

August 3, 2021

Mr. Ben McPherson
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203

Re: Expanded Remedial Investigation (Revised)
Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, NY 14086
BCP Site No. C915344

Dear Mr. McPherson:

In accordance with the Department's comments on the Remedial Investigation/Alternatives Analysis (RI/AA) Report and subsequent discussions with NYSDEC and NYSDOH, Matrix Environmental Technologies Inc. ("METI"), on behalf of 65 Lake Avenue LLC, proposes the following scope of work:

Expanded Remedial Investigation Scope of Work

The expanded remedial investigation will include the installation of a permanent monitoring well down gradient of the source area to delineate the leading edge of the groundwater plume and the installation and sampling of a temporary monitoring well at an off Site property at 1 Franklin Street. In addition, soil vapor probes will be installed and sampled at the off Site location and on the south property line of the Site to assess all potential human exposure pathways. Air monitoring will occur during all intrusive Site activities in accordance with the approved Community Air Monitoring Plan (CAMP) submitted as part of the Remedial Investigation Work Plan (RIWP). The CAMP is included in **Appendix A** for reference.

Soil Vapor Data Collection

Soil vapor samples will be collected at 1 Franklin Street and on Site between Building 1 and the southern property boundary as shown in **Figure 1**. Samples will be collected 24 hours following after the installation of temporary probes in accordance with the procedures detailed in Section 2.7 of the New York State Department of Health "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (October 2006 and its updates). The temporary probes will be installed to an approximate depth of 4 feet below grade, the assumed depth of the building foundation footings, using a direct-push drill rig. One to three implant volumes (i.e., the volume of the sample probe and tube) will be purged prior to collecting the samples. Flow rates for both purging and collecting will not exceed 0.2 liters per minute to minimize outdoor air infiltration during sampling. A tracer gas will be used to verify that an adequate surface seal is created. If high concentrations (> 10%) of tracer gas are observed in a sample using a portable monitoring device, the probe seal will be enhanced to reduce the infiltration of outdoor air. Samples will be collected over a two-hour duration.

Local conditions at the time of sampling, including weather conditions and odors or readings from field instrumentation, will be documented. The following data will also be recorded on sample log sheets:

- sample identification,
- date and time of sample collection,
- sampling depth,
- identity of samplers,
- sampling methods and devices,
- purge volumes,
- volume of soil vapor extracted,
- if canisters are used, the vacuum before and after samples were collected,
- apparent moisture content (dry, moist, saturated, etc.) of the sampling zone, and
- chain of custody protocols and records used to track samples from sampling point to analysis.

Samples will be submitted to Centek Laboratories of Syracuse, New York for analysis of Target Compound List (TCL) Volatile Organic Compounds (VOCs) by EPA Method TO-15. The laboratory reporting limits for this analysis are included in **Appendix B**. Analytical data will be reviewed by a third-party data validator and findings will be summarized in a Data Usability Summary Report.

Off Site Groundwater Data Collection

Following the collection of soil vapor data, a temporary groundwater monitoring well designated as TW1 will be installed at the off Site location shown in **Figure 1**. The well will be installed using a Geoprobe® 6620DT direct-push rig provided and operated by METI to a depth of approximately 15 feet below grade. The well will be constructed of 1-inch inner diameter (ID) SCH40 PVC well screen with 0.010-inch slots and a threaded bottom plug. The screen will be threaded to solid 1-inch ID SCH40 PVC riser and manually inserted into the borehole.

Immediately following installation, the well will be purged and a groundwater sample will be collected and submitted to Eurofins TestAmerica in Buffalo, New York for analysis of TCL VOCs by EPA Method 8260. Three to five well volumes of water will be removed from the top of the water column while the stability of water quality parameters (dissolved oxygen, oxidation-reduction potential, temperature, and pH) is monitored. Purged water will be containerized in 55-gallon drums for future off-Site disposal. After purging, the well will be allowed to recover for a short period of time to allow for a relatively static groundwater level measurement. Groundwater level measurements will also be collected from the on-Site wells at this time.

Following sampling, the well screen and casing will be removed and the well location will be backfilled with native soils. Upon receipt, analytical data will be reviewed by a third-party data validator and findings will be summarized in a Data Usability Summary Report.

On Site Monitoring Well Installation

A groundwater monitoring well will be installed down gradient of the source area to further define the leading edge of the groundwater plume. The location of the well, designated as MW9, is shown in **Figure**

1. The well will be installed, developed and surveyed according to the methods detailed in Section 3 of the approved RIWP.

Groundwater Sampling Event

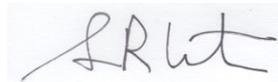
Groundwater samples will be collected from all nine (9) Site monitoring wells according to the procedures detailed in Section 3 of the RIWP. Prior to sample collection, static groundwater levels will be measured at each of the monitoring wells with a water level indicator. All samples will be submitted to Eurofins TestAmerica in Buffalo, New York for analysis of TCL VOCs by EPA Method 8260.

Installation of MW9 and collection of soil vapor and off Site groundwater data are scheduled to be completed on August 12-13, 2021. Groundwater elevation gauging and sampling of the on Site monitoring wells is scheduled to be completed on August 16, 2021. A revised RI/AA Report will be submitted upon completion of field work. Please contact us with any questions or comments.

Sincerely,
Matrix Environmental Technologies Inc.



Christine M. Curtis, P.E.
Project Engineer

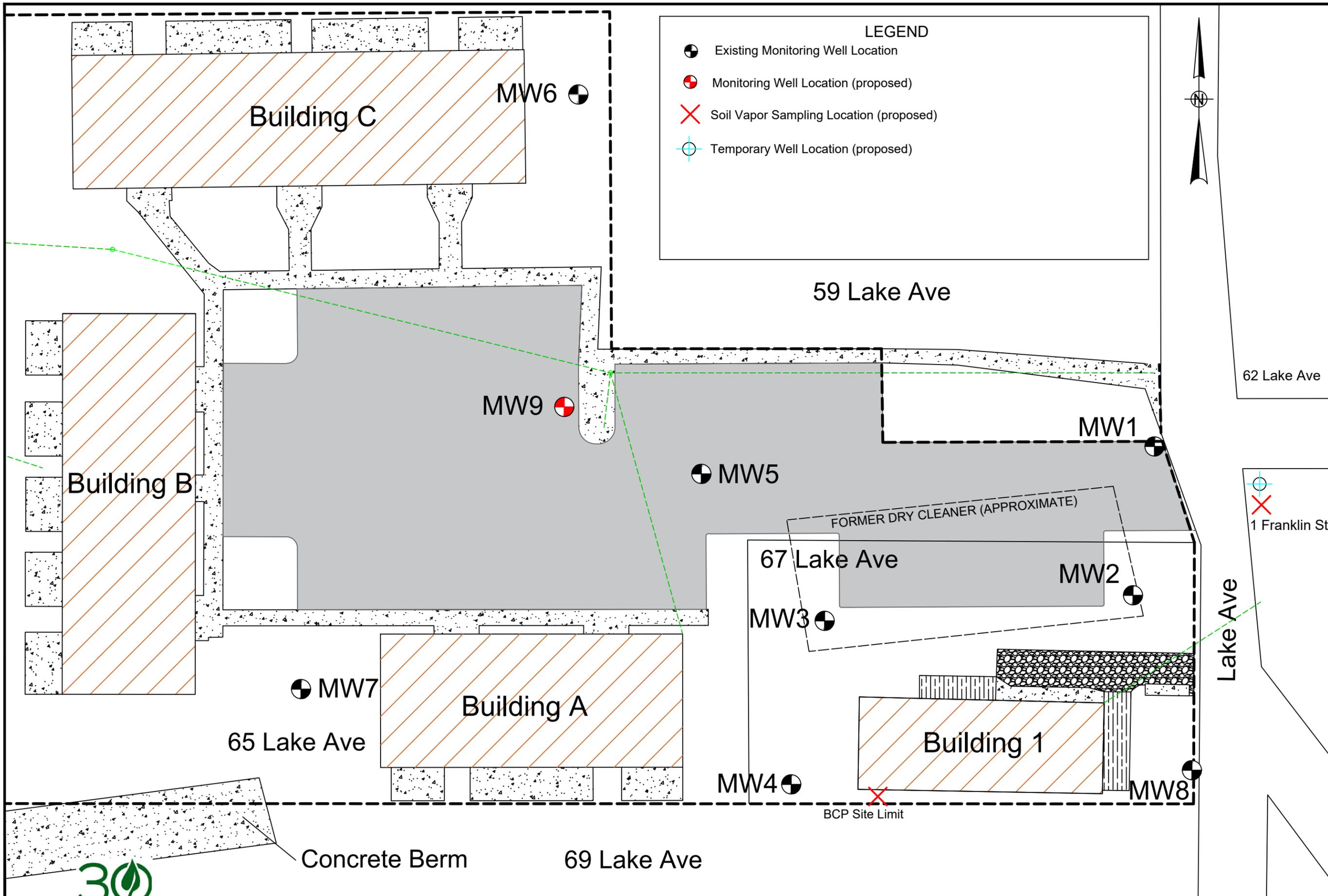


Sean R. Carter, P.E.
Principal Engineer

Enclosure

cc: Mr. Mark Aquino, 65 Lake Avenue LLC
Mr. Richard Moore, Esq.
Ms. Andrea Caprio, NYSDEC
Mr. Chad Staniszewski, NYSDEC
Ms. Jennifer Dougherty, Esq., NYSDEC
Ms. Charlotte Bethoney, NYSDOH
Ms. Sara Bogardus, NYSDOH

FIGURE



PREPARED BY:
MATRIX
 ENVIRONMENTAL TECHNOLOGIES INC.
 3730 California Road
 P.O. Box 427
 Orchard Park, NY 14127
 p:716.662.0745
 www.matrixbiotech.com

PREPARED FOR:
 65 Lake Avenue LLC

PROJECT MGR:
 SLM

DESIGNED BY:
 CMC

REVIEWED BY:
 SRC

DRAWN BY:
 CMC

REVISION	
BY	DATE
CMC	7/18/21

SCALE IN FEET: 1" = 20'

PROJECT NAME / LOCATION:
 Lakeside Village Apartments
 65-67 Lake Avenue
 Lancaster, New York
 BCP Site No. C915344

TITLE:
 Proposed Expanded
 Remedial Investigation
 Monitoring Well and
 Sampling Locations

DATE:

PROJECT NO.:
 18-046

FIGURE:
 1



APPENDIX A

Community Air Monitoring Program

COMMUNITY AIR MONITORING PLAN

March 2020

**Lakeside Village Apartments
65-67 Lake Avenue
Lancaster, New York
Site #C915344**

Prepared For:
65 Lake Avenue LLC
32 Central Avenue
Lancaster, New York 14086

Prepared By:



95 Brown Road, M/S 1052
Ithaca, New York 14850

A handwritten signature in black ink, appearing to read "Christine M. Curtis".

Christine M. Curtis, P.E.
Project Engineer

A handwritten signature in black ink, appearing to read "Steven L. Marchetti".

Steven L. Marchetti
Senior Project Manager

A handwritten signature in black ink, appearing to read "Sean R. Carter".

Sean R. Carter, P.E.
Principal Engineer

TABLE OF CONTENTS

1.0 INTRODUCTION 1

2.0 VOLATILE ORGANIC COMPOUND AIR MONITORING..... 1

3.0 PARTICULATE AIR MONITORING 2

4.0 DOCUMENTATION 3

5.0 WIND DIRECTION..... 3

FIGURE

Figure 1: Potential Air Monitoring Device Locations

ATTACHMENTS

- Attachment A:** NYSDEC DER-10 Appendix 1A, New York State Department of Health, Generic Community Air Monitoring Plan
- Attachment B:** Special CAMP Requirements for Work in or Near Buildings
- Attachment C:** NYSDEC DER-10 Appendix 1B, Fugitive Dust and Particulate Monitoring

1.0 INTRODUCTION

This document presents a Community Air Monitoring Plan (CAMP) to be implemented during remedial investigation (RI) activities at the Lakeside Village Apartments Site in Lancaster, New York. Matrix Environmental Technologies Inc. (METI) has prepared this CAMP on behalf of 65 Lake Avenue LLC.

Generic CAMP monitoring will be performed during non-intrusive activities, such as the collection of surface soil and groundwater samples from pre-existing monitoring wells, and during intrusive activities not taking place within 20 feet of potentially exposed populations or structures. Additional special requirements CAMP monitoring will be conducted during the installation of soil borings and monitoring wells located within 20 feet of potentially exposed populations or structures.

This CAMP will be completed in general accordance with NYSDEC DER-10 Appendix 1A, which is included in **Attachment A**, and the “Special CAMP Requirements for Work In or Near Buildings” provided by NYSDEC, included in **Attachment B**. Proposed monitoring locations are shown in **Figure 1**.

2.0 VOLATILE ORGANIC COMPOUND AIR MONITORING

VOCs will be monitored at the upwind and downwind perimeters of the work area on a continuous basis during intrusive activities and periodically during non-intrusive activities. The upwind and downwind locations will be determined based on observed wind conditions during ground intrusive work. MiniRAE 3000 organic vapor meters (OVMS) equipped with a photoionization detector (PID) with an 11.7 eV lamp will be used provide real-time recordable air monitoring data. The meters will be capable of calculating 15-minute running average concentrations for comparison to the action levels and will be equipped with an audible and/or visual alarm to indicate exceedance of the action level.

Generic CAMP VOC monitoring action levels as per DER-10 Technical Guidance for Site Investigations and Remediation are as follows:

- 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 (as measured at the upwind perimeter of the work area) 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.
- If the organic vapor level at the perimeter of the work area 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 take 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.

- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shut down.

Additional special requirements CAMP VOC monitoring action levels as per NYSDEC guidance are as follows:

- If total VOC concentrations next to the nearest air intake for the occupied building nearest the work area exceed 1 ppm, monitoring will occur within the occupied structure. Background readings in the occupied spaces will be taken prior to the commencement of the planned work assuming access is granted by the lessee.

3.0 PARTICULATE AIR MONITORING

The remediation crew will make all efforts to suppress dust and particulate matter during the handling of contaminated soil. Fugitive dust and particulate monitoring will be completed in accordance with the Special CAMP Requirements and DER-10 Appendix 1B, as included in **Attachment C**. The following techniques have been shown to be effective for the controlling 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/or
- (g) Reducing the excavation size and/or number of excavations.

Care will be taken not to use excess water, which can result in unacceptably wet site conditions.

Weather conditions will be evaluated during remedial work. When extreme wind conditions make dust control ineffective, remedial actions may need to be suspended as a last resort.

Dust and particulate monitoring will be conducted continuously at upwind and downwind perimeters of the work area during ground intrusive activities. If visual evidence of dust is apparent in other locations, monitoring equipment will be placed where necessary.

Particulate air monitoring will be done with a DataRAM-4 (or similar), which will be capable of reading particles less than 10 micrometers in size (PM-10). The meters will be capable of calculating 15-minute running average concentrations for comparison to the action levels and will be equipped with an audible and/or visual alarm to indicate exceedance of the action level. Particulate monitoring action levels for general CAMP monitoring are as follows:

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) greater than background for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that 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.
- 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 must be stopped and a reevaluation 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 $\mu\text{g}/\text{m}^3$ of the upwind level and in preventing visible dust migration.

Additional special requirements CAMP particulate monitoring action levels as per NYSDEC guidance are as follows:

- If total particulate concentrations next to the nearest air intake for the occupied building nearest the work area exceed 150 $\mu\text{g}/\text{m}^3$, work activities will be suspended until controls are implemented and are successful in reducing the total particulate concentrations to 150 $\mu\text{g}/\text{m}^3$ or less at the monitoring point.

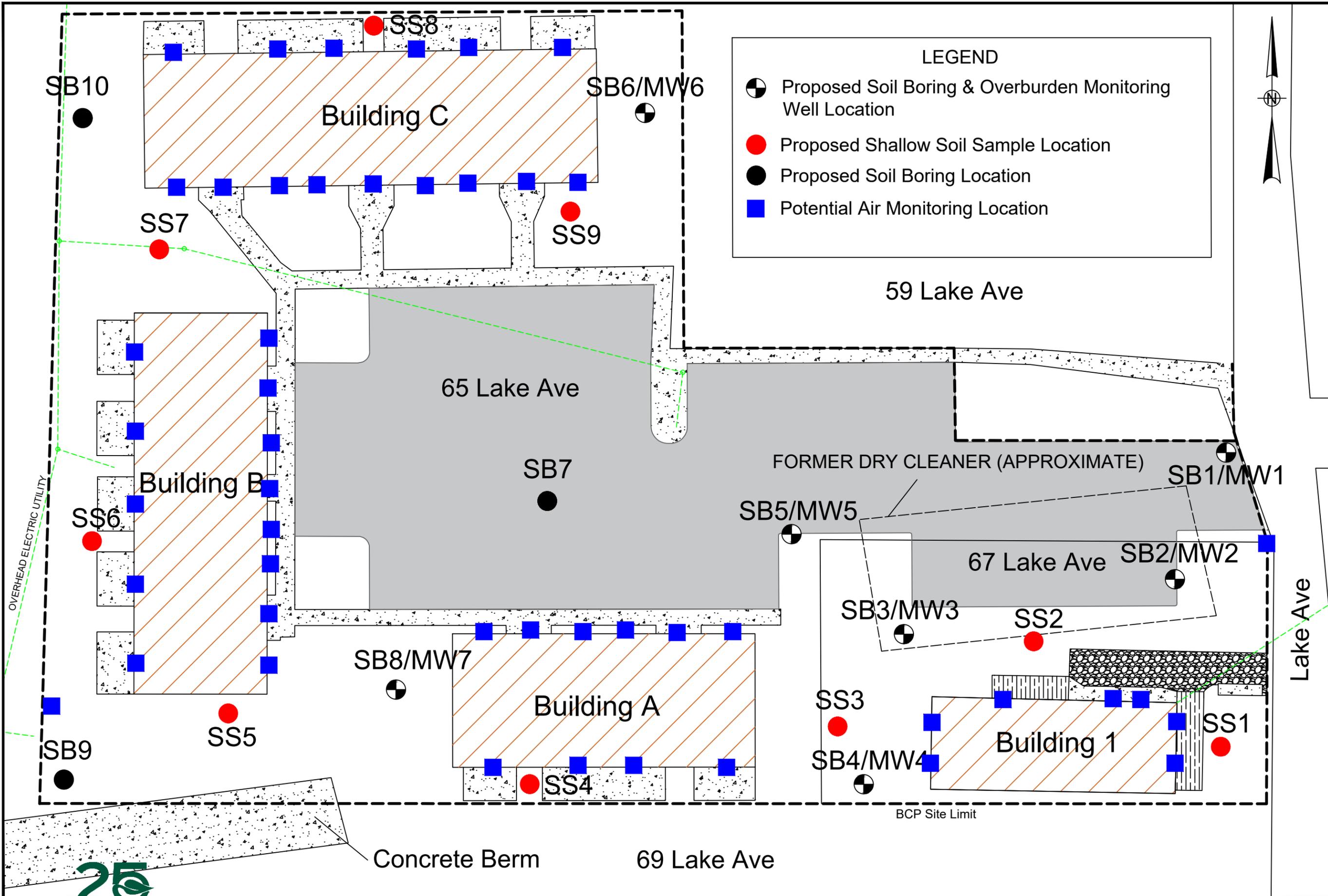
4.0 DOCUMENTATION

All 15-minute readings will be recorded and be available for or State (NYSDEC and NYSDOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

5.0 WIND DIRECTION

Prevailing wind direction will be recorded at the beginning of each work day by visual observations of an on-site windsock. As wind direction may change throughout the work day, direction will be reestablished if a significant change in direction is observed. The wind direction results will be utilized to determine the placement of the monitoring equipment.

FIGURE



LEGEND

- Proposed Soil Boring & Overburden Monitoring Well Location
- Proposed Shallow Soil Sample Location
- Proposed Soil Boring Location
- Potential Air Monitoring Location

PREPARED BY:
MATRIX
 ENVIRONMENTAL TECHNOLOGIES INC.
 3730 California Road
 P.O. Box 427
 Orchard Park, NY 14127
 p: 716.662.0745
 www.matrixbiotech.com

PREPARED FOR:
 65 Lake Avenue LLC

PROJECT MGR: SLM
 DESIGNED BY: CMC
 REVIEWED BY: SRC
 DRAWN BY: CMC

REVISION	
BY	DATE

SCALE IN FEET: 1" = 20'

PROJECT NAME / LOCATION:
 Lakeside Village Apartments
 65-67 Lake Avenue
 Lancaster, New York
 BCP Site No. C915344

TITLE:
 Potential Air Monitoring
 Device Locations

DATE: N/A
 PROJECT NO.: 18-046
 FIGURE: 1



ATTACHMENT A

**NYSDEC DER-10 Appendix 1A New York State Department of Health
Generic Community Air Monitoring Plan**

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

ATTACHMENT B

Special CAMP Requirements for Work in or Near Buildings

Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures

When work areas are within 20 feet of potentially exposed populations or occupied structures, the continuous monitoring locations for VOCs and particulates must reflect the nearest potentially exposed individuals and the location of ventilation system intakes for nearby structures. The use of engineering controls such as vapor/dust barriers, temporary negative-pressure enclosures, or special ventilation devices should be considered to prevent exposures related to the work activities and to control dust and odors. Consideration should be given to implementing the planned activities when potentially exposed populations are at a minimum, such as during weekends or evening hours in non-residential settings.

- If total VOC concentrations opposite the walls of occupied structures or next to intake vents exceed 1 ppm, monitoring should occur within the occupied structure(s). Background readings in the occupied spaces must be taken prior to commencement of the planned work. Any unusual background readings should be discussed with NYSDOH prior to commencement of the work.
- If total particulate concentrations opposite the walls of occupied structures or next to intake vents exceed 150 mcg/m³, work activities should be suspended until controls are implemented and are successful in reducing the total particulate concentration to 150 mcg/m³ or less at the monitoring point.
- Depending upon the nature of contamination and remedial activities, other parameters (e.g., explosivity, oxygen, hydrogen sulfide, carbon monoxide) may also need to be monitored. Response levels and actions should be pre-determined, as necessary, for each site.

Special Requirements for Indoor Work With Co-Located Residences or Facilities

Unless a self-contained, negative-pressure enclosure with proper emission controls will encompass the work area, all individuals not directly involved with the planned work must be absent from the room in which the work will occur. Monitoring requirements shall be as stated above under "Special Requirements for Work Within 20 Feet of Potentially Exposed Individuals or Structures" except that in this instance "nearby/occupied structures" would be adjacent occupied rooms. Additionally, the location of all exhaust vents in the room and their discharge points, as well as potential vapor pathways (openings, conduits, etc.) relative to adjoining rooms, should be understood and the monitoring locations established accordingly. In these situations, it is strongly recommended that exhaust fans or other engineering controls be used to create negative air pressure within the work area during remedial activities. Additionally, it is strongly recommended that the planned work be implemented during hours (e.g. weekends or evenings) when building occupancy is at a minimum.

ATTACHMENT C

NYSDEC DER-10 Appendix 1B Fugitive Dust and Particulate Monitoring

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.

Appendix 1C

DEC Permits Subject to Exemption

In accordance with section 1.10, exemptions from the following permit programs may be granted to the person responsible for conducting the remedial programs undertaken pursuant to section 1.2:

- Air - Title 5 permits
- Air - State permits
- Air - Registrations
- Ballast Discharge
- Chemical Control
- Coastal Erosion Hazard Areas
- Construction of Hazardous Waste Management Facilities
- Construction of Solid Waste Management Facilities
- Dams
- Excavation and Fill in Navigatable Waters (Article 15)
- Flood Hazard Area Development
- Freshwater Wetland
- Hazardous Waste
- Long Island Wells
- Mined Land Reclamation
- Navigation Law - Docks
- Navigation Law - Floating Objects
- Navigation Law - Marinas
- Non-Industrial Waste Transport
- Operation of Solid Waste Management Facilities
- Operation of Hazardous Waste Management Facilities
- State Pollution Discharge Elimination Systems (SPDES)
- Stream Disturbance
- Tidal Wetlands
- Water Quality Certification
- Water Supply
- Wild, Scenic and Recreational Rivers

APPENDIX B

Laboratory Reporting Limits

Test Code: IugM3_TO15
 Test Number: TO-15
 Test Name: Iug/M3 by Method TO15
 Matrix: Air Units: ppbV

**METHOD DETECTION /
 REPORTING LIMITS**

Updated: 28-Sep-18

Type	Analyte	MDL	PQL
A	1,1,1-Trichloroethane	0.035	0.15
A	1,1,2,2-Tetrachloroethane	0.101	0.15
A	1,1,2-Trichloroethane	0.046	0.15
A	1,1-Dichloroethane	0.025	0.15
A	1,1-Dichloroethene	0.034	0.15
A	1,2,4-Trichlorobenzene	0.081	0.15
A	1,2,4-Trimethylbenzene	0.074	0.15
A	1,2-Dibromoethane	0.04	0.15
A	1,2-Dichlorobenzene	0.065	0.15
A	1,2-Dichloroethane	0.028	0.15
A	1,2-Dichloropropane	0.057	0.15
A	1,3,5-Trimethylbenzene	0.07	0.15
A	1,3-butadiene	0.022	0.15
A	1,3-Dichlorobenzene	0.048	0.15
A	1,4-Dichlorobenzene	0.042	0.15
A	1,4-Dioxane	0.203	0.3
A	2,2,4-trimethylpentane	0.042	0.15
A	4-ethyltoluene	0.057	0.15
A	Acetone	0.116	0.3
A	Allyl chloride	0.042	0.15
A	Benzene	0.043	0.15
A	Benzyl chloride	0.097	0.15
A	Bromodichloromethane	0.031	0.15
A	Bromoform	0.024	0.15
A	Bromomethane	0.048	0.15
A	Carbon disulfide	0.043	0.15
A	Carbon tetrachloride	0.022	0.15
A	Chlorobenzene	0.034	0.15
A	Chloroethane	0.044	0.15
A	Chloroform	0.031	0.15
A	Chloromethane	0.046	0.15
A	cis-1,2-Dichloroethene	0.119	0.15
A	cis-1,3-Dichloropropene	0.039	0.15
A	Cyclohexane	0.039	0.15
A	Dibromochloromethane	0.024	0.15
A	Ethyl acetate	0.133	0.15
A	Ethylbenzene	0.031	0.15
A	Freon 11	0.035	0.15
A	Freon 113	0.036	0.15
A	Freon 114	0.024	0.15
A	Freon 12	0.034	0.15
A	Heptane	0.036	0.15

Test Code: IugM3_TO15

Test Number: TO-15

Test Name: Iug/M3 by Method TO15

Matrix: Air Units: ppbV

**METHOD DETECTION /
REPORTING LIMITS**

Updated: 28-Sep-18

Type	Analyte	MDL	PQL
A	Hexachloro-1,3-butadiene	0.106	0.15
A	Hexane	0.051	0.15
A	Isopropyl alcohol	0.086	0.15
A	m&p-Xylene	0.048	0.3
A	Methyl Butyl Ketone	0.088	0.3
A	Methyl Ethyl Ketone	0.119	0.3
A	Methyl Isobutyl Ketone	0.128	0.3
A	Methyl tert-butyl ether	0.062	0.15
A	Methylene chloride	0.04	0.15
A	o-Xylene	0.017	0.15
A	Propylene	0.04	0.15
A	Styrene	0.04	0.15
A	Tetrachloroethylene	0.025	0.15
A	Tetrahydrofuran	0.095	0.15
A	Toluene	0.05	0.15
A	trans-1,2-Dichloroethene	0.042	0.15
A	trans-1,3-Dichloropropene	0.034	0.15
A	Trichloroethene	0.017	0.15
A	Vinyl acetate	0.031	0.15
A	Vinyl Bromide	0.031	0.15
A	Vinyl chloride	0.024	0.15
I	1,4-Difluorobenzene	0	0
I	Bromochloromethane	0	0
I	Chlorobenzene-d5	0	0
S	Bromofluorobenzene	0	0