (hereinafter referred to as the Dischargers) to implement a cleanup and abatement program for the cleanup of wastes in soil, soil vapor, and groundwater and the abatement of the effects of the discharges of waste on water quality and beneficial uses of water.

On October 18, 2022, the Los Angeles Water Board conditionally approved the *Groundwater Removal Action Workplan* (Groundwater IRAP), dated January 31, 2022, submitted on behalf of the City of Torrance (City) by Terraphase Engineering Inc. (Terraphase), and subsequently updated and revised its conditions on April 14, 2023, after reviewing supplemental technical justifications and clarifications provided by Terraphase. The Groundwater IRAP includes two interim remedial components, the installation of a zero-valent iron (ZVI) barrier along Crenshaw Boulevard and enhanced in-situ bioremediation (EISB) treatment of groundwater beneath the Hi-Shear Corporation (HSC) property. The report documenting the implementation of the Groundwater IRAP is due by December 15, 2023 with quarterly performance monitoring of said interim remedies commencing 2024.

On January 17, 2023, the Los Angeles Water Board conditionally approved the revised *Removal Action Workplan for the East Adjacent Properties* (Revised EAP IRAP), dated June 24, 2022 submitted on behalf of the City by Terraphase. The Revised EAP IRAP provides targeted interim remedies for the eastern half of the Site (i.e., East Adjacent Properties [a.k.a. EA Properties or EAP]); a soil vapor extraction (SVE) system will address the soil and soil vapor contamination and EISB treatment will address groundwater contamination beneath the EAP. The report documenting the implementation of the Revised EAP IRAP was due by September 15, 2023.

On June 20, 2023, the Los Angeles Water Board staff received the *Source Control Pilot Study Work Plan* (Pilot Study Work Plan), submitted on behalf of HSC by Genesis Engineering & Redevelopment (GER) for review. The Pilot Study Work Plan proposes a pilot study to evaluate the effectiveness of air sparging (AS) in a limited area with elevated groundwater concentrations at the HSC property as a remedial alternative. On July 26, 2023, the Los Angeles Water Board informed the Dischargers and stakeholders of the HSC's submittal and invited the Dischargers and stakeholders to a virtual meeting on August 7, 2023, to provide technical feedback regarding the Pilot Study Work Plan, with an email reminder on August 4, 2023 (attached as Attachment 1).

On August 7, 2023, the Los Angeles Water Board hosted a virtual meeting that allowed Dischargers (and/or their technical representative[s]) and stakeholders to provide technical feedback regarding the Pilot Study Work Plan (Technical Discussion). Except for Dasco Engineering Corporation, all Dischargers (and/or their technical representative[s]) named in the Order were in attendance. A representative from the Water Replenishment District was also in attendance.

On August 21, 2023, the Los Angeles Water Board staff received *Comments on the Hi-Shear June 20, 2023, Source Control Pilot Study Work Plan* (City Comments to Work Plan), submitted on behalf of the City by Terraphase for its consideration. The Comments to Work Plan elaborated on certain topics discussed in the Technical Discussion.

Summaries of the Pilot Study Work Plan, Technical Discussion, and City Comments to Work Plan followed by Los Angeles Water Board comments are included below.

SUMMARY OF PILOT STUDY WORK PLAN

According to HSC, the objective of the Pilot Study Work Plan is to assess the effectiveness of AS as a mitigation measure for impacted groundwater.

The Pilot Study Work Plan outlines two periods of implementation: the AS period (6 months) and the rebound testing/monitoring period (6 months). Implementation of the Pilot Study Work Plan will take approximately one year. The Pilot Study Work Plan proposed the following field activities to achieve the objective:

1. Install AS well, AS-1, to a depth of 120 feet below ground surface (ft-bgs), as shown in Attachment 2, *Figure 12 – Sparging and Sampling Locations* (Figure 12), via continuous-flight hollow-stem auger.

    a. The well will be located on the HSC property approximately 40 feet from existing groundwater monitoring well, MW-18.

    b. The well will be constructed of 2-inch diameter Schedule 40 polyvinyl chloride (PVC) casing with 0.020-inch slotted screen and screened from 118 to 120 ft-bgs.

c. Groundwater samples will be collected from AS-1 after development and prior to the start of the pilot test for analysis of volatile organic compounds (VOCs) using EPA Method 8260B.

2. Install two AS monitoring wells, ASM-1 and ASM-2, to a depth of approximately 95 ft-bgs, as shown in Figure 12, via continuous-flight hollow-stem auger.

    a. ASM-1 and ASM-2 will be located 5 feet and 1 feet away from AS-1, respectively.

    b. The wells will be constructed of 2-inch diameter Schedule 40 PVC casing with a 0.020-inch slotted screen with a screened interval length of 2 feet to monitor groundwater from 8 to 10 feet below the regional water table.

    c. Groundwater samples will be collected from ASM-1 and ASM-2 after development and prior to the start of the pilot test for analysis of VOCs using EPA Method 8260B.

3. Toggle and utilize the existing SVE wells from the SVE system at the HSC property to capture VOCs stripped from the aqueous phase via AS.

    a. The following 5 multi-nested SVE wells proximal to AS-1 will be opened during the pilot study, as shown in Attachment 3, *Figure 10 – Current SVE System Layout*:

        i. VE-3A/B/C; where ‘A’ is screened from 12 to 30 ft-bgs, ‘B’ is screened from 45 to 65 ft-bgs, and ‘C’ is screened from 72 to 87 ft-bgs.

        ii. VE-6A/B/C; where ‘A’ is screened from 5 to 25 ft-bgs, ‘B’ is screened from 43 to 63 ft-bgs, and ‘C’ is screened from 72 to 87 ft-bgs.

        iii. VE-7A/B; where ‘A’ is screened from 52 to 67 ft-bgs and ‘B’ is screened from 77 to 87 ft-bgs,

        iv. VE-8A/B/C; where ‘A’ is screened from 5 to 25 ft-bgs, ‘B’ is screened from 43 to 63 ft-bgs, and ‘C’ is screened from 72 to 87 ft-bgs.

        v. SVE-13A/B/C; where ‘A’ is screened from 5 to 25 ft-bgs, ‘B’ is screened from 43 to 63 ft-bgs, and ‘C’ is screened from 72 to 87 ft-bgs.

    b. The existing SVE system’s blower capacity should be able to accommodate the anticipated rate of air injection for the pilot study.

4. Monitor groundwater and soil vapor during the pilot study.

a. Groundwater monitoring wells, MW-18 and MW-41, along with ASM-1 and ASM-2, will have water levels and dissolved oxygen concentrations continuously monitored with data loggers.

b. Groundwater from MW-18, MW-41, ASM-1, and ASM-2 will be sampled prior to the pilot study, monthly during the 6-month AS period, after two months of sparging when AS system is turned off, three months after sparging ends, and six months after AS ends. Groundwater samples will be analyzed for VOCs using EPA Method 8260B.

c. Select depths from 12 nested soil vapor probes (VP-97, -18, -7, -8, -10, -11, -12, -16, -17, -28, -29, and -93) will be measured weekly for negative pressures to demonstrate that the VOCs being sparged from groundwater into soil vapor is captured by the SVE system.

d. Nested soil vapor probe VP-29 will have all its probes sampled prior to the pilot study, after one month of AS, after 6-month AS period (i.e., when AS system is turned off), three months after sparging ends, and six months after AS ends. Soil vapor samples will be analyzed for VOCs using EPA Method TO-15.

5. In addition to continuing the operation of the SVE system at the HSC property during the pilot study, vapor samples will be collected from SVE wells VE-3 and VE-7 at all depths (i.e., VE-3A/B/C and VE-7A/B; a.k.a. wellhead vapor samples) and analyzed for VOCs using EPA Method TO-15 in accordance with the following proposed scheduled:

    a. Weekly basis during the 6-month air injection period.

    b. Monthly basis after the air injection period for six months.

The Pilot Study Work Plan asserts the following advantages for AS:

1. “AS systems typically operate for 3-5 years to reach cleanup goals, compared to enhanced bioremediation (5+ years) and a permeable reactive barrier (decades for contaminated groundwater to flow through the barrier). In addition, mass removal would begin immediately whereas there is a lag phase of more than 6 months for microbial populations to grow after enhanced bioremediation injections.”

2. The Site geology is conducive to AS with few low permeability layers to complicate vertical air flow through the saturated zone.

3. There is existing infrastructure (i.e., SVE system in-place at the HSC property).

4. Cost associated with AS will be primarily operational (i.e., electricity) following installation of injection wells.

Additionally, GER asserts that the AS pilot study will have minimal to no effects on the conditionally approved interim remedy alternatives at the rest of the Site (e.g., ZVI barrier along Crenshaw Boulevard, EISB at the EA Properties, etc.). There will be minimal to no effects because the air injection is limited to one well (AS-1), with an expected radius of influence (ROI) of 20 to 30 feet, which is located more than 1,000 feet from the ZVI barrier. Based on the distance from AS-1 and the slow-moving groundwater beneath the Site, the temporary oxidizing conditions created are expected to return to naturally reducing conditions once air injection concludes and will have limited effects on EISB.

SUMMARY OF AUGUST 7, 2023 TECHNICAL DISCUSSION

At the start of the meeting, Los Angeles Water Board staff relayed to the attendees that the Technical Discussion was their only opportunity to comment on the Pilot Study Work Plan and there will not be a formal written public comment period for the work plan.

GER provided a brief summary and overview of the Pilot Study Work Plan and highlighted the following:

1. The SVE system at the HSC property has been removing large amounts of mass following its relatively recent repairs.

2. AS has been effective and successful at nearby sites with similar geologic conditions within the first year of operation.

3. AS is a physical technique and water chemistry is not a significant factor in its implementability and anticipated effectiveness.

4. The pilot study is located in an area where historical EISB has been less effective and HSC's existing SVE system is complementary and more than adequate to capture the anticipated air injection rate.

5. There have not been sufficient pilot studies of remedial alternatives conducted at the Site.

The discussions that followed explored potential inhibition of other conditionally approved remedy alternatives (due to changes in groundwater conditions); historically effective and proven technologies (i.e., EISB); concerns about the increased vadose zone impacts; other potential pilot studies; HSC property, Site-wide implementability, and/or targeted (i.e, hot spot) remedy; and improvements to the Pilot Study Work Plan (i.e., adding SVE well[s] closer to AS-1 to better address and capture the increased soil vapor concentrations generated by AS-1).

SUMMARY OF CITY COMMENTS TO WORK PLAN

The Comments to the Work Plan assert that the Pilot Study Work Plan is a departure from the conditionally approved Groundwater IRAP, noted its technical limitations, and

identified the City's concerns. The Comments to the Work Plan included the following concerns and critiques:

1. The Pilot Study Work Plan is inconsistent with the conditionally approved Groundwater IRAP (i.e., the EISB at the HSC property component).

    a. EISB injection has been piloted and was one of the bases of the Los Angeles Water Board's conditional approval of the Groundwater IRAP.

        i. Implementing the Pilot Study Work Plan will further delay the already conditionally approved EISB injections at the HSC property.

    b. The Pilot Study Work Plan is contrary to the remedy selection process under State Water Resources Control Board's Resolution No. 92-49.

    c. The Pilot Study Work Plan lacks significant justification for the Los Angeles Water Board to reverse its conditional approval.

        i. Although HSC's existing SVE system may be a complementary technology to use alongside the proposed AS, the City reiterates that there is an infrastructure for EISB injections already in-place with over 70 dual-nested injection wells at the HSC property.

2. AS was screened out in prior remedial alternative evaluations by both HSC and the City. The historical pilot test was inconclusive (and not further evaluated) and there has been no new technical information.

3. The Pilot Study Work Plan is speculative in that it refers to a nearby site as an example of the success(es) of AS, the proclaimed cost savings of AS compared to EISB without evaluation, and the past "mixed results at best" of the historical AS pilot test conducted.

4. AS's superiority over EISB remains unanswered and unaddressed.

    a. AS displaces the contaminant into the vadose zone whereas EISB destroys the contaminant in-place without increasing impacts to the vadose zone.

    b. AS diminishes the reductive chlorination by converting conditions from anaerobic (naturally occurring) to aerobic.

    c. AS requires more operations and maintenance (O&M) than EISB.

5. Heterogeneity challenges beneath the HSC property, particularly in the pilot study area, may result in poor stripping of contaminant from soil or groundwater and an inadequate SVE capture zone may increase vapor intrusion potential. There will be areas where AS will be ineffective and/or not occur.

6. Although HSC's existing SVE system and the associated SVE well network may support the implementation of the Pilot Study Work Plan, Terraphase warns that it is unlikely to have the capacity to support a full-scale AS system.

LOS ANGELES WATER BOARD COMMENTS AND REQUIREMENTS

The Los Angeles Water Board conditionally approves the Pilot Study Work Plan with the following comments and requirements:

1. The effects on shallow groundwater from the implementation of the Pilot Study Work Plan are expected to be radial and emanating from AS-1. The proposed network of groundwater monitoring wells (i.e., MW-18, MW-41, ASM-1, and ASM-2) may not provide adequate resolution of the expected effects. For example, MW-41 is an intermediate monitoring well that is screened from 140 to 150 ft-bgs (screened in a different zone that is 20 feet below the screened interval of AS-1 and 27 feet below the screened interval of MW-18) and located more than 60 feet west-southwest from AS-1.

   There are no proposed groundwater monitoring points to the south, west, and north of AS-1. Additionally, aside from groundwater monitoring well MW-18 (the most recently available shallow groundwater concentration high at the HSC property and the general basis for the location of AS-1), there are no groundwater monitoring points eastward.

   a. Dual-nested injection wells IW-13, IW-14, IW-17, IW-18, IW-22, and IW-23 (all of which have screened intervals at 88 to 98 ft-bgs [shallow] and 103 to 113 ft-bgs [deep]) should be repurposed as groundwater monitoring points and incorporated into the implementation of the Pilot Study Work Plan (e.g., step-testing, step test monitoring, extended operation, extended operation monitoring, etc).

      i. The six dual-nested injection wells should be located and inspected. If they are deemed to be in poor working or nonworking conditions during inspection, they should be rehabilitated or replaced with new wells of similar construction and configuration (i.e., 2-inch diameter Schedule 80 PVC casing with 0.020-inch slotted screens).

      ii. The incorporation of the six dual-nested injection wells should not be in lieu of the proposed groundwater monitoring network of ASM-1, ASM-2, MW-18, and MW-41 for the Pilot Study Work Plan.

   b. In addition to the groundwater monitoring proposed in the Pilot Study Work Plan, continue implementation of the groundwater monitoring program, as conditionally approved, and amended on April 14, 2023, to document observed levels pre- and post-Pilot Study.

2. Similarly, the effects on soil vapor are expected to be radial and emanating from AS-1; therefore, at least two additional multi-nested soil vapor probes must be installed within the area of influence of AS-1 as the closest soil vapor probe, VP-29, is more than 36 feet away from AS-1. The probes must be constructed similarly to VP-29 (i.e., probes at 5, 15, 25, 45, 65 and 85 ft-bgs). These probes must be included in the proposed activities described in Summary of Pilot Study Work Plan items nos. 4.c. and 4.d. (i.e., negative pressure measurements and VOCs analyses across all depths).

3. A tracer test (i.e., helium tracer test) should be included in the implementation of the Pilot Study Work Plan. The tracer gas will offer additional lines of evidence/confirmation of the lateral extent of the air distribution (and capture zone of the SVE system) and may discern preferential flow paths. The data from the tracer test component may facilitate and/or optimize future larger-scale remedial designs, if the technology is proven to be viable. The tracer test should be incorporated as part of the Pilot Study Work Plan.

    a. The tracer gas should be continuously monitored in groundwater monitoring wells MW-18, MW-41, ASM-1, ASM-2, and in monitoring wells/points identified in and/or responsive to Comment No. 1 above.

    b. The tracer gas should be measured (i.e., concurrently with measurements for negative pressures) at the selected depths from the 12 nested soil vapor probes (VP-97, -18, -7, -8, -10, -11, -12, -16, -17, -28, -29, and -93) including the additional multi-nested soil vapor probes, across all depths, in Comment No. 2.

4. A minimum of one additional SVE well should be installed in the immediate vicinity of AS-1 (i.e., within/less than the expected ROI of 20 to 30 feet). The current closest SVE well to AS-1 is VE-3, which is more than 80 feet away. The additional SVE well(s) should be multi-nested and capable of extracting vapors from all depths of the vadose zone; it should be constructed similarly to triple-nested SVE wells VE-6, VE-8, and SVE-13 with screened interval(s) beginning as shallow as 5 ft-bgs. The additional SVE well(s) should be incorporated with the proposed activities for VE-3 and VE-7 (i.e., wellhead vapor samples at all depths).

5. Due to concerns about potentially increased vapor intrusion risks during air injection, the SVE system should be continuously extracting from shallow SVE wells closest to existing buildings on the HSC property during the implementation of the Pilot Study Work Plan.

6. Given the historically elevated soil vapor concentrations detected beneath the HSC property, particularly in the western portion, the SVE system should be continuously extracting from the current array of active SVE wells (as noted in the most recent *SVE System Operation – First Quarter 2023 Report*, submitted on

behalf of HSC by GER, dated July 7, 2023) during the implementation of the Pilot Study Work Plan. At a minimum, the SVE system should be extracting from triple-nested SVE wells VE-1, VE-2, VE-4, VE-5, SVE-14, and continually toggled and optimized to prioritize mass removal to address soil vapor hot spots and contain the soil vapor plume at the HSC property during the pilot study.

7. The Los Angeles Water Board staff acknowledges and recognizes the concerns in the City Comments to Work Plan. The implementation of the Pilot Study Work Plan, however, as conditionally approved in this letter, may validate and/or address those concerns. The proposed pilot study is limited in area and its effects (e.g., aerobic conditions, induced vadose zone impacts, etc.) are also expected to be temporary and limited spatially. Additionally, the proposed pilot study area is greater than 400 feet from the EA Properties and greater than 1,000 feet from Crenshaw Boulevard; based on these distances and the groundwater gradient, the AS pilot study is not expected to have an impact (or a lasting impact) to the subsurface conditions that will affect the activities proposed and/or conditionally approved at the EA Properties and along Crenshaw Boulevard.

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

9. Notify your Los Angeles Water Board case manager at least ten (10) working days in advance of field work.

10. The Los Angeles Water Board is concerned about the proposed length of time for the complete implementation of the Pilot Study Work Plan. As proposed, the first period of the AS pilot study (6 months) will provide sufficient data on the effectiveness and applicability of AS at the HSC (i.e., AS period). For these reasons, the Los Angeles Water Board requires the following:

    a. Commence operation of the AS pilot study no later than **December 15, 2023**.

    b. Submit a technical report documenting the AS period (i.e., six months of AS) of the Pilot Study Work Plan to the Los Angeles Water Board by **July 31, 2024**. The technical report must include, but is not limited to, the following:

        i. An evaluation and determination of whether AS is an effective remedial technology in treating groundwater beneath the HSC property and the Site generally.

            Los Angeles Water Board staff's interpretation of an effective technology includes, but is not limited to, a decrease in concentration of at least two orders of magnitude and/or a decrease in

concentration to within one order of magnitude of the respective maximum contaminant levels of the chemicals of concern.

ii. Field confirmation(s) and determination(s) of the AS ROI.

iii. Monthly groundwater concentrations at all monitoring points of the pilot study (i.e., dual-nested injection wells IW-13, IW-14, IW-17, IW-18, IW-22, and IW-23; MW-18; MW-41; ASM-1; and ASM-2) with trend graphs and analysis for all chemicals of concern.

iv. An estimate of mass removal of VOCs in the shallow regional groundwater and deeper groundwater (i.e., MW-41 [intermediate groundwater, screened 140 to 150 ft-bgs]; IW-13, IW-14, IW-17, IW-18, IW-22, and IW-23 [screened 103 to 113 ft-bgs]).

v. An in-depth analysis of the SVE well network's capability and capacity to capture the stripped VOCs from groundwater into the vadose zone during the AS pilot test. If warranted, recommendation(s) should be made for additional SVE well(s) to the network to provide adequate containment of the stripped VOCs from groundwater.

vi. An in-depth side-by-side comparison (e.g., performance evaluation[s], installation costs, O&M costs, longevity of the technology[ies], scalability cost[s], etc.) of AS and EISB for the HSC property and Site-wide. The comparison must consider and incorporate the costs of HSC property's historical EISB implementation.

A recommendation for the immediate next remedial actions with a proposed schedule. Note that if the pilot study is inconclusive, determines that AS is ineffective for the HSC property and Site-wide, and/or fails to indicate AS is superior to EISB, EISB must be implemented, as approved, at the HSC property immediately (i.e., the conditionally approved Groundwater IRAP will become effective with a new deadline of December 31, 2024. This deadline is specific only to the EISB interim remedial component of the Groundwater IRAP.

11. HSC has asked for a reprieve from the December 15, 2023 deadline for EISB at the HSC property and an opportunity to test AS technology to determine if it will be more efficient and cost effective. The Los Angeles Water Board is willing to consider this technology, given its demonstrated success at nearby sites and the likelihood for accelerated results. Resolution 92-49 requires that we take into consideration the potential for cost savings, which has been presented as a basis for AS. The Los Angeles Water Board will make a determination upon submission

of the July 31, 2024 technical report, of whether AS has been shown to be effective, as per the above criteria.

If AS is not shown to be an effective technology, then the Los Angeles Water Board's *Review of a Technical Memorandum*, dated April 14, 2023 (Amendment to the Order setting the deadline for EISB injections at the HSC property) will go back into effect, and the requirements established in that document will become operative, with the following conditional deadlines.

a. Apply for (and/or revise) the waste discharge requirements (WDR) permit from the Los Angeles Water Board. You are required to submit a completed application/report of Waste Discharge (Form 200) by **September 30, 2024**, including the appropriate fee and supporting documents to the Los Angeles Water Board, Groundwater Permitting Unit, attention Dr. Jim Kang. Form 200 and the fee schedules can be found at the following addresses:

   i. https://www.waterboards.ca.gov/publications_forms/forms/docs/form200.pdf

   ii. https://www.waterboards.ca.gov/resources/fees/water_quality/docs/fy1819_wdr_fees.pdf

b. Commence EISB treatment of groundwater (i.e., EISB injections at existing dual-nested injection wells) beneath the HSC property no later than **December 31, 2024**.

c. Prepare and submit quarterly EISB performance monitoring reports following EISB injections with the first performance monitoring report due **April 15, 2025**.

12. If, after reviewing the July 31, 2024 technical report, AS is established as an effective technology, the Dischargers are required to amend the Draft Remedial Action Plan (a.k.a. Draft RAP) submitted by HSC on December 19, 2022, to propose a comprehensive remedial action plan(s) (i.e., RAP) for cleanup of wastes in soil matrix, soil vapor, and groundwater no later than **March 31, 2025**. This deadline is intentionally lengthy to allow plenty of time for the Dischargers to evaluate the effectiveness of installed interim remedies and collaborate on the appropriate technology(ies) for unaddressed areas of discharges.

13. We note that the deadline for completion of the RAP (March 31, 2027) is not altered by this Amendment to the Order. Based upon similarly situated, complex remedial actions at other sites, it is reasonable to expect that the Dischargers can complete remedial activities, even allowing for the Pilot Study Work Plan.

14. The Los Angeles Water Board is concerned about the capacity and capture zone (i.e., radius of influence) of the current configuration of HSC's SVE system. A

robust SVE system is crucial to achieve soil remediation and to support potential expansion to a full-scale AS system, if proven effective and viable. Based on the *SVE System Operation – Fourth Quarter 2022 Report*, submitted on behalf of HSC by GER, dated May 18, 2023, radius of influence figures at probes across multiple depths indicate little to no influence beneath the northern half of the HSC property, particularly in the upper 30 ft-bgs. Therefore, submit a work plan for the installation and operation of multi-nested SVE well(s) or other technology to address soil vapor impacts beneath northern half of the HSC property to the Los Angeles Water Board by **November 30, 2023**.

The above requirements and conditional approval and the revised Attachment B (attached hereto) is an amendment to Cleanup and Abatement Order No. R4-2021-0079. All other aspects of the Order No. R4-2021-0079, originally dated June 18, 2021, and the amendments thereto, remain in full force and effect. Pursuant to section 13350 of the California Water Code, a person who violates a cleanup and abatement order issued or amended by a regional board may be subject to civil liabilities of up to fifteen thousand dollars ($15,000) for each day the violation occurs. The Los Angeles Water Board or the California Attorney General's Office reserves their rights to take any further enforcement action authorized by law.

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 Dr. Angelica Castaneda, Site Cleanup Unit IV Supervisor, at (213) 576-6737 or via email at angelica.castaneda@waterboards.ca.gov.

Sincerely,

Hugh Marley

Digitally signed by Hugh Marley
Date: 2023.10.06 11:23:30 -07'00'

Water Boards

for Susana Arrendondo
Executive Officer

Attachments:

1. Los Angeles Water Board. "SKYPARK COMMERCIAL PROPERTIES (SCP NO. 1499) Technical Discussion - Source Control Pilot Study Work Plan." 26 July 2023.
2. Figure 12 – Sparging and Sampling Locations
3. Figure 10 – Current SVE System Layout
4. Cleanup and Abatement Order No. R4-2021-0079, Attachment B Revised Time Schedule of Order
5. Cleanup and Abatement Order No. R4-2021-0079, Attachment B Revised Time Schedule of Order (underline/strikeout version)

cc (via email):

Dmitriy Ginzburg, State Water Board Division of Drinking Water
James Kang, Los Angeles Regional Water Quality Control Board
Joseph Liles, Water Replenishment District
Carla Dillon, City of Lomita
Ryan Smoot, City of Lomita
Trevor Rusin, City of Lomita
Alan B. Fenstermacher, Rutan & Tucker, LLP
Travis Van Ligten, Rutan & Tucker, LLP
Richard Montevideo, Rutan & Tucker, LLP
Darren Croteau, Terraphase Engineering Inc.
Sonja A. Inglin, Cermak & Inglin, LLC
Patrick L. Rendon, Lamb and Kawakami, LLP
William J. Beverly, Law Offices of William J. Beverly
Brian M. Ledger, Gordon Rees Scully Mansukhani, LLP
Thomas Schmidt, Hamrick & Evans, LLP
David L. Evans, Hamrick & Evans, LLP
Jeff W. Poole, Hamrick & Evans, LLP
Steve Van der Hoven, Genesis Engineering & Redevelopment
Solomon Seyum, Genesis Engineering & Redevelopment

Attachment 1 - Los Angeles Water Board. "SKYPARK COMMERCIAL PROPERTIES (SCP NO. 1499) Technical Discussion - Source Control Pilot Study Work Plan." 26 July 2023.

From:	Lin, Kevin@Waterboards
To:	Ginzburg, Dmitriy@Waterboards; "jliles@wrd.org"; "Brian Partington (bpartington@wrd.org)"; "c.dillon@lomitacity.com"; "Ryan Smoot"; "Trevor.Rusin@bbklaw.com"; "Van Ligten, Travis"; "Montevideo, Richard"; "Fenstermacher, Alan"; "Timothy Wood"; "Peter Scaramella"; "Sonja Inglin"; "Patrick L. Rendon"; "Brian M. Ledger Esq. (bledger@grsm.com)"; "Thomas Schmidt"; "David L. Evans"; "sseyum@gercorp.com"; "Steve Van der Hoven"; "ward@dascoeng.com"; "DARVILLE Christian"; "Chaparyan, Aram"; "Jeff Poole"; "darren.croteau@terraphase.com"; "Charlie Robinson"; "William J. Beverly Esq. (Beverlylaw@frontier.com)"; "mkinworthy@mkeci.com"; "PG CHG CEG Scott D. Warner (swarner@bbjgroup.com)"; "William J. Beverly Esq. (Beverlylawcorp@aol.com)"; "Christopher Johnson"; "Sara Justice"
Cc:	Ly, Jillian@Waterboards; Castaneda, Angelica@Waterboards; Austin, Tamarin@Waterboards
Subject:	RE: SKYPARK COMMERCIAL PROPERTIES (SCP NO. 1499) Technical Discussion - Source Control Pilot Study Work Plan
Date:	Friday, August 4, 2023 4:02:00 PM

Good afternoon,

This is a reminder that you and your technical representative(s) are invited to a technical meeting to share your input and comments on the proposed *Source Control Pilot Study Work Plan* (Pilot Study Work Plan) on **Monday (August 7th), 11:00 AM – 12:30 PM** via Microsoft Team (the link was provided the previous email [included below]). Again, we ask that the input and comments during the meeting relate to the Pilot Study Work Plan and are technical in nature.

Thank you,

Kevin Lin, P.E.
Water Resource Control Engineer
Los Angeles Regional Water Quality Control Board
Site Cleanup Program Unit IV
320 West 4th Street, Suite 200
Los Angeles, CA 90013
213-576-6781

Due to COVID-19, I am teleworking on a full-time basis.
E-mail is the best way to reach me for immediate assistance.

From: Lin, Kevin@Waterboards
Sent: Wednesday, July 26, 2023 8:29 AM
To: Ginzburg, Dmitriy@Waterboards <Dmitriy.Ginzburg@waterboards.ca.gov>; jliles@wrd.org; Brian Partington (bpartington@wrd.org) <bpartington@wrd.org>; c.dillon@lomitacity.com; Ryan Smoot <r.smoot@lomitacity.com>; Trevor.Rusin@bbklaw.com; Van Ligten, Travis <TVanLigten@rutan.com>; Montevideo, Richard <rmontevideo@rutan.com>; Fenstermacher, Alan <AFenstermacher@rutan.com>; Timothy Wood <tfwood@gsi-net.com>; Peter Scaramella <PJScaramella@gsi-net.com>; Sonja Inglin <singlin@cermaklegal.com>; Patrick L. Rendon <prendon@lkfirm.com>; Brian M. Ledger Esq. (bledger@grsm.com) <bledger@grsm.com>; Thomas Schmidt <tpjschmidt@gmail.com>; David L. Evans <dlevans@hamricklaw.com>; sseyum@gercorp.com; Steve Van der Hoven <svanderhoven@gercorp.com>; ward@dascoeng.com; DARVILLE Christian <Christian.DARVILLE@lisi-group.com>; Chaparyan, Aram <AChaparyan@TorranceCA.gov>; Jeff Poole <JPoole@hamricklaw.com>; darren.croteau@terraphase.com; Charlie Robinson <charlie.robinson@terraphase.com>; William J.

Beverly Esq. (Beverlylaw@frontier.com) <beverlylaw@frontier.com>; mkinworthy@mkeci.com; PG CHG CEG Scott D. Warner (swarner@bbjgroup.com) <swarner@bbjgroup.com>; William J. Beverly Esq. (Beverlylawcorp@aol.com) <beverlylawcorp@aol.com>; Christopher Johnson <ctjohnson@grsm.com>; Sara Justice <sjustice@hamricklaw.com>
Cc: Ly, Jillian@Waterboards <Jillian.Ly@waterboards.ca.gov>; Castaneda, Angelica@Waterboards <angelica.castaneda@waterboards.ca.gov>; Austin, Tamarin@Waterboards <tamarin.austin@waterboards.ca.gov>
Subject: SKYPARK COMMERCIAL PROPERTIES (SCP NO. 1499) Technical Discussion - Source Control Pilot Study Work Plan

Good morning,

On June 20, 2023, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) staff received the *Source Control Pilot Study Work Plan* (Pilot Study Work Plan), submitted on behalf of Hi-Shear Corporation (HSC) by Genesis Engineering & Redevelopment for review.

The Pilot Study Work Plan proposes a pilot test to evaluate the effectiveness of air sparging in a small area with elevated groundwater concentrations at the HSC property as a remedial alternative for cleanup of volatile organic compounds in groundwater. Los Angeles Water Board staff have conducted a preliminary review of the Pilot Study Work Plan and are considering the activities proposed.

Los Angeles Water Board staff are inviting you and your technical representative(s) to a technical meeting to share your input and comments on the proposed Pilot Study Work Plan on **August 7th, 11:00 AM – 12:30 PM** via Microsoft Teams (link included below). To ensure that the meeting is constructive and productive, we ask that parties ensure that input and comments during the meeting relate to the Pilot Study Work Plan and are technical in nature.

Microsoft Teams meeting
Join on your computer, mobile app or room device
Click here to join the meeting
Meeting ID: 288 240 458 057
Passcode: 7Aux7d
Download Teams | Join on the web
Or call in (audio only)
+1 916-562-0861,,379488515# United States, Sacramento
Phone Conference ID: 379 488 515#
Find a local number | Reset PIN
Learn More | Meeting options

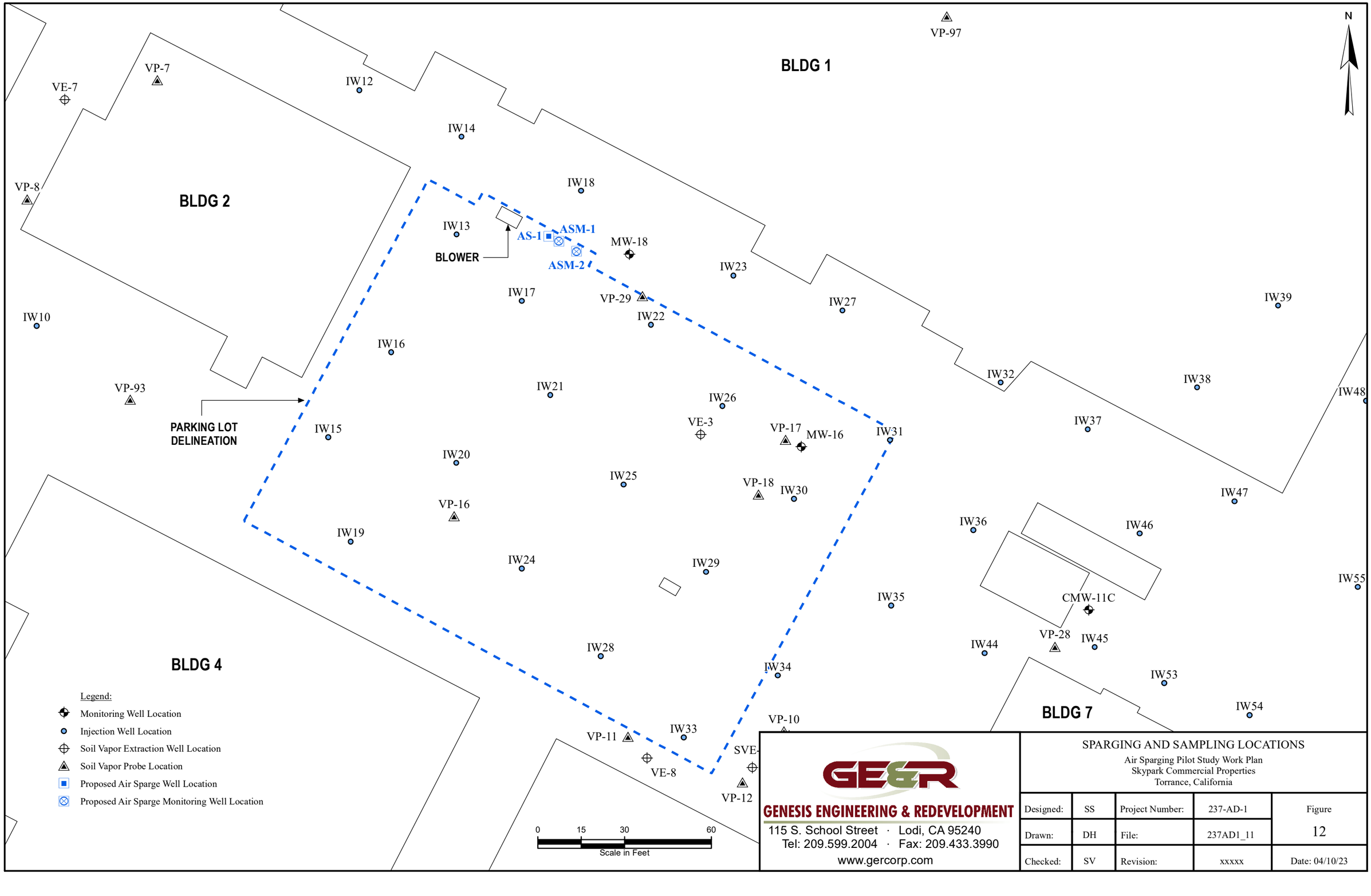
A copy of the Pilot Study Work Plan for your review can be found in the GeoTracker link below.
https://documents.geotracker.waterboards.ca.gov/esi/uploads/geo_report/3115725934/T10000014333.PDF

Thank you,

Kevin Lin, P.E.
Water Resource Control Engineer
Los Angeles Regional Water Quality Control Board
Site Cleanup Program Unit IV
320 West 4th Street, Suite 200
Los Angeles, CA 90013
213-576-6781

Due to COVID-19, I am teleworking on a full-time basis.
E-mail is the best way to reach me for immediate assistance.

Attachment 2 - Figure 12 – Sparging and Sampling Locations

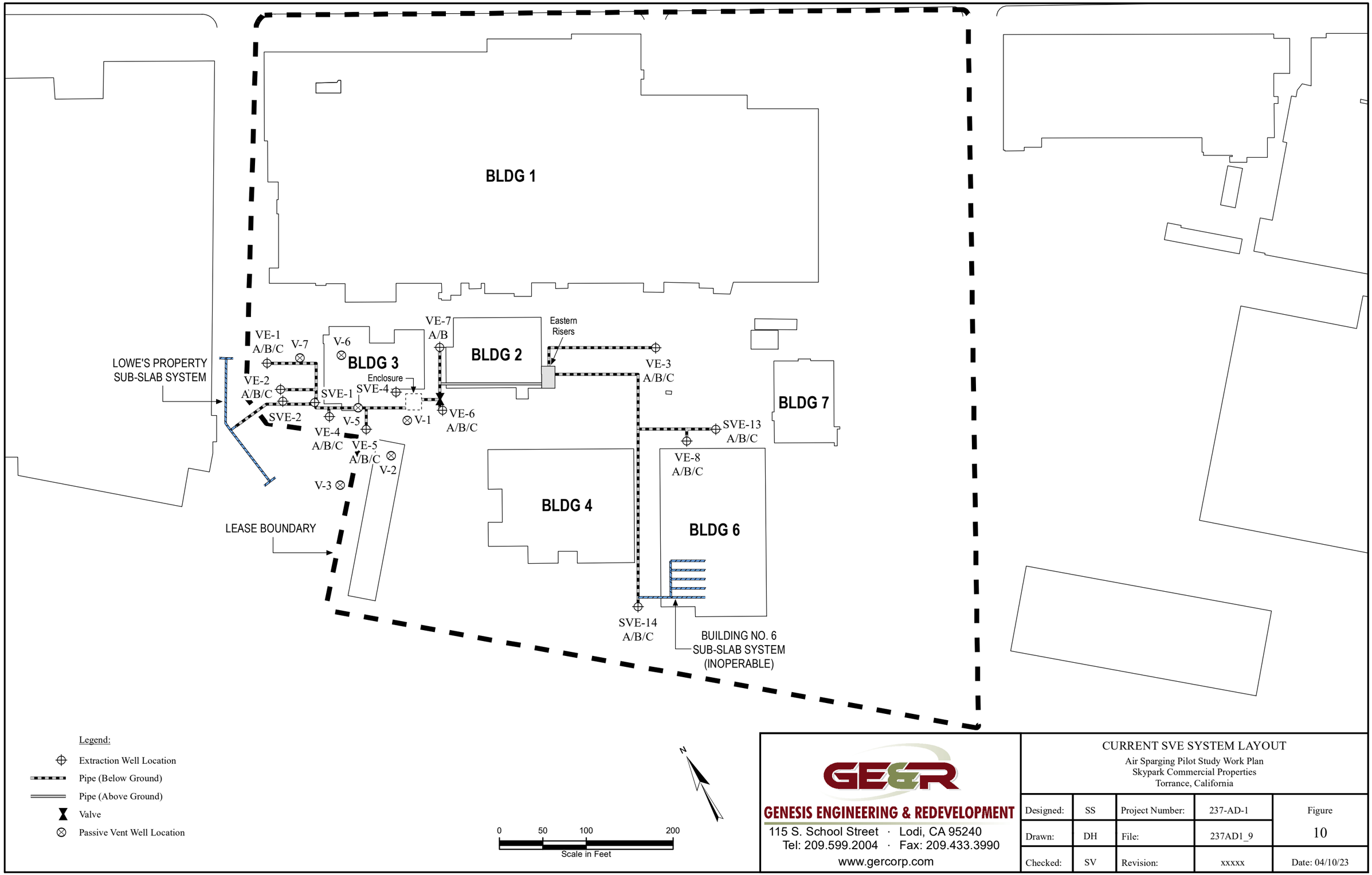


GENESIS ENGINEERING & REDEVELOPMENT
115 S. School Street · Lodi, CA 95240
Tel: 209.599.2004 · Fax: 209.433.3990
www.gercorp.com

SPARGING AND SAMPLING LOCATIONS
Air Sparging Pilot Study Work Plan
Skypark Commercial Properties
Torrance, California

Designed:	SS	Project Number:	237-AD-1	Figure 12
Drawn:	DH	File:	237AD1_11	
Checked:	SV	Revision:	xxxxx	Date: 04/10/23

Attachment 3 - Figure 10 – Current SVE System Layout



GENESIS ENGINEERING & REDEVELOPMENT
115 S. School Street · Lodi, CA 95240
Tel: 209.599.2004 · Fax: 209.433.3990
www.gercorp.com

CURRENT SVE SYSTEM LAYOUT
Air Sparging Pilot Study Work Plan
Skypark Commercial Properties
Torrance, California

Designed:	SS	Project Number:	237-AD-1	Figure 10
Drawn:	DH	File:	237AD1_9	
Checked:	SV	Revision:	xxxxx	Date: 04/10/23

CLEANUP AND ABATEMENT ORDER NO. R4-2021-0079
ATTACHMENT B: REVISED TIME SCHEDULE

DIRECTIVE	DUE DATE
1. Site Conceptual Model: The Dischargers shall prepare and submit to the Regional Board a Site Conceptual Model which provides details on and illustrates waste discharge scenario(s), geology and hydrogeology, waste constituent fate and transport in soil, soil vapor, and groundwater, distribution of waste constituents, exposure pathways, sensitive receptors and other relevant information. [Note that the Regional Board may require revisions to the Site Conceptual Model as necessary to complete the Model.]	(Directive 1) Site Conceptual Model due **September 10, 2021.** Revisions due within 60 days of receiving directive from the Regional Board.
2. Risk Assessment: The Dischargers shall:	
a. Prepare and submit a comprehensive HHRA	(Directive 2.a.) **September 10, 2021**
b. Prepare and submit implementation reports for the response zones designated in the Vapor Intrusion Response Plan.	
i. Completion report for the Accelerated Response Zone	(Directive 2.b.i.) **August 15, 2022**
ii. Interim completion report for the Evaluate Need for Action Zone.	(Directive 2.b.ii.) **August 15, 2022**
iii. Completion report for the Evaluate need for Action Zone	(Directive 2.b.iii.) **March 17, 2023**
c. Submit a revised Evaluate Need for Action Zone Plan and its Figure 7 – Proposed VI Assessment Sectors	(Directive 2.c.) **August 13, 2021**
d. Prepare and submit **semi-annual** and **annual** soil vapor monitoring reports.	
i. Continue to monitor and submit semi-annual soil vapor probe monitoring reports for the	(Directive 2.d.i) **Semi-annually beginning January 31, 2022**

DIRECTIVE	DUE DATE
network of soil vapor probes (at 5 and 15 feet below ground surface) east of Crenshaw Boulevard as conditionally approved on November 15, 2021.	
ii. Monitor and submit annual soil vapor monitoring reports for all soil vapor probes across all depths associated with the Site, not otherwise covered in Directive 2.d.i. (above).	(Directive 2.d.ii.) First Site-wide annual soil vapor monitoring report due **July 31, 2024**.
Monitoring Periods April – June (Semiannual; Annual) October – December (Semiannual)	**Report Due Date** July 31st January 31st
3. Site Assessment:	
a. The Dischargers shall prepare and submit Site Assessment Work Plan(s) for each Property	(Directive 3.a.) **September 10, 2021**
The Dischargers shall implement the Site Assessment Work Plan(s) according to the approved schedule	(Directive 3.a.) According to the schedule approved by the Executive Officer. Vertical and lateral delineation must be completed no later than **September 12, 2022**
The Dischargers shall submit the Site Assessment Completion Report(s)	(Directive 3.a.) According to the schedule approved by the Executive Officer
Submit implementation report for the investigative component of the Revised EAP IRAP.	(Directive 3.a.) **December 30, 2022**
b. Hi-Shear Corporation shall submit the Additional Scope Report	(Directive 3.b.) **October 15, 2021**
c. Hi-Shear Corporation shall submit the Module IV Report	(Directive 3.c.) **October 15, 2021**
d. Hi-Shear Corporation shall submit the Onsite Vertical Groundwater Investigation Report	(Directive 3.d.) **August 27, 2021**

DIRECTIVE	DUE DATE
e. The Dischargers shall submit the Groundwater Modeling Work Plan	(Directive 3.e.) **January 7, 2022**
4. Conduct Remedial Action: The Dischargers shall:	
a. Develop and submit the IRAP(s)	(Directive 4.a.) **August 31, 2021**
i. Submit the Groundwater IRAP implementation report	(Directive 4.a.i.) **December 15, 2023**
1. Implementation of Hi-Shear Corporation's *Source Control Pilot Study Work Plan*	
a. Commence operation of pilot air sparging system	(Directive 4.a.i.1.a.) **December 15, 2023**
b. Implementation report for air sparging period (i.e., six months of air sparging) of *Source Control Pilot Study Work Plan*	(Directive 4.a.i.1.b.) **July 31, 2024**
This is a conditional reprieve from the EISB component of the Groundwater IRAP at the Hi-Shear Corporation property. If AS is determined to be ineffective, then the following conditional deadlines will become operative.	
a. Submit a complete application/report of Waste Discharge (Form 200)	(Directive 4.a.i.1.a. [conditional]) **September 30, 2024**
b. EISB implementation at the Hi-Shear Property	(Directive 4.a.i.1.b. [conditional]) **December 31, 2024**
c. Prepare and submit quarterly EISB progress reports	(Directive 4.a.i.1.c. [conditional]) Quarterly beginning **April 15, 2025**.
Monitoring Period January – March April – June	**Report Due Date** April 15 July 15

DIRECTIVE	DUE DATE
July – September October – December	October 15 January 15
ii. Prepare and submit Remediation Progress Reports for the implementation of the Groundwater IRAP according to the Los Angeles Regional Water Quality Control Board letter, "Review of a Technical Memorandum," dated April 14, 2023	(Directive 4.a.ii.) Quarterly beginning April 15 of the year implementation of the Groundwater IRAP begins.
iii. Submit the Revised EAP IRAP implementation report	(Directive 4.a.iii.) **September 15, 2023**
1. Submit a complete application/report of Waste Discharge (Form 200)	(Directive 4.a.iii.1.) **February 24, 2023**
iv. Prepare and submit Remediation Progress Reports for the implementation of the Revised EAP IRAP	(Directive 4.a.iv.) Tri-annually beginning September 15 of the year implementation of the Revised EAP IRAP begins.
v. Develop and submit a work plan to address soil vapor impacts beneath the northern half of the Hi-Shear Corporation property.	(Directive 4.a.v.) **November 30, 2023**
vi. Prepare and submit quarterly Hi-Shear Corporation property *SVE System Operation* reports	(Directive 4.a.vi.) Quarterly beginning October 15, 2023
Monitoring Period January – March April – June July – September October – December	**Report Due Date** April 15 July 15 October 15 January 15
b. Develop and submit the RAP(s)	(Directive 4.b.) **March 31, 2022**
i. Amend and revise Hi-Shear Corporation's Draft Remedial Action Plan (a.k.a. Draft RAP)	(Directive 4.b.i.) **March 31, 2025**

DIRECTIVE	DUE DATE
to propose comprehensive remedial action plan(s) for cleanup of wastes in soil matrix, soil vapor, and groundwater	
Implement the RAP(s)	(Directive 4.b.) According to the schedule in the RAP approved by the Executive Officer. RAP Implementation must be complete and cleanup achieved by **March 31, 2027**.
Prepare and submit Remediation Progress Reports for the implementation of the RAP(s)	(Directive 4.b.) Quarterly beginning January 15 of the year implementation of the RAP begins
Upon completion of implementation of the RAP, submit a Remedial Action Completion Report	(Directive 4.b.) 60 days after completion of implementation of the RAP
5. Groundwater Monitoring: The Dischargers shall conduct groundwater monitoring according to the Los Angeles Regional Water Quality Control Board letter, "Review of Proposed Revisions to the Groundwater Monitoring Plan and Second Tri-Annual 2022 Groundwater Monitoring Report," dated April 14, 2023; Attachment C (Monitoring and Reporting Program) and the following schedule.	(Directive 5) The next groundwater monitoring report is due on **October 15, 2023**.
Monitoring Period January – March (Quarterly gauging; Semiannual monitoring and reporting)	(Directive 5) **Report Due Date** April 15th
April – June (Quarterly gauging)	(Directive 5) To be included in the October 15th due date
July – September (Quarterly gauging; Semiannual monitoring and reporting; Select constituents monitored and reported annually or biennially, as detailed in Table 1 of the Los Angeles Regional Water Quality Control Board letter, "Review of Proposed Revisions to the Groundwater Monitoring Plan and Second Tri-Annual 2022 Groundwater Monitoring Report," dated April 14, 2023)	(Directive 5) October 15th

DIRECTIVE	DUE DATE
October – December (Quarterly gauging)	(Directive 5) To be included in the April 15th due date
6. Public Participation: The Dischargers shall submit information and take actions addressing public participation requirements of CWC sections 13307.5 and 13307.6, including, but not limited to:	
a. Submit a baseline community assessment	(Directive 6.a.) According to the schedule approved by the Executive Officer.
b. Submit an interested persons contact list	(Directive 6.b.) According to the schedule approved by the Executive Officer.
c. Submit a draft fact sheet	(Directive 6.c.) According to the schedule approved by the Executive Officer.

CLEANUP AND ABATEMENT ORDER NO. R4-2021-0079
ATTACHMENT B: REVISED TIME SCHEDULE

DIRECTIVE	DUE DATE
1. Site Conceptual Model: The Dischargers shall prepare and submit to the Regional Board a Site Conceptual Model which provides details on and illustrates waste discharge scenario(s), geology and hydrogeology, waste constituent fate and transport in soil, soil vapor, and groundwater, distribution of waste constituents, exposure pathways, sensitive receptors and other relevant information. [Note that the Regional Board may require revisions to the Site Conceptual Model as necessary to complete the Model.]	(Directive 1) Site Conceptual Model due **September 10, 2021.** Revisions due within 60 days of receiving directive from the Regional Board.
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DIRECTIVE	DUE DATE
network of soil vapor probes (at 5 and 15 feet below ground surface) east of Crenshaw Boulevard as conditionally approved on November 15, 2021.	(Directive 2.d.i) **Semi-annually beginning January 31, 2022**
ii. Monitor and submit annual soil vapor monitoring reports for all soil vapor probes across all depths associated with the Site, not otherwise covered in Directive 2.d.i. (above). **Monitoring Periods** April – June (Semiannual; Annual) October – December (Semiannual)	(Directive 2.d.ii.) First Site-wide annual soil vapor monitoring report due **July 31, 2024**. **Report Due Date** July 31st January 31st
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The Dischargers shall submit the Site Assessment Completion Report(s)	(Directive 3.a.) According to the schedule approved by the Executive Officer
Submit implementation report for the investigative component of the Revised EAP IRAP.	(Directive 3.a.) **December 30, 2022**
b. Hi-Shear Corporation shall submit the Additional Scope Report	(Directive 3.b.) **October 15, 2021**
c. Hi-Shear Corporation shall submit the Module IV Report	
d. Hi-Shear Corporation shall submit the Onsite Vertical Groundwater Investigation Report	(Directive 3.c.) **October 15, 2021**

DIRECTIVE	DUE DATE
e. The Dischargers shall submit the Groundwater Modeling Work Plan	(Directive 3.d.) **August 27, 2021** (Directive 3.e.) **January 7, 2022**
4. Conduct Remedial Action: The Dischargers shall:	
a. Develop and submit the IRAP(s)	(Directive 4.a.) **August 31, 2021**
i. Submit the Groundwater IRAP implementation report	(Directive 4.a.i.) **December 15, 2023**
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a. Commence operation of pilot air sparging system	(Directive 4.a.i.1.a.) **December 15, 2023**
b. Implementation report for air sparging period (i.e., six months of air sparging) of *Source Control Pilot Study Work Plan*	(Directive 4.a.i.1.b.) **July 31, 2024**
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b. EISB implementation at the Hi-Shear Property	(Directive 4.a.i.1.b. [conditional]) **December 31, 2024**
c. Prepare and submit quarterly EISB progress reports	(Directive 4.a.i.1.c. [conditional]) Quarterly beginning **April 15, 2025**.

DIRECTIVE	DUE DATE
Monitoring Period January – March April – June July – September October – December	**Report Due Date** April 15 July 15 October 15 January 15
~~i.~~ii. Prepare and submit Remediation Progress Reports for the implementation of the Groundwater IRAP according to the Los Angeles Regional Water Quality Control Board letter, "Review of a Technical Memorandum," dated April 14, 2023	(Directive 4.a.ii.) Quarterly beginning April 15 of the year implementation of the Groundwater IRAP begins.
~~ii.~~iii. Submit the Revised EAP IRAP implementation report	(Directive 4.a.iii.) **September 15, 2023**
1. Submit a complete application/report of Waste Discharge (Form 200)	(Directive 4.a.iii.1.) **February 24, 2023**
iv. Prepare and submit Remediation Progress Reports for the implementation of the Revised EAP IRAP	(Directive 4.a.iv.) Tri-annually beginning September 15 of the year implementation of the Revised EAP IRAP begins.
v. Develop and submit a work plan to address soil vapor impacts beneath the northern half of the Hi-Shear Corporation property.	(Directive 4.a.v.) **November 30, 2023**
vi. Prepare and submit quarterly Hi-Shear Corporation property *SVE System Operation* reports ~~of RemediationNorthern Half of the~~ **Monitoring Period** January – March April – June July – September October – December	(Directive 4.a.vi.) Quarterly beginning October 15, 2023 **Report Due Date** April 15 July 15 October 15

DIRECTIVE	DUE DATE
b. Develop and submit the RAP(s)	January 15
~~iii.~~ i. Amend and revise Hi-Shear Corporation's Draft Remedial Action Plan (a.k.a. Draft RAP) to propose comprehensive remedial action plan(s) for cleanup of wastes in soil matrix, soil vapor, and groundwater	(Directive 4.b.) **March 31, 2022** (Directive 4.b.i.) **March 31, 2025**
Implement the RAP(s)	(Directive 4.b.) According to the schedule in the RAP approved by the Executive Officer. RAP Implementation must be complete and cleanup achieved by **March 31, 2027**.
Prepare and submit Remediation Progress Reports for the implementation of the RAP(s)	(Directive 4.b.) Quarterly beginning January 15 of the year implementation of the RAP begins
Upon completion of implementation of the RAP, submit a Remedial Action Completion Report	(Directive 4.b.) 60 days after completion of implementation of the RAP
5. Groundwater Monitoring: The Dischargers shall conduct groundwater monitoring according to the Los Angeles Regional Water Quality Control Board letter, "Review of Proposed Revisions to the Groundwater Monitoring Plan and Second Tri-Annual 2022 Groundwater Monitoring Report," dated April 14, 2023; Attachment C (Monitoring and Reporting Program) and the following schedule.	(Directive 5) The next groundwater monitoring report is due on **October 15, 2023**.
Monitoring Period January – March (Quarterly gauging; Semiannual monitoring and reporting) April – June (Quarterly gauging)	(Directive 5) **Report Due Date** April 15th

DIRECTIVE	DUE DATE
July – September (Quarterly gauging; Semiannual monitoring and reporting; Select constituents monitored and reported annually or biennially, as detailed in Table 1 of the Los Angeles Regional Water Quality Control Board letter, "Review of Proposed Revisions to the Groundwater Monitoring Plan and Second Tri-Annual 2022 Groundwater Monitoring Report," dated April 14, 2023)	(Directive 5) To be included in the October 15th due date
October – December (Quarterly gauging)	(Directive 5) October 15th
	(Directive 5) To be included in the April 15th due date
6. Public Participation: The Dischargers shall submit information and take actions addressing public participation requirements of CWC sections 13307.5 and 13307.6, including, but not limited to:	
a. Submit a baseline community assessment	(Directive 6.a.) According to the schedule approved by the Executive Officer.
b. Submit an interested persons contact list	(Directive 6.b.) According to the schedule approved by the Executive Officer.
c. Submit a draft fact sheet	(Directive 6.c.) According to the schedule approved by the Executive Officer.