

# **SOILS MANAGEMENT PLAN**

**3-9 Trinidad Street  
Rochester, NY  
County of Monroe**

Prepared For:

City of Rochester  
30 Church Street  
Rochester, New York 14614

Prepared By:

Lu Engineers  
2230 Penfield Road  
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## 1. Project Narrative

The Site is located at 3-9 Trinidad Street in the City of Rochester, New York. It consists of a 1.7-acre vacant parcel currently owned by the City of Rochester. Adjacent properties include a railroad, the Rochester Public Market, Harmon Flooring, and vacant commercial land. The future development project associated with the Site includes the construction of a paved parking lot to support the Rochester Public Market. As part of the construction, new electrical systems (i.e. lighting) and storm-water drainage systems will be installed.

## 2. Objectives

The site has been characterized during several previous investigations. The user should refer to the following investigation reports as necessary for more detail:

- Phase I Environmental Site Assessment, July 2005 by Lu Engineers
- Technical Memorandum, August 2005 by Lu Engineers
- Tank Closure and Remediation Report, September 2008 by NYETECH
- Subsurface Soil Sampling Report, April 2009 by Lu Engineers

The objective of this Soils Management Plan (SMP) is to set guidelines for management of soil material encountered and disturbed during construction activities. This SMP addresses environmental concerns related to soil management and has been reviewed by the City of Rochester Division of Environmental Quality.

## 3. Nature and Extent of Contamination

Tank Closure and Remediation Report, September 2008 developed by NYETECH. A summary follows below:

- A 12,000 gallon underground storage tank (UST) was discovered on 09/26/08
- Gasoline contaminated soil was observed at the ground surface around the entire tank footprint
- The contents of the 12,000 gallon tank (approximately 8,100 gallons of gasoline/water mixture) were pumped into a NYETECH vacuum truck and transported off-site for disposal on 09/29/08
- The 12,000 tank was removed and petroleum impacted soil was excavated on 09/30/08
- An 8,000 gallon tank (containing approximately 5" diesel fuel/water mixture) was discovered while removing the 12,000 gallon tank on 09/30/08
- The diesel fuel/water mixture was pumped out into a NYETECH vacuum truck and transported off-site for disposal on 09/30/08
- The 8,000 gallon tank was removed and petroleum impacted soil was excavated on 10/1/08
- A total of 13,585 gallons of gasoline contaminated water was recovered and transported off-site

- A total of 1,032.21 tons of gasoline contaminated soil was excavated and disposed off-site
- Soil samples collected at the Site revealed elevated VOC compounds north and east of the former 12,000 gallon tank location; soil sample analytical results indicate that all samples revealing detectable concentrations of VOCs fall below applicable NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives (see attached Table 1)
- Based on field screening and field observations, it is believed that pockets of petroleum contaminated soil remains at the northeast corner of the excavation limits and that petroleum impacted soil remains along the north edge of the property in the area of a 2" galvanized pipe. (See Attached Figure)

The constituents of potential concern (COPC) for soil consist primarily of BTEX compounds. The most recent sampling at the Site, conducted in March 2009, found BTEX compounds to be below the NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives (see attached Table 1).

#### **4. Projected Future Use**

As part of the redevelopment project for this Site, the property has been proposed to be developed into a public parking lot. The zoning specifically prohibits day care and child care from being constructed at the Site.

#### **5. Management of Soils/Fill Materials**

The purpose of this section is to provide environmental guidelines for management of subsurface soils/fill during any future intrusive work.

The SMP includes the following conditions:

- Control of surface erosion and run-off of the entire property at all times, including during construction activities.
- Site soil that is excavated and is intended to be removed from the property must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives. (Refer to Section 5.1 below for procedures in handling excavated and stockpiled soils intended for removal from the site.)
- Soil excavated at the site may be reused as backfill material on-site provided it does not exceed levels established in TAGM 4046.
- Any off-site fill material brought to the site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. Off-site borrow sources should be subject to collection of one representative composite sample per source in accordance with NYSDEC recommended soil cleanup objective TAGM 4046.

- Prior to any construction activities, workers are to be notified of the site conditions with clear instructions regarding how the work is to proceed. Intrusive work performed at the property will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety.
- The Owner shall complete and submit to the Department an annual report by January 15<sup>th</sup> of each year. Such annual report shall contain certification that the institutional controls put in place, pursuant this Soils Management Plan, are still in place, have not been altered and are still effective. The remedy must be maintained and the conditions at the site are fully protective of public health and the environment.

### **5.1 Excavated and Stockpiled Soil/Fill Disposal**

For excavated soil/fill with visual evidence of contamination (i.e., staining or elevated PID measurements), one composite sample and a duplicate sample will be collected for 2,000 cubic yards of stockpiled soil, and a minimum of 1 sample will be collected for volumes totaling less than 2,000 cubic yards.

The composite sample will be collected from five grab locations within each stockpile. A duplicate composite sample will also be collected. PID measurements will be recorded for each of the five individual locations. One grab sample will be collected from the individual location with the highest PID measurement. If none of the five individual sample locations exhibit elevated PID readings, one location will be selected at random. The composite sample will be analyzed to confirm compliance with NYSDEC TAGM 4046.

Soil samples will be composited by placing equal portions of fill/soil from each of the five grab sample locations into a pre-cleaned, stainless steel (or Pyrex glass) mixing bowl. The soil/fill will be thoroughly homogenized using a stainless steel scope or trowel and transferred to pre-cleaned jars provided by the laboratory. Sample jars will then be labeled and a chain-of-custody form will be prepared.

If soils are determined to exceed TAGM 4046, additional characterization sampling for off-site disposal may be required by the disposal facility. To potentially reduce off-site disposal requirements/costs, the Owner or site developer may also choose to characterize each stockpile individually. If the analytical results indicate that concentrations exceed the standards for RCRA characteristics, the material will be considered a hazardous waste and must be properly disposed off-site at a permitted disposal facility within 90 days of excavation. If the analytical results indicate that the soil is not a hazardous waste, the material will be properly disposed off-site at a non-hazardous waste facility. Stockpiled soil cannot be transported on or off-site until the analytical results are received.

## 5.2 Subgrade Material

Subgrade material used to backfill excavations or placed to increase site grades or elevation shall meet the following criteria.

- Excavated on-site soil/fill which appears to be visually impacted shall be sampled and analyzed. If analytical results indicate that the contaminants, if any, are present at concentrations below NYSDEC TAGM 4046 recommended soil cleanup objectives, the soil/fill can be re-used as backfill on-site.
- Any off-site fill material brought to the site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination.
- Off-site soils intended for use as site backfill cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).
- If the contractor designates a source as "virgin" soil, it shall be further documented in writing to be native soil material from areas not having supported any known prior industrial or commercial development or agricultural use.
- Virgin soils should be subject to collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, SVOCs, pesticides, PCBs, arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, and cyanide. The soil will be acceptable for use as backfill provided that all parameters meet the NYSDEC TAGM 4046 objectives.
- Non-virgin soils will be tested via collection of one composite sample per 500 cubic yards of material from each source area. If more than 1,000 cubic yards of soil are borrowed from a given off-site non-virgin soil source area and both samples of the first 1,000 cubic yards meet TAGM 4046 objectives, the sample collection frequency will be reduced to one composite for every 2,500 cubic yards of additional soils from the same source, up to 5,000 cubic yards. For borrow sources greater than 5,000 cubic yards, sampling frequency may be reduced to one sample per 5,000 cubic yards, provided all earlier samples met the NYSDEC TAGM 4046 objectives.

If you should have any questions, please contact me at 585-377-1450 ext 249.

Sincerely,



Steven A. Campbell, CHMM

# Legend

- Geoprobe Boring
- Tax Parcel Line

