

Attachment 2
Site Management Plan

Site Management Plan
10 East Chester Street
Kingston, New York

BCP Site No. C356032

November 2006
(Revised December 2006)

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Prepared for
New York State Department of Environmental Conservation
Division of Environmental Remediation
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Prepared on Behalf of:
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Prepared by:
S&W Redevelopment of North America, LLC

November 2006
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Project No. N5007

**SITE MANAGEMENT PLAN
10 EAST CHESTER STREET
KINGSTON, NEW YORK
BCA Index # D7-0001-0005
BCP Site No. C356032**

1. OVERVIEW AND OBJECTIVES

The site occupies approximately 1 acre of land located at the corner of Broadway Avenue and East Chester Street in Kingston, Ulster County, New York. The site is commercially zoned with surrounding properties that include a mix of commercial businesses and residential lots. Over its history, portions of the site have been occupied by a dry cleaning facility, a gasoline service station, and a trolley barn that later became a school bus maintenance garage. The owner, 10 East Chester Street, LLC (10 East Chester), entered into the New York State Brownfield Cleanup Program (BCP) and has completed remediation of the site in accordance with the requirements of the BCP. A summary of investigation and remedial activities completed at the site have been reported in several reports. The user should refer to the reports referenced below for more detail, as needed. The reports include

1. Brownfield Cleanup Program Remedial Investigation Report/Remedial Action Plan, BCP Site No. C356032. S&W Redevelopment of North America, LLC. Syracuse, New York: August 2005.
2. Remedial Design In-Situ Chemical Oxidation BCP Site No. C356032. Stearns & Wheler, LLC. Syracuse, New York: October 2005.
3. Final Engineering Report BCP Site No. C356032. S&W Redevelopment of North America, LLC. Syracuse, NY: October 2006.

The site has undergone a remedial action which will allow the site to be put back to productive use. The site remediation consisted of two phases:

- removing seven (7) petroleum underground storage tanks (USTs) including contaminated soils based on field observations; and
- performing in situ chemical oxidation using potassium permanganate to remediate contaminated groundwater.

All remediation activities were conducted in accordance with the NYSDEC-approved Remedial Action Plan and Remedial Design Document.

The purpose of this Site Management Plan (SMP) is to provide guidelines for the management of engineering controls to eliminate the potential exposure of impacted site media (i.e., soil, groundwater, and soil vapor) to humans and other environmental receptors. This SMP addresses potential environmental concerns related to soil and soil vapor management and has been

submitted to the NYSDEC and the New York State Department of Health (NYSDOH).

2. NATURE AND EXTENT OF CONTAMINATION

Data obtained from previous investigations are discussed in the *Remedial Investigation Report and Remedial Action Plan* dated August 2005, prepared by S&W Redevelopment of North America, LLC. Based on the findings of these reports, the constituents of potential concern (COPCs) included volatile organic compounds associated with solvents (e.g., trichloroethylene, perchloroethylene, and their degradation products), and petroleum (e.g., toluene and xylene).

3. CONTEMPLATED USE

Based on the environmental setting, the parcel can be utilized for a variety of uses, including municipal urban parkland or commercial and/or light industrial purposes. Based on the BCP guidelines, the contemplated use category of the site is designated as restricted commercial under a Track 4 clean-up scenario. Commercial uses are allowed, but require engineering and/or institutional controls. The institutional controls for this site are:

- restricted end use limited to commercial and/or industrial uses
- the use of groundwater underlying the site is prohibited without prior approval from NYSDEC to allow treatment to render it safe for drinking or industrial purposes.

The engineering controls for this site are:

- the Grantor or its successors in title must maintain a barrier layer on the Controlled Property of either one foot of clean fill or an alternative barrier layer approved by the NYSDEC, such as concrete, asphalt, or structure; and
- any proposed soil excavation on the Controlled Property below the barrier layer requires prior notification and prior approval by NYSDEC in accordance with a Site Management Plan approved by NYSDEC for this site, and the excavated soil must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives; and
- any area of soil excavation below the barrier layer that is to be returned to vegetated soil (i.e., not concrete, asphalt or structures) must be backfilled with a minimum one (1) foot layer of clean fill underlain by a demarcation layer; and
- any future structures shall be constructed with a sub-slab depressurization system approved by the NYSDEC and NYSDOH

4. MANAGEMENT OF SOILS AND LONG TERM MAINTENANCE OF BARRIER LAYER

The purpose of this section is to provide environmental guidelines for management of subsurface soils, and the barrier layer during any site work which disturbs or removes the subsurface soils, or barrier layers.

The SMP includes the following conditions:

- The surfaces of the site will be maintained with one (1) foot of clean soil that meets NYSDEC soil cleanup objectives (SCOs) or an alternative barrier consisting of asphalt, concrete, or other structure as approved by the NYSDEC.
- The NYSDEC will be notified and approval secured prior to disturbing or excavating soils below the barrier.
- Prior to any construction activities, workers are to be notified of historical site conditions, as well as former site investigations and remedial actions with clear instructions regarding how the work is to proceed. Invasive work performed at the property will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety.
- During excavation or disturbance of soils, a community air-monitoring plan (CAMP), will be implemented to monitor particulates at the downwind boundary and take actions to control dust migration off the site.
- During work at the site, a site health and safety plan (HSP) will be implemented to protect worker health and safety.
- Surface erosion and run-off of the entire property will be controlled at all times, during construction activities. This includes implementation and maintenance of the appropriate sediment/erosion controls and controlling run-off from stockpiled soils.
- Soil excavated at the site may be reused as backfill material on-site provided it contains no visual or olfactory evidence of contamination. Following excavation, a geotextile demarcation layer with a minimum of 1-foot of clean off-site soil, 6" of concrete, or 6" of asphalt pavement must be placed over the excavation area.
- 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. Impacted soil that is stockpiled on-site shall be staged on and covered with polyethylene sheeting to shed storm water and control dust.
- 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. For off-site non-virgin borrow material, one composite sample shall be collected 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 RSCOs, the sample 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 RSCO. The samples should be analyzed for target compound list (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), pesticides, PCBs, and target analyte list (TAL) metals, including cyanide. The soil will be acceptable for use as cover material provided that all parameters meet soil cleanup objectives (SCOs), per the NYSDEC regulatory requirements.

4.1 – EXCAVATED AND STOCKPILED SOIL MANAGEMENT

Soil that is excavated as part of development which can not be used as fill at the site will be further characterized prior to transportation off-site for proper disposal. Soil that is removed from any excavations will be staged on-site on polyethylene sheeting and field-screened for organic vapors using a photoionization detector (PID).

Following screening, if the excavated soil/fill exhibits visual evidence of contamination (i.e., staining or elevated PID measurements), one composite sample and a duplicate sample will be collected for each 100 cubic yards of stockpiled soil/fill. For excavated soil/fill that does not exhibit visual evidence of contamination, but must be sent for off-site disposal, one composite sample will be collected for every 2000 cubic yards of stockpiled soil, and a minimum of 1 sample will be collected for volumes less than 2000 cubic yards. The samples will be placed in clean sample jars provided by the laboratory. The laboratory will composite the sample in the laboratory or the samples can be composited by other acceptable methods. Sample jars will then be labeled and a chain-of-custody form will be prepared. The samples will be analyzed by a NYSDOH ELAP-certified laboratory for pH (EPA Method 9045C), reactivity, ignitability, TCL VOCs, polycyclic aromatic hydrocarbons (PAHs), PCBs, and TAL metals, and cyanide.

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 but exceeds NYSDEC Technical and Administrative Guidance Memorandum #4046 (TAGM #4046) Recommended Soil Cleanup Objectives (RSCOs) (<http://www.dec.state.ny.us/website/der/tagms/prtg4046.html>), the material will be properly disposed off-site at a permitted non-hazardous waste facility. If the analytical results indicate that the soil does not exceed TAGM #4046 guidance values, the soil may be taken off-site for use as fill material or used on-site as fill material. Stockpiled soil cannot be transported on or off-site until the analytical results are received.

4.2 – 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 (per Section 4.1). If analytical results indicate that the contaminants, if any, are present at concentrations below applicable NYSDEC SCOs, the soil/fill can be used on-site as backfill material.
- 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 (per Section 4).
- 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 are below NYSDEC RSCOs.

5. SOIL VAPOR

Any occupied structures on the site shall be constructed with a sub-slab depressurization system approved by the NYSDEC and NYSDOH. The system will be properly constructed, operated, and maintained for its intended use, and as approved by the NYSDEC.

6. GROUNDWATER AND MONITORING

Two (2) rounds of groundwater monitoring will be completed in 2007. The groundwater monitoring events will include sampling of three (3) wells located along the down-gradient property boundary, currently referred to as MW-1, MW-2, and MW-3, during the 1st quarter and 3rd quarter of 2007. Thereafter, annual groundwater monitoring will be conducted at wells located along the down gradient property boundary, currently referred to as monitoring wells MW-1, MW-2, and MW-3. Groundwater samples will be taken from each of the three wells and sent to a NYSDOH ELAP certified laboratory to be analyzed for target compound list Volatile Organic Compounds (VOCs) by EPA Method 8260.

The three (3) monitoring wells must be maintained such that protective covers and wells are intact, the monitoring well is free from obstructions, and that the integrity of the wells will be maintained to support the collection of representative groundwater samples.

The groundwater monitoring data will be evaluated after each monitoring event to assess trends in groundwater quality. If the data indicates that the concentration of target contaminants (VOCs) are increasing or do not continue to show a decreasing trend, the need for additional remedial action will be evaluated in consultation with the NYSDEC. If it is determined that additional remedial action with respect to groundwater is needed, a remedial action workplan will be developed for NYSDEC/NYSDOH review and approval.

7. ANNUAL CERTIFICATION

Annually, or such intervals as NYSDEC may allow, submit to NYSDEC a written statement by a qualified professional acceptable to the NYSDEC certifying under penalty of perjury that the engineering and institutional controls employed at the site are unchanged from the previous certification 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 the site to evaluate continued maintenance of such controls.