

C.T. MALE ASSOCIATES

Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

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March 11, 2021

Revised March 15, 2021

VIA EMAIL

Ms. Kimberly Junkins, Environmental Engineer
NYSDEC Region 3 - Division of Environmental Remediation
21 South Putt Corners Road
New Paltz, NY 12561-1620

**RE: Remedial Investigation Work Plan (Soil Vapor Investigation Modification)
Mobile Media Inc., NYSDEC Site No: C336093
Town of Crawford, Orange County
C.T. Male Project No: 19.9347**

Dear Ms. Junkins:

This letter work plan describes the scope of work proposed to complete the soil vapor intrusion (SVI) investigation portion of the Draft Remedial Investigation Work Plan (RIWP) submitted by C.T. Male Associates (C.T. Male) in January 2021 on behalf of the Participant, Mobile Media, Inc., for the NYSDEC Site No. C336093. This SVI portion of the RIWP has been prepared to address the Department's requests to conduct an SVI investigation in the primary building during the current heating season, that is, before March 31, 2021. The investigation will be performed in accordance with the New York State Department of Health's (NYSDOH) Final Soil Vapor Intrusion Guidance dated October 2006 and NYSDEC Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10, May 3, 2010). Methodology, quality assurance/quality control, health and safety (including community air monitoring) and citizen participation activities will be implemented in accordance with the C.T. Male Draft RIWP.

Background

The Site is located at 175 Kelly Avenue Pine Bush, Orange County New York 12566. The Site consists of one tax parcel which encompasses approximately 0.48 acres of land known on the Orange County Tax Map as S.B.L. 6-8-3. The coordinates for the approximate center of the Site are 41° 36' 23.9034" latitude and -74° 18' 3.33" longitude. The approximate Site boundaries are depicted on Figure 1, Soil Vapor Locations.

C.T. MALE ASSOCIATES

NYSDEC, Ms. Kimberly Junkins

Page - 2

This Site features a single structure where Mobile Media Inc. operated a small commercial manufacturing facility, making specialty high density shelving for the retail industry. Mobile Media Inc. has since relocated its operations to a facility in Ellenville, NY. The building is currently used as a warehouse.

Southwest of and directly across Kelly Avenue from the Site, there is a small parking lot that is also owned by Mobile Media Inc. This parcel, which is not part of the BCP Site, is covered by parking lot and is sparsely wooded with trees and landscaping.

As per the NYSDEC's direction, and in consideration of protection of the health of the personnel reporting work inside the structure, the Participant intends to perform the SVI investigation during the current heating season. The results of the SVI investigation will be incorporated into the Draft RIWP.

Scope of Work

The scope work is proposed to complete an SVI during the current heating season. The results of the investigation will be used to inform and adapt or adjust the proposed field investigation.

The following work will be implemented during this initial phase of the remedial investigation:

- Install two sub-slab vapor wells in the basement of the existing structure (Sub-Slab #1) and collect two (2) sub-slab samples;
- Collect four (4) indoor air samples as follows:
 - Two (2) indoor air (IA-1) sample co-located with the sub-slab vapor sample;
 - One (1) indoor air (IA-2) sample near the location of the sump pit in the basement; and
 - One (1) indoor air (IA-3) sample in a 1st floor occupied space.
- Collect one (1) ambient air sample (AA-1);
- Submit sub-slab vapor, indoor air and ambient air samples (a total of seven samples) to an NYS ELAP certified laboratory for volatile organic compound (VOC) analysis via EPA Method TO-15.

C.T. MALE ASSOCIATES

NYSDEC, Ms. Kimberly Junkins

Page - 3

Sub-slab Vapor Point Installation and Vapor Sampling Methodology

Sub-slab soil vapor points will be installed and samples will be collected in accordance with Section 3.3.9 of the Draft RIWP and NYSDOH's SVI Guidance as described below. 24 hours prior to sampling, the heating systems in any vacant structures will be turned on and will operate to maintain normal indoor air temperatures (65°F to 75°F). The heating systems will remain operational until sub-slab soil vapor sampling is complete.

Temporary sub-slab soil vapor points will be installed using a hand-held hammer drill with a concrete drill bit. The drill bit will be extended a maximum two inches below the floor slab for sub-slab soil vapor samples. At the terminal depth of sub-slab soil vapor locations, the sample probe will be attached to ¼-inch diameter non-reactive tubing and extended to the surface. The borehole above the sampling probe to grade will be sealed using an inert sealant to prevent ambient air mixing with the soil vapor. Ambient air will be purged from the boring hole by attaching the surface end of the ¼-inch diameter non-reactive tube to an air valve and then to a vacuum pump. The vacuum pump will remove no more than one to three volumes of air (volume of the sample probe and tube) prior to sample collection. The flow rate for both purging and sample collection will not exceed 0.2 liters per minute.

The sub-slab soil vapor samples will be first screened for VOCs using a photoionization detector (PID). A tracer gas (helium) will be used in accordance with the NYSDOH protocols to evaluate the integrity of the soil vapor probe seal. Helium will be used as the tracer gas and a bucket will serve to keep it in contact with the probe during testing. A portable monitoring device will be used to analyze a sample of soil vapor from the tracer prior to sampling. Although there is an allowable amount of tracer gas that can be detected as per the NYSDOH SVI Guidance, if the tracer sample results show any presence of the tracer gas, the probe seals will be adjusted to prevent infiltration which would result in the generation of inaccurate (likely biased low) results.

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. A building questionnaire and product inventory will be completed, in accordance with NYSDOH's SVI Guidance.

Sub-slab soil vapor samples will be collected in laboratory-supplied 6-liter Summa canisters using eight-hour regulators. All samples will be sealed, labeled, and placed in a secure container for delivery to a NYSDOH ELAP-certified analytical laboratory. Sub-

C.T. MALE ASSOCIATES

NYSDEC, Ms. Kimberly Junkins

Page - 4

slab soil vapor samples will be analyzed for EPA Method TO-15 VOCs. Analytical methods will achieve a minimum reporting limit of 1.0 micrograms per cubic meter (ug/m³) for all sub-slab samples.

Indoor Air and Ambient Air Sampling Methodology

Indoor air and ambient air samples will be collected in accordance with Section 3.3.9 of the Draft RIWP and NYSDOH's SVI Guidance as described below. 24 hours prior to sampling, the heating systems in any vacant structures will be turned on and will operate to maintain normal indoor air temperatures (65°F to 75°F). The heating systems will remain operational until indoor air sampling is complete.

An indoor air sample will be co-located with sub-slab soil vapor sample within the lowest level the building. Additionally, one indoor air sample will be collected near the location of the sump pit in the basement and one indoor air sample will be collected from the ground floor in an occupied space. Both indoor and ambient air samples will be collected from breathing height (three to five feet above the floor). A secure, upwind location will be selected for the collection of the exterior ambient sample. The sampling flow rate will not exceed 0.2 liters per minute (L/min). Sampling will occur for a duration of eight hours. 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. A building questionnaire and product inventory will be completed, in accordance with NYSDOH's SVI Guidance.

Samples will be collected during the heating season in laboratory-supplied 6-liter Summa canisters using eight- hour regulators in commercial structures and will be sealed, labeled, and placed in a secure container for delivery to a NYSDOH ELAP-certified analytical laboratory. All samples will be analyzed for EPA Method TO-15 VOCs. For indoor air samples, analytical methods will achieve a minimum reporting limit of 1.0 micrograms per cubic meter (ug/m³) for methylene chloride, tetrachloroethene and 1,1,1- trichloroethane; additionally, methods will achieve a minimum reporting limit of 0.2 ug/m³ for carbon tetrachloride, 1,1-dichloroethene, cis-1,2-dichloroethene, trichloroethene and vinyl chloride.

C.T. MALE ASSOCIATES

NYSDEC, Ms. Kimberly Junkins

Page - 5

Quality Assurance/Quality Control

Sub-slab soil vapor, indoor air and ambient air samples will be collected in accordance with the Quality Assurance Project Plan (QAPP) included as Appendix B of the Draft RIWP. The laboratory will report sample results on a standard turn-around time. An independent sub-consultant will validate sample results and a Data Usability Summary Report (DUSR) will be prepared.

Health and Safety

All work at the Site will be completed in accordance with the Health and Safety Plan (HASP) included in Appendix C of the Draft RIWP.

Air Monitoring and Daily Reporting

Ground-intrusive sampling activities are not planned, therefore, a Community Air Monitoring Plan (CAMP), will not be required. Daily reports will be sent to the NYSDOH and NYSDEC Project Manager via email. Daily reports will include a Site figure depicting Work Zones, activities, representative photos of work performed, and wind direction.

Reporting

The findings of the soil vapor investigation will be incorporated into the draft RIWP and submitted to NYSDEC and NYSDOH for approval. We will review the results with you, especially if the findings may alter future remedial investigations.

C.T. MALE ASSOCIATES

NYSDEC, Ms. Kimberly Junkins
Page - 6

Please contact me or Jim McIver with any questions, and if further information is needed. You can reach us at: (845) 454-4400 or k.garbarino@ctmale.com or j.mciver@ctmale.com.

Sincerely,

C.T. MALE ASSOCIATES

A handwritten signature in black ink, appearing to read 'K. Garbarino', written over a horizontal line.

Kristine Garbarino, P.G.
Managing Geologist

Attachments: Figure 1: Soil Vapor Sample Locations

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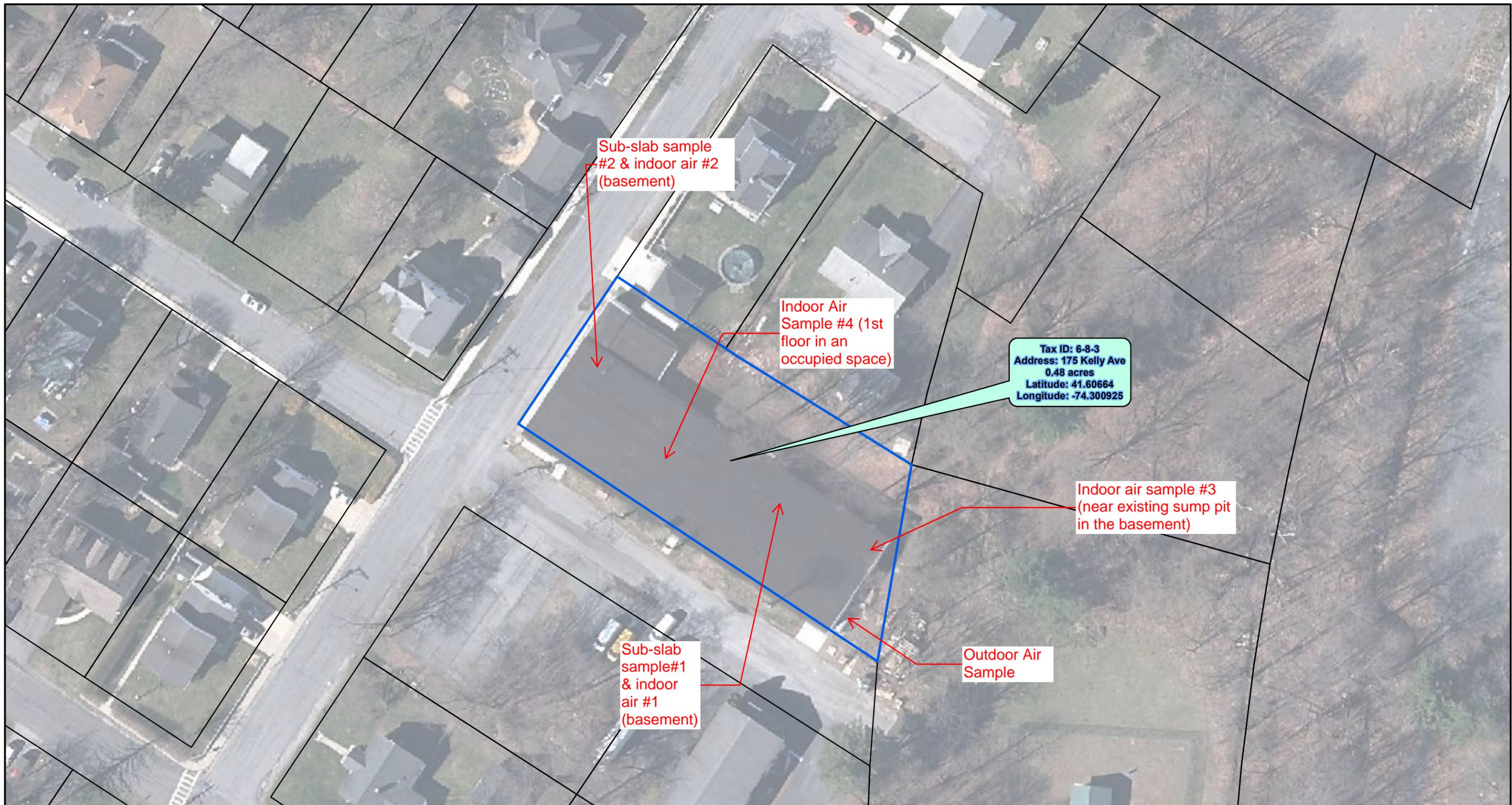
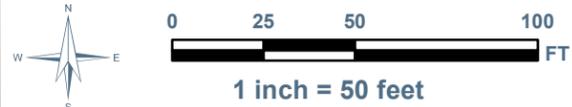


Figure 1
Soil Vapor Sample Locations

Town of Crawford Orange County, NY



Map Note: The locations and features depicted on this map are approximate and do not represent a field survey.

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Project Number: 19.9347
Data Source: NYSGIS Clearinghouse
Projection: State Plane NAD83 NYE (Feet)
Date: December 16, 2020
File: KellyAve_ParcelMap_11x17.mxd
GIS: D Landreville

Legend

- Parcel of Interest (Approx.)
- Orange County Tax Parcels 2018 (Approx.)