



**FORMER DISPOSAL AREA
COMMUNITY AIR MONITORING PLAN
FORMER ALEXANDER SCHMIGEL SITE, HOOSICK FALLS, NY
NYSDEC SITE ID NO.: 442002**

Prepared for:

**HONEYWELL INTERNATIONAL, INC.
101 COLUMBIA ROAD
MORRISTOWN, NEW JERSEY**

Prepared by:

**Mactec Engineering and Consulting, Inc.
800 North Bell Avenue
Carnegie, Pennsylvania 15106**

Mactec Project No. 3410060481

AUGUST 26, 2010



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A handwritten signature in black ink, appearing to read "Nicole Feczko", is written over a horizontal line.

Nicole Feczko
Project Scientist

A handwritten signature in black ink, appearing to read "Robert E. Crowley", is written over a horizontal line.

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Senior Principal Scientist

Mactec Project No. 3410060481

AUGUST 26, 2010

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LIST OF ACRONYMS

CAMP	Community Air Monitoring Plan
CY	Cubic Yards
HASP	Site Health and Safety Plan
Honeywell	Honeywell, Inc.
JHAs	Job Hazard Analyses
m ³	cubic meter
Mactec	Mactec Engineering and Consulting, Inc.
NIOSH	National Institute for Occupational Safety & Health
NYCRR	New York Codes, Rules, and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
PM-10	particulate matter smaller than 10 microns
ppm	parts per million
SCOs	NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives
Site	Former Alexander Schmigel Site, Hoosick Falls, NY
µg	microgram
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

Mactec Engineering and Consulting, Inc. (Mactec), has prepared this Community Air Monitoring Plan (CAMP) on behalf of Honeywell, Inc. (Honeywell) for the former Alexander Schmigel Site located in Hoosick Falls, New York (Site). The New York State Department of Environmental Conservation (NYSDEC) identification number for the Site is 442002. The Site is located on the north side of State Route 67 in Hoosick Falls, New York. Figure 1 shows the location of the Site on a United States Geological Survey 7.5-minute topographic map, and Figure 2 shows a plan view of the Site layout. The figures are included as Appendix A.

This CAMP outlines the air quality monitoring procedures that will be implemented during the excavation and moving of wastes at the Site including such things as soils, drums, and/or related debris in connection with the construction of the remedy or any related excavation or remediation. This CAMP is consistent with the New York State Department of Health (NYSDOH) guidance documents: Generic Community Air Monitoring Plan and Fugitive Dust and Particulate Monitoring. These guidance documents are included as Appendix B.

Results of sampling activities conducted at the Site in 2007 indicated that four subsurface soil samples contained concentrations of acetone that exceed the New York Codes, Rules, and Regulations (NYCRR) Part 375 Unrestricted Use Soil Cleanup Objectives (SCOs), and that one subsurface soil sample collected contained concentrations of lead that exceeded the Resource Conservation and Recovery Act characteristic hazardous waste limit value. The sample with the exceedance of lead above the characteristic hazardous waste limit value and three of the four samples with concentrations of acetone above the SCOs are located within the proposed excavation area (Figure 3). It should be noted that the exceedance of acetone in the fourth sample was the analytical result from a duplicate sample, and that the analytical result from the original sample did not show an exceedance of this compound.

1.1 Purpose

The purpose of this CAMP is to provide a measure of protection for the downwind community from potential airborne contaminant releases as a result of remediation work activities. In addition, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

2.0 SOIL EXCAVATION SCOPE OF WORK

The work described below will be completed in one phase. This work includes the excavation of debris, soil and drums (including partial or crushed drums that may contain regulated materials), characterization and offsite disposal of any full or partially-full drums or soil containing acetone above the SCOs or lead above the characteristic hazardous waste limit value, and backfilling of the excavation area. The proposed excavation area is shown on Figure 3, which is included in Appendix A. The proposed remedy anticipates the excavation of less than 665 cubic yards (CY) of soil from an approximate 1,900 square-foot area, to an average depth of approximately nine feet below ground surface in the area. Due to the close proximity of bedrock to the ground surface in this area, it is expected that the excavation will extend down to the bedrock.

After excavated material has been stockpiled on-Site, samples will be immediately collected and analyzed in order to minimize the time the wastes are staged on the Site. Once the sample results are received, the excavated waste will be disposed of properly at an offsite facility. The excavated material will be staged, sampled, and disposed of as outlined in the approved Work Plan for the Site.

3.0 AIR MONITORING PROCEDURES FOR INTRUSIVE ACTIVITIES

A Site-Specific Health and Safety Plan (HASP) has been developed by Mactec for the use of its employees during this project. The HASP identifies the anticipated hazards, action levels for known compounds, required monitoring equipment, appropriate personal protective equipment, and includes Job Hazard Analyses (JHAs) for the proposed project activities at the Site. Subcontractors for this project will also have HASPs which are equal to or more stringent than Mactec's HASP. The HASPs and the CAMP will be reviewed by all personnel participating in Site activities prior to beginning work, and copies of these documents will be available on-Site during Site activities.

The CAMP requires real-time monitoring in the breathing zone (i.e., the area from four to five feet above the ground surface) for volatile organic compounds (VOCs) and particulate levels at the downwind designated work area perimeter when excavation or remediation activities are in progress at the Site. Samples will be collected at the perimeter of the work area or the Site perimeter for lead-containing dusts one time each day that excavation activities are being conducted. The VOC and lead monitoring component of the CAMP will only be implemented during activities being conducted at work areas known or suspected to contain these compounds. Monitoring will be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment will be calibrated at the interval suggested by the equipment manufacturer for the contaminant(s) of concern or for appropriate surrogate(s). All air monitoring data, including calibration information, monitoring results, wind speed and direction, as well as the locations of monitoring equipment will be recorded daily in field notes and readily available for review by NYSDEC, NYSDOH, applicable local agencies, and Honeywell.

The following subsections describe the specific CAMP monitoring procedures for VOCs, lead, and particulates that will be employed at the Site during the excavation and remediation activities. The monitoring will be conducted as specified in the NYSDOH guidance documents, included as Appendix B.

3.1 Volatile Organic Compound Monitoring

Acetone was the only VOC identified at the Site that exceeds the SCOs. Although VOCs are not anticipated to be an airborne concern during Site activities, VOC monitoring will be conducted at the

downwind work area perimeter on a continuous basis. Upwind (i.e., background) concentrations will be measured at the start of each workday and periodically thereafter (at least two additional times per workday), particularly if wind direction changes, to establish background conditions. The monitoring equipment will be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below:

1. If the total organic vapor level at the downwind perimeter of the work area exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm above background, work activities will resume with continued monitoring.
2. If the total organic vapor level at the downwind perimeter of the work area persists at levels in excess of 5 ppm but less than 25 ppm above background, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities will resume provided that the total organic vapor level at the downwind perimeter is less than 5 ppm above background for the 15-minute average.
3. If the total organic vapor level at the downwind perimeter of the work area exceeds 25 ppm above background, work activities will be halted in the area of concern until corrective measures are identified and implemented to reduce levels as described above. Corrective measures will be discussed with Mr. James A. Moras, P.E., the NYSDEC project manager, by phone at (518) 402-9814 prior to resuming work activities.

3.2 Lead Monitoring

Air samples will be collected for lead-containing dusts one time each day that excavation activities are being conducted. Two samples will be collected at the perimeter of the work area or at the Site perimeter, one from an upwind location and one from a downwind location. The sample locations will be established prior to beginning excavation activities that day. The samples will be collected on filters per the modified National Institute for Occupational Safety & Health (NIOSH) method 7300/ Occupational Safety and Health Administration (OSHA) method 125G. Per the modified NIOSH/ OSHA method, each sample will be collected at a flow rate between one and four liters per minute, and a total volume between 50 and 2,000 liters of air will be collected. The analytical method will use inductively coupled plasma-mass spectroscopy, which provides a quantification level of 0.2 micrograms (μg) per sample. Based on a quantification level of 0.2 μg and a maximum sample volume of 2,000 liters, the lowest method detection level is 0.0043 μg per cubic meter ($\mu\text{g}/\text{m}^3$) and a laboratory reporting limit of 0.1 $\mu\text{g}/\text{m}^3$, which is below the lead ambient air standard of 0.15 $\mu\text{g}/\text{m}^3$.

The samples will be sent by overnight courier to a New York state accredited laboratory for 24-hour sample analysis. Chain of custody documentation will be maintained during sample collection and analysis. Sample results will be provided to NYSDEC and NYSDOH for review and discussion.

3.3 Particulate Monitoring

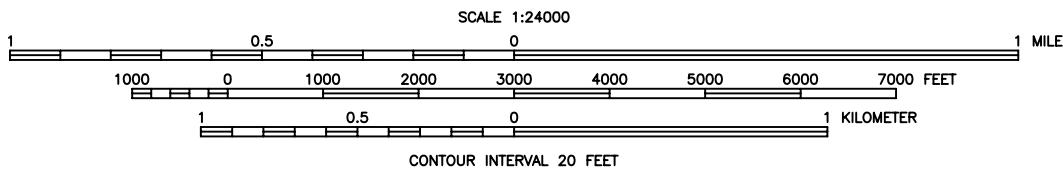
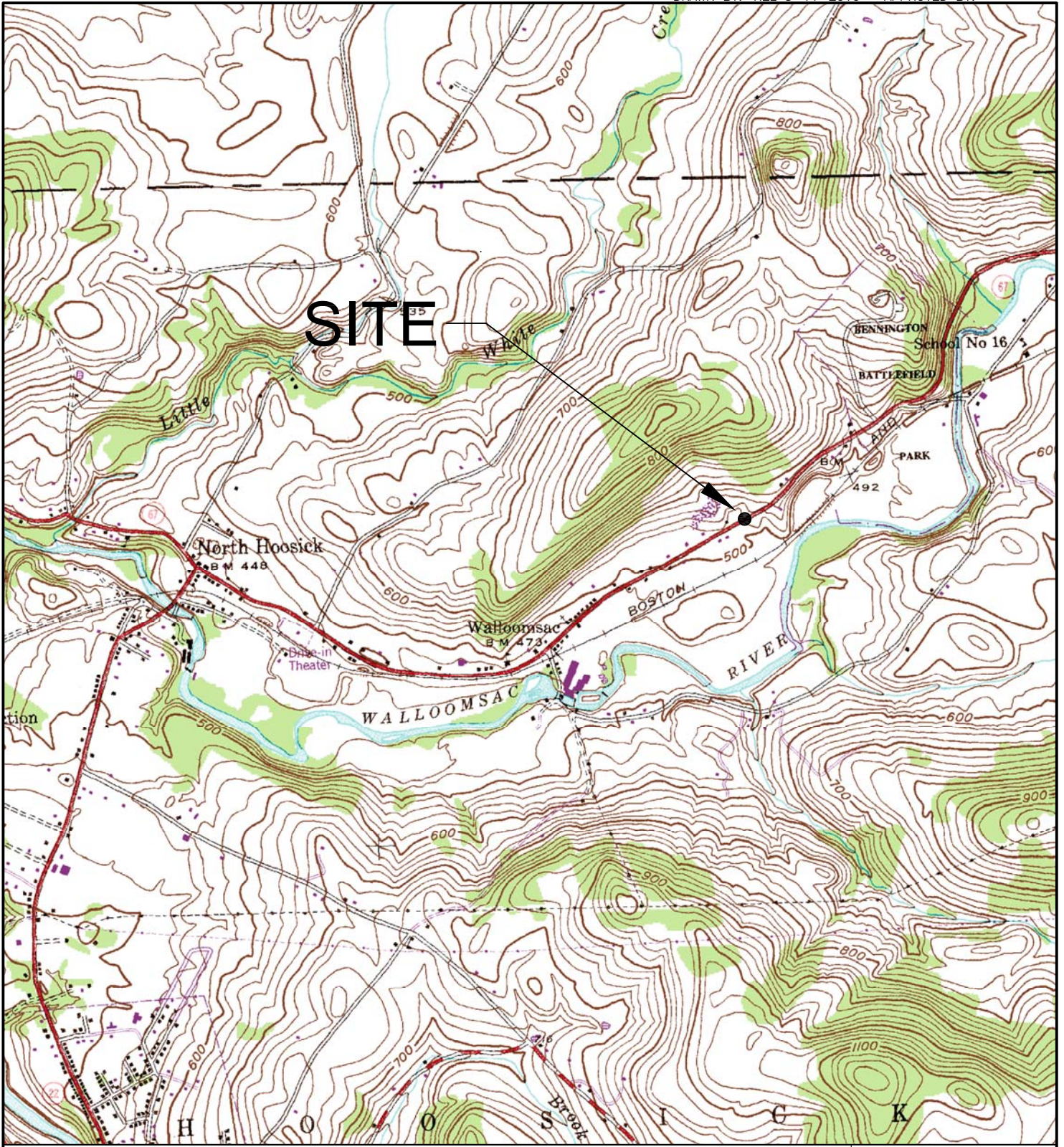
Air monitoring for particulates (i.e., dust) will be performed continuously during excavation and remediation activities using both air monitoring equipment and visual observations. Monitoring equipment capable of measuring particulate matter smaller than 10 microns (PM-10) and capable of averaging over periods of 15 minutes or less, at a minimum, will be set up at one upwind location and one downwind location. This equipment will log the 15-minute average concentrations for subsequent downloading and reporting. An audible alarm on the downwind particulate monitoring device will be set at $90 \mu\text{g}/\text{m}^3$ above the background level. Upwind concentrations will be measured at the start of each workday and periodically throughout the day thereafter to establish background conditions. These data will be used as a real-time surrogate for lead monitoring since the lead concentrations in soil do not appear to support lead concentrations in particulate matter that exceed the lead exposure standard if PM-10 is less than $90 \mu\text{g}/\text{m}^3$.

The wind direction and speed will be reviewed each workday to ensure that the monitoring equipment is located appropriately based on wind direction. The particulate monitoring equipment will be calibrated at the start of each day, and as necessary throughout the day. Particulate monitoring will be conducted as follows:

1. If the downwind PM-10 particulate level is $100 \mu\text{g}/\text{m}^3$ greater than background for the 15-minute period, or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques as long as the downwind PM-10 particulate levels do not exceed $150 \mu\text{g}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area. (Dust suppression techniques will also be applied in other circumstances as described in the HASP).
2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \mu\text{g}/\text{m}^3$ above the upwind level, work activities will be halted in the area of concern until corrective measures are identified and implemented to reduce levels to less than $150 \mu\text{g}/\text{m}^3$ above background conditions and to prevent visible dust migration.

APPENDIX A

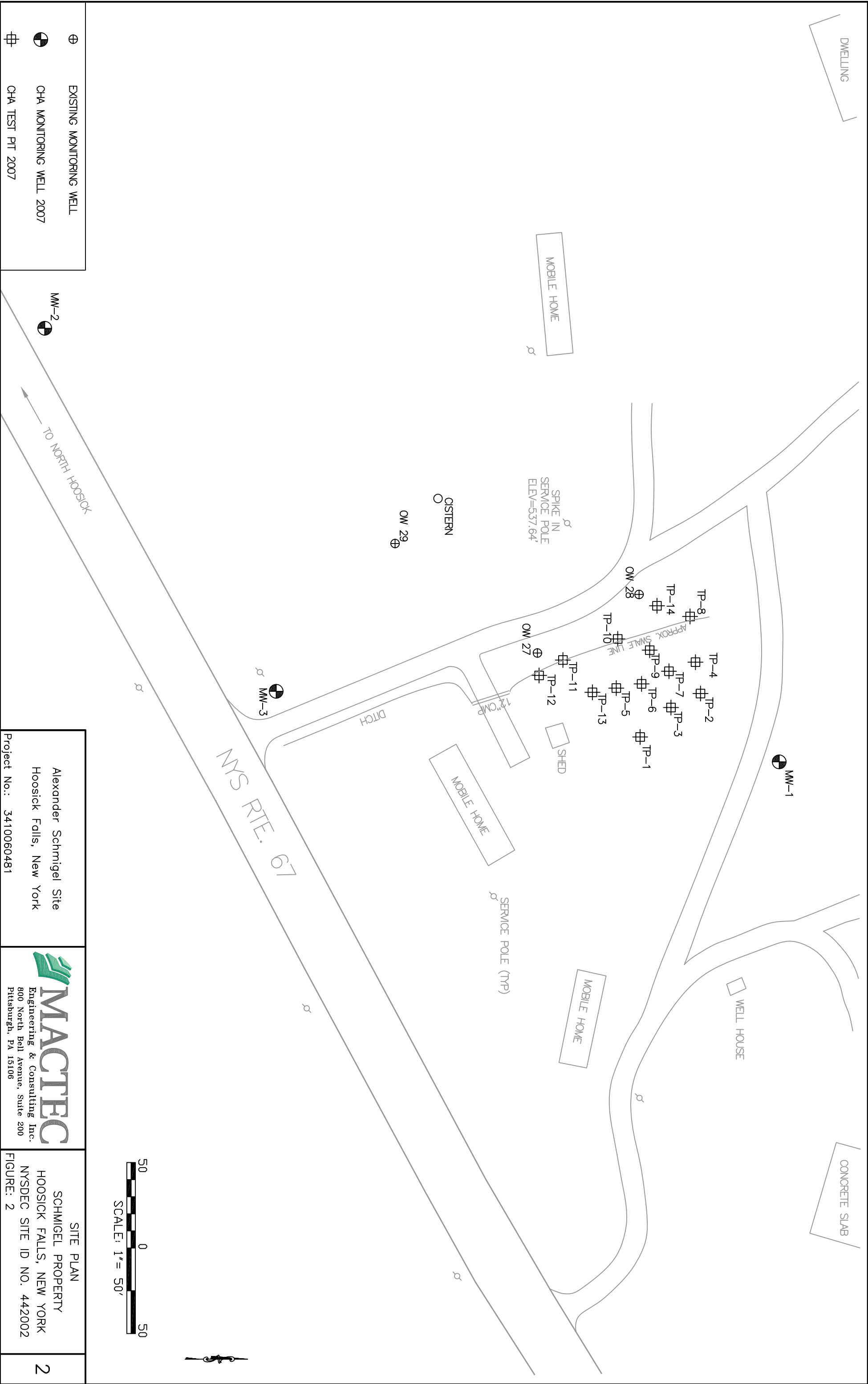
FIGURES



Alexander Schmigel Site
Hoosick Falls, New York

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Pittsburgh, PA 15106

SITE LOCATION MAP
SCHMIGEL PROPERTY
HOOSICK FALLS, NEW YORK
NYSDEC SITE ID NO. 442002
FIGURE: 1



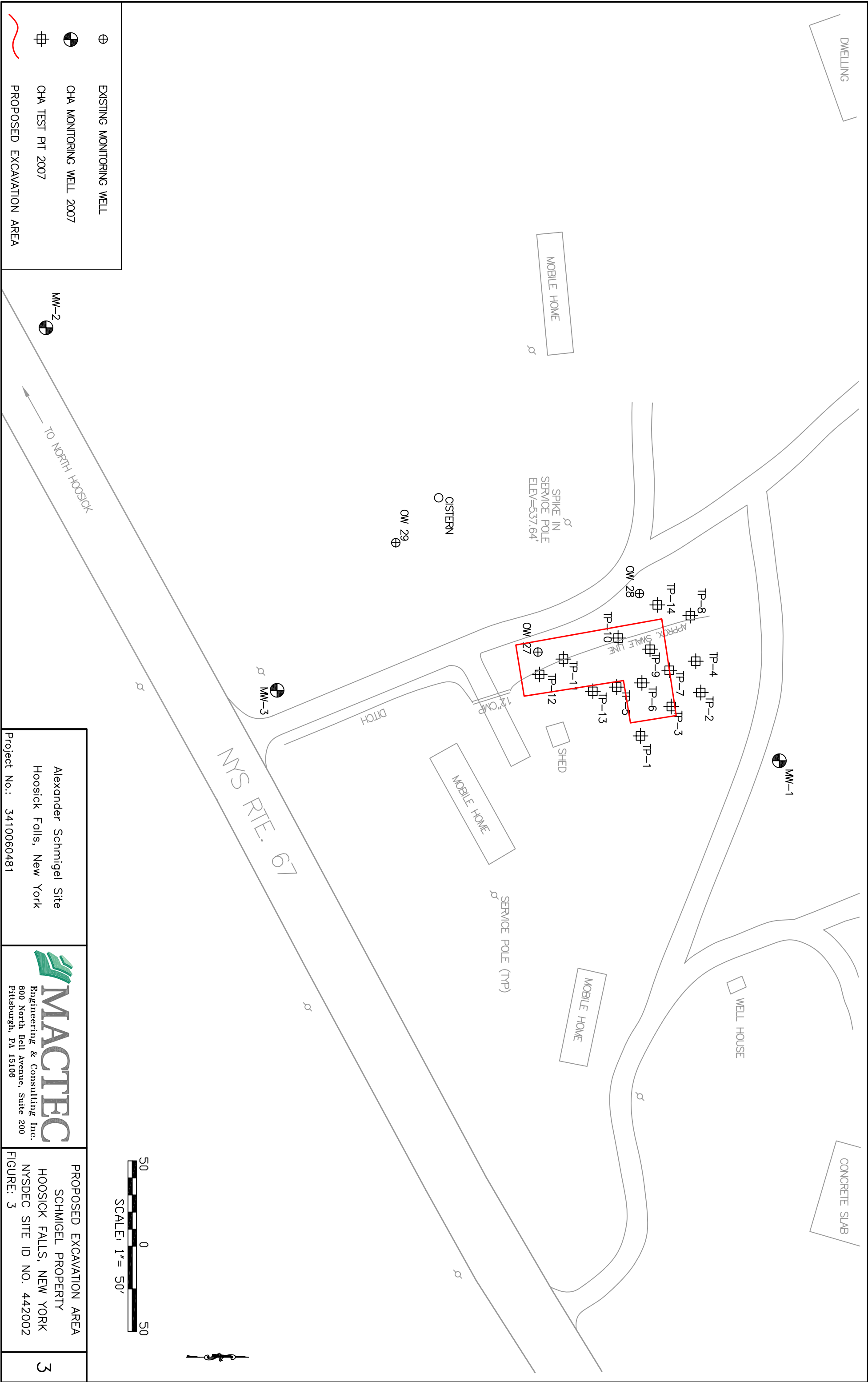
	EXISTING MONITORING WELL
	CHA MONITORING WELL 2007
	CHA TEST PIT 2007

Alexander Schmigel Site
Hoosick Falls, New York
Project No.: 3410060481

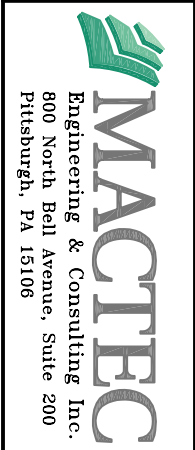


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SITE PLAN
SCHMIGEL PROPERTY
HOOSICK FALLS, NEW YORK
NYSDEC SITE ID NO. 442002
FIGURE: 2



Alexander Schmigel Site
Hoosick Falls, New York
Project No.: 3410060481



PROPOSED EXCAVATION AREA
SCHMIGEL PROPERTY
HOOSICK FALLS, NEW YORK
NYSDEC SITE ID NO. 442002
FIGURE: 3

APPENDIX B
NYSDOH GUIDANCE DOCUMENTS

Appendix 1A

New York State Department of Health Generic Community Air Monitoring Plan

Overview

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical- specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for VOCs and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate DEC/NYSDOH staff.

Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures. Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

Periodic monitoring for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. “Periodic” monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or

overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a continuous basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions, particularly if wind direction changes. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

1. If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
2. If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
3. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.
4. All 15-minute readings must be recorded and be available for State (DEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

1. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed $150 \text{ mcg}/\text{m}^3$ above the upwind level and provided that no visible dust is migrating from the work area.

2. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than $150 \text{ mcg}/\text{m}^3$ above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within $150 \text{ mcg}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

3. All readings must be recorded and be available for State (DEC and NYSDOH) and County Health personnel to review.

December 2009

Appendix 1B

Fugitive Dust and Particulate Monitoring

A program for suppressing fugitive dust and particulate matter monitoring at hazardous waste sites is a responsibility on the remedial party performing the work. These procedures must be incorporated into appropriate intrusive work plans. The following fugitive dust suppression and particulate monitoring program should be employed at sites during construction and other intrusive activities which warrant its use:

1. Reasonable fugitive dust suppression techniques must be employed during all site activities which may generate fugitive dust.
2. Particulate monitoring must be employed during the handling of waste or contaminated soil or when activities on site may generate fugitive dust from exposed waste or contaminated soil. Remedial activities may also include the excavation, grading, or placement of clean fill. These control measures should not be considered necessary for these activities.
3. Particulate monitoring must be performed using real-time particulate monitors and shall monitor particulate matter less than ten microns (PM₁₀) with the following minimum performance standards:
 - (a) Objects to be measured: Dust, mists or aerosols;
 - (b) Measurement Ranges: 0.001 to 400 mg/m³ (1 to 400,000 :ug/m³);
 - (c) Precision (2-sigma) at constant temperature: +/- 10 :g/m³ for one second averaging; and +/- 1.5 g/m³ for sixty second averaging;
 - (d) Accuracy: +/- 5% of reading +/- precision (Referred to gravimetric calibration with SAE fine test dust (mmd= 2 to 3 :m, g= 2.5, as aerosolized);
 - (e) Resolution: 0.1% of reading or 1g/m³, whichever is larger;
 - (f) Particle Size Range of Maximum Response: 0.1-10;
 - (g) Total Number of Data Points in Memory: 10,000;
 - (h) Logged Data: Each data point with average concentration, time/date and data point number
 - (i) Run Summary: overall average, maximum concentrations, time/date of maximum, total number of logged points, start time/date, total elapsed time (run duration), STEL concentration and time/date occurrence, averaging (logging) period, calibration factor, and tag number;
 - (j) Alarm Averaging Time (user selectable): real-time (1-60 seconds) or STEL (15 minutes), alarms required;
 - (k) Operating Time: 48 hours (fully charged NiCd battery); continuously with charger;
 - (l) Operating Temperature: -10 to 50° C (14 to 122° F);
 - (m) Particulate levels will be monitored upwind and immediately downwind at the working site and integrated over a period not to exceed 15 minutes.
4. In order to ensure the validity of the fugitive dust measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the remedial party to adequately supplement QA/QC Plans to include the following critical features: periodic instrument calibration, operator training, daily instrument performance (span) checks, and a record keeping plan.
5. The action level will be established at 150 ug/m³ (15 minutes average). While conservative,

this short-term interval will provide a real-time assessment of on-site air quality to assure both health and safety. If particulate levels are detected in excess of 150 ug/m³, the upwind background level must be confirmed immediately. If the working site particulate measurement is greater than 100 ug/m³ above the background level, additional dust suppression techniques must be implemented to reduce the generation of fugitive dust and corrective action taken to protect site personnel and reduce the potential for contaminant migration. Corrective measures may include increasing the level of personal protection for on-site personnel and implementing additional dust suppression techniques (see paragraph 7). Should the action level of 150 ug/m³ continue to be exceeded work must stop and DER must be notified as provided in the site design or remedial work plan. The notification shall include a description of the control measures implemented to prevent further exceedances.

6. It must be recognized that the generation of dust from waste or contaminated soil that migrates off-site, has the potential for transporting contaminants off-site. There may be situations when dust is being generated and leaving the site and the monitoring equipment does not measure PM₁₀ at or above the action level. Since this situation has the potential to allow for the migration of contaminants off-site, it is unacceptable. While it is not practical to quantify total suspended particulates on a real-time basis, it is appropriate to rely on visual observation. If dust is observed leaving the working site, additional dust suppression techniques must be employed. Activities that have a high dusting potential--such as solidification and treatment involving materials like kiln dust and lime--will require the need for special measures to be considered.

7. The following techniques have been shown to be effective for the controlling of the generation and migration of dust during construction activities:

- (a) Applying water on haul roads;
- (b) Wetting equipment and excavation faces;
- (c) Spraying water on buckets during excavation and dumping;
- (d) Hauling materials in properly tarped or watertight containers;
- (e) Restricting vehicle speeds to 10 mph;
- (f) Covering excavated areas and material after excavation activity ceases; and
- (g) Reducing the excavation size and/or number of excavations.

Experience has shown that the chance of exceeding the 150ug/m³ action level is remote when the above-mentioned techniques are used. When techniques involving water application are used, care must be taken not to use excess water, which can result in unacceptably wet conditions. Using atomizing sprays will prevent overly wet conditions, conserve water, and provide an effective means of suppressing the fugitive dust.

8. The evaluation of weather conditions is necessary for proper fugitive dust control. When extreme wind conditions make dust control ineffective, as a last resort remedial actions may need to be suspended. There may be situations that require fugitive dust suppression and particulate monitoring requirements with action levels more stringent than those provided above. Under some circumstances, the contaminant concentration and/or toxicity may require additional monitoring to protect site personnel and the public. Additional integrated sampling and chemical analysis of the dust may also be in order. This must be evaluated when a health and safety plan is developed and when appropriate suppression and monitoring requirements are established for protection of health and the environment.