CIDER ENVIRONMENTAL
6268 Jericho Turnpike, Suite 12, Commack, NY 11725 | ww.CiderEnvironmental.com
P: (631) 616-4000 | F: (631) 980-7972 | E-mail: info@ciderenvironmental.com

January 15, 2025

Mr. Robert V. Bellotti
Project Manager, Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7015

Re: Soil Vapor Intrusion Investigation Work Plan (2nd submittal)
Site Name: Jackson Steel
Site Code: 130095
Site Address:435 First Street, Mineola, NY 11501
Project No.: CE2025-002

Dear Mr. Bellotti:

Cider Environmental (CE), on behalf of Mineola 435 LLC, has prepared this Soil Vapor Intrusion (SVI) Investigation Plan for the above referenced property (the "Site" or the "Subject Property"). The proposed work was based on the approved Soil Vapor Intrusion Investigation Work Plan (dated 3/23/2021 and prepared by Fleming Engineering) and the requirements of the New York State Department of Environmental Conservation (NYSDEC).

Site Conditions

The Site is located at 435 First Street, Mineola, NY, and consists of a 1.5-acre property with a vacant, one-story, 43,000 square foot building formerly used as a metal forming facility and an approximately 10,000 square foot paved parking area.

Soil, groundwater, and soil vapor remediation occurred under United States Environmental Protection Agency (USEPA) direction from 2005 through 2013. Remediation included excavation of contaminated surface soil and contaminated material in the building sumps, trench, and dry wells; in situ chemical oxidation; and Soil Vapor Extraction (SVE) to treat sub-surface soil. The in situ chemical oxidation component included approximately 15,000 gallons of iron-catalyzed sodium persulfate and 600 gallons of hydrogen peroxide. The SVE system operated from 2005 through 2013.

Previous SVI Investigation

In March 2017, NYSDEC collected nine (9) sub-slab soil vapor samples and three (3) indoor air samples at the Site. For sub-slab vapor samples, PCE was detected at max. 8,500 µg/m^3 and TCE was detected at max. 320 µg/m^3. For indoor air samples, PCE was detected at max. 0.49 µg/m^3 and TCE was non-detect.

In May 2021, Fleming Engineering collected eight (8) sub-slab soil vapor samples at the Site. PCE was detected at max. 302 µg/m^3 and TCE was detected at max. 117 µg/m^3. No indoor air samples were collected due to the condition of the building slab and roof.

Proposed SVI Investigation

The scope of the proposed SVI investigation work was based on the approved Soil Vapor Intrusion Investigation Work Plan (dated 3/23/2021 and prepared by Fleming Engineering) and the NYSDEC requirements. All sampling work will be conducted in accordance with the *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH October 2006 with update)*. The proposed sampling locations can be referenced with **Figure 1**.

Pre-Work Field Preparation

Prior to the commencement of the sampling work, CE will perform a pre-sampling inspection: 1) to evaluate the physical layout and conditions of the building; 2) to field verify (and modify if necessary) the sampling locations; 3) to identify conditions that may potentially affect or interfere with the proposed sampling; and 4) to prepare the building for sampling. The following actions were taken:

- Identify the storage of volatile chemicals.
- Identify heating or air conditioning systems.
- Prepare floor plan sketches showing sampling locations, chemical storage, doorways, stairways, sumps or drains, utility perforations through building foundations, and HVAC system supply and return registers.

Air Sampling Work

Eight (8) sub-slab soil vapor samples (SV-1 through SV-8) will be collected through existing sampling ports (installed in 2021 by Fleming). If any sampling ports are damaged or inaccessible, they will be replaced in accordance with the procedures detailed in the Soil Vapor Intrusion Investigation Work Plan (dated 3/23/2021 and prepared by Fleming Engineering).

Eight (8) indoor air samples (IA-1 through IA-8) will be collected. Each sub-slab sample will have a corresponding indoor air sample.

One (1) outdoor/ambient air sample (AA-1) will be collected from outside the building.

Sampling duration for all air samples will be 8 hours (for commercial/industrial uses). Each sampling canister will be equipped with an 8-hour regulator and a pressure gauge. Pressure readings will be recorded every 2 hours from the beginning to end of the sampling event.

Samples will be collected in 6 Litter Summa canisters that have been certified clean by the laboratory and samples will be analyzed by using USEPA Method TO-15. Flow rate for both purging and sampling will not exceed 0.2 L/min. Three implant volumes shall be purged prior to the collection of any soil-vapor samples. A sample log sheet will be maintained summarizing sample identification, date and time of sample collection, sampling depth, identity of samplers, sampling methods and devices, soil vapor purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after the samples are collected, apparent moisture content of the sampling zone, and chain of custody protocols.

As part of the vapor intrusion evaluation, a tracer gas will be used in accordance with NYSDOH protocols to serve as a quality assurance/quality control (QA/QC) device to verify the integrity of the soil vapor probe seal. A container (box, plastic pail, etc.) will serve to keep the tracer gas in contact with the probe during testing. A portable monitoring device will be used to analyze a sample of soil vapor for the tracer gas prior to sampling. If the tracer sample results show a significant presence of the tracer, the probe seals will be adjusted to prevent infiltration. At the conclusion of the sampling round, tracer monitoring will be performed a second time to confirm the integrity of the probe seals.

Laboratory Analysis

Eight (8) sub-slab soil vapor samples, eight (8) indoor air samples and one (1) outdoor air sample will be analyzed via USEPA Test Method TO-15 for VOCs by NYSDEC July 2005 ASP methods as shown below:

- VOCs by EPA Method TO-15
- Analysis of naphthalene will be included.
- The following 5 compounds in indoor and ambient air samples: trichloroethene; cis-1,2-dichloroethene; 1,1-dichloroethene; carbon tetrachloride and vinyl chloride will have a minimum laboratory reporting limit of 0.20 micrograms per cubic meter (mcg/m^3) or less, by EPA Method TO-15 Selected Ion Monitoring (SIM).
- Eight (8) sub-slab soil vapor samples will also be analyzed for helium for QA/QC.

Reporting

Once the investigation is complete, an SVI Investigation Report will be prepared and submitted to the NYSDEC.

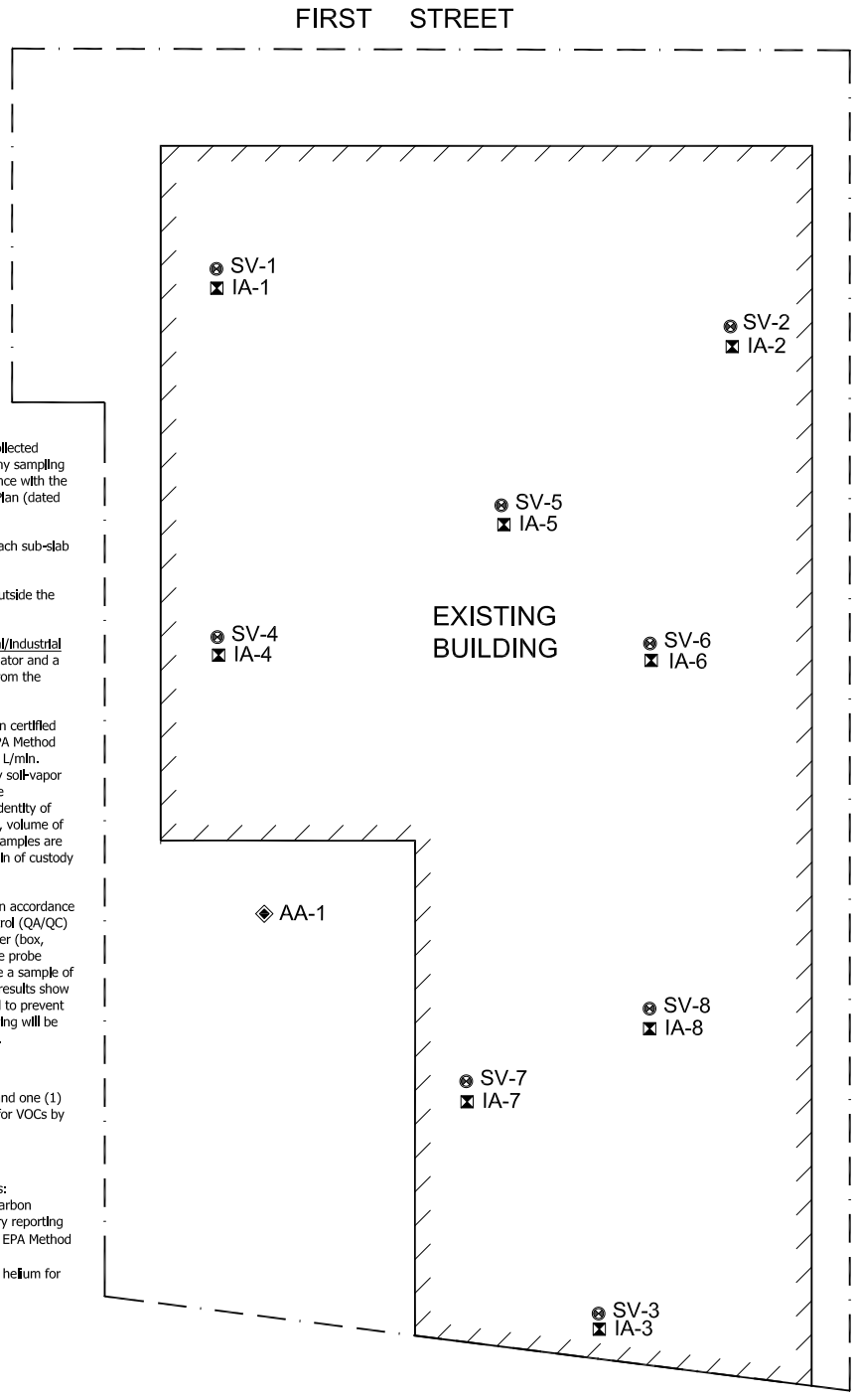
Please do not hesitate to contact us with any questions or comments.

Sincerely,

CIDER ENVIRONMENTAL



Wenqing Fang, P.E.
Sr. Consultant/Principal



Note:
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Scale In Feet
10 5 0 10 20 50

Legend

- Soil Gas Sampling Point
- Indoor Air Sampling Location
- Outdoor Air Sampling Location

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TITLE: Proposed Sampling Locations

435 First Street, Mineola, New York

DRAWN BY:	WF	REVISED BY:		PROJECT No. CE2025-002
CHECKED BY:	JC	REVISED DATE:		
DATE:	1-15-2025	APPROVED BY:		FIGURE No. 01
SCALE:	1" = 50'	FILE NAME:		

CIDER ENVIRONMENTAL
Tel: (631) 616-4000 Fax: (631)980-7972
www.CiderEnvironmental.com
6268 Jericho Tpke, Suite 12, Commack, NY 11725