

## **APPENDIX U**

### **Community Air Monitoring Plan (CAMP)**

**DRAFT**

**FYN PAINT & LACQUER CO., INC.  
230 KENT AVENUE  
BROOKLYN, KINGS COUNTY, NEW YORK**

---

**COMMUNITY AIR MONITORING PLAN  
NYSDEC BCP SITE NO. C224154  
INDEX NO. C224154-02-15**

Prepared For

Kent Riverview LLC

April 2015

**LBG ENGINEERING SERVICES, P.C.  
Professional Environmental & Civil Engineers  
4 Westchester Park Drive, Suite 175  
White Plains, NY 10604  
(914) 694-5711**

**LEGGETTE, BRASHEARS & GRAHAM, INC.  
Professional Groundwater and Environmental  
Engineering Services  
4 Westchester Park Drive, Suite 175  
White Plains, NY 10604  
(914) 694-5711**

## **TABLE OF CONTENTS**

	<b><u>Page</u></b>
1.0 INTRODUCTION .....	1
2.0 SOIL EXCAVATION SCOPE OF WORK .....	3
3.0 AIR MONITORING PROCEDURES FOR INTRUSIVE ACTIVITIES .....	3
3.1 Particulate Monitoring.....	4
3.2 Volatile Organic Compound Monitoring .....	5
APPENDIX I	
NYSDOH Generic Community Air Monitoring Plan	

**LIST OF FIGURE**  
**(at end of report)**

**Figure**

1            Site Plan

**FYN PAINT & LACQUER CO., INC.  
230 KENT AVENUE  
BROOKLYN, KINGS COUNTY, NEW YORK**

---

**COMMUNITY AIR MONITORING PLAN  
NYSDEC BCP SITE NO. C224154  
INDEX NO. C224154-02-15**

## **1.0 INTRODUCTION**

Kent Riverview LLC (KR) has applied and been accepted into the Brownfield Cleanup Program (BCP) with the New York State Department of Environmental Conservation (NYSDEC) as a Volunteer to remediate the property located at 230 Kent Avenue, Brooklyn New York (heretofore referred to as “Fyn” or the “Site”). The Site is recorded under the Brownfield Cleanup Agreement (BCA) with a Site Name of Fyn Paint & Lacquer Co., Inc., Site Number C224154 and Index Number C224154-02-15.

The Site is located in an area of Brooklyn (Williamsburg) which is predominantly industrial and commercial with lesser amounts of residential properties throughout. The Site is located at the intersection of Kent Avenue and North First Street and consists of a partial two story industrial/warehouse building. A site plan is presented as figure 1.

On behalf of KR, LBG Engineering Services, P.C. and/or Leggette, Brashears & Graham, Inc. (LBG) has developed a Remedial Action Work Plan (RAWP) for the Site to meet requirements set by NYSDEC. LBG has prepared this Community Air Monitoring Plan (CAMP) as a supplemental governing document in association with the RAWP.

This CAMP will be implemented during the demolition of the existing building as well as the subsequent excavation of Site soils (or other ground invasive activities that involve moving existing Site soils around or off the Site) in connection with Site remediation activities. Specifically, this CAMP outlines the air quality monitoring procedures to be followed to protect the surrounding/downwind community (i.e., offsite receptors, including residents and workers) from potential airborne contaminant releases that may be generated as a direct result of the Project activities. This CAMP is consistent with the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan (included as Appendix I).

Several historical environmental remedial investigation activities have been performed at the Site and surrounding properties by Con Ed (via its representatives) and representatives for Fyn Paint (Fenley & Nicol Environmental and LBG). The contamination beneath the Site

identified during these investigations (which exceeds the NYSDEC regulatory guidance levels) consists of:

1. **Free Phase Product**

The historical observations have identified the free phase product as primarily being localized to the northeast corner of the Site as well as within the adjacent lot to the north. In addition, free phase product has been observed to the south and southeast of the Site in groundwater monitor wells.

2. **Soil Contamination**

The soil VOC contamination was detected at its highest concentrations (during previous excavation and well installation activities) in the northeast corner of the Site as well as within the adjacent Con Ed parking lot to the north with lesser amounts of contamination in the soil to the west. Additionally, similar contaminants of concern (toluene and xylene) were detected in soil collected from upgradient of the Site (to the southeast). Based on the soil contamination distribution, one source (with the possibility of unknown source areas in the surrounding area) is the former UST area in the northeast corner of the Site.

3. **Groundwater Contamination**

The dissolved phase VOC groundwater contamination beneath the Site correlates with the distribution of VOC contamination recorded in soil samples collected throughout the Site. The highest concentrations of VOCs detected in the groundwater are located beneath the Site (the Fyn Paint building and the adjacent Con Ed property to the north) extending downgradient to the west. Groundwater analyzed from points outside of the block encompassing the Site are on average several orders of magnitude lower than those beneath the Site.

#### **4. Soil Vapor Contamination**

The VOCs detected in historical soil vapor samples collected from beneath the Site and surrounding properties (compounds and relative concentrations) correlate with the distribution of the soil and groundwater VOC contamination. Additionally, there are compounds of concern detected in the soil vapor both onsite and surrounding the site (namely chlorinated solvents) which do not correlate with the soil and groundwater contamination observed as part of the environmental investigations.

### **2.0 SOIL EXCAVATION SCOPE OF WORK**

The RAWP for the Site includes the demolition of the Fyn Paint building and the excavation of contaminated soils (where not already excavated) at the Site. This project will follow a Track 1 cleanup approach to the remediation of soil contamination, as defined in 6 NYCRR Part 375. It is anticipated that the excavations will be advanced to a minimum depth of approximately 15 feet below grade (ft bg), except in areas of the Site where soil contamination exceeding Unrestricted Use Soil Cleanup Objectives is not present. The RAWP anticipates the excavation and disposal of approximately 3,600 tons of contaminated soil.

Soil will be characterized prior to excavation to facilitate direct loading and transport to an offsite disposal facility. This is preferred due to the limited operating space available at the Site. When sampling is completed and prior to excavation, excavated material will be placed directly into disposal trucks for appropriate offsite disposal. When excavation precedes waste characterization sampling, excavated material will be stockpiled on polyethylene liners, covered and stored on various areas of the Site.

### **3.0 AIR MONITORING PROCEDURES FOR INTRUSIVE ACTIVITIES**

The following sections describe the specific CAMP monitoring procedures for both particulates and volatile organic compounds.

### **3.1 Particulate Monitoring**

The air will be monitored in real-time during the demolition of the building and subsequent excavation of Site soils (or other ground invasive activities that involve moving existing Site soils/fill around or off the Site) in connection with the RAWP activities. Air monitoring for particulates (i.e. - dust) will be performed continuously during any demolition, excavation, or other ground invasive activities using both air monitoring equipment and visual observations. Monitoring equipment capable of measuring particulate matter smaller than 10 microns (PM-10) and will be used to monitor upwind (background), work zone and downwind locations, at heights approximately 4 feet to 5 feet above land surface (i.e., the breathing zone). This equipment will log instantaneous concentrations for subsequent reporting. Upwind work zone and downwind concentrations will be measured at the start of each workday and periodically throughout the day (at 30 minute to 1 hour intervals) thereafter to establish background conditions. The CAMP coordinator (the onsite field supervisor or Health and Safety Officer) will record the wind direction and speed as described below. These readings will allow the CAMP coordinator to ensure that CAMP monitoring locations are appropriate based upon the wind direction. The particulate monitoring equipment will be calibrated at the start of each day and as necessary throughout the day. The monitoring results will be compared to the following:

- If the downwind PM-10 particulate level is  $100 \mu\text{g}/\text{m}^3$  greater than background (upwind perimeter) or if airborne dust is observed leaving the work area, then dust suppression techniques shall 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. (Dust suppression techniques will also be applied in other circumstances as described in the Health and Safety Plan [HASP]).
- 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 will cease. The situation will be re-evaluated and changes implemented to ensure



particulate levels are less than  $150 \mu\text{g}/\text{m}^3$  above background conditions and to prevent visible dust migration.

Wind speed and wind direction will be observed and recorded continuously throughout the day. Meteorological data including temperature and barometric pressure will be recorded at a minimum once a day. These results will be utilized to position the particulate monitoring equipment in appropriate upwind and downwind locations.

There may also be situations where visible dust is generated by demolition and excavation activities and migrates to downwind locations but is not detected by the monitoring equipment at or above the action levels. Therefore, if visible dust is observed leaving the working area, dust suppression techniques such as those described in the RAWP and/or HASP will be employed.

If dust suppression techniques do not lower particulates to  $150 \mu\text{g}/\text{m}^3$  below background or if visible dust persists, additional measures, including work suspension if necessary, will be implemented to remedy the situation.

All air monitoring data, meteorological data, and the monitoring locations will be recorded in the daily air monitoring logs and will be available for NYSDEC and NYSDOH review.

### **3.2 Volatile Organic Compound Monitoring**

Air monitoring for volatile organic compounds (VOCs) will be performed continuously during any demolition, excavation or ground invasive activities (concurrent with particulate monitoring), including the handling of free-phase/NAPL, maintenance on the treatment system and any other activities which may release VOCs into the atmosphere. This monitoring will ensure the prevention of over exposure to workers at the Site and to citizens surrounding the Site. VOCs will be monitored at the downwind perimeter of the immediate work area or Site perimeter on a continuous basis. Upwind concentrations will be measured at the start of each workday and periodically thereafter (not less than three times per day) to establish background conditions. The monitoring work will be performed using equipment appropriate to measure

the types of contaminants known to be present at the Site. This equipment will consist of a MiniRAE 2000 Photoionization detector (PID) or equivalent PID capable of detecting total hydrocarbons at a sensitivity of 0.1 ppm. The equipment will be calibrated daily at a minimum.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or Site perimeter exceeds 5 parts per million (ppm) above background, work activities must be temporarily halted in the area of concern 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 total organic vapor levels at the downwind perimeter of the work area or Site perimeter persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities in the area of concern 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 at the downwind perimeter of the work area or Site perimeter is below 5 ppm over background for a 15-minute average.
- If the organic vapor level is more than 25 ppm above background at the downwind perimeter of the work area or Site perimeter, activities must be halted in the area of concern until corrective measures are identified and implemented to reduce emissions as described above.

All air monitoring data and the monitoring locations will be recorded in the daily air monitoring logs and will be available for NYSDEC and NYSDOH review.

dmd

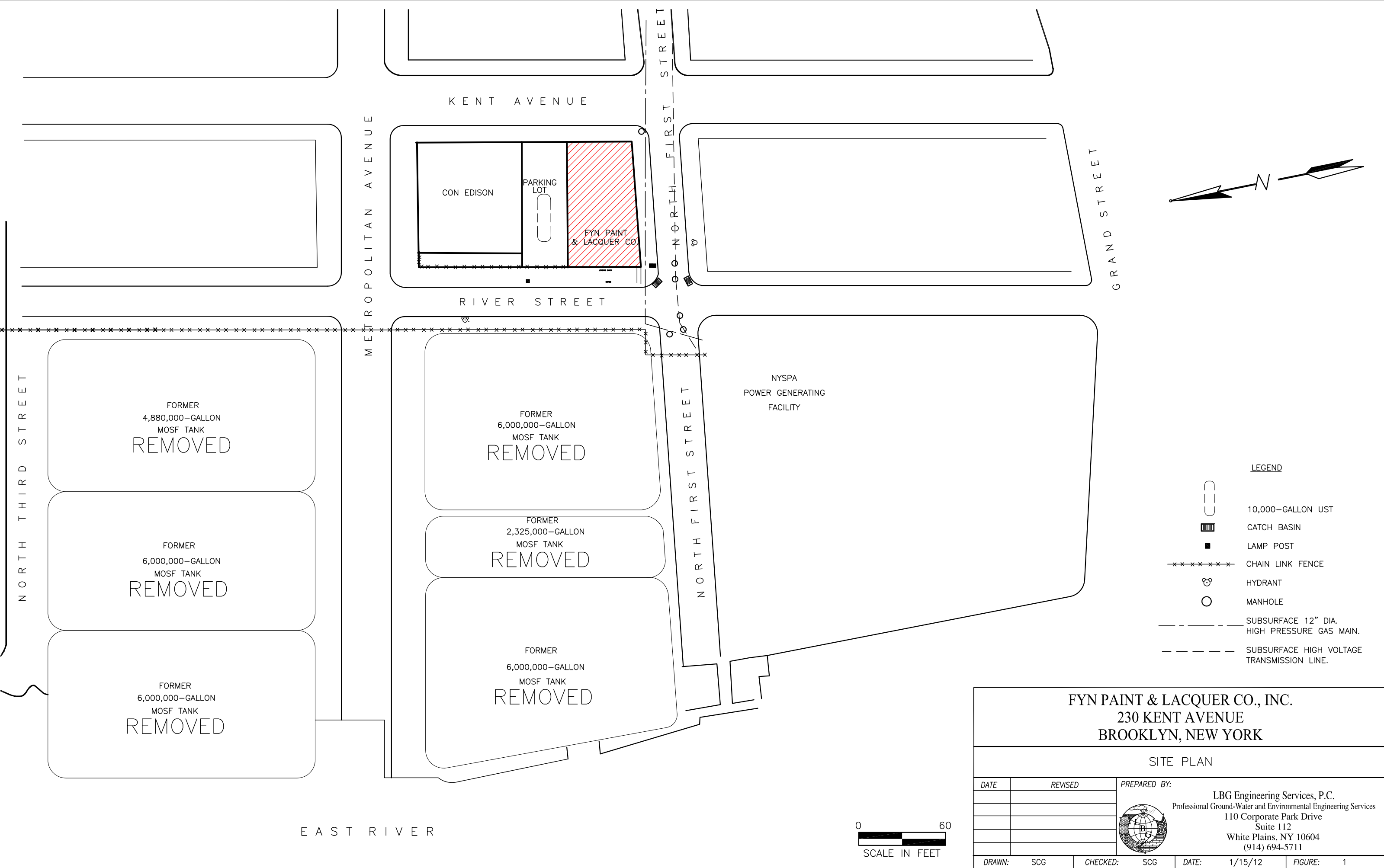
June 13, 2008

Revised: October 9, 2008

April 10, 2015

f:\reports\fyn paint bcp\01 - bcp cleanup - fyn paint\01 - rawp\appendices\working versions\appendix u - community air monitoring plan\community air monitoring plan.doc

**FIGURE**



## **APPENDIX I**

### **NYSDOH Generic Community Air Monitoring Plan**

## APPENDIX 1A

### New York State Department of Health Generic Community Air Monitoring Plan

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 volatile organic compounds (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 NYSDEC/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. 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.

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

All 15-minute readings must be recorded and be available for State (DEC and DOH) 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.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter ( $\text{mcg}/\text{m}^3$ ) 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.
- 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.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.