**Environmental Resources Management**

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31 July 2019

John P. McAuliffe, P.E.
Honeywell
301 Plainfield Road, Suite 330
Syracuse, New York 13212

RE: Supplemental Site Characterization Phase 2 Scope of Work
Oak Materials Site (River Road 1, 2 and 3)
Town of Hoosick, Rensselaer Co., New York
NYSDEC Site Number 442008

Dear Mr. McAuliffe:

Honeywell is performing a Site Characterization (SC) at the above-referenced property as required by the Order on Consent and Administrative Settlement Index Number 4-20160415-79 between Honeywell and the New York State Department of Environmental Conservation (NYSDEC). The work is being performed consistent with the NYSDEC-approved Final Supplemental SC Scope of Work dated 5 December 2018.

Soil and groundwater laboratory analytical results for Supplemental SC work performed to date are summarized in Table 1 and Table 2, respectively. Figure 1 summarizes groundwater volatile organic compound (VOC) data and Figure 2 summarizes groundwater field parameter data.

ERM Consulting & Engineering, Inc. (ERM) proposes the additional work (Phase 2) shown in Figure 3 (attached) and as described in this work plan to further the SC of the River Road property. The Supplemental SC Phase 2 work will be performed using NYSDEC-approved methods contained in:

- the SC Field Sampling and Analysis Plan (FSAP) dated July 2016;
- the updated Quality Assurance Project Plan (QAPP) dated 16 March 2018; and
- the Supplemental SC Scope of Work dated 5 December 2018.

## Areas for Further Investigation

- Area 02: VOCs at Location RR-MW-005
- Area 04: Former Petroleum Storage at Building #3

The locations of these areas are shown in Figure 3.

## Purpose/Objectives

- Evaluate overburden beneath/near Building #3 and nearby on-site and off-site areas of historic container storage or soil disturbance for potential sources of the VOCs detected in bedrock groundwater at location RR-MW-005BR.
- Identify, through evaluation of the soil vapor data, potential additional on-site or off-site sources of VOCs.
- Evaluate the source and extent of petroleum residuals observed at location RR-B/MW-020A.
- NYSDEC will evaluate if nearby private water supply wells shown in Figure 3 require sampling for VOCs. If sampling of one or more of these private wells is required, the sampling will be performed by NYSDEC or the New York State Department of Health (NYSDOH).

## Supplemental SC Phase 2 Scope of Work

- Collection of 120 passive soil vapor samples (15 beneath Building #3 and the remainder around the building perimeter, a potential drywell structure, the former petroleum storage area, and nearby on-site and off-site areas of historic container storage or soil disturbance). Suspected areas of historic container storage or soil disturbance are based on review of aerial photographs dated 1994 and 2007 viewed using Google Earth Pro software.
- Installation and sampling of three soil borings/fixed overburden monitoring well couplets outside Building #3 near the area of former petroleum storage area based analytical results from location RR-B/MW-20A and observations during site inspection.
- Collection of subsurface soil samples from the three newly-installed soil borings for evaluation of the petroleum release near Building #3.
- Collection of groundwater samples at existing and newly-installed monitoring wells at and surrounding Building #3 (see Figure 3 for the proposed area of groundwater sampling).

The NYSDEC's Project Manager will be notified via e-mail a minimum of one week prior to the start of field activities.

**Analytical Parameters**

- VOCs (all samples)
- 1,4-Dioxane (Area 02 samples)
- Semivolatile organic compounds (SVOCs; Area 04 samples)
- Geochemical parameters including dissolved cations (Ca, Mg, K, and Na), dissolved anions ($HCO_3$, $CO_3$, Cl, and $SO_4$), total and dissolved Fe and Mn, nitrate, alkalinity, ethene/ethane, and methane (all groundwater samples)
- Analysis for per- and polyfluoroalkyl substances (PFAS) is not proposed for the Supplemental SC Phase 2 because the focus of this effort is the evaluation of VOCs and SVOCs.

If insufficient aqueous sample volume can be obtained to complete all analyses, priority of analyses will be VOCs, 1,4-Dioxane, SVOCs, and geochemical parameters.

For water samples, a calibrated electronic field parameter meter will be utilized to record field geochemical data. The field parameter meter will be calibrated at the start of each day and will have documented calibration checks at the middle and end of each day. A three-point calibration will be used for pH measurements. A single-point calibration will be used for other groundwater quality parameters. Fresh calibration solutions will be used each day, but may be re-used through the day. All calibration records and checks will be documented in field notes or sampling records by recording the value of the calibration solution, the value the instrument was reading prior to calibration, and if re-calibration was needed. Geochemical parameters including temperature, specific conductivity, pH, oxidation-reduction potential, turbidity, and dissolved oxygen will be monitored and recorded.

Laboratory analyses will be performed at a NYSDOH-approved environmental laboratory, with the exception of passive soil vapor samples, which will be analyzed at Amplified Geochemical Imaging, LLC (AGI) of Newark, Delaware. AGI is a proprietary provider of the passive soil vapor samplers proposed for use in this work plan. AGI has provided ERM with a statement indicating that the AGI laboratory operates under the guidelines of its ISO Standard 17025 DoD ELAP accreditation and its

Quality Assurance Manual, Operating Procedures, and Methods (SOP-QA-0462).

**Schedule**

An estimated project schedule for the soil vapor sampling effort has been prepared (Table 3).

**Meeting**

A meeting will be scheduled with NYSDEC and NYSDOH upon receipt of preliminary laboratory analytical results of the soil vapor sampling effort to present and discuss the preliminary results.

Please contact me at 315-233-3035 to discuss any questions or comments.

Sincerely,

Jon S. Fox, P.G.
Principal Consultant Geologist

Attachments

Figure 1 – Summary of Groundwater Laboratory Analytical Data
Figure 2 – Summary of Groundwater Field Parameter Data
Figure 3 - Proposed Supplemental SC Phase 2 Sample Locations
Table 1 – Summary of Laboratory Analytical Results – Soil
Table 2 – Summary of Laboratory Analytical Results - Groundwater
Table 3 – Estimated Project Schedule – Soil Vapor Sampling

Cc: John Morris, P.E. (Honeywell)
Chris French, C.G. (Honeywell)
Tim Johnson (Anchor QEA)
Jim Perazzo, P.G. (ERM)
Maureen Leahy, Ph.D. (ERM)

*Figures*

OS-MW-021A
OS-MW-021B
OS-MW-022A
5 - 10'
Carbon Disulfide: 0.26
RR-MW-001A
RR-MW-001B
RR-TMW-014
OS-MW-001A
OS-MW-001B
RR-MW-003A
RR-MW-003B
RR-TMW-012
RR-MW-010B
25.1 - 30.1'
1,1,2 Trichloroethane: 7.9
1,1 Dichloroethene: 0.3
1,2 Dichloroethane: 0.34
MTBE: 0.23
Vinyl Chloride: 3.6
RR-MW-004B
14 - 17'
TCE: 2.9
OS-MW-020A
OS-MW-020B
RR-MW-004A
RR-MW-005BR
37 - 62'
1,1,2 Trichloroethane: 95,000
1,1 Dichloroethene: 1,700
Methylene Chloride: 49,000
Vinyl Chloride: 11,000
RR-MW-010A
RR-MW-008A
RR-TMW-016
4 - 14'
TCE: 0.68
OS-MW-003A
6 - 11'
TCE: 0.64
OS-MW-003B
20 - 25'
MTBE: 0.21
OS-MW-023A
RR-MW-018A
4 - 9'
TCE: 0.55
RR-MW-018B
12 - 17'
TCE: 0.68
RR-TMW-013
RR-MW-019A
4 - 9'
TCE: 0.59
RR-TMW-017
RR-MW-020A
4 - 9'
Ethylbenzene: 1,500
Isopropylbenzene Cumene: 260
N-Propylbenzene: 120
Toluene: 980
Xylenes, Total: 9,600
RR-MW-011A
6 - 10'
TCE: 0.68
RR-MW-005A
10 - 15'
TCE: 0.77
OS-MW-004A
6 - 11'
1,2 Dichloroethane: 0.45
RR-MW-005B
21.4 - 23.4'
1,2 Dichloroethane: 32
Vinyl Chloride: 640
RR-TMW-015
OS-MW-004B
28 - 33'
MTBE: 0.6
RR-MW-020B
12 - 17'
1,1,2 Trichloroethane: 7.2
1,2 Dichloroethane: 1.8
Ethylbenzene: 36
Isopropylbenzene Cumene: 4.5
Toluene: 11
TXylenes, Total: 240
OS-MW-029A
OS-MW-007A
9 - 14'
MTBE: 0.27
OS-MW-005A
OS-MW-005B
21 - 24'
MTBE: 8
OS-MW-007B
23.5 - 26.5'
MTBE: 1.2
OS-MW-009A
OS-MW-009B

## Legend

- Wells With Detected VOC Concentrations
- Wells With Non-Detect VOC Results
- Wells Not Sampled for VOCs
- Approximate Property Boundaries
- Hoosick Tax Parcels

NOTES:
- Samples were collected during the January, 2019 groundwater sample event.
- Screen length is presented as feet below ground surface.
- Analytical results are reported in micrograms per liter.

N

0 25 50 100 150 200
Feet

Figure 1: VOCs Detected in Groundwater - January, 2019
Supplemental Site Characterization
River Road 1, 2, 3
Town of Hoosick
New York

ERM

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RR-MW-001A
DO: 10.6
ORP: 185.9

RR-MW-001B
DO: 0.6
ORP: -40

RR-TMW-014
DO: 12.9
ORP: 119

OS-MW-022A
DO: 6.02
ORP: 155.6

RR-MW-003A
DO: 11.12
ORP: 98

RR-MW-003B
DO: 0
ORP: -45.5

OS-MW-001A
DO: 2.1
ORP: 58.1

OS-MW-001B
DO: 0.74
ORP: -49

RR-TMW-012
DO: 12.64
ORP: 49

OS-MW-020B
DO: 0.56
ORP: 73.4

RR-MW-004A
DO: 5.21
ORP: 147.6

RR-MW-004B
DO: 1.88
ORP: 49.2

RR-MW-008A
DO: 3.38
ORP: -54

RR-MW-010A
DO: 9.63
ORP: 206.2

RR-MW-010B
DO: 0.72
ORP: -28

OS-MW-003A
DO: 6.61
ORP: 227.5

RR-TMW-016
DO: 4.2
ORP: 119.9

RR-MW-005BR
DO: 0.33
ORP: -300

RR-TMW-017
DO: 3.99
ORP: 87.1

RR-MW-005A
DO: 4.35
ORP: 210

OS-MW-003B
DO: 2.2
ORP: -31

RR-TMW-013
DO: 0.76
ORP: 81

RR-MW-005B
DO: 0.35
ORP: -105

RR-MW-020A
DO: 0.17
ORP: -19

RR-MW-019A
DO: 0.39
ORP: 38

RR-MW-018A
DO: 6.14
ORP: 71

OS-MW-004A
DO: 1.63
ORP: 62.5

RR-MW-020B
DO: 0
ORP: 58

RR-MW-019B
DO: 0.19
ORP: 219

OS-MW-004B
DO: 2.01
ORP: -30

RR-TMW-015
DO: 2.24
ORP: 109

OS-MW-029A
DO: 3.61
ORP: 140

OS-MW-005A
DO: 6.26
ORP: 52.6

OS-MW-005B
DO: 0.28
ORP: -57

OS-MW-007A
DO: 0.18
ORP: -128

OS-MW-007B
DO: 0.44
ORP: -81

## Legend

- Monitoring Well
- Approximate Property Boundaries

NOTES:
- Samples were collected during the January, 2019 groundwater sample event.
- DO = Dissolved Oxygen
- ORP = Oxidation-Reduction Potential

N

0 25 50 100 150 200 250
Feet

**Figure 2 - Groundwater** Field **Parameters - January 2019 Sampling**

Supplemental Site Characterization
River Road 1, 2, 3
Town of Hoosick
New York

ERM

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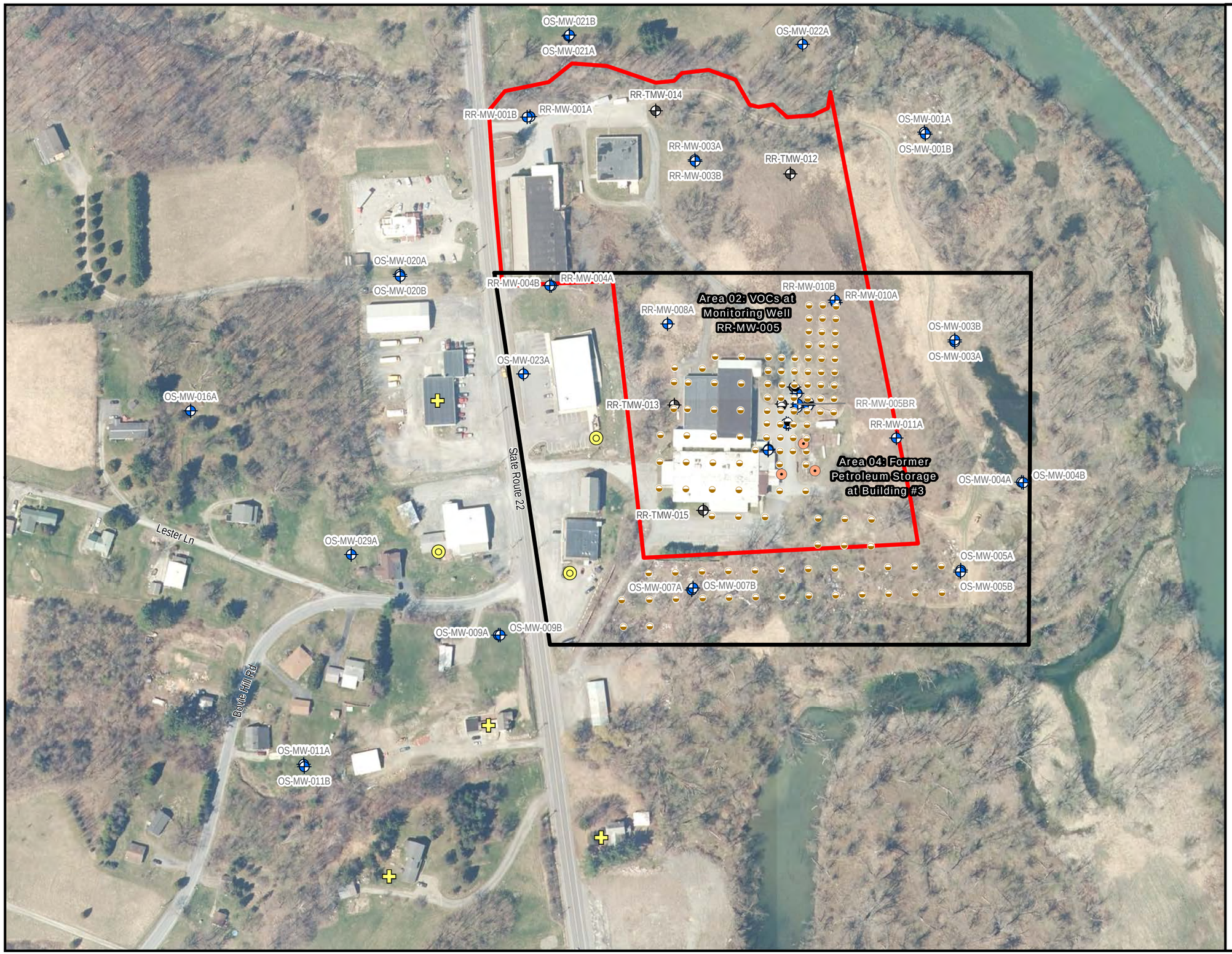



Legend

- Proposed Passive Soil Vapor Point (120)
- Proposed Soil Boring / Overburden Monitoring Well (3)
- Private Well (Known Bedrock) Sample Location (3)
- Private Well (Zone Unknown) Sample Location (4)
- Existing Soil Vapor Point
- Existing Monitoring Well Location
- Existing Temporary Well Location
- Approximate Property Boundary
- Monitoring Well Sampling Area

NOTES:

- Approximate off site dumping area was defined using extent of debris visible in historical aerial imagery.
- Aerial Imagery captured in 2014 from New York State.

N

0 37.5 75 150 225 300

Feet

Figure 3: River Road Supplemental Site Characterization Phase 2 Sample Locations

Oak Materials

River Road Property

Town of Hoosick

New York

ERM

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*Tables*

**Table 1**
**Summary of Soil Data - SCO Exceedances**
**River Road Supplemental Site Characterization**
**NYSDEC Site Number 442008**

| | | | | Location ID | RR-B-019 | RR-B-019 | RR-B-019 | RR-B-020 | RR-B-020 | RR-B-020 | RR-B-020 | RR-B-021 | RR-B-022 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Sample Type | N | N | N | N | N | FD | N | N | N |
| | | | | Sample ID | RR-B-019(5-6)(12182018) | RR-B-019 (16-18) (01072019) | RR-B-019 (19-21) (01072019) | RR-B-020 (0-2)(12192018) | RR-B-020(6-7)(12182018) | RR-DUP-(12182018) | RR-B-020 (10-12)(12192018) | RR-B-021 (2-12)(12202018) | RR-B-022 (0-2)(12202018) |
| | | | | Depth Range | 5-6 ft | 16-18 ft | 19-21 ft | 0-2 in | 6-7 ft | 6-7 ft | 10-12 ft | 2-12 in | 0-2 in |
| | | | | Sample Date | 12/18/2018 | 1/7/2019 | 1/7/2019 | 12/19/2018 | 12/18/2018 | 12/18/2018 | 12/19/2018 | 12/20/2018 | 12/20/2018 |
| | | | | Validated - Y/N | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Analyte | Result Unit | PGW SCO | COMM SCO | | | | | | | | | | |
| **VOCs** | | | | | | | | | | | | | |
| 1,2-Dichloroethane | ug/kg | 20 | 30000 | | 190 | 99 | | | | | | | |
| Acetone | ug/kg | 50 | 500000 | 160 | | | | | | | | | |
| Ethylbenzene | ug/kg | 1000 | 390000 | | | | | 34000 J | 61000 J | 11000 | | | |
| Methylene Chloride | ug/kg | 50 | 500000 | | | 94 | | | | | | | |
| N-Propylbenzene | ug/kg | 3900 | 500000 | | | | | | 5000 J | | | | |
| Toluene | ug/kg | 700 | 500000 | | | | | 5200 J | 15000 J | 2800 | | | |
| Vinyl Chloride | ug/kg | 20 | 13000 | | 10000 | 430 | | | | | | | |
| **SVOCs** | | | | | | | | | | | | | |
| Benzo(A)Anthracene | ug/kg | 1000 | 5600 | | | | 1000 J | | | | 1000 | 2100 | |
| Benzo(A)Pyrene | ug/kg | 22000 | 1000 | | | | | | | | | 2200 | |
| Benzo(B)Fluoranthene | ug/kg | 1700 | 5600 | | | | | | | | | 2600 | |
| Benzo(K)Fluoranthene | ug/kg | 1700 | 56000 | | | | | | | | | | |
| Chrysene | ug/kg | 1000 | 56000 | | | | 1100 | | | | | 1900 | |

**NOTES:**
- For sample type, N = normal and FD = field duplicate
- PGW SCO = NYSDEC Protection of Groundwater Soil Cleanup Objective
- COMM SCO = NYSDEC Commercial Soil Cleanup Objective

**Table 1**
**Summary of Soil Data - SCO Exceedances**
**River Road Supplemental Site Characterization**
**NYSDEC Site Number 442008**

| | | | | Location ID | RR-B-022 | RR-B-022 | RR-B-023 |
|---|---|---|---|---|---|---|---|
| | | | | Sample Type | N | N | N |
| | | | | Sample ID | RR-B-022 (2-12)(12202018) | RR-B-022 (3-4)(12202018) | RR-B-023 (2-12)(12202018) |
| | | | | Depth Range | 2-12 in | 3-4 ft | 2-12 in |
| | | | | Sample Date | 12/20/2018 | 12/20/2018 | 12/20/2018 |
| | | | | Validated - Y/N | Y | Y | Y |
| Analyte | Result Unit | PGW SCO | COMM SCO | | | | |
| **VOCs** | | | | | | | |
| 1,2-Dichloroethane | ug/kg | 20 | 30000 | | | | |
| Acetone | ug/kg | 50 | 500000 | | | | |
| Ethylbenzene | ug/kg | 1000 | 390000 | | | | |
| Methylene Chloride | ug/kg | 50 | 500000 | | | | |
| N-Propylbenzene | ug/kg | 3900 | 500000 | | | | |
| Toluene | ug/kg | 700 | 500000 | | | | |
| Vinyl Chloride | ug/kg | 20 | 13000 | | | | |
| **SVOCs** | | | | | | | |
| Benzo(A)Anthracene | ug/kg | 1000 | 5600 | 4400 | 1700 | 7400 | |
| Benzo(A)Pyrene | ug/kg | 22000 | 1000 | 3900 | 1400 | 6800 | |
| Benzo(B)Fluoranthene | ug/kg | 1700 | 5600 | 4900 | 1700 | 8100 | |
| Benzo(K)Fluoranthene | ug/kg | 1700 | 56000 | 2300 | | 4200 | |
| Chrysene | ug/kg | 1000 | 56000 | 4100 | 1500 | 6600 | |

**NOTES:**
- For sample type, N = normal and FD = field duplicate
- PGW SCO = NYSDEC Protection of Groundwater Soil Cleanup Objective
- COMM SCO = NYSDEC Commercial Soil Cleanup Objective

**Table 2**
**Summary of Groundwater Data - Water Quality Exceedances**
**River Road Supplemental Site Characterization**
**NYSDEC Site Number 442008**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Location ID | OS-MW-001B | OS-MW-003A | OS-MW-003B | OS-MW-004A | OS-MW-004B | OS-MW-005A | OS-MW-005B | OS-MW-005B |
| | | | | | Sample Type | N | N | N | N | N | N | FD | N |
| | | | | | Sample ID | OS-MW-001B (01292019) | OS-MW-003A (01302019) | OS-MW-003B (01302019) | OS-MW-004A (01302019) | OS-MW-004B (01302019) | OS-MW-005A (01292019) | DUP (01292019) | OS-MW-005B (01292019) |
| | | | | | Sample Date | 1/29/2019 | 1/30/2019 | 1/30/2019 | 1/30/2019 | 1/30/2019 | 1/29/2019 | 1/29/2019 | 1/29/2019 |
| | | | | | Validated - Y/N | Y | Y | Y | Y | Y | Y | Y | Y |
| Analyte | Fraction | Result Unit | TOGS-1.1.1 GA STANDARD | TOGS-1.1.1 GA GUIDANCE | | | | | | | | | |
| **Metals** | | | | | | | | | | | | | |
| Antimony | T | mg/l | 0.003 | | | | | | | | 0.036 J | 0.035 J |
| Arsenic | T | mg/l | 0.025 | | | | | | | | 0.28 | 0.3 |
| Barium | T | mg/l | 1 | | | | | | | | 3 | 3.1 |
| Beryllium | T | mg/l | | 0.003 | | | | | | | 0.021 | 0.021 |
| Cadmium | T | mg/l | 0.005 | | | | | | | | 0.0057 | 0.0052 |
| Chromium, Total | T | mg/l | 0.05 | | | | | | | | 0.6 | 0.61 |
| Copper | T | mg/l | 0.2 | | | | | | | | 0.79 | 0.79 |
| Iron | T | mg/l | 0.3 | | 0.33 | | 8 | 3.8 | | | 1120 J | 1140 J |
| Lead | T | mg/l | 0.025 | | | | | | | | 0.62 | 0.64 |
| Magnesium | D | mg/l | | 35 | | | | | | | | |
| Magnesium | T | mg/l | | 35 | | | | | | | 298 | 298 |
| Manganese | T | mg/l | 0.3 | | | | 0.65 | | | | 25.1 J | 25 J |
| Nickel | T | mg/l | 0.1 | | | | | | | | 1.2 | 1.2 |
| Selenium | T | mg/l | 0.01 | | | | | | | | 0.015 J | 0.015 J |
| Sodium | D | mg/l | 20 | | 75.3 | 23.7 | 33.3 | 61.1 | 61.2 | 81.9 | 55.4 | 55.7 |
| Sodium | T | mg/l | 20 | | 75 | 22.9 | 34.8 | 61.2 | 61.5 | 83.6 | 47.8 | 48.8 |
| **VOCs** | | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | NA | ug/l | 1 | | | | | | | | | |
| 1,1-Dichloroethene | NA | ug/l | 5 | | | | | | | | | |
| 1,2-Dichloroethane | NA | ug/l | 0.6 | | | | | | | | | |
| Ethylbenzene | NA | ug/l | 5 | | | | | | | | | |
| Isopropylbenzene | NA | ug/l | 5 | | | | | | | | | |
| Methylene Chloride | NA | ug/l | 5 | | | | | | | | | |
| N-Propylbenzene | NA | ug/l | 50 | | | | | | | | | |
| Toluene | NA | ug/l | 5 | | | | | | | | | |
| Vinyl Chloride | NA | ug/l | 2 | | | | | | | | | |
| Xylenes, Total | NA | ug/l | 5 | | | | | | | | | |
| **SVOCs** | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | NA | ug/l | 1 | 50 | | | | | | | | |
| **Other** | | | | | | | | | | | | | |
| Chloride (as Cl) | NA | mg/l | 250 | | | | | | | | | |

NOTES:
- For sample type, N = normal and FD = field duplicate
- For fraction, T = total; D = dissolved
- TOGS-1.1.1 = NYSDEC Technical Operations Guidance Series Memo No. 1.1.1
- GA = NYSDEC Class GA waters (groundwater)

**Table 2**
**Summary of Groundwater Data - Water Quality Exceedances**
**River Road Supplemental Site Characterization**
**NYSDEC Site Number 442008**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Location ID | OS-MW-007A | OS-MW-007B | OS-MW-009B | OS-MW-011B | OS-MW-016A | OS-MW-020A | OS-MW-021B | OS-MW-022A |
| | | | | Sample Type | N | N | N | N | N | N | N | N |
| | | | | Sample ID | OS-MW-007A (01292019) | OS-MW-007B (01292019) | OS-MW-009B (01292019) | OS-MW-011B (01282019) | OS-MW-016A (01282019) | OS-MW-020A (01292019) | OS-MW-021B (01282019) | OS-MW-022A (02062019) |
| | | | | Sample Date | 1/29/2019 | 1/29/2019 | 1/29/2019 | 1/28/2019 | 1/28/2019 | 1/29/2019 | 1/28/2019 | 2/6/2019 |
| | | | | Validated - Y/N | Y | Y | Y | Y | Y | Y | Y | Y |
| Analyte | Fraction | Result Unit | TOGS-1.1.1 GA STANDARD | TOGS-1.1.1 GA GUIDANCE | | | | | | | | |
| **Metals** | | | | | | | | | | | | |
| Antimony | T | mg/l | 0.003 | | | | | | | | | |
| Arsenic | T | mg/l | 0.025 | | | | | | | | | |
| Barium | T | mg/l | 1 | | | | | | | | | |
| Beryllium | T | mg/l | | 0.003 | | | | | | | | |
| Cadmium | T | mg/l | 0.005 | | | | | | | | | |
| Chromium, Total | T | mg/l | 0.05 | | | | | | | | | |
| Copper | T | mg/l | 0.2 | | | | | | | | | |
| Iron | T | mg/l | 0.3 | | 73 | 2.5 | | | 4.4 | 0.49 | 4.5 | 5.2 |
| Lead | T | mg/l | 0.025 | | | | | | | | | |
| Magnesium | D | mg/l | | 35 | | | | | | | | |
| Magnesium | T | mg/l | | 35 | | | | | | | | |
| Manganese | T | mg/l | 0.3 | | 8.8 | 0.46 | | | | | 0.46 | 0.31 |
| Nickel | T | mg/l | 0.1 | | | | | | | | | |
| Selenium | T | mg/l | 0.01 | | | | | | | | | |
| Sodium | D | mg/l | 20 | | 56.2 | 40.5 | 21.1 | 89.4 | | | 32.8 | |
| Sodium | T | mg/l | 20 | | 56.7 | 39.5 | 20.7 | 90.5 | | | 45.2 | |
| **VOCs** | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | NA | ug/l | 1 | | | | | | | | | |
| 1,1-Dichloroethene | NA | ug/l | 5 | | | | | | | | | |
| 1,2-Dichloroethane | NA | ug/l | 0.6 | | | | | | | | | |
| Ethylbenzene | NA | ug/l | 5 | | | | | | | | | |
| Isopropylbenzene | NA | ug/l | 5 | | | | | | | | | |
| Methylene Chloride | NA | ug/l | 5 | | | | | | | | | |
| N-Propylbenzene | NA | ug/l | 50 | | | | | | | | | |
| Toluene | NA | ug/l | 5 | | | | | | | | | |
| Vinyl Chloride | NA | ug/l | 2 | | | | | | | | | |
| Xylenes, Total | NA | ug/l | 5 | | | | | | | | | |
| **SVOCs** | | | | | | | | | | | | |
| 2,4-Dimethylphenol | NA | ug/l | 1 | 50 | | | | | | | | |
| **Other** | | | | | | | | | | | | |
| Chloride (as Cl) | NA | mg/l | 250 | | | | | | | | | |

NOTES:
- For sample type, N = normal and FD = field duplicate
- For fraction, T = total; D = dissolved
- TOGS-1.1.1 = NYSDEC Technical Operations Guidance Series Memo No. 1.1.1
- GA = NYSDEC Class GA waters (groundwater)

**Table 2**
**Summary of Groundwater Data - Water Quality Exceedances**
**River Road Supplemental Site Characterization**
**NYSDEC Site Number 442008**

| | | | | | Location ID | OS-MW-029A | RR-MW-001A | RR-MW-001B | RR-MW-003B | RR-MW-004A | RR-MW-004B | RR-MW-005A | RR-MW-005B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Sample Type | N | N | N | N | N | N | N | N |
| | | | | | Sample ID | OS-MW-029A (01282019) | RR-MW-001A (01302019) | RR-MW-001B (01302019) | RR-MW-003B (01302019) | RR-MW-004A (01292019) | RR-MW-004B (01292019) | RR-MW-005A(01312019) | RR-MW-005B(01312019) |
| | | | | | Sample Date | 1/28/2019 | 1/30/2019 | 1/30/2019 | 1/30/2019 | 1/29/2019 | 1/29/2019 | 1/31/2019 | 1/31/2019 |
| | | | | | Validated - Y/N | Y | Y | Y | Y | Y | Y | Y | Y |
| Analyte | Fraction | Result Unit | TOGS-1.1.1 GA STANDARD | TOGS-1.1.1 GA GUIDANCE | | | | | | | | | |
| **Metals** | | | | | | | | | | | | | |
| Antimony | T | mg/l | 0.003 | | | | | | | | | | |
| Arsenic | T | mg/l | 0.025 | | | | | | | | | | |
| Barium | T | mg/l | 1 | | | | | | | | | | |
| Beryllium | T | mg/l | | 0.003 | | | | | | | | | |
| Cadmium | T | mg/l | 0.005 | | | | | | | | | | |
| Chromium, Total | T | mg/l | 0.05 | | | | | | | | | | |
| Copper | T | mg/l | 0.2 | | | | | | | | | | |
| Iron | T | mg/l | 0.3 | | 9.2 | | 5.6 | 0.38 | | | | | 5.4 |
| Lead | T | mg/l | 0.025 | | | | | | | | | | |
| Magnesium | D | mg/l | | 35 | | | | | | | | | |
| Magnesium | T | mg/l | | 35 | | | | | | | | | |
| Manganese | T | mg/l | 0.3 | | 0.61 | | 0.38 | | | | | | 0.5 |
| Nickel | T | mg/l | 0.1 | | | | | | | | | | |
| Selenium | T | mg/l | 0.01 | | | | | | | | | | |
| Sodium | D | mg/l | 20 | | 137 | 35.8 J | | 38.6 J | 36.5 | 30.3 | 42.2 | 53.2 | |
| Sodium | T | mg/l | 20 | | 142 | 33.6 J | | 37.9 J | 36.8 | 28.3 | 45.7 | 52.4 | |
| **VOCs** | | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | NA | ug/l | 1 | | | | | | | | | | |
| 1,1-Dichloroethene | NA | ug/l | 5 | | | | | | | | | | |
| 1,2-Dichloroethane | NA | ug/l | 0.6 | | | | | | | | | | 32 |
| Ethylbenzene | NA | ug/l | 5 | | | | | | | | | | |
| Isopropylbenzene | NA | ug/l | 5 | | | | | | | | | | |
| Methylene Chloride | NA | ug/l | 5 | | | | | | | | | | |
| N-Propylbenzene | NA | ug/l | 50 | | | | | | | | | | |
| Toluene | NA | ug/l | 5 | | | | | | | | | | |
| Vinyl Chloride | NA | ug/l | 2 | | | | | | | | | | 640 J |
| Xylenes, Total | NA | ug/l | 5 | | | | | | | | | | |
| **SVOCs** | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | NA | ug/l | 1 | 50 | | | | | | | | | |
| **Other** | | | | | | | | | | | | | |
| Chloride (as Cl) | NA | mg/l | 250 | | | | | | | | | | |

NOTES:
- For sample type, N = normal and FD = field duplicate
- For fraction, T = total; D = dissolved
- TOGS-1.1.1 = NYSDEC Technical Operations Guidance Series Memo No. 1.1.1
- GA = NYSDEC Class GA waters (groundwater)

**Table 2**
**Summary of Groundwater Data - Water Quality Exceedances**
**River Road Supplemental Site Characterization**
**NYSDEC Site Number 442008**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Location ID | RR-MW-005BR | RR-MW-008A | RR-MW-010B | RR-MW-011A | RR-MW-018A | RR-MW-018B | RR-MW-019A | RR-MW-019B |
| | | | | | Sample Type | N | N | N | N | N | N | N | N |
| | | | | | Sample ID | RR-MW-005BR (01302019) | RR-MW-008A(01312019) | RR-MW-010B (01302019) | RR-MW-011A (01302019) | RR-MW-018A (01282019) | RR-MW-018B (01282019) | RR-MW-019A(01312019) | RR-MW-019B(01312019) |
| | | | | | Sample Date | 1/30/2019 | 1/31/2019 | 1/30/2019 | 1/30/2019 | 1/28/2019 | 1/28/2019 | 1/31/2019 | 1/31/2019 |
| | | | | | Validated - Y/N | Y | Y | Y | Y | Y | Y | Y | Y |
| Analyte | Fraction | Result Unit | TOGS-1.1.1 GA STANDARD | TOGS-1.1.1 GA GUIDANCE | | | | | | | | | |
| **Metals** | | | | | | | | | | | | | |
| Antimony | T | mg/l | 0.003 | | | | | | | | | | |
| Arsenic | T | mg/l | 0.025 | | | | | | | | | | |
| Barium | T | mg/l | 1 | | 2.7 J | | | | | | | | |
| Beryllium | T | mg/l | | 0.003 | | | | | | | | | |
| Cadmium | T | mg/l | 0.005 | | | | | | | | | | |
| Chromium, Total | T | mg/l | 0.05 | | | | | | | | | | |
| Copper | T | mg/l | 0.2 | | | | | | | | | | |
| Iron | T | mg/l | 0.3 | | 32.6 | 8.4 | | | | | | | |
| Lead | T | mg/l | 0.025 | | | | | | | | | | |
| Magnesium | D | mg/l | | 35 | 167 | | | | | | | | |
| Magnesium | T | mg/l | | 35 | 147 | | | | | | | | |
| Manganese | T | mg/l | 0.3 | | 0.75 | 0.8 | | | | | | 0.96 | |
| Nickel | T | mg/l | 0.1 | | | | | | | | | | |
| Selenium | T | mg/l | 0.01 | | | | | | | | | | |
| Sodium | D | mg/l | 20 | | 629 J | 52.8 | | 42.2 J | 54.7 | 37.8 | 54 | 58.8 | |
| Sodium | T | mg/l | 20 | | 553 J | 58.8 | | 43.8 J | | | 54.3 | 60.2 | |
| **VOCs** | | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | NA | ug/l | 1 | | 95000 | | 7.9 | | | | | | |
| 1,1-Dichloroethene | NA | ug/l | 5 | | 1700 | | | | | | | | |
| 1,2-Dichloroethane | NA | ug/l | 0.6 | | | | | | | | | | |
| Ethylbenzene | NA | ug/l | 5 | | | | | | | | | | |
| Isopropylbenzene | NA | ug/l | 5 | | | | | | | | | | |
| Methylene Chloride | NA | ug/l | 5 | | 49000 | | | | | | | | |
| N-Propylbenzene | NA | ug/l | 50 | | | | | | | | | | |
| Toluene | NA | ug/l | 5 | | | | | | | | | | |
| Vinyl Chloride | NA | ug/l | 2 | | 11000 | | 3.6 | | | | | | |
| Xylenes, Total | NA | ug/l | 5 | | | | | | | | | | |
| **SVOCs** | | | | | | | | | | | | | |
| 2,4-Dimethylphenol | NA | ug/l | 1 | 50 | | | | | | | | | |
| **Other** | | | | | | | | | | | | | |
| Chloride (as Cl) | NA | mg/l | 250 | | 1890 | | | | | | | | |

NOTES:
- For sample type, N = normal and FD = field duplicate
- For fraction, T = total; D = dissolved
- TOGS-1.1.1 = NYSDEC Technical Operations Guidance Series Memo No. 1.1.1
- GA = NYSDEC Class GA waters (groundwater)

**Table 2**
**Summary of Groundwater Data - Water Quality Exceedances**
**River Road Supplemental Site Characterization**
**NYSDEC Site Number 442008**

| | | | | | Location ID | RR-MW-020A | RR-MW-020B | RR-MW-020B | RR-TMW-015 | RR-TMW-016 | RR-TMW-017 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Sample Type | N | FD | N | N | N | N |
| | | | | | Sample ID | RR-MW-020A(01312019) | DUP(01312019) | RR-MW-020B(01312019) | RR-TMW-015 (01302019) | RR-TMW-016 (01302019) | RR-MW-TMW-017 (01282019) |
| | | | | | Sample Date | 1/31/2019 | 1/31/2019 | 1/31/2019 | 1/30/2019 | 1/30/2019 | 1/28/2019 |
| | | | | | Validated - Y/N | Y | Y | Y | Y | Y | Y |
| Analyte | Fraction | Result Unit | TOGS-1.1.1 GA STANDARD | TOGS-1.1.1 GA GUIDANCE | | | | | | | |
| **Metals** | | | | | | | | | | | |
| Antimony | T | mg/l | 0.003 | | | | | | | | |
| Arsenic | T | mg/l | 0.025 | | | | | | | | |
| Barium | T | mg/l | 1 | | | | | | | | |
| Beryllium | T | mg/l | | 0.003 | | | | | | | |
| Cadmium | T | mg/l | 0.005 | | | | | | | | |
| Chromium, Total | T | mg/l | 0.05 | | | | | | | | |
| Copper | T | mg/l | 0.2 | | | | | | | | |
| Iron | T | mg/l | 0.3 | | 14.5 | | | | | | |
| Lead | T | mg/l | 0.025 | | | | | | | | |
| Magnesium | D | mg/l | | 35 | | | | | | | |
| Magnesium | T | mg/l | | 35 | | | | | | | |
| Manganese | T | mg/l | 0.3 | | 13.4 | 0.45 | 0.43 | | | | |
| Nickel | T | mg/l | 0.1 | | | | | | | | |
| Selenium | T | mg/l | 0.01 | | | | | | | | |
| Sodium | D | mg/l | 20 | | | 70.8 | 74 | 112 J | 48.9 J | 43.2 | |
| Sodium | T | mg/l | 20 | | | 77.8 | 77.5 | 114 J | | | |
| **VOCs** | | | | | | | | | | | |
| 1,1,2-Trichloroethane | NA | ug/l | 1 | | | 7.3 | 7.2 | | | | |
| 1,1-Dichloroethene | NA | ug/l | 5 | | | | | | | | |
| 1,2-Dichloroethane | NA | ug/l | 0.6 | | | 1.8 J | 1.8 J | | | | |
| Ethylbenzene | NA | ug/l | 5 | | 1500 | 34 | 36 | | | | |
| Isopropylbenzene | NA | ug/l | 5 | | 260 | | | | | | |
| Methylene Chloride | NA | ug/l | 5 | | | | | | | | |
| N-Propylbenzene | NA | ug/l | 50 | | 120 | | | | | | |
| Toluene | NA | ug/l | 5 | | 980 | 10 | 11 | | | | |
| Vinyl Chloride | NA | ug/l | 2 | | | | | | | | |
| Xylenes, Total | NA | ug/l | 5 | | 9600 | 230 | 240 | | | | |
| **SVOCs** | | | | | | | | | | | |
| 2,4-Dimethylphenol | NA | ug/l | 1 | 50 | 21 | 1.1 J | 1 J | | | | |
| **Other** | | | | | | | | | | | |
| Chloride (as Cl) | NA | mg/l | 250 | | | | | | | | |

NOTES:
- For sample type, N = normal and FD = field duplicate
- For fraction, T = total; D = dissolved
- TOGS-1.1.1 = NYSDEC Technical Operations Guidance Series Memo No. 1.1.1
- GA = NYSDEC Class GA waters (groundwater)

**Table 3**
**Estimated Project Schedule for Soil Vapor Sampling**
**River Road Supplemental SC Phase 2**

| ***Milestone*** | ***Date/Duration**** |
|---|---|
| Submit Supplemental SC Phase 2 Scope of Work to NYSDEC | 31-July-2019 |
| Mobilization and Initiate Site Work | 2 weeks after receipt of DEC approval |
| Complete Subsurface Clearance Site Work | 2 weeks after start of mobilization |
| Complete Installation of Passive Soil Vapor Samplers | 2 weeks after completion of subsurface clearance site work |
| Complete Collection of Passive Soil Vapor Samplers | 2 weeks after completion of installation of soil vapor samplers |
| Preliminary Passive Soil Vapor Analytical Results received | 3 weeks after collection of soil vapor samplers |
| Meeting with NYSDEC/NYSDOH | 2 weeks after receipt of preliminary analytical results |

* The schedule is estimated and tentative and is subject to change based on contractor availability, site conditions, turn-around time for receipt of laboratory analytical reports, and other considerations.