

**ENVIRONMENTAL MANAGEMENT PLAN**

**965 MAPLE STREET  
ROCHESTER, NEW YORK**

**NYSDEC SPILL #1306999**

**Prepared for:** City of Rochester  
Division of Environmental Quality  
30 Church Street, Room 300B  
Rochester, New York, 14614-1278

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**Project No.:** 4906S-13

**Date:** November 2013

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## 1.0 INTRODUCTION

This Environmental Management Plan (EMP) was prepared by Day Environmental Inc. (DAY) on behalf of the City of Rochester (City) for 965 Maple Street, Rochester, New York (Site). The general location of the Site is depicted on the Project Locus Map, included as Figure 1.

Previous investigations at the Site identified the presence of soil and groundwater contamination due to historic uses of the Site (i.e., auto repair, garage, contractor yard). This EMP should be implemented when work at the Site has the potential to disturb soil/fill and/or groundwater in areas of known contamination. The purpose of this EMP is to:

- Establish goals, procedures, and appropriate response actions to be used by on-site personnel should soil, fill material or groundwater impacted with volatile organic compounds (VOCs) and/or semi-volatile compounds (SVOCs) be encountered;
- Manage the impacted material, including characterization, handling, off-site disposal or re-use;
- Establish engineering and institutional controls to reduce potential environmental impacts, to be implemented if warranted; and
- Satisfy the New York State Department of Environmental Conservation (NYSDEC) requirements for closure of Spill #1306999.

## **2.0 SITE DESCRIPTION**

The Site consists of an approximate 2.5-acre parcel improved with an approximate 27,360 square foot single story, concrete block building constructed in 1953. From 1953 to 1977, the Site was used as a private commercial auto repair garage by a meat packing company (Tobin Packing Co., Inc.). An approximate 40' x 130' exterior portion of the Site that bounds Potomac Street to the south of the building was used as a contractor's storage yard containing heavy equipment and some 5-gallon containers.

### **2.1 Site Ownership and Planned Use**

The City acquired the Site on September 25, 2013. The City is the current owner of the Site as of the date of this EMP. The City Department of Environmental Services (DES) Parks Division plans to use the Site for equipment and material storage and as offices for City DES personnel.

### **2.2 Previous Environmental Studies**

DAY completed a Phase I Environmental Site Assessment (ESA) at the Site in 2013. The Phase I ESA Report (DAY File 4844E-13) identified the following Recognized Environmental Concerns (RECs):

1. Current and Historical Uses of the Site
  - a. Former Underground Storage Tank (UST) Systems
  - b. Former/Existing Drains
  - c. Former Vehicle Service Pit
  - d. Former Oil-Water Separator
  - e. Degraded Concrete Block Wall
2. Historical Uses of Adjoining/Nearby Properties
3. Asbestos-Containing Material (ACM)

DAY conducted a Phase II ESA at the Site in 2013 to further investigate REC #1 and REC #2. The following scope of work was completed during the Phase II ESA:

- Tracer testing of trench drain, sewer cleanouts and sump
- Advancement of 32 test borings including field screening of soil/fill samples
- Laboratory analysis of 15 soil/fill samples
- Installation of nine groundwater monitoring wells
- Laboratory analysis of nine groundwater samples from the monitoring wells
- Site restoration
- Preparation of the Phase II ESA report (DAY File 4861S-13)

The attached Figure 2 through Figure 4, and the attached Table 1 through Table 7, present pertinent information and data generated as part of the Phase II ESA. Findings from the Phase II ESA report include the following:

- Testing of accessible drains that had the highest potential of receiving historic discharges of chemical or petroleum products within the building confirmed they are connected to the public combined sewer system located beneath Maple Street. On-site drain and off-site sewer locations are depicted on Figure 2.
- Soil samples collected from two exterior test borings (TB-06 and TB-08) that were advanced within the former UST system area exceeded NYSDEC CP-51 soil cleanup levels (SCOs) and 6 New York Codes, Rules and Regulations (6NYCRR) Part 375 Protection of Groundwater SCOs for petroleum-related VOCs (refer to Figure 3 and Table 2). A groundwater sample from monitoring well MW-2 located within the former UST system area exceeded NYSDEC Technical and Operational Guidance Series (TOGS 1.1.1) standards and guidance values for petroleum-related VOCs (refer to Figure 3 and Table 6). Soil samples collected from test borings in proximity to, but outside of the UST system area, did not contain evidence of petroleum impact (refer to Figure 3 and Table 2, Table 3, and Table 6).
- A concentration of acetone exceeding the Protection of Groundwater SCO, but not exceeding the Restricted Commercial Use SCO, was detected in a soil sample from a test boring (TB-30) in the former interior trench drain (refer to Figure 3 and Table 2). However, soil and groundwater samples collected from the other nearby and distant test locations across the Site did not contain acetone (refer to Figure 3, Table 2 and Table 6).
- Elevated SVOCs exceeding 6NYCRR Part 375 Restricted Commercial Use, Restricted Industrial Use, and Protection of Groundwater SCOs were detected in a test boring (TB-25) that contained urban fill material in the contractor yard (refer to Figure 3 and Table 3).
- No additional field evidence of contamination was encountered in test boring or monitoring well locations across the remainder of the Site that were associated with the investigation of current and historical uses of the Site (refer to Figure 3 and Table 2 through Table 6).
- VOC results for the two corroded concrete block samples were non-detect or insignificant. A comparison of pH and sulfate results for the two corroded concrete block samples (CC-3 and CC-4) in relation to the two non-corroded (control) concrete block samples (CC-1 and CC-2) showed no significant differences. However, chloride results for the two corroded concrete block samples were significantly higher than the two non-corroded (control) concrete block samples. The four concrete block sample locations are shown on Figure 3, and the test results are summarized on Table 7. The reason for the significant difference in chloride concentrations has not been definitively determined at this time. However, since the building was formerly used as a vehicle maintenance facility and also as a Mr. Seconds retail outlet of building materials and supplies, it is possible that salt products were stored in this area of the building that could have caused the corrosion of the concrete blocks.

Findings of the Phase II ESA resulted in the identification of two RECs at the Site in addition to ACM REC as identified in the Phase I ESA. The two additional RECs are:

1. The Former UST System Area: This area remains a REC due to elevated concentrations of petroleum-related VOCs in soil and groundwater samples, and the presence of petroleum sheen and odor in groundwater.

2. Urban Fill Material: Urban fill material is a REC due to concentrations of SVOCs exceeding SCOs in the one sample of urban fill material tested, which was collected from the area of the Site used as a contractor yard. The aerial and vertical extents of the urban fill material at the Site were generally defined during the Phase II ESA.

### **2.3 Geology and Hydrogeology**

Fill material consisting of reworked soil (e.g., sand, silt, and gravel) was present in 25 of the 32 test borings advanced during the Phase II ESA from near the ground surface to up to four feet below ground surface (bgs). Fill material with trace to some amounts of slag, brick, cinders, and/or ash was present in nine of the 25 test borings containing fill material. Indigenous soils were observed to start beneath the concrete floor of the building or beneath overlying fill material. A layer approximately two to six inches thick of black organic soil (apparent former indigenous topsoil layer) was present in five of the 32 test borings at depths ranging from two to four feet bgs. Indigenous sub-soils generally consisted of sand and silt with lesser amounts of clay and gravel.

Elevated photoionization detector (PID) readings up to 220 parts per million (ppm), petroleum-type odors, and black/gray stained soils were encountered at test borings TB-06 and TB-08 starting at depths of approximately 10.0 feet and 8.0 feet bgs, respectively. A petroleum-type sheen and odor were encountered in MW-2 during well development and groundwater sampling activities. Test locations MW-1 (TB-06) and TB-08 are located in the former UST system area. No additional monitoring wells or test borings had field evidence of petroleum-type impact. Test boring and monitoring well locations are depicted on the Sample Location Plan included as Figure 3.

Static water levels from the nine monitoring wells installed during the Phase II ESA were measured on June 20, 2013 and ranged in depths from 5.03 feet to 13.12 feet from the top of well casings. Groundwater elevation data for June 20, 2013 is included as Table 1. Groundwater at the Site generally appears to flow towards MW-3 located near the center of the building as shown on Figure 4.

### **2.4 NYSDEC Spill Reporting and Corrective Actions**

On October 4, 2013, the City reported the findings of the Phase II ESA to the NYSDEC as they relate to the area of petroleum-impacted soil and groundwater that was encountered in the area of the former UST system (i.e., REC #1). On October 4, 2013, the City also provided electronic copy of the Phase II ESA report to the NYSDEC. The NYSDEC subsequently opened Spill File #1306999. On October 17, 2013, the NYSDEC agreed that Spill File #1306999 could be closed upon: 1) receipt of an EMP that addresses the proper management of any petroleum-impacted media; and 2) flagging the Site in the City's electronic Building Information System (BIS) database so that environmental conditions are evaluated by the City prior to issuance of any new building permits.

### **2.5 Well Decommissioning**

On November 8, 2013, Nothnagle Drilling Inc. decommissioned the nine monitoring wells (i.e., MW-1 through MW-9 shown on Figure 3) that had been installed and used during the Phase II ESA. Well decommissioning records are included in Attachment 1.

### **3.0 ENVIRONMENTAL MANAGEMENT PLAN**

The purpose of this EMP is to provide information, procedures and guidance on: 1) mitigating exposure to petroleum-impacted material and urban fill material at the Site should they be encountered; and 2) identifying, handling and managing impacted material at the Site should they be encountered. The procedures herein are intended to reduce potential exposures of harmful materials to the environment, Site personnel during construction activities and building occupants should impacted material be encountered. [Note: the EMP does not cover the REC associated with ACM. ACM will be addressed separately in accordance with applicable local, state and federal regulations]

The Site owner is responsible for addressing impacted material in accordance with this EMP unless a different entity acceptable to the NYSDEC is identified as the responsible party. If Site activities have the potential to disturb impacted subsurface material, it is recommended that an environmental professional be present to monitor and document the work being completed for compliance with this EMP. In addition to visually observing the material for impact, a PID should be used to screen soil, fill material and groundwater for the presence of VOCs.

#### **3.1 Identification of Impacted Media**

This section provides information on the identification of impacted material at the Site based on the findings of the Phase II ESA performed in 2013.

Soil and/or groundwater at the Site may contain elevated levels of VOCs associated with petroleum products, in particular in the area of the former UST system located north of the northeast corner of the existing building (refer to Figure 3). Fill material, particularly in the contractor yard (area of TB-24, MW-7(TB-25) and TB-26 on Figure 3), may contain elevated levels of SVOCs. Petroleum-impacted soil/fill material may be stained black or gray, emit petroleum/chemical odors, and show elevated PID readings. Petroleum-impacted groundwater may contain sheen on top of the water, emit petroleum/chemical odors, and show elevated PID readings.

Fill material over most of the Site, including the contractor yard, may potentially contain SVOCs. The fill material typically consists of a reworked sand, silt, and gravel soil that may contain trace to some amounts of slag, brick, cinders, and/or ash. The fill material documented at the Site generally did not emit a discerning odor or result in elevated PID readings. The fill material may be brown, red, gray or black in appearance. The fill material is generally near surface or immediately beneath paved surfaces or the existing building floor.

#### **3.2 Handling and Disposal of Impacted Media**

Petroleum-impacted soil or fill material in the area of the former UST system that is disturbed should be removed, segregated from non-petroleum-impacted material, and placed on and covered with plastic sheeting. Alternatively, the impacted material may be placed in 55-gallon drums or a roll-off disposal container (depending on the quantity generated), or direct-loaded onto trucks for off-site disposal following approval by the disposal facility. If impacted material is to be staged on-site, any treatment or disposal must be completed within 60 days of generation, unless authorized otherwise by the appropriate regulatory agency.

Fill material that is disturbed and does not appear petroleum-impacted should be removed, segregated from other materials, and placed on and covered with plastic sheeting. Alternatively, the fill material may be placed in 55-gallon drums or a roll-off disposal container (depending on the quantity generated), or direct-loaded into trucks for off-site disposal following approval by the disposal facility. If impacted material is to be staged on-site, any treatment or disposal must be completed within 60 days of generation, unless authorized otherwise by the appropriate regulatory agency.

In the event that impacted groundwater is encountered and needs to be removed from an excavation, the water must be containerized (i.e., placed in sealed New York State Department of Transportation (NYSDOT)-approved 55-gallon drums, holding tank, etc.) prior to characterization and disposal. Additional guidance regarding characterization, disposal or re-use is provided below.

### **3.2.1 Characterization Procedures**

Representative samples of the staged material should be collected and analyzed by a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified analytical laboratory.

Based on previous laboratory testing results from soil samples collected at the Site, the recommended analytical laboratory testing program for petroleum-impacted soil or fill material will include:

- NYSDEC CP-51 VOCs via United States Environmental Protection Agency (USEPA) Method 8260; and
- Additional waste characterization parameters, if required by the disposal facility.

Based on previous laboratory testing results from fill material samples collected at the Site, the recommended analytical laboratory testing program for fill material that does not appear to be petroleum-impacted will include:

- NYSDEC CP-51 SVOCs via USEPA Method 8270; and
- Additional waste characterization parameters, if required by the disposal facility.

Based on previous laboratory testing results from groundwater samples collected at the Site, the recommended analytical laboratory testing program for petroleum-impacted groundwater will include:

- Purgeable Organics VOCs via USEPA Method 624; and
- Additional waste characterization parameters, if required by the disposal facility.

The testing program may vary due to the nature of the soil, fill material and/or groundwater, or the disposal facility requirements. The analytical laboratory test results should be compared to the following criteria:

### Soil and Fill Material

- 6NYCRR Part 375 SCOs to assist in determining if soil or fill material requires removal, off-site disposal and/or treatment, or if it can be re-used on-site.
- If petroleum-impacted, also compare to NYSDEC CP-51 Soil Cleanup Levels (SCLs) to assist in determining if soil or fill material requires removal, off-site disposal and/or treatment, or if it can be re-used on-site.

### Groundwater

- NYSDEC TOGS 1.1.1 groundwater standards and guidance values to assist in determining if groundwater 1) can be discharged on-site; 2) requires pre-treatment and/or can be discharged to the public combined sewer system under a sewer use permit; or 3) requires off-site disposal at a regulated treatment/disposal facility.
- Applicable portions of the Monroe County Pure Waters (MCPW) Rules and Regulations, and Sewer Use Law, to assist in determining if water from the Site (groundwater, excavation water, etc.) requires pre-treatment and/or can be discharged to the public combined sewer under a Sewer Use Permit, or requires off-site disposal at a treatment/disposal facility.

### **3.2.2 Disposal of Impacted Material**

Off-site disposal of impacted material may be warranted based on laboratory test results, or construction requirements. Based on previous testing during the Phase II ESA, petroleum-impacted material will likely be classified as non-hazardous waste. Written permission must be acquired from the NYSDEC for any on-site treatment of petroleum-impacted soil (e.g., bio-remediation).

Groundwater generated and/or removed during construction or other Site activities that meet NYSDEC TOGS 1.1.1 groundwater standards and guidance values may be discharged on-site. Groundwater generated and/or removed during construction or other Site activities, that does not meet NYSDEC TOGS 1.1.1 groundwater standards and guidance values must be: 1) discharged to the public combined sewer under a Sewer Use Permit; or 2) transported and disposed off-site at a permitted facility. Although not anticipated, if free phase petroleum product is present on the groundwater, pre-treatment will be required prior to discharge to the combined sewer under a Sewer Use Permit.

Personnel transporting contaminated material from the Site must have the appropriate Waste Transporter Permits in accordance with 6NYCRR Part 364. In addition, the selected disposal facility of each waste stream (e.g., soil/fill material to landfill, water to POTW, etc.) must be approved by the appropriate regulatory agency to accept the specific waste.

### **3.2.3 Re-Use of Soil or Fill Material**

Soil or fill material that is not impacted with contaminants exceeding 6NYCRR Part 375 Unrestricted Use SCOs, or NYSDEC CP-51 SCLs (if applicable) may be left in place, re-used on-site, or re-used off-site following approval from NYSDEC. If soil or fill material is to be re-used, its geotechnical properties should be considered.

### **3.3 Health and Safety Monitoring**

The Site owner is responsible for making Site workers involved with intrusive activities aware of the potential harmful exposures that may be present in subsurface media at the Site. A copy of the EMP should be kept at the Site. This EMP, in addition to other environmental reports and/or assessments, should be provided for their review. The Site owner will discuss with the Site workers the proper identification, handling, and disposal methods described herein, and will caution the Site workers to avoid or minimize disturbance of impacted material in order to reduce or eliminate exposure to contaminants. Areas that have disturbed (e.g., excavated, graded, etc.) that contain impacted material should be restored (e.g., backfilled/covered with clean soil/fill cover, paved, etc.).

The Community Air Monitoring Program (CAMP) included in Attachment 2 must be implemented when Site activities will involve disturbing potentially impacted media associated with the former UST area and in areas of fill material. This CAMP is referenced from the NYSDEC's DER-10 document, Technical Guidance for Site Investigation and Remediation, dated May 3, 2010.

### **3.4 Notification Requirements**

The NYSDEC Spills Unit must be notified at least two days prior to intrusive activities that will disturb known areas of impacted soil/fill material at the Site. If impacted material is encountered, samples must be submitted to a NYSDOH ELAP-certified analytical laboratory for testing. Following receipt of the laboratory results indicating the presence of petroleum, or if petroleum impact was observed visually during construction activities, the NYSDEC must be notified within two hours. Contact information for the appropriate agencies to be notified is included in Section 6.0 of this document.

#### **4.0 ENGINEERING CONTROLS**

Based on the results of the Phase II ESA performed inside and outside the existing building that included field monitoring at test borings, test pits and monitoring wells, subsequent analytical laboratory testing of soil and groundwater samples, and on the construction and planned use of the existing building, soil vapor intrusion monitoring and mitigation do not appear warranted for the existing building at this time. However, the need for soil vapor mitigation should be evaluated for any new buildings to be constructed at the Site. If soil vapor intrusion evaluation work indicates that harmful vapors are not present, a vapor mitigation system will not be necessary in any new buildings. In the event that a soil vapor mitigation engineering control is deemed necessary in new buildings, the appropriate regulatory agencies must be notified.

## 5.0 INSTITUTIONAL CONTROLS

The City will 'flag' the Site on its electronic BIS database of properties located in the City of Rochester. The BIS is used by City staff involved with issuing permits. Flagging this property will require City Division of Environmental Quality (DEQ) approval prior to issuance of a new permit. This institutional control ensures that the environmental conditions of the Site are evaluated prior to new construction.

If a permit is approved but has the potential to result in encountering impacted material, City DEQ will provide a copy of this EMP to the involved parties, and notify them of the environmental conditions at the Site. In addition, City DEQ may condition the permit to comply with the following:

- Site-specific EMP
- Notification of the City and/or regulatory agencies prior to construction activities
- Installation of engineering controls
- Consultation and/or approval by regulatory agencies

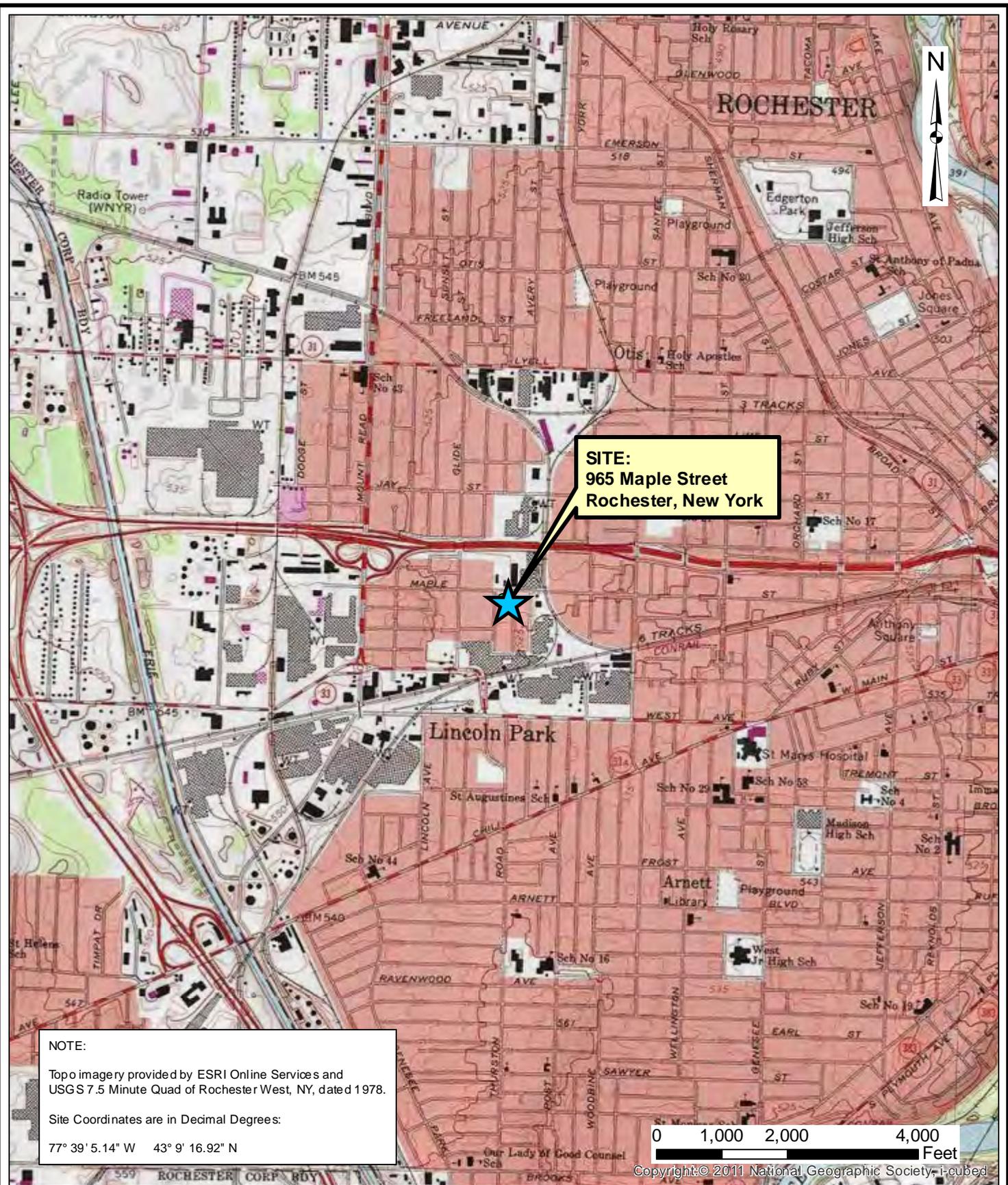
## **6.0 SITE CONTACTS**

NYSDEC Region 8  
6274 East Avon-Lima Road  
Avon, New York 14414  
Contact: Pete Miller  
Phone: 585-226-5434

Monroe County Department of Public Health  
111 Westfall Road , Room 914  
Rochester, New York 14620  
Contact: John Frazer, P.E.  
Phone: 585-753-5476

City of Rochester  
Division of Environmental Quality  
30 Church Street, Room 300B  
Rochester, New York 14614  
Contact: Joseph Biondolillo  
Phone: 585-428-6649

# Figures



NOTE:

Topo imagery provided by ESRI Online Services and USGS 7.5 Minute Quad of Rochester West, NY, dated 1978.

Site Coordinates are in Decimal Degrees:  
 77° 39' 5.14" W    43° 9' 16.92" N

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Document Path: E:\GIS\GIS Mapping\Rochester\4861S-13Roch\4861S-2 - Locus.mxd

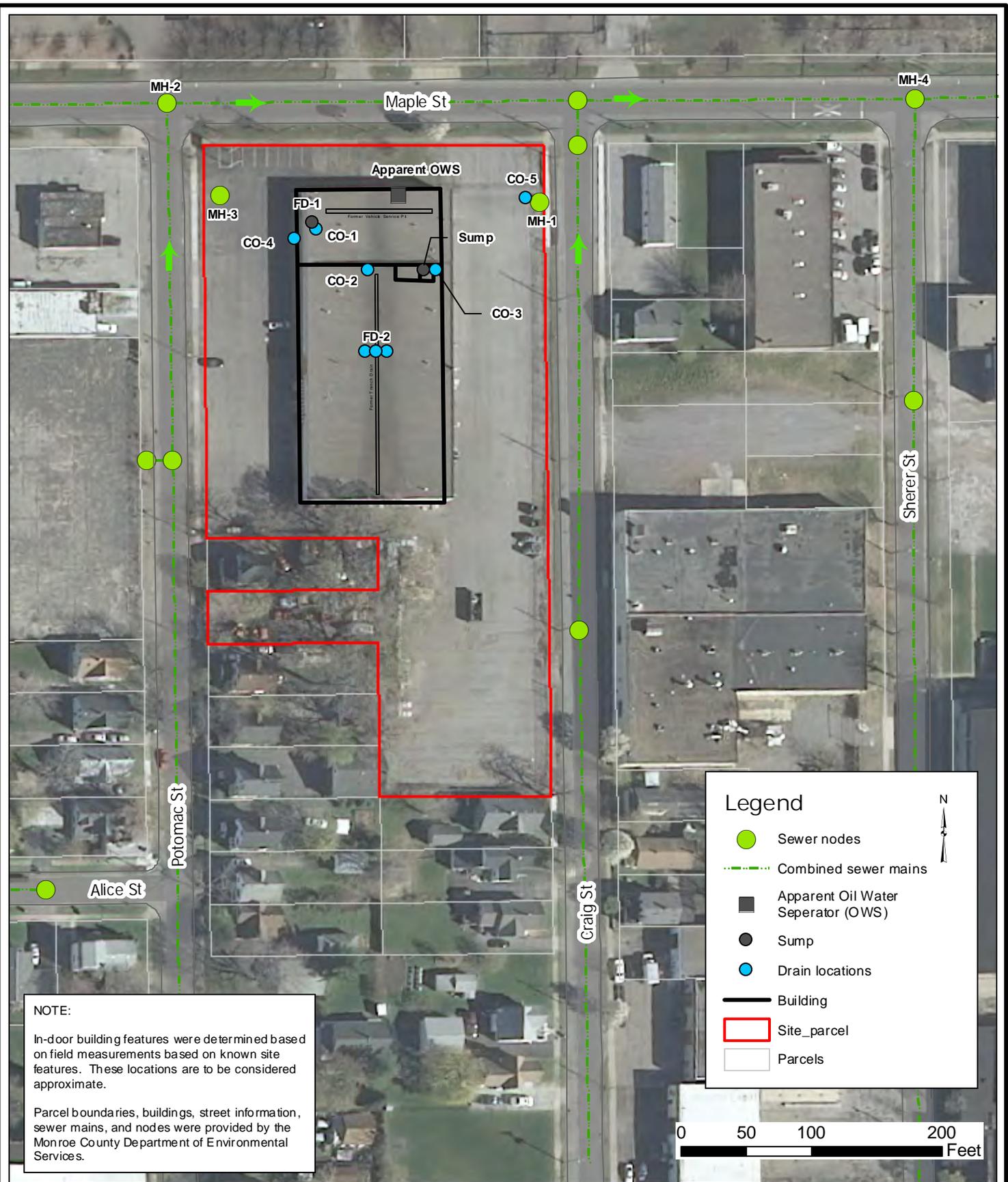
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Date	07-23-2013
Drawn By	CPS
Scale	AS NOTED

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 New York, New York 10170

Project Title	965 MAPLE STREET ROCHESTER, NEW YORK
Drawing Title	Project Locus Map

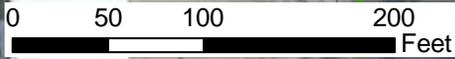
Project No.	4861S-13
	FIGURE 1



**NOTE:**  
 In-door building features were determined based on field measurements based on known site features. These locations are to be considered approximate.  
 Parcel boundaries, buildings, street information, sewer mains, and nodes were provided by the Monroe County Department of Environmental Services.

**Legend**

- Sewer nodes
- - - Combined sewer mains
- Apparent Oil Water Separator (OWS)
- Sump
- Drain locations
- Building
- Site\_parcel
- Parcels

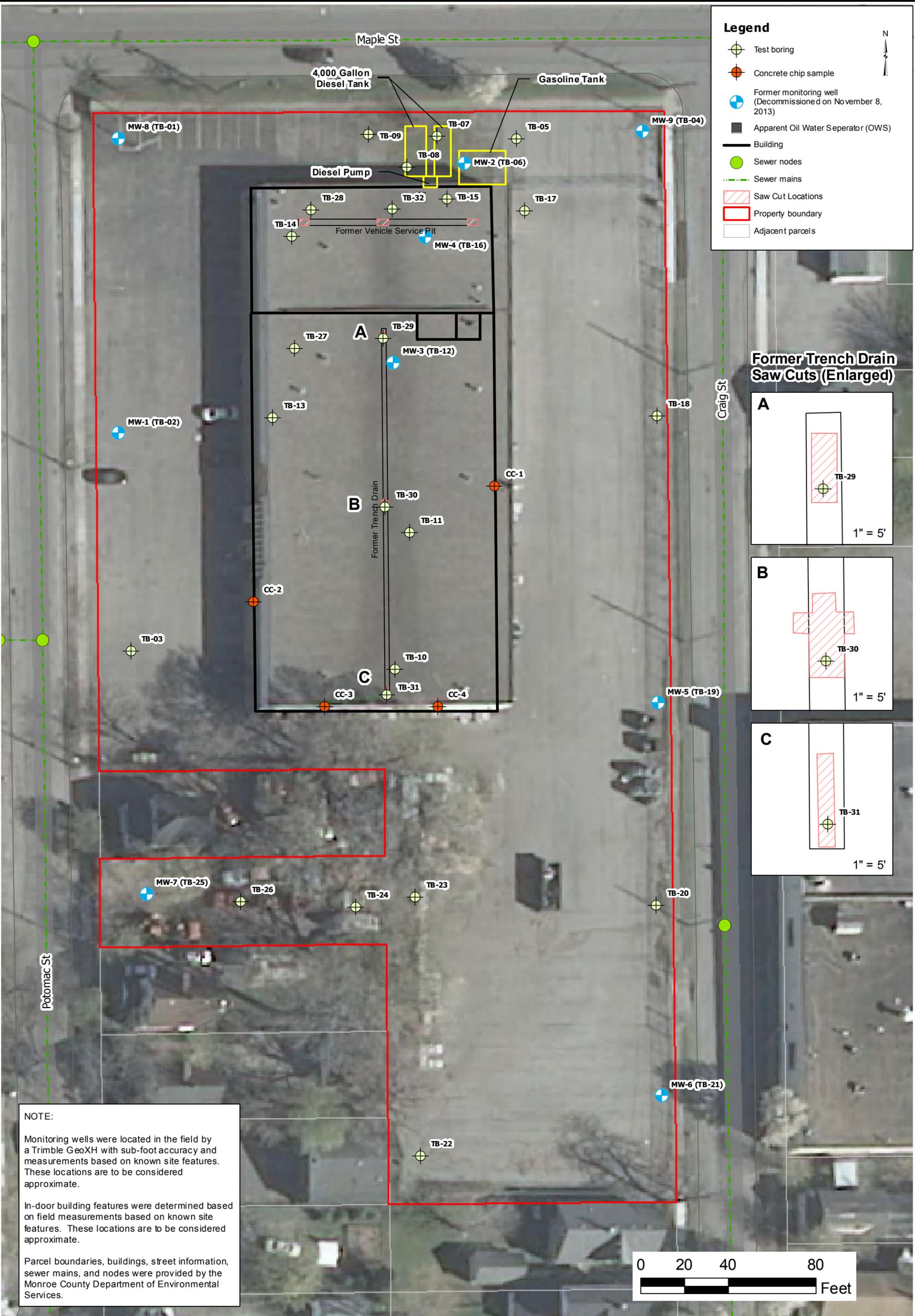


Date	07-23-2013
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Scale	AS NOTED

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 New York, New York 10170

Project Title	965 MAPLE STREET ROCHESTER, NEW YORK
Drawing Title	Site Plan with On-Site and Off-Site Drain and Sewer Structures

Project No.	4861S-13
	FIGURE 2



**NOTE:**

Monitoring wells were located in the field by a Trimble GeoXH with sub-foot accuracy and measurements based on known site features. These locations are to be considered approximate.

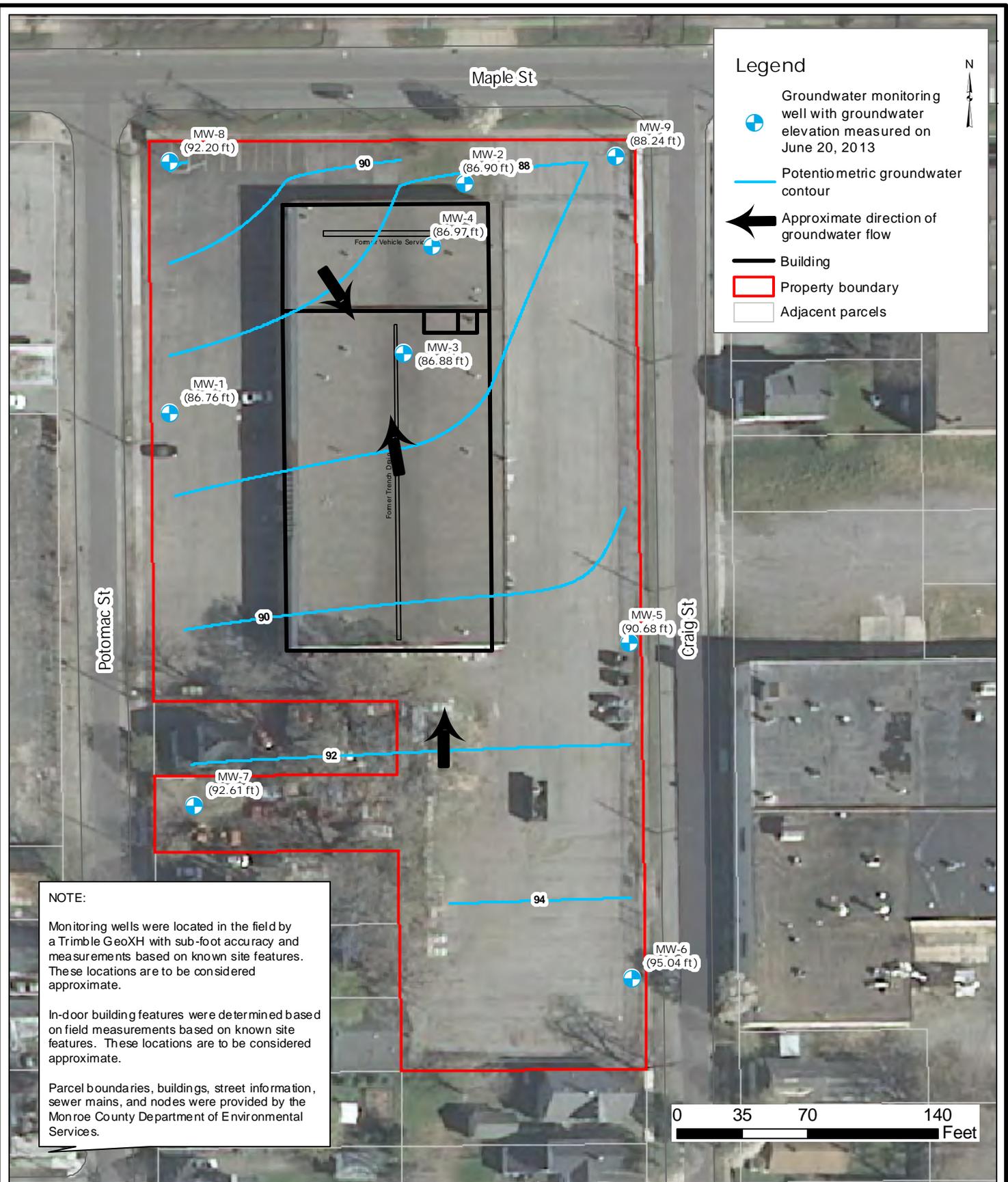
In-door building features were determined based on field measurements based on known site features. These locations are to be considered approximate.

Parcel boundaries, buildings, street information, sewer mains, and nodes were provided by the Monroe County Department of Environmental Services.

<b>FIGURE 3</b> 4861S-13 Project No.	Project Title 965 MAPLE STREET ROCHESTER, NEW YORK
	Drawing Title Sample Location Plan

**DAY ENVIRONMENTAL, INC.**  
 Environmental Consultants  
 Rochester, New York 14606  
 New York, New York 10170

DESIGNED BY	DATE
NES	11-2013
DRAWN BY	DATE DRAWN
CPS	11-2013
SCALE	DATE ISSUED
AS NOTED	11-20-2013



**Legend**

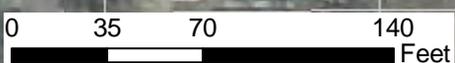
- Groundwater monitoring well with groundwater elevation measured on June 20, 2013
- Potentiometric groundwater contour
- Approximate direction of groundwater flow
- Building
- Property boundary
- Adjacent parcels

**NOTE:**

Monitoring wells were located in the field by a Trimble GeoXH with sub-foot accuracy and measurements based on known site features. These locations are to be considered approximate.

In-door building features were determined based on field measurements based on known site features. These locations are to be considered approximate.

Parcel boundaries, buildings, street information, sewer mains, and nodes were provided by the Monroe County Department of Environmental Services.



Date	07-23-2013
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Project Title	965 MAPLE STREET ROCHESTER, NEW YORK
Drawing Title	Potentiometric Groundwater Contour Map for June 20, 2013

Project No.	4861S-13
	FIGURE 4

# Tables

**Table 1**

**Phase II Environmental Site Assessment  
965 Maple Street  
Rochester, NY**

**Groundwater Elevation Data for June 20, 2013**

<b>Well ID</b>	<b>Elevation of PVC Well Casing (ft)</b>	<b>Static Water Level (SWL) Measurement (ft)</b>	<b>Groundwater Elevation (ft)</b>
MW-1	98.21	11.45	86.76
MW-2	99.63	12.73	86.90
MW-3	100.00	13.12	86.88
MW-4	100.03	13.06	86.97
MW-5	98.63	7.95	90.68
MW-6	100.07	5.03	95.04
MW-7	98.30	5.69	92.61
MW-8	98.99	6.79	92.20
MW-9	99.23	10.99	88.24

Note: The oil/water interface probe did not detect light non-aqueous phase liquid (LNAPL) or dense non-aqueous phase liquid (DNAPL) at the well locations during collection of static water level measurements.

Table 2

Phase II Environmental Site Assessment  
965 Maple Street  
Rochester, NY

Summary of Detected VOCs in mg/kg or ppm

Soil and Fill Samples

Contaminant	A Restricted Commercial Use	B Restricted Industrial Use	C <sup>(1)</sup> Protection of Groundwater	D <sup>(1)</sup> CP-51	TB-06 (12') 6/10/13	TB-08 (10.5') 6/10/13	TB-10 (4.0') 6/10/13	TB-14 (10.0') 6/11/13	TB-15 (12.0') 6/11/13	TB-17 (11') 6/11/13	TB-25 (2.5') 6/12/13	TB-27 (9.0') 6/13/13	TB-28 (8.0') 6/14/13	TB-30 (4.0') 6/14/13		
Acetone	500	1,000	0.05	NA	ND [8.98]	ND [9.05]	ND [0.0426]	ND [0.0466]	ND [0.0441]	ND [0.0425]	ND [0.0444]	ND [0.0378]	ND [0.0441]	0.0675	C	
N-Butylbenzene	500	1,000	12	12	7.25	2.44	ND [0.00851]	ND [0.00933]	ND [0.00882]	ND [0.0085]	ND [0.00888]	ND [0.00755]	ND [0.00881]	ND [0.00853]		
Cyclohexane	NA	NA	NA	NA	9.94	ND [9.05]	ND [0.0426]	ND [0.0466]	ND [0.0441]	ND [0.0425]	ND [0.0444]	ND [0.0378]	ND [0.0441]	ND [0.0427]		
Ethylbenzene	390	780	1	1	4.4	CD	1.94	CD	ND [0.00851]	ND [0.00933]	ND [0.00882]	ND [0.0085]	ND [0.00888]	ND [0.00755]	ND [0.00881]	ND [0.00853]
Isopropylbenzene	NA	NA	NA	2.3	2.22	ND [1.81]	ND [0.00851]	ND [0.00933]	ND [0.00882]	ND [0.0085]	ND [0.00888]	ND [0.00755]	ND [0.00881]	ND [0.00853]		
Methylcyclohexane	NA	NA	NA	NA	39	3.33	ND [0.00851]	ND [0.00933]	ND [0.00882]	ND [0.0085]	ND [0.00888]	ND [0.00755]	ND [0.00881]	ND [0.00853]		
n-Propylbenzene	500	1,000	3.9	3.9	10.4	CD	ND [1.81]	ND [0.00851]	ND [0.00933]	ND [0.00882]	ND [0.0085]	ND [0.00888]	ND [0.00755]	ND [0.00881]	ND [0.00853]	
1,2,4-Trimethylbenzene	190	380	3.6	3.6	51.3	CD	12.9	CD	ND [0.00851]	ND [0.00933]	ND [0.00882]	ND [0.0085]	ND [0.00888]	ND [0.00755]	ND [0.00881]	ND [0.00853]
1,3,5- Trimethylbenzene	190	380	8.4	8.4	19.6	CD	4.62	ND [0.00851]	ND [0.00933]	ND [0.00882]	ND [0.0085]	ND [0.00888]	ND [0.00755]	ND [0.00881]	ND [0.00853]	
Xylene (mixed)	500	1,000	1.6	0.26	17.3	CD	8.19	CD	0.01	ND [0.00933]	ND [0.00882]	ND [0.0085]	ND [0.00888]	ND [0.00755]	ND [0.00881]	0.0102
Total VOCs					161.41	33.42	0.01	0	0	0	0	0	0	0.0777		

Notes

(1) It is assumed that CP-51 Soil Cleanup Levels (SCLs) only apply to the UST area soil samples [i.e., soil samples TB-05 (18'), TB-07 (15'), TB TB-06 (10.5'), TB-08 (10.5), TB-09 (15'), TB-15 (12.0'), TB-17 (11') and TB-32 (8')].

ND [0.00851] = Not Detected [Detection limit utilized by laboratory]

A = Exceeds Commercial Use SCO

B = Exceeds Industrial Use SCO

C = Exceeds Protection of Groundwater SCO

D= Exceeds CP-51 SCL

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

The SCLs are as referenced in NYSDEC Final Commissioner Policy CP-51, dated October 21, 2010.

VOC = Volatile Organic Compound

Table 2

Phase II Environmental Site Assessment  
 965 Maple Street  
 Rochester, NY

Summary of Detected VOCs in mg/kg or ppm  
 Soil and Fill Samples

Contaminant	A Restricted Commercial Use	B Restricted Industrial Use	C <sup>(1)</sup> Protection of Groundwat	D <sup>(1)</sup> CP-51	TB-05 (18') 6/10/13	TB-07 (15') 6/10/13	TB-09 (15') 6/10/13	TB-32 (8') 6/14/13
Acetone	500	1,000	0.05	NA	NT	NT	NT	NT
N-Butylbenzene	500	1,000	12	12	ND [0.00681]	ND [0.00737]	ND [0.00677]	ND [0.00672]
Cyclohexane	NA	NA	NA	NA	NT	NT	NT	NT
Ethylbenzene	390	780	1	1	ND [0.00681] M	ND [0.00737]	ND [0.00677]	ND [0.00672]
Isopropylbenzene	NA	NA	NA	2.3	ND [0.00681]	ND [0.00737]	ND [0.00677]	ND [0.00672]
Methylcyclohexane	NA	NA	NA	NA	NT	NT	NT	NT
n-Propylbenzene	500	1,000	3.9	3.9	ND [0.00681]	ND [0.00737]	ND [0.00677]	ND [0.00672]
1,2,4-Trimethylbenzene	190	380	3.6	3.6	ND [0.00681]	ND [0.00737]	ND [0.00677]	ND [0.00672]
1,3,5- Trimethylbenzene	190	380	8.4	8.4	ND [0.00681]	ND [0.00737]	ND [0.00677]	ND [0.00672]
Xylene (mixed)	500	1,000	1.6	0.26	ND [0.00681]	ND [0.00737]	ND [0.00677]	ND [0.00672]
Total VOCs					0	0	0	0

Notes

(1) It is assumed that CP-51 Soil Cleanup Levels (SCLs) only apply to the UST area soil samples [i.e., soil samples TB-05 (18'), TB-07 (15'), TB-06 (10.5'), TB-08 (10.5'), TB-09 (15'), TB-15 (12.0'), TB-17 (11') and TB-32 (8')].

ND [0.00681] = Not Detected [Detection limit utilized by laboratory]

M = Matix spike recoveries outside QC limits. Matrix bias indicated.

A = Exceeds Commercial Use SCO

B = Exceeds Industrial Use SCO

C = Exceeds Protection of Groundwater SCO

D = Exceeds CP-51 SCL

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

The SCLs are as referenced in NYSDEC Final Commissioner Policy CP-51, dated October 21, 2010.

VOC = Volatile Organic Compound

NT = Not Tested

Table 3

**Phase II Environmental Site Assessment**  
**965 Maple Street**  
**Rochester, NY**

**Summary of Detected SVOCs in mg/kg or ppm**

**Soil and Fill Samples**

Contaminant	A Restricted Commercial Use	B Restricted Industrial Use	C <sup>(1)</sup> Protection of Groundwater	D <sup>(1)</sup> CP-51	TB-06 (12') 6/10/13	TB-08 (10.5') 6/10/13	TB-25 (2.5') 6/12/13	TB-28 (8.0) 6/14/13	TB-30 (4.0') 6/14/13
Benz(a)anthracene	5.6	11	1	1	ND [0.369]	ND [0.672]	3.15 <b>C</b>	ND [0.354]	ND [0.324]
Benzo(a)pyrene	1	1.1	22	1	ND [0.369]	ND [0.672]	3.26 <b>AB</b>	ND [0.354]	ND [0.324]
Benzo(b)fluoranthene	5.6	11	1.7	1	ND [0.369]	ND [0.672]	6.0 <b>AC</b>	ND [0.354]	ND [0.324]
Benzo(g,h,i)perylene	500	1,000	1,000	100	ND [0.369]	ND [0.672]	3.67	ND [0.354]	ND [0.324]
Benzo(k)fluoranthene	56	110	1.7	0.8	ND [0.369]	ND [0.672]	3.43 <b>C</b>	ND [0.354]	ND [0.324]
Chrysene	56	110	1	1	ND [0.369]	ND [0.672]	4.84 <b>C</b>	ND [0.354]	ND [0.324]
Dibenz(a,h)anthracene	0.56	1.1	1,000	0.33	ND [0.369]	ND [0.672]	1.01 <b>A</b>	ND [0.354]	ND [0.324]
Fluoranthene	500	1,000	1,000	100	ND [0.369]	ND [0.672]	3.69	ND [0.354]	ND [0.324]
Indeno(1,2,3-cd)pyrene	5.6	11	8.2	0.5	ND [0.369]	ND [0.672]	4.1	ND [0.354]	ND [0.324]
Naphthalene	500	1,000	12	12	ND [0.369]	5.16	ND [0.324]	ND [0.354]	ND [0.324]
Phenanthrene	500	1,000	1,000	100	ND [0.369]	1.41	0.896	ND [0.354]	ND [0.324]
Pyrene	500	1,000	1000	100	ND [0.369]	0.805	3.48	ND [0.354]	ND [0.324]
<b>Total SVOCs</b>					0	7.375	37.526	0	0

**Notes**

(1) It is assumed that CP-51 Soil Cleanup Levels (SCLs) only apply to the UST area soil samples [i.e., soil samples TB-05 (18'), TB-07 (15'), TB-06 (10.5'), TB-08 (10.5'), TB-09 (15'), TB-15 (12.0'), TB-17 (11') and TB-32 (8')].

**A** = Exceeds Commercial Use SCO

**B** = Exceeds Industrial Use SCO

**C** = Exceeds Protection of Groundwater SCC

**D** = Exceeds CP-51 SCL

mg/kg = milligrams per kilograms or parts per million (ppm).

ND [0.369] = Not Detected [Detection limit utilized by laboratory]

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

The SCLs are as referenced in NYSDEC Final Commissioner Policy CP-51, dated October 21, 2010.

SVOC = Semi-Volatile Organic Compound

Table 4

**Phase II Environmental Site Assessment  
965 Maple Street  
Rochester, NY**

**Summary of Detected Metals in mg/kg or ppm**

**Soil and Fill Samples**

Contaminant	<b>A</b> Restricted Commercial Use	<b>B</b> Restricted Industrial Use	<b>C</b> Protection of Groundwater	TB-06 (12') 6/10/13	TB-25 (2.5') 6/12/13	TB-10 (4.0) 6/10/13	TB-19 (2.0) 6/11/13
Arsenic	16	16	16	6.08	3.68	3.84	1.85
Barium	400	10,000	820	67.5	47	69.5	44
Cadmium	9.3	60	7.5	ND [0.682]	0.861	0.605	ND [0.502]
Chromium	1,500	6,800	NA	13.1	14.1	9.35	7.25
Lead	1,000	3,900	450	31	104	25.6	4.39
Total Mercury	2.8	5.7	0.73	0.0433	0.178	0.0551	0.0175
Silver	1,500	6,800	8.3	1.55	2.26	1.23	1.12

**Notes**

ND [0.682] = Not Detected [Detection limit utilized by laboratory]

NA = Not Available

mg/kg = milligrams per kilograms or parts per million (ppm).

Soil cleanup objectives (SCO) are as referenced in 6 NYCRR Part 375-6, Remedial Program Cleanup Objectives, dated December 14, 2006.

**A** = Exceeds Commercial Use SCO

**B** = Exceeds Industrial Use SCO

**C** = Exceeds Protection of Groundwater SCO



Table 6

**Phase II Environmental Site Assessment  
965 Maple Street  
Rochester, NY**

**Summary of Detected VOCs and Naphthalene in ug/L or ppb**

**Groundwater Samples**

Contaminant	Groundwater Standard or Guidance Value	MW-1 6/20/2013	MW-2 6/20/2013	MW-3 6/20/2013	MW-4 6/20/2013	MW-5 6/20/2013	MW-6 6/20/2013	MW-7 6/20/2013	MW-8 6/20/2013	MW-9 6/20/2013
Cyclohexane	NA	ND [10]	113	ND [10]						
Methylcyclohexane	NA	ND [2]	120	ND [2]						
Ethylbenzene	5	ND [2]	46.4 X	ND [2]						
Mixed Xylenes	5	2.46 B	167.9 X	2.75 B	2.65 B	2.72 B	3.88 B	2.87 B	2.64 B	2.91 B
n-Propylbenzene	5	ND [2]	54.4 X	ND [2]						
Isopropylbenzene	5	ND [2]	14.2 X	ND [2]						
1,2,4-Trimethylbenzene	5	ND [2]	293 X	ND [2]						
1,3,5-Trimethylbenzene	5	ND [2]	110 X	ND [2]						
Naphthalene	10	ND [5]	28.5 X	ND [5]						
Total VOCs <sup>(1)</sup>		0	923.74	0	0	0	0	0	0	0

**Notes**

All values are in parts per billion (ppb)

1) Total VOCs does not include Naphthalene or the compounds detected in the laboratory method blank (i.e., flagged with a "B")

Groundwater standard or guidance values are as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended by NYSDEC's supplemental table dated April 2000.

ND [10] = Not Detected [Detection limit utilized by laboratory]

NA = Not Available

X = Exceeds groundwater standard or guidance value

B = Method blank contained trace levels of analyte. Refer to included method blank report.

Table 7

Phase II Environmental Site Assessment  
 965 Maple Street  
 Rochester, NY

Summary of Detected Chloride, Sulfate, pH and VOCs in mg/kg or ppm

Concrete Block Samples

Contaminant	CC-1 East Wall 6/13/13	CC-2 West Wall 6/13/13	CC-3 South Wall	CC-4 South Wall
Chloride (mg/Kg)	555	624	7790	6720
pH (S.U.)	8.73	10.28	8.38	8.48
Sulfate (mg/Kg)	4410	4520	5540	7290
VOCs (mg/Kg)				
Mixed Xylenes	NT	NT	ND [0.008]	0.0102

**Notes**

ND [0.008] = Not Detected [Detection limit utilized by laboratory]

mg/kg = milligrams per kilograms or parts per million (ppm).

VOC = Volatile Organic Compound

S.U. = Standard Units

NT = Not Tested

**Attachment 1**

**Well Decommissioning Records**

# WELL DECOMMISSIONING RECORD

Site Name: CITY OF ROCHESTER

Well I.D.: MW-1

Site Location: 965 MAPLE STREET

Driller: N. SHORT

Drilling Co.: NOTHNAGLE DRILLING, INC.

Inspector: D. PECK

Date: 11-8-13

## DECOMMISSIONING DATA (Fill in all that apply)

### OVERDRILLING

Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

### CASING PULLING

Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	

### CASING PERFORATING

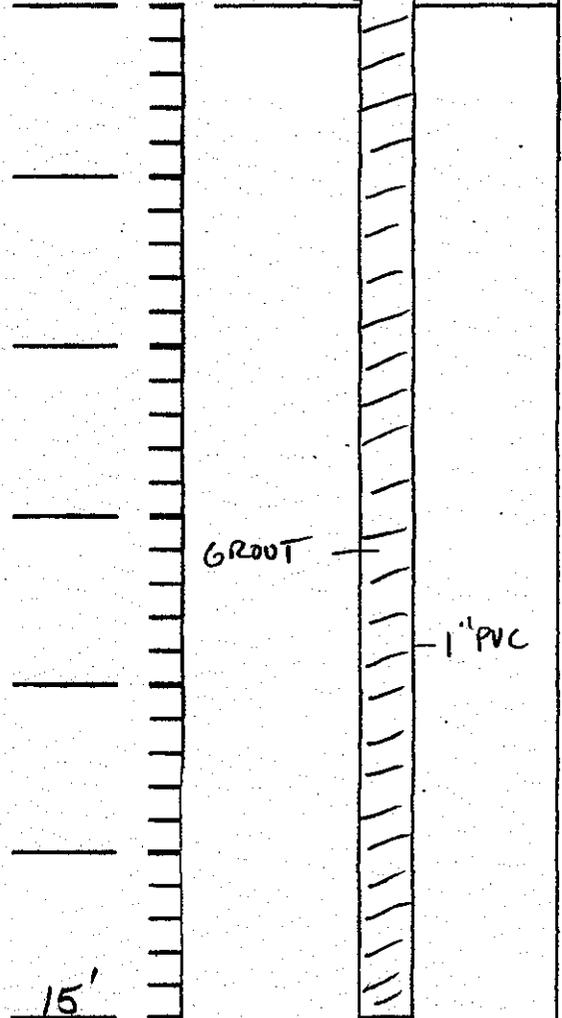
Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

### GROUTING

Interval grouted (FBLs)	<u>15'</u>
# of batches prepared	<u>1</u>
For each batch record:	
Quantity of water used (gal.)	<u>7.8</u>
Quantity of cement used (lbs.)	<u>94</u>
Cement type	<u>F</u>
Quantity of bentonite used (lbs.)	<u>3.9</u>
Quantity of calcium chloride used (lbs.)	<u>-</u>
Volume of grout prepared (gal.)	<u>11.4</u>
Volume of grout used (gal.)	<u>1.0</u>

## WELL SCHEMATIC\*

Depth  
(feet)



## COMMENTS:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* Sketch in all relevant decommissioning data, including:  
 interval overdrilled, interval grouted, casing left in hole,  
 well stickup, etc.

Drilling Contractor

Department Representative

# WELL DECOMMISSIONING RECORD

Site Name: CITY OF ROCHESTER  
 Site Location: 965 MAPLE STREET  
 Drilling Co.: NOTHABLE DRILLING, INC.

Well I.D.: MW-2  
 Driller: N. SHORT  
 Inspector: P. PECK  
 Date: 11-8-13

### DECOMMISSIONING DATA (Fill in all that apply)

**OVERDRILLING**

Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

**CASING PULLING**

Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	

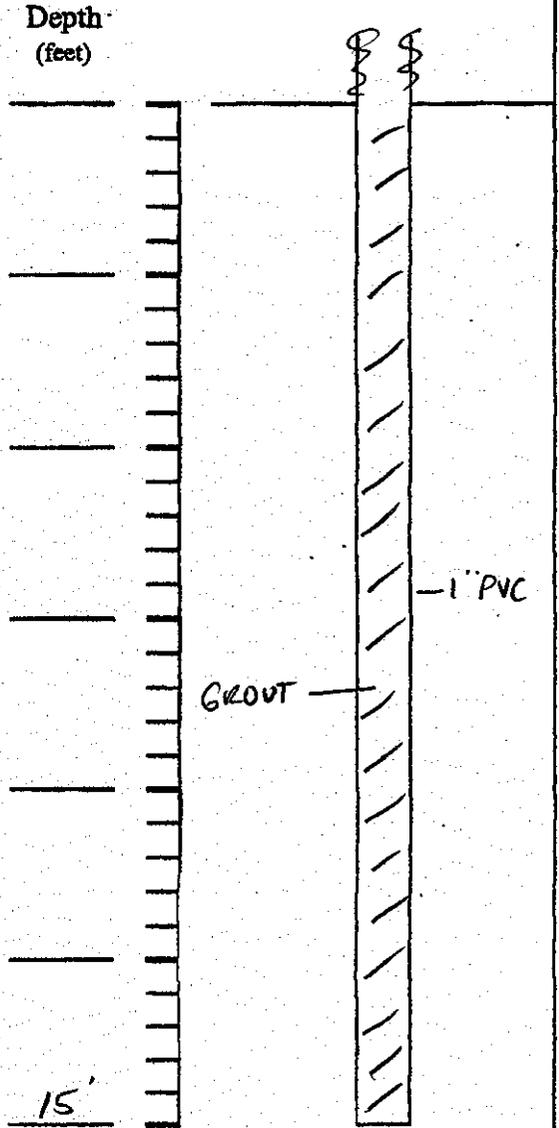
**CASING PERFORATING**

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

**GROUTING**

Interval grouted (FBLs)	15'
# of batches prepared	1
<b><u>For each batch record:</u></b>	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	F
Quantity of bentonite used (lbs.)	3.9
Quantity of calcium chloride used (lbs.)	-
Volume of grout prepared (gal.)	11.4
Volume of grout used (gal.)	1.0

### WELL SCHEMATIC\*



**COMMENTS:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor \_\_\_\_\_

Department Representative \_\_\_\_\_

# WELL DECOMMISSIONING RECORD

Site Name: CITY OF ROCHESTER  
 Site Location: 965 MAPLE STREET  
 Drilling Co.: NOTHAWALE DRILLING, INC.

Well I.D.: MW-3  
 Driller: N. SHORT  
 Inspector: D. PECK  
 Date: 11-8-13

## DECOMMISSIONING DATA (Fill in all that apply)

### OVERDRILLING

Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

### CASING PULLING

Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	

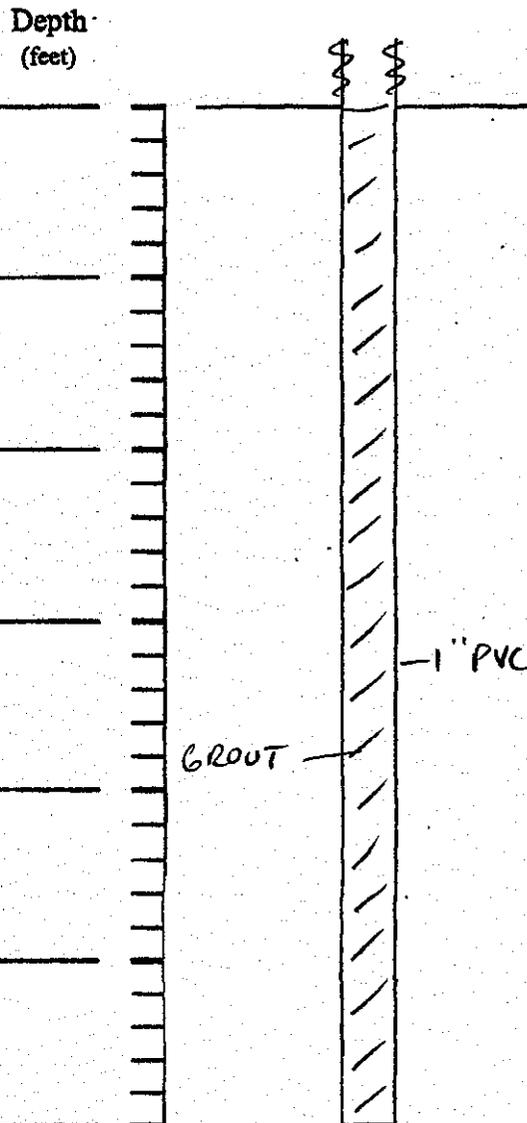
### CASING PERFORATING

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

### GROUTING

Interval grouted (FBSL)	<u>15'</u>
# of batches prepared	<u>1</u>
For each batch record:	
Quantity of water used (gal.)	<u>7.8</u>
Quantity of cement used (lbs.)	<u>94</u>
Cement type	<u>F</u>
Quantity of bentonite used (lbs.)	<u>3.9</u>
Quantity of calcium chloride used (lbs.)	<u>-</u>
Volume of grout prepared (gal.)	<u>11.4</u>
Volume of grout used (gal.)	<u>1.0</u>

## WELL SCHEMATIC\*



COMMENTS:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* Sketch in all relevant decommissioning data, including:  
 interval overdrilled, interval grouted, casing left in hole,  
 well stickup, etc.

Drilling Contractor \_\_\_\_\_

Department Representative \_\_\_\_\_

# WELL DECOMMISSIONING RECORD

Site Name: CITY OF ROCHESTER  
 Site Location: 965 MAPLE STREET  
 Drilling Co.: NOTHNAGLE DRILLING, INC.

Well I.D.: MW-4  
 Driller: N. SHORT  
 Inspector: D. PECK  
 Date: 11-8-13

## DECOMMISSIONING DATA (Fill in all that apply)

### OVERDRILLING

Interval Drilled

Drilling Method(s)

Borehole Dia. (in.)

Temporary Casing Installed? (y/n)

Depth temporary casing installed

Casing type/dia. (in.)

Method of installing

### CASING PULLING

Method employed

Casing retrieved (feet)

Casing type/dia. (in)

### CASING PERFORATING

Equipment used

Number of perforations/foot

Size of perforations

Interval perforated

### GROUTING

Interval grouted (FBLs) 15'

# of batches prepared 1

For each batch record:

Quantity of water used (gal.) 7.8

Quantity of cement used (lbs.) 94

Cement type F

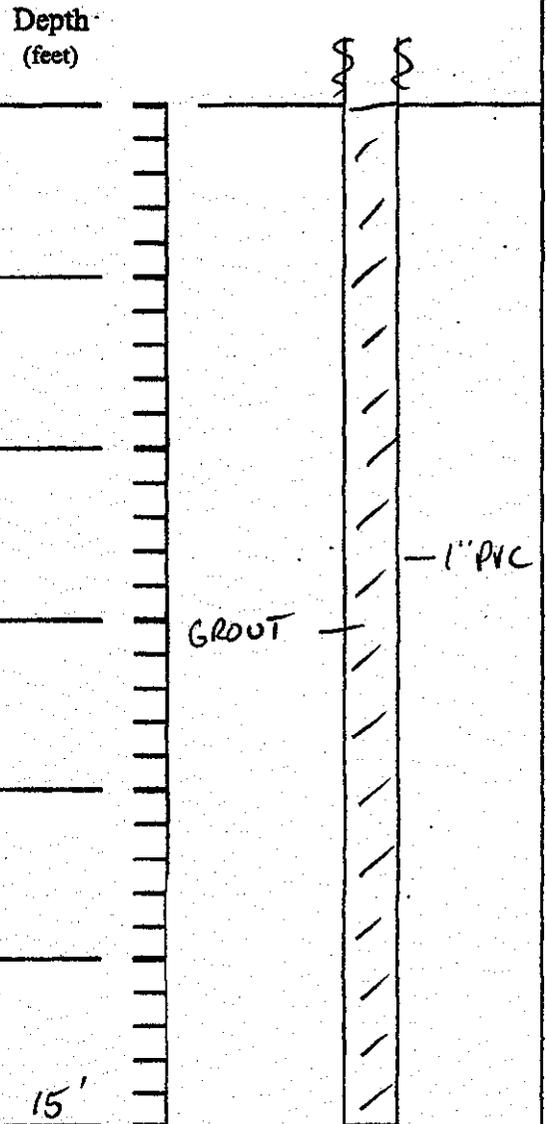
Quantity of bentonite used (lbs.) 3.9

Quantity of calcium chloride used (lbs.) -

Volume of grout prepared (gal.) 11.4

Volume of grout used (gal.) 1.0

## WELL SCHEMATIC\*



COMMENTS:

\* Sketch in all relevant decommissioning data, including:  
 interval overdrilled, interval grouted, casing left in hole,  
 well stickup, etc.

Drilling Contractor

Department Representative

# WELL DECOMMISSIONING RECORD

Site Name: CITY OF ROCHESTER  
 Site Location: 965 MAPLE STREET  
 Drilling Co.: NOTHAWALE DRILLING, INC.

Well I.D.: MW-5  
 Driller: N. SHORT  
 Inspector: D. PECK  
 Date: 11-8-13

## DECOMMISSIONING DATA (Fill in all that apply)

### OVERDRILLING

Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

### CASING PULLING

Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	

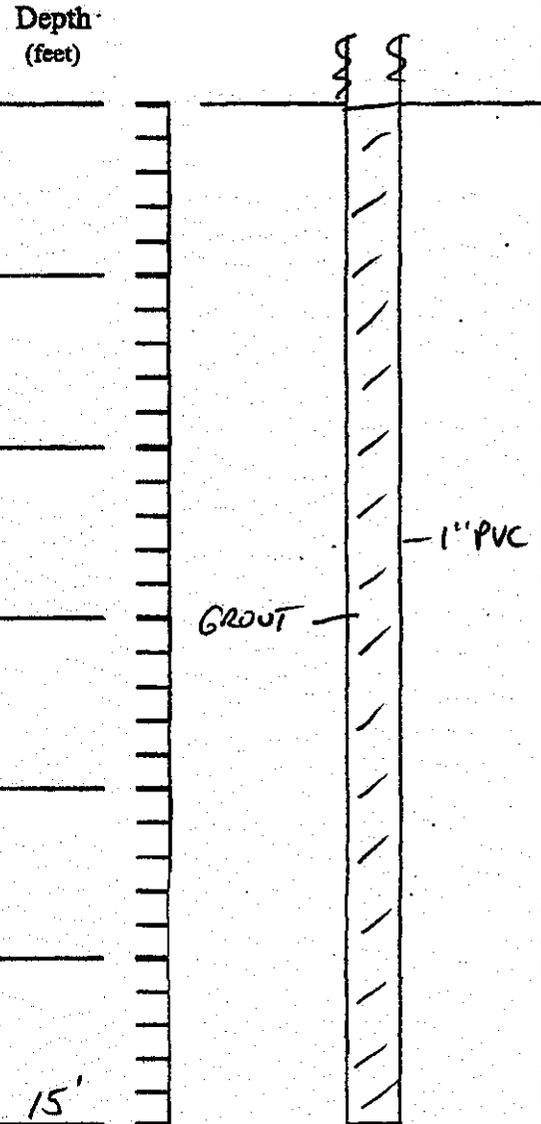
### CASING PERFORATING

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

### GROUTING

Interval grouted (FBLs)	<u>15'</u>
# of batches prepared	<u>1</u>
For each batch record:	
Quantity of water used (gal.)	<u>7.8</u>
Quantity of cement used (lbs.)	<u>94</u>
Cement type	<u>I</u>
Quantity of bentonite used (lbs.)	<u>3.9</u>
Quantity of calcium chloride used (lbs.)	<u>-</u>
Volume of grout prepared (gal.)	<u>11.4</u>
Volume of grout used (gal.)	<u>1.0</u>

## WELL SCHEMATIC\*



COMMENTS:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* Sketch in all relevant decommissioning data, including:  
 interval overdrilled, interval grouted, casing left in hole,  
 well stickup, etc.

Drilling Contractor \_\_\_\_\_

Department Representative \_\_\_\_\_

# WELL DECOMMISSIONING RECORD

Site Name: CITY OF ROCHESTER  
 Site Location: 965 MAPLE STREET  
 Drilling Co.: NOTHAWALE DRILLING, INC.

Well I.D.: MW-6  
 Driller: N. SHORT  
 Inspector: D. PECK  
 Date: 11-8-13

### DECOMMISSIONING DATA (Fill in all that apply)

**OVERDRILLING**

Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

**CASING PULLING**

Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	

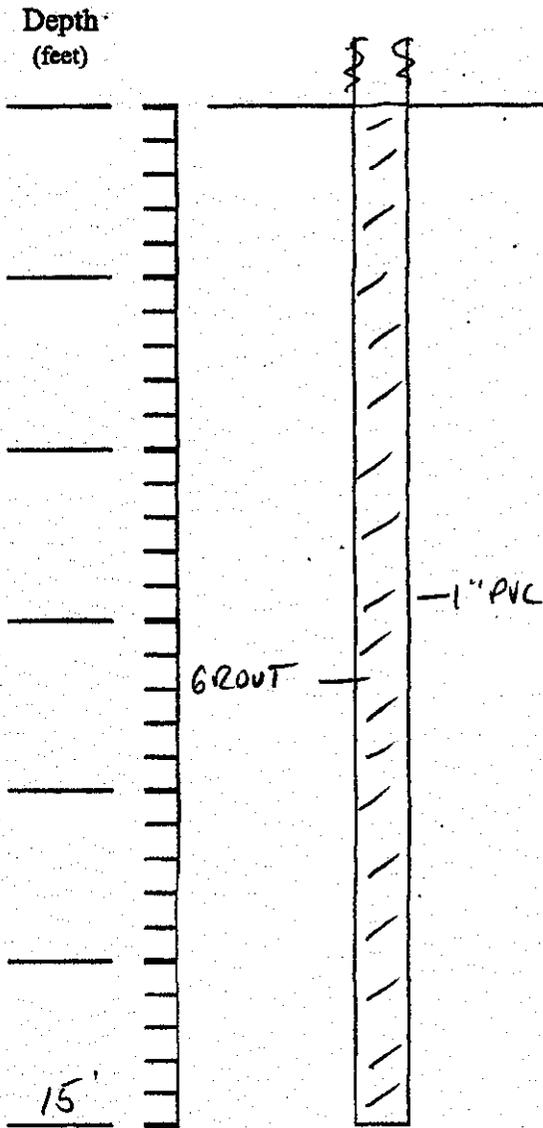
**CASING PERFORATING**

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

**GROUTING**

Interval grouted (FBLs)	15'
# of batches prepared	1
<u>For each batch record:</u>	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	F
Quantity of bentonite used (lbs.)	3.9
Quantity of calcium chloride used (lbs.)	-
Volume of grout prepared (gal.)	11.4
Volume of grout used (gal.)	1.0

### WELL SCHEMATIC\*



**COMMENTS:**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor \_\_\_\_\_

Department Representative \_\_\_\_\_

# WELL DECOMMISSIONING RECORD

Site Name: CITY OF ROCHESTER  
 Site Location: 965 MAPLE STREET  
 Drilling Co.: NOTHABLE DRILLING, INC.

Well I.D.: MW-7  
 Driller: N. SHORT  
 Inspector: D. PECK  
 Date: 11-8-13

### DECOMMISSIONING DATA (Fill in all that apply)

**OVERDRILLING**

Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

**CASING PULLING**

Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	

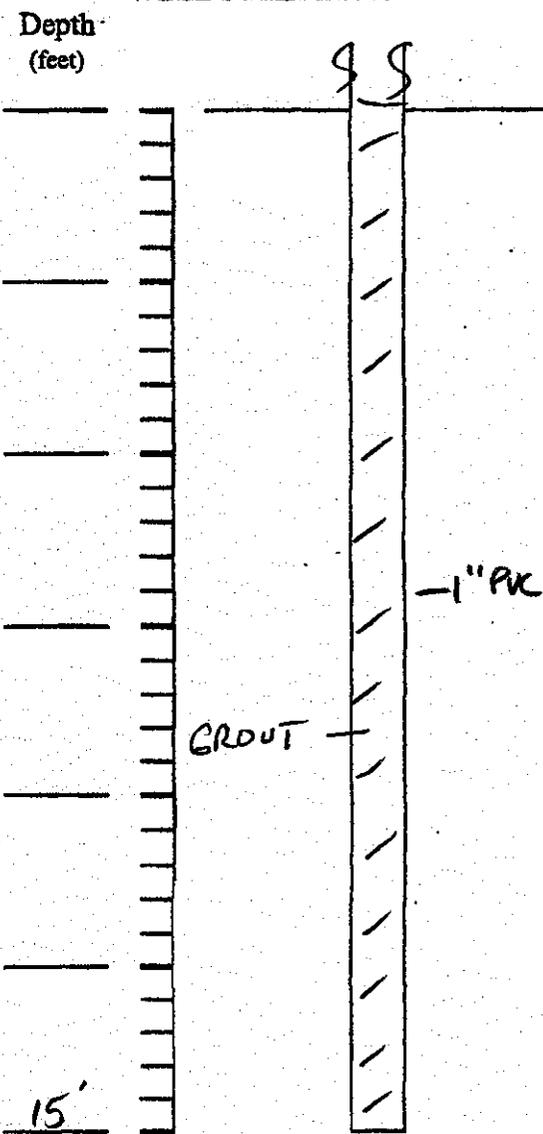
**CASING PERFORATING**

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

**GROUTING**

Interval grouted (FBLs)	15'
# of batches prepared	1
<b><u>For each batch record:</u></b>	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	F
Quantity of bentonite used (lbs.)	3.9
Quantity of calcium chloride used (lbs.)	-
Volume of grout prepared (gal.)	11.4
Volume of grout used (gal.)	1.0

### WELL SCHEMATIC\*



**COMMENTS:**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

Drilling Contractor \_\_\_\_\_

Department Representative \_\_\_\_\_

# WELL DECOMMISSIONING RECORD

Site Name: CITY OF ROCHESTER  
 Site Location: 965 MAPLE STREET  
 Drilling Co.: NOTHNAGLE DRILLING, INC.

Well I.D.: MW-8  
 Driller: N. SHORT  
 Inspector: D. PECK  
 Date: 11-8-13

## DECOMMISSIONING DATA (Fill in all that apply)

### OVERDRILLING

Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

### CASING PULLING

Method employed	
Casing retrieved (feet)	
Casing type/dia. (in.)	

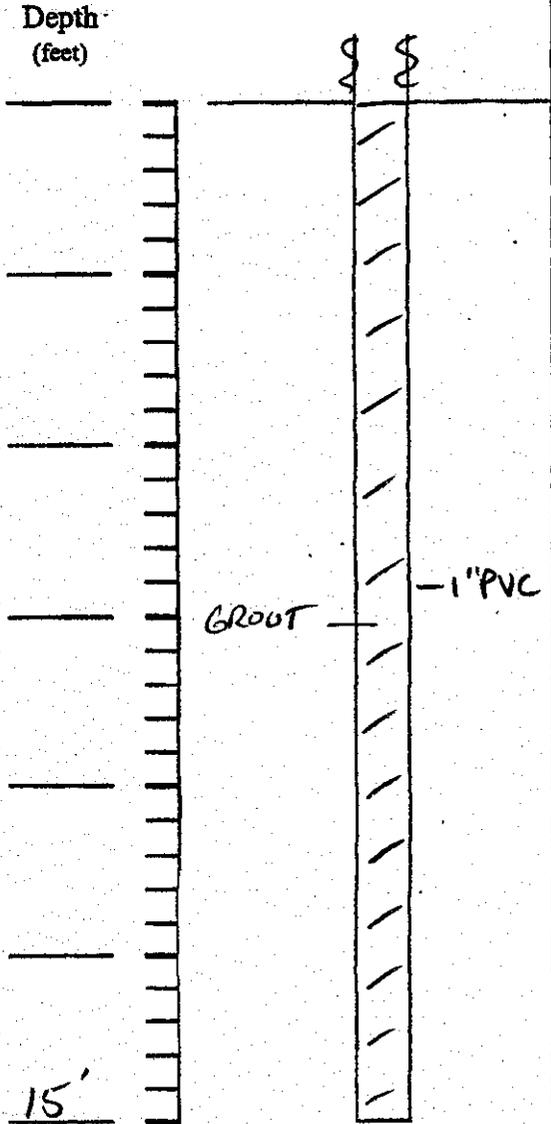
### CASING PERFORATING

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

### GROUTING

Interval grouted (FBLs)	<u>15'</u>
# of batches prepared	<u>1</u>
For each batch record:	
Quantity of water used (gal.)	<u>7.8</u>
Quantity of cement used (lbs.)	<u>94</u>
Cement type	<u>F</u>
Quantity of bentonite used (lbs.)	<u>3.9</u>
Quantity of calcium chloride used (lbs.)	<u>-</u>
Volume of grout prepared (gal.)	<u>11.4</u>
Volume of grout used (gal.)	<u>1.0</u>

## WELL SCHEMATIC\*



### COMMENTS:

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* Sketch in all relevant decommissioning data, including:  
 interval overdrilled, interval grouted, casing left in hole,  
 well stickup, etc.

Drilling Contractor

Department Representative

# WELL DECOMMISSIONING RECORD

Site Name: CITY OF ROCHESTER  
 Site Location: 965 MAPLE STREET  
 Drilling Co.: NOTHNAGLE DRILLING, INC.

Well I.D.: MW-9  
 Driller: N. SHORT  
 Inspector: D. PECK  
 Date: 11-8-13

### DECOMMISSIONING DATA (Fill in all that apply)

**OVERDRILLING**

Interval Drilled	
Drilling Method(s)	
Borehole Dia. (in.)	
Temporary Casing Installed? (y/n)	
Depth temporary casing installed	
Casing type/dia. (in.)	
Method of installing	

**CASING PULLING**

Method employed	
Casing retrieved (feet)	
Casing type/dia. (in)	

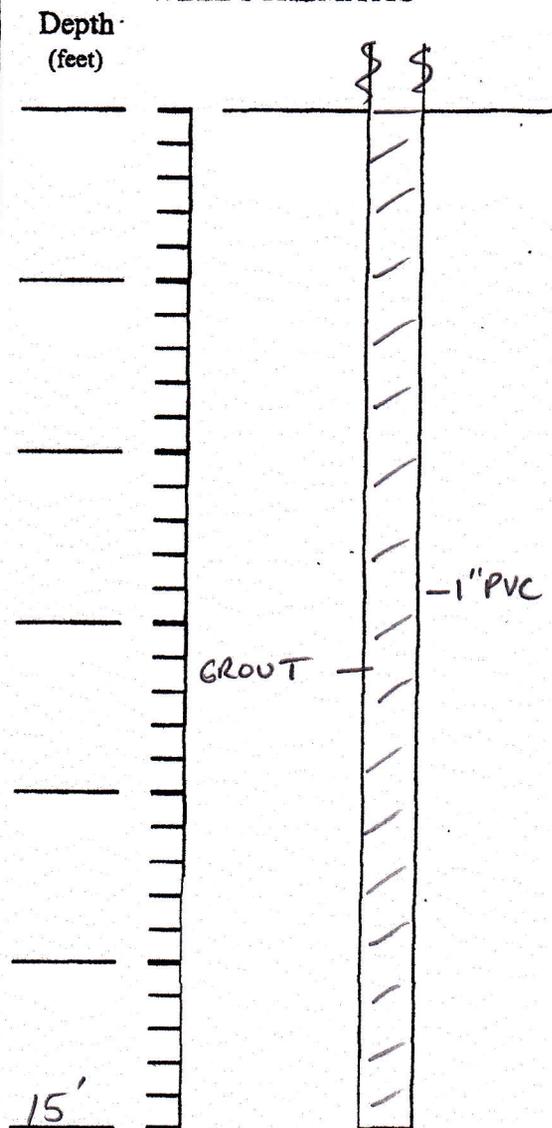
**CASING PERFORATING**

Equipment used	
Number of perforations/foot	
Size of perforations	
Interval perforated	

**GROUTING**

Interval grouted (FBLs)	15'
# of batches prepared	1
<b>For each batch record:</b>	
Quantity of water used (gal.)	7.8
Quantity of cement used (lbs.)	94
Cement type	F
Quantity of bentonite used (lbs.)	3.9
Quantity of calcium chloride used (lbs.)	-
Volume of grout prepared (gal.)	11.4
Volume of grout used (gal.)	1.0

### WELL SCHEMATIC\*



**COMMENTS:**  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

\* Sketch in all relevant decommissioning data, including: interval overdrilled, interval grouted, casing left in hole, well stickup, etc.

**Attachment 2**

**DER-10 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 ( $\text{mcg}/\text{m}^3$ ) 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.

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