

# GERMANOW-SIMON COMPANIES

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JAN 09 2008

Re: Notice of Environmental Easement  
8-28 Ward Street, Rochester, New York  
NYSDEC BCP Site No. B8-0566-99-10

Dear Mayor Duffy:

As you may know, the referenced site is undergoing a voluntary environmental cleanup pursuant to the New York State Department of Environmental Conservation ("DEC") Brownfield Cleanup Program. As part of the cleanup an environmental easement has been placed on the site. We are required to provide notice to the City of Rochester of the existence of this environmental easement. This letter is for notification purposes only and does not require any action on your part.

Please be advised that an application has been made to the DEC to grant an Environmental Easement pursuant to Article 71, Section 36 affecting real property held by Germanow-Simon Corporation, located at 8-28 Ward Street, Monroe County, New York known and designated on the tax map of the City of Rochester as tax map parcel number Block 106.63, block 1, lot 16, DEC Site No: C828136. The property affected by the Environmental Easement continues to be subject to all covenants and restrictions set forth in the deed from the City of Rochester to the Genesee Brewing Co., Inc., dated January 21, 1980, and recorded in the Monroe County Clerk's Office on February 15, 1980 at Liber 5761, p. 121 of Deeds.

This Environmental Easement restricts future use of the Site to restricted commercial and industrial uses. In addition, a multi-phase vacuum extraction system ("MPVE") will be operated both on-site and off-site within the right-of-way for Ward Street. Additional specific restrictions and obligations are contained in a Site Management Plan prepared for the Site and incorporated in the Environmental Easement.

Article 71, Section 71-3607 of the New York State Environmental Conservation Law requires that:


1. Whenever the department is granted an environmental easement, it shall provide each affected local government with a copy of such easement and shall also provide a copy of any documents modifying or terminating such environmental easement.
2. Whenever an affected local government receives an application for a building permit or any other application affecting land use or development of land that is subject to an environmental easement and that may relate to or impact such easement, the affected local government shall notify the department and refer such application to the department. The department shall evaluate whether the application is consistent with the environmental easement and shall notify the affected local government of its determination in a timely fashion, considering the time frame for the local government's review of the application. The affected local government shall not approve the application until it receives approval from the department.

An electronic version of every environmental easement that has been accepted by DEC is available to the public at: <http://www.dec.ny.gov/cfm/xtapps/derfoil/index.cfm?pageid>. If you have any questions or comments regarding this matter, please do not hesitate to contact me.

Very truly yours,

Germanow Simon Corporation

By:

  
\_\_\_\_\_  
Andrew Germanow

dated:

1/8/09

CC: Yvonne M. Ward Esq., NYS DEC  
Easement Attorney  
NYS Department of Environmental Conservation  
Office of the General Counsel  
625 Broadway  
Albany, NY 12233-5500



**SITE MANAGEMENT PLAN  
8-28 WARD STREET SITE  
INDEX #B8-0566-99-10  
SITE #C828136**

**NOVEMBER 2008**

**Prepared for:**

**NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION  
6274 EAST AVON-LIMA ROAD  
AVON, NEW YORK 14414**

**Prepared on Behalf of:**

**GERMANOW-SIMON CORPORATION  
408 ST. PAUL STREET  
ROCHESTER, NEW YORK 14601-0144**

**Prepared by:**

**STANTEC CONSULTING SERVICES INC.  
2250 BRIGHTON HENRIETTA TOWN LINE ROAD  
ROCHESTER, NEW YORK 14623**



**Stantec**

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## **1.0 Introduction**

### **1.1 Purpose**

This Site Management Plan (SMP) has been developed at the request of Germanow-Simon Corporation (Germanow-Simon) and pertains to the 8-28 Ward Street Site (Site) located in the City of Rochester, Monroe County, New York (Figure 1). It has been developed to assist Germanow-Simon's contractors and designers in planning for the operation of the Multi-Phase Vacuum Extraction System (MPVE) and any subsequent development work at the Site. It will accomplish this by describing the methods and procedures for monitoring, management and characterization of any materials and groundwater containing contaminants that may be encountered during subsurface activities at the Site.

New York State Department of Environmental Conservation (NYSDEC) regulates hazardous waste or non-hazardous solid waste as set forth in 6 NYCRR Parts 371-376 and 6 NYCRR Part 360. Proper management will require that care be taken in planning, monitoring and characterizing the waste soil/fill materials and water generated at the Site to confirm their hazardous or non-hazardous status and allow for proper off-site disposal in compliance with all applicable laws. Alternatively, with NYSDEC's prior approval, some of those wastes may be relocated and placed on-site.

This SMP provides guidance for planning and performing such monitoring, testing and management of excavated soil/fill materials or groundwater that may be encountered at the Site, whether returned to excavation, placed elsewhere on-site or sent off-site for disposal in compliance with applicable law.

As required in the Engineering Certification, the Site Management Plan contains and/or refers to documents that identify use restrictions, institutional controls, engineering controls and and/or operation and maintenance requirements. The applicable use restriction, institutional controls, and engineering controls for the 8-28 Ward Street Site are discussed in Section 2, subsections A through E of the Environmental Easement contained in Appendix C.

### **1.2 Background**

The Site, owned by Germanow-Simon, is a 1.2 acre parcel located at the corner of Ward Street and Emmett Street. The current and proposed future use of the Site is for commercial/industrial purposes. At present, the Site is occupied by an asphalt-paved parking lot. A narrow, unpaved strip with lawn and trees borders the east and south edges of the parking lot. Germanow-Simon and its affiliated companies currently employ approximately 85 individuals at its manufacturing facility located on the adjacent Ward Street Site. Germanow-Simon and its affiliated companies produce bimetal thermometers, plastic optics, and gauge and watch crystals.

Germanow-Simon factory buildings, located at 376-378 St. Paul Street, 388-392



St. Paul Street, and 19-23 Emmett Street, are located on adjacent property to the west and north of the Site. A parking lot, located at 398-402 St. Paul Street, is located to the northwest of the Site. Baseball and football playing fields for an elementary school are located across Emmett Street, at 455 North Clinton Avenue, opposite the northern corner of the Site. Residential townhouses are located at 405-433 North Clinton Avenue across Emmett Street to the east of the Site, and at 360 St. Paul Street across Ward Street south of the Site. To the southwest, at 360 St. Paul Street, is St. Simon's Terrace, a residential high rise building located at the corner of Ward Street and St. Paul Street. Further to the southwest beyond St. Paul Street is a city park overlooking the High Falls of the Genesee River gorge. The nearest residential buildings are located approximately 65 feet to the east of the Site across Emmett Street and south-southeast of the Site across Ward Street. The gorge of the Genesee River is located approximately 475 feet southwest of the Site across St. Paul Street.

The remedial investigation determined that impacted sub-surface soils requiring remedial measures are located in the area of MW-23 and MW-23R. The remedial investigation results indicate that the primary sources of contamination do not appear to be present on the Site. The data indicate that the on-Site contamination is more related to off-Site sources of contamination present to the north, south and west. The remedial investigation also suggests that an apparent off-Site source of contamination is present in the Ward Street right-of-way downgradient to the south of the Site, and that this source has resulted in low-level impacts along the south Site boundary. The remedial investigation findings suggest that the source of the contamination encountered at MW-23 and MW-23R is probably located at or in the immediate vicinity of MW-23 and MW-23R.

### **1.3 Completed Environmental Investigation, Remedial Actions and Pilot Tests**

Several environmental investigations have been completed at the Site since 2000. After acquiring the Site, Germanow-Simon entered into a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation on October 4, 2006.

Copies of reports documenting the activities and findings of previous environmental investigations conducted at the Site were appended to Stantec's May 2, 2006 Remedial Investigation Work Plan. In addition, Stantec's February 15, 2008 Remedial Investigation Report documents activities and findings of the most recent environmental investigation conducted at the Site.

A multi phase vacuum extraction (MPVE) system was designed and implemented for the adjacent Ward Street Site (Site #C828117, Index #B8-0566-99-10) as per the Alternative Analysis Report and Remedial Work Plan (AAR/RWP) dated July 17, 2006. The AAR/RWP was approved by the Department in its August 31, 2006 letter following completion of the required 45-day public comment period, and presented in detail in the Department-approved Remedial Design Work Plan (RDWP) dated August 8, 2006. A Certificate of Completion was issued on December 22, 2006 for the Ward Street Site following submission and approval of a Final Engineering

Report (FER).

Copies of select figures, summary tables of field screening, soil and groundwater analytical results, etc., from the remedial investigations conducted on the Site are attached to this SMP. Copies of the select soil boring logs for the Site are presented in Appendix A.



## **2.0 Development and Pre-Excavation Planning**

### **2.1 Existing Information**

The full-scale MPVE, as well as any future excavation and development activities, have the potential to disturb environmental media and fill materials at the Site which contain low levels of chlorinated volatile organic contaminants (VOCs) as a result of off-Site sources of contamination present to the north, south and west. The planning and design of the MPVE took into account, and any future excavation activities must take into account, the information from the previous investigations, documented subsurface contamination, and the intended location of proposed remediation construction/development. The NYSDEC-approved RDWP for the adjacent Ward Street Site to which a previously prepared SMP was appended already took into account these site-related considerations.

Future site development and excavation planning activities shall require prior approval by NYSDEC and the City of Rochester before proceeding. To this end, the Environmental Easement presented in Appendix C, which is acceptable to the NYSDEC has been recorded by Germanow-Simon, and the Site has been flagged by the City's Division of Environmental Quality in the City of Rochester Building Information System (BIS) in order to protect potential developers and establish proper management of construction activities prior to their commencement. This flagging provides an institutional control mechanism as required in the Engineering Certification. Further information regarding the BIS flagging system is provided in Section 8.0 of this report.

#### **General Subsurface Conditions**

Soils on the subject property are mapped in the Monroe County Soil Survey as Urban Land, which are areas that have been so altered or obscured by public works that identification of the soils is not feasible. These areas are commonly located in the older parts of the City of Rochester.

Based upon the subsurface investigations completed to date, the overburden soils beneath the Site include a few to several feet of inert fill material, which is composed of silt, sand and gravel with cinders and various building demolition debris, overlying upper and lower glacial till deposits. The 20 ft.-thick overburden sequence overlies dolomitic bedrock of the Upper Silurian Clinton Group. The uppermost bedrock unit is the Decew Dolostone which is comprised of a fine grained gray dolostone characterized by uneven, disturbed bedding features. The Decew is generally on the order of 6 to 16 feet thick in the Rochester area. The Decew is underlain by the Gates Dolostone Member of the Clinton Group Rochester Shale formation.

The Site has a layer of fill over the naturally deposited glacial tills. Fill thickness observed in test pit TP-101 and the new Site borings ranged from 1.8 to 4.7 ft. A layer of relatively low-density glacial till was found beneath the fill. The depth to the dense, lower till ranged from 10.0 to 14.0 ft. BGS. The depth to bedrock ranged between 19.5 ft. and 22 ft. BGS. These observations were consistent



with the conditions observed in previous investigations at the Site and on the adjacent Ward Street Site.

#### Groundwater

The near surface geology of the overburden and shallow bedrock provides for a shallow water table, low hydraulic conductivities, and low average linear velocities of groundwater flow.

Groundwater flow at the Site within the shallow water table zone is generally to the south towards Ward Street. Investigations along Ward Street during the previous Ward Street Site RI indicated that groundwater flow from the north side of Ward Street appeared to be directed toward the center of the street before flow proceeded southwesterly toward St. Paul Street. This pattern of flow indicated that underground utility features present below Ward Street (including sewer lines and/or pipe bedding) influenced local groundwater flow directions.

Figure 5 (from Stantec's February 14, 2008 Remedial Investigation Report) presents groundwater elevation data for overburden wells at the Site on October 10, 2007 when the MPVE system was in operation. As shown on Figure 5, two overburden groundwater capture zones related to operation of the Ward Street Site MPVE system extend onto the 8-28 Ward Street Site at its northwest and southwest corners.

A water-table contour plot based on the October 17-19, 2007 water level data, collected one week after the Ward Street Site MPVE system was shut down, is presented on Figure 6 (from Stantec's February 14, 2008 Remedial Investigation Report). The data indicate that in the absence of groundwater extraction activities, shallow groundwater generally flows in a southerly or southwesterly direction across the 8-28 Ward Street Site (Figure 6) towards Ward Street. The depths to groundwater in the overburden wells located on the 8-28 Ward Street Site ranged from 9.6 to 13.5 ft. BGS during the October 17-19, 2007 monitoring period. That range of water levels is consistent with previously reported water levels for the period prior to implementation of the MPVE remedial activities, and the October 17-19, 2007 water levels appear to be roughly representative of 'static' conditions.

Comparison of the groundwater elevation contours from prior to and after MPVE system shut-down indicates that the influence of the groundwater capture zones appears to extend east onto the 8-28 Ward Street Site as far as overburden wells MW-45, GQ2/MW-2 and GQ8/MW-5. Water levels at each of those three wells rebounded by approximately 1 foot after the system was shut down. At monitoring well GQ3/MW-3 in the southwest corner of the Site (west of MW-45), the water table is depressed below the bottom of the GQ3/MW-3 monitoring interval during MPVE operation.

The October 10, 2007 water level data for bedrock wells are presented in Table 4 (from Stantec's February 14, 2008 Remedial Investigation Report) and Figure 7 (from Stantec's February 14, 2008 Remedial Investigation Report). The data



indicate that during operation of the MPVE system, there is a 20-foot deep cone of depression in the bedrock groundwater potentiometric surface centered at the Ward Street Site extraction wells located to the southwest of the 8-28 Ward Street Site. Its influence is only marginal at bedrock well MW-46R, located in the center of the 8-28 Ward Street Site, but the influence of the MPVE system does appear to extend to off-Site well MW-23R. The October 17-19, 2007 water level data, described below, indicate that the water level at MW-23R rebounded by approximately 2 feet after the MPVE system was shut down.

The October 17-19, 2007 water level data for bedrock wells are presented in Figure 8 (from Stantec's February 14, 2008 Remedial Investigation Report). The data indicate that under non-MPVE conditions there is a downward vertical flow gradient from the overburden to shallow bedrock at both the MW-23/23R and MW-46/46R well pairs, with a head difference of 0.8 ft. at both locations. The bottom of the overburden well monitoring interval is approximately 3 feet above the top of the bedrock well monitoring interval at both locations. The bedrock groundwater elevation contour plot indicates that bedrock groundwater flow under non-MPVE conditions is generally in a westerly direction towards the Genesee River Gorge (Figure 8) (from Stantec's February 14, 2008 Remedial Investigation Report).

#### **Field Screening of Soils**

During Stantec's February 14, 2008 Remedial Investigation, field screening of soil samples did not detect indications of significant contamination. Staining and odors were not noted in fill or native soil samples. Sample headspace testing with a PID did not detect organic vapors above background levels at most locations. Slightly elevated PID readings were noted at three borings:

- At test boring B-38, 21 to 56 ppm of organic vapors were recorded in the sample intervals from 2 – 4 ft. BGS and 4 – 6 ft. BGS, respectively. The base of the fill and top of the upper till soils were encountered at 4.7 ft. in this boring. Sample material from the 4 – 6 ft. interval was submitted for laboratory VOC analysis. However, VOCs were not detected. (Laboratory analytical results for soil samples are described below in Section 4.4.)
- At test boring B-39, 67 ppm of organic vapors were recorded in the 0 – 2 ft. BGS sample, which included parking lot sub-base material and various rock, gravel, and cinder fill. The 0 – 2 ft. sample was submitted for laboratory VOC analysis, but no VOCs were detected.
- At the MW-45 test boring, 18 and 16.5 ppm of organic vapors were recorded in the 4 – 6 ft. BGS and 8 – 10 ft. BGS samples from within and at the base of the upper till, respectively. Both samples were submitted for laboratory VOC analysis. Toluene was the only VOC detected, reported at concentrations of 1 and 2 ppb, respectively.

At test pit TP-101, sheet metal debris and a section of metal pipe were encountered in the fill. These are likely to have been the causes of indications of buried metal identified in the area by the March 2002 geophysical survey conducted for High Falls Brewing Company (refer to Stantec's February 14, 2008



Remedial Investigation Report for more information on the March 2002 geophysical survey).

### **Soil Analytical Data**

The soil analytical results are summarized in the following Stantec tables:

*Selected Tables from Stantec, February 14, 2008, Remedial Investigation Report as noted:*

Table 5:	Analytical Results Summary, Soil – VOCs
Table 6:	Analytical Results Summary, Soil – SVOCs
Table 7:	Analytical Results Summary, Soil – PCBs and Pesticides
Table 8:	Analytical Results Summary, Soil – Metals

Stantec's February 14, 2008 Remedial Investigation Report did not identify any on-Site soil contamination. As shown on Tables 5-8, no inorganics (metals), PCBs, pesticides, SVOCs, or VOCs were reported above the 6 NYCRR Part 375 Soil Cleanup Objectives (SCOs) for either commercial or industrial use. Furthermore, none were above the more protective "Protection of Groundwater" SCOs, with the exception of PCE in one sample. PCE was reported at a concentration of 9.9 ppm in the 12-14 ft. BGS sample from the off-Site test boring at MW-23R. The Protection of Groundwater SCO for PCE is 1.3 ppm. PCE had been reported at a similar concentration of 8.3 ppm in the 12-14 ft. BGS soil sample from the test boring at adjacent off-Site well MW-23 during the previous Ward Street Site investigation. The 12-14 ft. BGS sample interval corresponds to the depth at which the water table has been observed at MW-23.

Germanow-Simon anticipates that the MPVE system will attain soil and groundwater quality concentrations meeting the applicable NYSDEC standards, criteria and guidance values (SCGs) for the intended use of the Site. During the implementation of the MPVE, and in the unlikely event that SCGs are not attained due to the complexities at the Site, persons conducting work at the Site must abide by the requirements of this SMP when excavating or otherwise disturbing fill, soil or groundwater in the following areas in which contaminants exceeding 6 NYCRR Part 375 Protection of Groundwater SCOs were identified.

Impacted sub-surface soils that require remedial measures are present off-Site at the locations of MW-23 and MW-23R. Soil containing PCE at concentrations above the Protection of Groundwater SCO is present at the locations of monitoring wells MW-23 and MW-23R. The contaminated soil samples were collected from a depth of 12 to 14 feet BGS, and the field screening data indicate that the soil contamination is limited in vertical extent to the water table horizon. No soil contamination was detected in on-Site borings located 40 to 55 feet to the north and northwest of the MW-23 and MW-23R locations. Germanow-Simon will be addressing these soils with the MPVE system.



The total on-site quantity of soils that are impacted at levels greater than 6 NYCRR Part 375 Protection of Groundwater SCOs is estimated at 300 C.Y. or 500 tons.

### **Groundwater Analytical Data**

The groundwater analytical results are summarized in the following Stantec tables:

*Selected Tables from Stantec, February 14, 2008, Remedial Investigation Report as noted:*

Table 9:	Analytical Results Summary, Groundwater - VOCs
Table 10:	Analytical Results Summary, Groundwater - SVOCs
Table 11:	Analytical Results Summary, Groundwater – PCBs and Pesticides
Table 12:	Analytical Results Summary, Groundwater – Metals

Stantec's February 14, 2008 Remedial Investigation Report identified trace to low levels of PCE, TCE, and cis-1,2-dichloroethene (cis-1,2-DCE) present in on-Site overburden groundwater on the west and south sides of the 8-28 Ward Street Site. The maximum on-Site total VOC concentration detected in Stantec's February 14, 2008 Remedial Investigation Report groundwater samples was 0.087 ppm at monitoring well MW-45, where the cis-1,2-DCE concentration exceeded the NYSDEC Ambient Water Quality Standard. VOC concentrations did not exceed NYSDEC standards in samples from other on-Site wells. At on-Site well MW-45, 0.087 ppm of cis-1,2-DCE was reported in the groundwater sample. Traces (less than 0.005 ppm) of PCE and/or TCE were also reported at on-Site wells GQ2/MW-2 and GQ4/MW-4, and 0.001 ppm of cis-1,2-DCE was reported in the sample from new on-Site well MW-47. Although GQ3/MW-3 was dry at the time of sampling (due to the effectiveness of the MPVE system implemented at the adjacent Ward Street Site), historically TCE had been detected in GW3/MW-3 at concentrations ranging from 0.016 ppm to 0.069 ppm.

As shown on Tables 10 and 11, no target SVOCs or PCBs were reported above detection limits, and no pesticides were reported above applicable New York State standards or guidance values. Reported concentrations of inorganics (metals) that represent potential Site contaminants were also not above applicable New York State standards or guidance values, as shown on Table 12. Table 13 presents a comparison of analytical results for VOCs detected in groundwater samples from the RI and previous investigations. As shown on Table 13, the VOC compounds identified and concentrations detected have been relatively consistent at the six wells which were installed during previous investigations (GQ1/MW-1 through GQ8/MW-5 and MW-23).

Chemical screening for groundwater involved comparison of detected concentrations in groundwater from wells on site and off site to the New York State Class GA potable groundwater standards in 6 NYCRR Part 703 and the



guidance values in Technical and Operational Guidance Series (TOGS) 1.1.1, NYSDEC, June 1998.

Off-site VOC impacts to overburden groundwater were associated with the Ward Street right-of-way south of the Site, in the location of MW-23 and MW-23R. Groundwater contamination by PCE and its degradation products TCE and cis-1,2-DCE is present in the overburden and shallow bedrock at off-Site monitoring wells MW-23 and MW-23R. As shown on Table 9, the chlorinated VOCs PCE, TCE and cis-1,2- DCE were reported in groundwater samples from off-Site wells MW-23 and MW-23R at concentrations ranging from 0.04 to 0.81 ppm. The volume of off-site overburden groundwater with total chlorinated VOC concentrations >100 µg/L is estimated at more than 25,000 gallons (gal). The volume of on-site overburden groundwater with total chlorinated VOC concentrations >100 µg/L is estimated at more than 25,000 gal.

### **Soil Vapor Analytical Data**

On May 25, 2007, a total of 28 Emflux soil vapor survey canisters were installed in shallow small-diameter (3/4-inch) borings. The approximate soil vapor survey locations are depicted on Stantec's February 14, 2008 Remedial Investigation Report Figure 4. The soil vapor collectors were allowed to accumulate vapors for 7 days. The Multi-Phase Vacuum Extraction (MPVE) remedial system operating at the adjacent Ward Street Site was shut down for one week during deployment of the passive soil vapor collectors to minimize potential impacts to the collection of passive soil vapor data. The soil vapor collectors were retrieved on June 1, 2007. The soil vapor borings were subsequently backfilled with sand and sealed with asphalt cold patch. In addition to the field samples, one trip blank and one blind field duplicate were submitted for Quality Assurance/Quality Control (QA/QC) purposes. The 28 soil vapor collectors and QA/QC samples targeted chlorinated ethene VOCs, including PCE, trichloroethylene (TCE), cis-1,2-DCE, trans-1,2- dichloroethene, 1,1-dichloroethene and vinyl chloride (VC) using EPA Method 8260.

Of the six compounds that were analyzed, only PCE and TCE were detected. PCE and TCE are present at low levels in soil vapor in the area of the Site immediately to the east of MW-45 and northwest of SV-6/B-23/MW-23. Soil vapor contamination by PCE is present in the immediate vicinity of the MW-23 and MW-23R locations, but VOC concentrations in soil vapor drop off significantly at survey points located 25 feet to the west, north and east. The lower levels of soil vapor contamination detected do not extend laterally to the west, north or east more than 100 feet beyond the immediate vicinity of the MW-23 and MW-23R locations. A complete review of the passive soil gas surveys is presented in the Stantec's February 14, 2008 Remedial Investigation Report.

## **2.2 Construction/Design Considerations**

Stantec's February 15, 2008 Remedial Investigation Report has shown that the contaminants present at the Site consist of chlorinated VOCs present in soil, soil vapor, and groundwater. Any waste material that is generated from excavation



activities at the Site, including trenching or footer excavation for future development, must therefore be properly characterized and managed. The process can be simplified by pre-planning how the material will be handled during necessary excavation.

In order to properly characterize the waste material, soils and/or fill materials potentially containing contaminants will be screened and segregated into designated roll-offs. Segregation is intended to decrease the volume of waste material requiring handling and treatment as a solid or hazardous waste following characterization sampling and laboratory analysis.

If hazardous waste is generated as part of this remediation program, or during future site development or maintenance activities involving subsurface disturbance, this waste should not be replaced on the Site and must be properly characterized, managed and disposed of off site at a permitted facility in compliance with applicable law. Management of impacted materials is discussed in Section 7.0 of this SMP.

As this remediation project and future excavation projects progress, planning will need to consider that soil/fill management and waste characterization may affect the following construction elements:

- Schedules: Scheduling will need to allow for management of waste material that is generated during excavation. Should unanticipated materials or conditions be observed during excavation work, sampling may be required. Sampling will involve laboratory analysis, which typically takes from several days to several weeks to be completed. Therefore, construction schedules and design plans should allow for adequate flexibility for sampling, segregation, and temporary stockpiling of unanticipated materials on-site in roll-off containers in the parking lots to the east or north of Building B Annex.
- Subsurface Variability: Schedules should provide both contingency time and measures to address variability in subsurface conditions and the potential presence of groundwater. For example, if hazardous conditions are encountered, additional safety measures and use of personal protection gear will be required. Excavation dewatering and work stoppage could also affect construction schedules and costs.

Measures designed to address these situations are described in further detail in Sections 4.0, 5.0 and 6.0 of this SMP.



### 3.0 System Design Details

#### 3.1 *MPVE System Configuration*

Two monitoring wells (MW-23 and MW-23R) have been converted to MPVE extraction wells at the Site. The locations of the monitoring wells are shown in Figure 2 of the August 2008 Remedial Action Work Plan. The MPVE vacuum pump unit, installed during the Ward Street MPVE system installation, is pre-fabricated, container-mounted, pre-piped, and pre-wired and contains the following major components which are schematically presented in Figure 3 of the August 2008 Remedial Action Work Plan:

- One 50 HP, 1300 ACFM (max) 875 ACFM @ 20" in Hg capacity belt-driven air-cooled rotary lobe vacuum pump;
- Steel and PVC piping;
- Steel, brass and PVC valves;
- 630 gallon system vessel with internally mounted high efficiency low maintenance oil/water separator and air stripper;
- Container heater and exhaust fan; and
- Aqueous phase 25 GPM Mono Progressive Cavity pump.

A second Treatment Unit container houses:

- Container heater and exhaust fan;
- Aqueous phase bag filters;
- 300-gallon water surge tank w/ float switch;
- Aqueous phase 10 GPM centrifugal pump (float switch-activated)
- Two parallel sets of two 170 lbs aqueous-phase GAC treatment vessels in series;
- Air-to-air heat exchanger to cool the vapor exhaust stream to approximately 110°F (off-line);
- Two 1,500 lbs vapor-phase GAC treatment vessels in series (off-line); and
- A 5HP centrifugal blower to reduce backpressure on the MPVE unit (off-line).

#### 3.2 *Well head, piping configuration*

The extraction wells are 2-inch inside diameter (ID) PVC screen with 0.010-inch slots to promote well efficiency and formation airflow.

The extraction wells are individually connected to a manifold system located in a heated enclosure constructed along the east wall of the Building B Annex, using 1.5-inch diameter HDPE (low friction) pipe for vacuum extraction and 0.5-inch diameter HDPE pipe for bleed air. The piping is attached to the wellheads and drop tubes within flush-mounted 12-inch diameter steel road boxes. The wellhead and piping are installed in trenches to a depth of 48 to 60 inches in exterior locations. This depth protects against freezing weather. Where they can



not be placed at sufficient depths, piping placed outdoors is heat traced and insulated to protect against freezing. Access to the drop tube, located between 48 and 60 inches from the surface within the well riser, is provided by means of a pitless adapter. This allows for removal of the drop tube for groundwater sampling using a removable threaded metal pipe. The drop tubes are set approximately 6 inches above the bottom of all extraction wells. A quick-connect adapter may be temporarily attached to the removable well caps to allow pressure measurements at the well head with a portable pressure gauge. Detailed drawings of extraction wells are shown in Stantec's December 2006 Final Engineering Report Drawing EN-8 for the Ward Street Site. The trenching detail is shown in Stantec's November 2006 Final Engineering Report Drawing EN-6 for the Ward Street Site.

One bedrock well (MW-23R) was installed on July 30-31, 2007, which was converted to an extraction well on October 15, 2008, along with one existing overburden well (MW-23).

Screened intervals were determined based on the extent of impacted soil across the soil profile. The layouts of the overburden and bedrock wells and associated piping are shown in Stantec's August 2008 Remedial Action Work Plan Drawing EN-2.

### **3.3     *Manifold***

The manifold is housed in an insulated, heated and secured enclosure designed specifically for the manifold. The individual extraction wells converge in one hole bored through the asphalt on the east side of the manifold, and feed directly into the manifold enclosure. The individual lines loop upwards to a 6-inch schedule 80 PVC piping header, where vacuum will be measured for each well. Vacuum measurements will also be made at each sub-manifold.

### **3.4     *Sub-slab depressurization system***

In order to minimize the potential for VOC soil vapor intrusion into any future buildings constructed at the Site, a sub-slab depressurization (SSD) system, appropriate to the future building design, should be installed. The design for the SSDS would need to be prepared and constructed in conjunction with the design and construction of any future buildings. Guidance for the design and installation of a SSDS is presented in the NYSDOH Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.

### **3.5     *Sewer discharge***

Treated aqueous effluent is discharged into a sewer line located in Building B Annex. A detailed layout of this connection is shown in Stantec's December 2006 Final Engineering Report Drawing EN-6. A sewer discharge permit was obtained from Monroe County Pure Waters to discharge the treated aqueous effluent. The Sewer Use Permit is included as Appendix B.

### **3.6     *Air discharge***

A permit from the NYSDEC to discharge treated vapors was not required pursuant to the terms of the BCA. However, a substantive review and approval by the NYSDEC of the anticipated air emissions and the proposed treatment plans was required.

An eight-inch exhaust stack runs horizontally from the MPVE trailer along Building B Annex until it reaches Building B, at which point it runs vertically straight up Building B. This stack rises 11 feet above the top of Building B for an approximate total stack height of 56 feet from ground surface. A detailed layout of the stack is shown in Stantec's December 2006 Final Engineering Report Drawing EN-7. An air emission analysis was performed to determine short term and annual air emission concentrations. This analysis is found in Appendix D.



## **4.0 Soil-Fill Characterization**

### **4.1 Pre-excavation Sampling**

Sufficient data are available at this time such that additional soil/fill sampling prior to excavation activities is unnecessary. In general, soil borings previously completed on the Site appear to provide sufficient coverage. During future excavation activities, visual observations and PID readings should be used to determine if soil/fill sampling is necessary to evaluate unanticipated conditions outside of previously identified areas of contamination.

### **4.2 Excavation Sampling**

Sampling of excavated fill or subsurface materials encountered during construction efforts should be considered if either of the following conditions is encountered:

- If conditions during excavation are significantly different than those observed during previously completed soil investigations, including unusual odors, visual observations such as stained soils, drums, containers, etc.; or
- If concerns, such as gross contamination, sheens on water or free-product are identified within soil.

In these situations, sampling frequency and analyses would vary based on the types and quantities of material encountered and the anticipated use/disposal of removed materials. Analysis must adequately characterize materials in light of applicable NYSDEC guidance values (e.g., 6 NYCRR Part 375) and/or permitted disposal facility requirements, depending on intended destination of materials.

Typical waste disposal analyses are:

- Full Toxicity Characteristic Leaching Procedure (TCLP) VOCs,
- Full TCLP SVOCs,
- Ignitability,
- Reactivity,
- Modified Paint Filter Test, and
- pH.

## **5.0 Groundwater Characterization**

### **5.1 *Sampling***

Sufficient data are available at this time such that additional groundwater sampling prior to or during excavation activities is unnecessary. The wellheads and piping were installed in trenches at depths of 48 to 60 inches in exterior areas exposed to freezing weather. Therefore, with these shallow depths below ground surface, groundwater was not encountered. Groundwater that is encountered during excavation in an impacted area will need to be run through the liquid phase GAC in the Treatment Unit prior to discharge to the sanitary sewer, or containerized, characterized and properly disposed of off Site. Monitoring wells have been installed on the subject property and provide sufficient coverage for the portion of the Site affected by the impacted groundwater plumes. If excavation activities are proposed outside of these areas and are expected to extend to the depth of the water table, pre-excavation sampling may be recommended. In such cases, pre-excavation sampling frequency and analyses would vary based on the location of proposed work in relation to the characterized areas and on the anticipated quantity and handling of groundwater (see also Appendix B, Sewer Use Permit Information).

Surface water and rainwater should be prevented from reaching excavations; and excavations need to be covered if there is the possibility of such an occurrence.



## **6.0 Monitoring During Excavation, Well Installation, Remedial System Installation and Future Development**

Monitoring of materials encountered during excavation activities, well installation, remedial system installation and future development is generally needed for three purposes:

- To protect the health and safety of Site workers during intrusive activities;
- To determine that soil/fill materials and groundwater are consistent with pre-excavation characterization; and
- To determine whether the materials need to be characterized for handling and disposal where no pre-excavation characterization was performed.

### **6.1 Health and Safety Monitoring**

Past investigations have shown that impacted materials will be encountered during construction activities in portions of the Site. Based on the historical uses of the Site, hazardous materials may potentially be encountered.

Generally, VOCs are associated with the soil/fill and are considered as potentially hazardous materials subject to health and safety planning.

VOCs are also associated with the groundwater and are considered potentially hazardous materials subject to health and safety planning.

Health and safety planning should also give consideration to other construction-related issues, such as use of heavy equipment, noise, odor, weather conditions, confined space entry, excavation safety and other construction-related OSHA regulations.

Health and safety planning should be performed prior to excavation and other activities which disturb the surface of the Site. This should include the preparation of a written Health and Safety Plan (HASP) for excavation activities. The HASP would be based on the results of the previous chemical analyses, information specific to the proposed remediation activities, specific excavation tasks to be completed and the potential for exposure of Site workers to the Site contaminants.

Workers on site performing or supervising earthwork activities, well installation and system installation and operations should be OSHA 1910.120 certified to perform work on a hazardous waste site. Previous investigations show that while the potential for worker exposure exists, it is relatively low. However, all contractors, developers and owner representatives involved in earthwork activities, well installation and system installation should consider the need for health and safety planning relative to their specific tasks and planned activities.



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

PCE and TCE are the primary volatile organic compounds of concern that are present, or are potentially present, in the soil and groundwater at the Site. Volatilization of these compounds through disturbance of soils and/or groundwater could result in releases to the ambient air creating possible nuisance or exposure risks to the neighborhood.

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 CAMP presented below is identical to the New York State Department of Health (NYSDOH) generic CAMP presented in Appendix 1A of NYSDEC's Draft DER-10 Technical Guidance for Site Investigation and Remediation (December 25, 2002). Should site conditions change in the future, specific requirements for community air monitoring at the 8-28 Ward Street Site should be reviewed in consultation with NYSDOH to ensure proper applicability. For example, depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Or, depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements would 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 (mcg/m<sup>3</sup>) 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 mcg/m<sup>3</sup> 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 mcg/m<sup>3</sup> 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 mcg/m<sup>3</sup> 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.

### **6.3 Soil/Fill/Groundwater Monitoring**

Monitoring of soil and fill materials that are excavated and groundwater that is pumped during construction should be performed for two reasons:

- To determine that the material encountered during excavation is consistent with the material encountered during previous investigations; and
- To allow characterization of the non-hazardous or hazardous nature of material encountered in the event that no previous investigation results are available for a specific area.

Monitoring should generally consist of documentation of visible characteristics of the soil, fill and groundwater encountered, including obvious staining, sheens, odors, or other indicators of contamination such as solvents, oils, tars or containers. It is recommended that construction monitoring be conducted by a



trained individual, such as an environmental engineer, scientist, or geologist during all earthwork activities, well installation, system installation and future development.

Several portable monitoring instruments are available to assist in field monitoring of materials. Such instruments are primarily used for detection of VOCs or dust and particulates. Since volatile organics (VOCs) have been detected in the past at the Site, this type of instrumentation is appropriate for construction excavation monitoring. Types of instruments available for this purpose include:

- Photoionization detector instruments (PID) - these instruments operate by pumping a sample of ambient air into a chamber where the air is ionized using a light source of specific energy (either 10.2, 10.6, or 11.7 eV). Such instruments are manufactured by HNu and Microtip.
- Flame ionization detector instruments (FID) - these instruments operate on a similar principle as the PIDs; however, ionization is caused by a flame produced by combusting hydrogen. The OVA manufactured by Foxboro is such an instrument.
- Combustible gas meters/gas monitors – these instruments are capable of measuring combustible gases, such as methane and hydrogen sulfide, and would be used during construction activities if large amounts of organic materials such as railroad timbers or peat are encountered. However, it is not expected that large amounts of organic matter will be found.
- Dust/Particulate Meters – these instruments are capable of measuring dust and particulates in ambient air. An example of an aerosol monitor is the MIE PDE-1000.

These types of instruments are readily available in the Rochester area and can be rented or purchased from several sources. However, these instruments should be operated by individuals trained and experienced in their use, limitations and capability for data generation. Readings generated from monitoring instruments should be recorded in the field along with visual observations.



## **7.0 Management of Impacted Material**

### **7.1 On-Site Re-Use of Excavated Materials**

It is recommended that non-hazardous excavated material be re-used onsite and covered with either clean soil or an impervious surface.

### **7.2 Off-Site Disposal of Excavated Materials**

Fill material at the Site has been visually observed to contain solid waste (i.e. glass, cinders). As a result, fill material that is excavated will need to be handled as a solid waste for off-site disposal purposes. This will involve the characterization of the fill material to determine if it is a hazardous waste or if it should be disposed of as a solid waste at a permitted disposal facility. Such testing is typically performed to fulfill the disposal facility requirements and could include Toxicity Characteristic Leaching Procedure (TCLP) VOCs, SVOCs, and metals, PCBs, pesticides, herbicides, flashpoint, corrosivity and paint filter test.

Any fill materials that are proposed to be sent off-site to a non permitted disposal facility would need to be sampled pursuant to a Department approved sampling plan and would need to meet the Unrestricted Use contaminant levels set forth in 6NYCRR Part 375-6.8(a).

Prior to off-site disposal of removed VOC impacted material (non-fill), waste characterization sampling should be performed to determine if the stockpiled material should be disposed off site as non-hazardous solid waste, or hazardous waste with or without treatment. A composite sample should be collected in accordance with the disposal facility requirements (e.g., 1 sample per 500 tons). Each composite sample should be submitted for laboratory analysis in accordance with the disposal facility requirements (e.g., TCL VOCs by EPA Test Method 8260 and TCLP VOCs by EPA Test Method 1311/8260).

Management of materials that will be disposed offsite will need to include characterization (sampling and laboratory analysis as required by the chosen landfill), management, off-site transportation and disposal at an approved landfill. Appropriate measures for management of excavated materials will need to include temporarily stockpiling excavated soils and solids, as well as measures to prevent them from contaminating other materials or migrating off site. Measures that should be incorporated into such plans include:

- Stockpile locations should be away from storm sewers, downwind property boundaries, and drainage courses;
- Dust suppression techniques should be used as necessary;
- Placement of stockpiles of soils, fill or hazardous materials containing contaminants (e.g. drums, containers, odiferous fill) should be in lined roll-offs with perimeter berms;
- Stockpiles of contaminated soils, fill, or hazardous materials (e.g. drums, containers, odiferous fill) should be covered with weighted down poly at the



end of each day of placement to prevent migration by wind-blown dust or stormwater runoff until final placement is established; and

- Lined and covered roll-off containers should be used for material that will be disposed of off-site.

### **7.3 Off-Site Disposal of Impacted Water**

Management of water will include characterization (sampling and laboratory analysis as required by the Monroe County Department of Environmental Services (MCDES) – Division of Pure Waters (DPW)), management, pumping to the Monroe County sewer system (if permitted), and identification of and conformance to the restriction on the use of groundwater. The prior approval of the NYSDEC must be obtained before the groundwater underlying the Controlled Property may be used for any purpose. Appropriate measures for management of water will need to include temporary containerization and measures to prevent water from contaminating other materials or migrating off-site. Measures that should be incorporated into such plans include:

- Containerize water prior to pumping off-site;
- Stage containers away from downwind property boundaries and drainage sources;
- Pump water directly into containers;
- Perform necessary sampling prior to disposal;
- Coordinate with MCDES-DPW to receive permission for disposal;
- Use granular activated carbon (GAC) to treat groundwater (if appropriate); and
- Do not use groundwater, either as potable water or in manufacturing processes.

The sewer use permit information is included in Appendix B.

If groundwater is pumped at the Site, a temporary sewer use permit is required for sewer disposal from MCDES-DPW. The required information to be supplied to the MCDES-DPW is included in Appendix B.

## **8.0 Monitoring After Excavation**

Monitoring after excavation activities are completed is generally needed for three purposes:

- To continue protection of the health and safety of Site workers and anyone else potentially affected by the remedial measures taken by checking for malfunctions of remedial systems still in place;
- To ensure remedial measures are working; and
- To determine when system shutdown and/or site closure can occur.

### **8.1 Operations, Maintenance and Monitoring (OM&M) Plan**

A site-specific plan is needed to ensure that post-excavation monitoring is completed properly. Stantec has prepared an Operations, Maintenance & Monitoring (OM&M) Plan for monitoring of the remedial measures put in place at the Site. The OM&M Plan is a modified version of Stantec's OM&M Plan for the adjacent Ward Street Site and is included in the Final Engineering Report for the 8-28 Ward Street Site.

### **8.2 Post-Remediation Sampling Plan**

A site-specific post-remediation sampling plan is needed to demonstrate that the contaminants of concern are at or below the remedial action objectives. The cleanup equipment will remain in place until closure sampling has been completed and approval from the Department has been obtained. The final sampling event will consist of a limited number of borings for confirmatory sampling (one to two). The locations of soil samples will be proposed to the Department for review and approval prior to collection.



## 9.0 Flagging System

An Environmental Easement has been established in conjunction with this Site Management Plan for the Site's soil and groundwater. In addition, the City of Rochester has "flagged" the parcels that comprise the Site, and they will be subject to a special environmental review prior to issuance of a permit. A special notation has been added to the City's mainframe computer database of property information for the following tax account numbers:

The City of Rochester has established a procedure for "flagging" the tax account numbers of properties that require special environmental reviews as a result of hazardous waste or hazardous substance contamination. The reviews are conducted as referrals to the City's Division of Environmental Quality (DEQ) for any permit applications for properties where soil management plans or environmental contingency plans need to be established and followed during construction activities.

Tax ID #	Address	Zoning	Use
106.630-01-016	8-28 Ward Street	M1 (Industrial District)	Parking Lot

The notation appears as a "flag" to City staff that receive future building and site preparation permit applications. The flag will require a referral to the City's DEQ before the application can be processed for approval. DEQ staff will review the permit application for consistency with the Site Management Plan, limited-use areas and land-use restrictions. A notification to the NYSDEC will be included at the time the permit is reviewed given the scope of the proposed work.

Consistent with the SMP, the Environmental Easement as set forth in Appendix C below, stipulates the following:

- The Controlled Property may be used for restricted **commercial or industrial** use as long as the following long-term engineering controls are employed:
  - i) A multi-phase vacuum extraction system ("MPVE") will be operated beneath on-site and beneath off-site within the right-of-way for Ward Street as depicted in ALTA Survey dated October 17, 2008 (Appendix E), until the remedial requirements are achieved to the satisfaction of the Department;
  - ii) the groundwater beneath the Controlled Property may not be used for potable or nonpotable purposes;
  - iii) the Site Management Plan (SMP), dated November 2008, must be implemented for the Controlled Property;
  - iv) soils at the Controlled Property shall be managed in accordance with the SMP, dated November 2008; The SMP includes requirements for the characterization, handling, and



disposal/re-use of residual contaminated media (e.g., soil, fill, groundwater) and requirements for soils imported to the site;

v) the existing surface and near surface soil, asphalt-paved surfaces, concrete-paved surfaces, and the building itself, as depicted in ALTA Survey dated October 17, 2008, act as a cover system at the Controlled Property. Disturbances and incidental damage to this cover system shall be repaired upon discovery with cover materials approved by the NYSDEC and the NYSDOH;

vi) the potential for vapor intrusion for any new buildings developed on the Controlled Property must be evaluated and mitigation shall be implemented, if needed, prior to occupancy. If a vapor mitigation system is required, it shall be operated and maintained until such time NYSDEC deems it is no longer needed;

vii) Grantor shall provide all persons who acquire any interest in the Controlled Property a true and complete copy of the Site Management Plan dated November 2008, that the Department has approved for the Controlled Property and all Department-approved amendments to the Site Management Plan.

The Grantor hereby acknowledges receipt of a copy of the NYSDEC-approved Site Management Plan, dated November 2008 ("SMP"). The SMP describes obligations that Grantor assumes on behalf of Grantor, its successors and assigns. The Grantor's assumption of the obligations contained in the SMP which may include sampling, monitoring, and/or operating a treatment system on the Controlled Property, and providing certified reports to the NYSDEC, is and remains a fundamental element of the Department's determination that the Controlled Property is safe for a specific use, but not all uses. The Department may change the SMP for the Controlled Property from time to time on the basis of requests or information submitted by Grantor, and modifications in applicable statutes regulations, guidance or site conditions. The Department reserves a unilateral right to modify the SMP. The Grantor and all successors and assigns, assume the burden of complying with the SMP and obtaining an up-to date version of the SMP from:

Regional Remediation Engineer  
Region 8  
NYS DEC  
6274 East Avon-Lima Road  
Avon, New York 14414

or

Site Control Section  
Div. of Environmental Remediation  
NYS DEC  
625 Broadway  
Albany, NY 12233

- The Controlled Property may not be used for a higher level of use such as **unrestricted or restricted residential** use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of this Environmental Easement.
- Grantor covenants and agrees that until such time as the Environmental Easement is extinguished in accordance with the requirements of Article 71, Title 36 of the ECL, the property deed and all subsequent instruments of conveyance relating to the Controlled Property shall state in at least fifteen-point bold-faced type:



**This property is subject to an environmental easement held by the New York State Department of Environmental Conservation pursuant of Title 36 to Article 71 of the Environmental Conservation Law.**

- Grantor covenants and agrees that this Environmental Easement shall be incorporated in full or by reference in any leases, licenses, or other instruments granting a right to use the Controlled Property.
- Grantor covenants and agrees that it shall annually, or such time as NYSDEC may allow, submit to NYSDEC a written statement by an expert the NYSDEC may find acceptable certifying under penalty of perjury that the controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such control to protect the public health and environment or constitute a violation or failure to comply with any Site Management Plan for such controls and giving access to such Controlled Property to evaluate continued maintenance of such controls.