# **DECISION DOCUMENT**

136 Fuller Road
Brownfield Cleanup Program
Albany, Albany County
Site No. C401055
March 2013



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

# **DECLARATION STATEMENT - DECISION DOCUMENT**

136 Fuller Road Brownfield Cleanup Program Albany, Albany County Site No. C401055 March 2013

# **Statement of Purpose and Basis**

This document presents the remedy for the 136 Fuller Road site, a brownfield cleanup site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the 136 Fuller Road site and the public's input to the proposed remedy presented by the Department.

## **Description of Selected Remedy**

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the proposed remedy for the site.

#### **Declaration**

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

March 12, 2013	
Date	Robert Cozzy, Director
	Remedial Rureau R

# **DECISION DOCUMENT**

136 Fuller Road Albany, Albany County Site No. C401055 March 2013

## **SECTION 1: SUMMARY AND PURPOSE**

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternative analysis (AA). The IRMs undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM(s) conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the selected remedy. A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This DD identifies the IRM(s) conducted and discusses the basis for No Further Action.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

# **SECTION 2: CITIZEN PARTICIPATION**

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

NYS DEC Attn: John Durnin Division of Environmental Remediation 625 Broadway, 12th Floor Albany, NY 12233-7016

Phone: 518-402-9768

Albany Public Library Main Branch Attn: Ellen K. Gamache 161 Washington Avenue Albany, NY 12210

Phone: 518-427-4300

#### **Receive Site Citizen Participation Information By Email**

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <a href="http://www.dec.ny.gov/chemical/61092.html">http://www.dec.ny.gov/chemical/61092.html</a>

## **SECTION 3: SITE DESCRIPTION AND HISTORY**

Location: The 136 Fuller Road BCP Site is in a mixed commercial and industrial area in the City of Albany, Albany County, NY. This site (tax map parcel 53.00-1-47) is situated on the eastern side of Fuller Road with Consolidated Rail Corporation Railroad tracks to the north and the Interstate 90 exit ramp (Exit #2) to the south.

Site Features: The property is 15.56 acres with a 270,000 square foot single-story main industrial/warehouse structure, half of which is occupied by industrial tenants. There are two onsite ancillary buildings (emergency water pump house and cell tower equipment building). For fire protection, there is a 150,000 gallon elevated steel water tower, a 250,000 gallon at-grade water storage tank and an electrical sub-station with transformers.

Current Zoning/Use: This is an active site and is zoned for C-M which is a light manufacturing district. The surrounding parcels are transportation corridors (Interstate 90 highway, Consolidated Railroad), commercial properties and a park to the west. The nearest residential area is approximately 1,500 feet northeast of the site. This site is located in an Environmental Zone (Enzone) as defined by the Commissioner of Economic Development.

Historic Uses: The property was developed in 1955 as a brush manufacturing facility. In or about 1974, the facility was converted to manufacture poly-fill material, used for the inside of

jackets, blankets, and other textiles. Since the late 1980s, plastic resins have been produced at the facility from recycled materials. Perchloroethylene (PCE) was not documented as ever being used at the site, but a source area of groundwater contamination has been discovered.

Site Geology and Hydrogeology: Depth to groundwater ranges between 4 feet and 10 feet and this shallow groundwater flows to the south. Bedrock was not encountered in any of the deepest borings (40 feet deep). The soil across the site is primarily silty sand with a clay layer (approx. 30 feet below the surface) throughout the entire site. The closest surface water body to the site is the Patroon Creek which is adjacent to the south side of the site and flows easterly approximately six miles to the Hudson River.

A site location map is attached as Figure 1.

#### **SECTION 4: LAND USE AND PHYSICAL SETTING**

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the Remedial Investigation (RI) Report.

#### **SECTION 5: ENFORCEMENT STATUS**

The Applicant(s) under the Brownfield Cleanup Agreement is a/are Volunteer(s). The Applicant(s) does/do not have an obligation to address off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

#### **SECTION 6: SITE CONTAMINATION**

#### **6.1:** Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions:
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess

groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- air
- groundwater
- surface water
- soil
- indoor air
- sub-slab vapor

## 6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. For a full listing of all SCGs see: <a href="http://www.dec.ny.gov/regulations/61794.html">http://www.dec.ny.gov/regulations/61794.html</a>

#### 6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

DICHLOROETHYLENE XYLENE (MIXED)
TETRACHLOROETHYLENE (PCE) 1,1,1-TRICHLOROETHANE

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report.

# **6.2:** <u>Interim Remedial Measures</u>

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Decision Document.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

# Sub Slab Depressurization System (SSDS) IRM

A SSDS system was constructed as an IRM in April 2011 and is operational. The SSDS system is divided into three SSDS zones each with two vapor extraction wells. This configuration uses three 1.5 horsepower regenerative blowers to provide sufficient vacuum extraction capacity. The purpose of this IRM is to draw soil vapor from beneath the building slab and keep any potentially harmful soil vapors from entering the building.

## High Vacuum/Soil Vapor Extraction (HVE/SVE) System IRM

A HVE/SVE System was constructed as an IRM in the source area on the north side of the building. The system, which began operation in April of 2011, includes a network of nine recovery wells and a treatment building. The HVE lowers the water table to the depth of the contaminated shallow clay surface (Source Area) exposing the impacted soil layer for the SVE system to remediate. This IRM was designed to capture and remove highly impacted groundwater and contaminated soil vapor.

#### **6.3:** Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Remediation at the site is complete. Prior to remediation, the primary contaminants of concern were perchloroethylene (PCE) and petroleum compounds (xylenes) in soil and in shallow groundwater.

## **6.4:** Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

Direct contact with contaminants in the soil is unlikely because the majority of contamination is below the site building and/or pavement. People are not drinking the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination.

Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Sub-slab depressurization systems (systems that ventilate/remove the air beneath the building) have been installed in the on-site building to prevent the indoor air quality from being affected by the contamination in soil vapor beneath the building.

## **6.5:** Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

#### **Groundwater**

#### **RAOs for Public Health Protection**

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

#### **RAOs for Environmental Protection**

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

#### Soil

#### **RAOs for Public Health Protection**

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

#### **RAOs for Environmental Protection**

• Prevent migration of contaminants that would result in groundwater or surface water contamination.

#### Soil Vapor

#### **RAOs for Public Health Protection**

• Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

#### SECTION 7: ELEMENTS OF THE SELECTED REMEDY

Based on the results of the investigations at the site and the two IRMs that have been constructed, including the evaluation presented here, the Department has selected a No Further Action Alternative. This alternative includes continued operation of the SSDS system, the HVE/SVE system and the implementation of Institutional Controls/Engineering Controls (ICs/ECs) as the selected remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives describe in Section 6 above.

The selected remedy is a Track 4: Restricted use with site-specific soil cleanup objectives remedy.

The elements of the two constructed IRMs and the ICs/ECs are listed below:

1. Continued Operation of the Interim Remedial Measure: HVE/SVE System

The HVE System extracts impacted groundwater from beneath the Source Area and the SVE System removes the contaminated soil vapors from the subsurface.

The SVE physically removes contaminants from the soil by applying a vacuum to SVE wells that have been installed into the vadose zone (the area below the ground but above the water table). The vacuum draws air through the soil matrix which carries the VOCs from the soil to the SVE wells. The air extracted from the SVE wells is then run through an air treatment process before the air is discharged to the atmosphere.

The lowered groundwater level in the source area helps contain impacted groundwater within the treatment area boundaries. Liquid separated from both the SVE and HVE systems is treated and discharged to the on-site wastewater system in accordance with conditions listed on the sewer discharge permit.

2. Continued operation of the Interim Remedial Measure: SSDS System

Installed as an Engineering Control, the SSDS is an IRM to prevent the potential migration of vapors into the building from soil and/or groundwater.

#### 3. Site Cover

A site cover currently exists and will be maintained to allow for commercial use of the site. Any site redevelopment will maintain a site cover, which may consist either of the structures such as buildings, pavement and sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for commercial use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil

of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

#### 4. Environmental Easement

Imposition of an institutional control in the form of an Environmental Easement for the controlled property that:

- Requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- Allows the use and development of the controlled property for commercial and industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
  - Restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
  - Requires compliance with the Department approved Site Management Plan.

## 5. Site Management Plan

A Site Management Plan is required, which includes the following:

a. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Control Plan: The Environmental Easement discussed above.

Engineering Control Plan: The continued operation and maintenance of the SSDS, HVE/SVE system, and the Site Cover discussed in paragraphs 1, 2 and 3 above.

This plan includes, but may not be limited to:

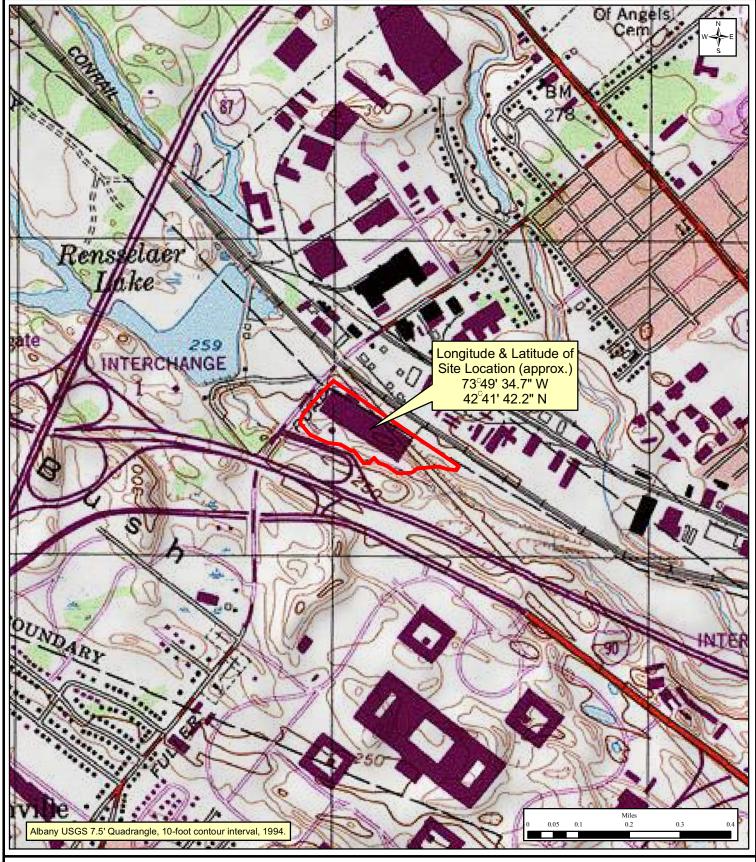
- An Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
- Descriptions of the provisions of the environmental easement including any land use, and/or groundwater use;
- A provision for evaluation of the potential for soil vapor intrusion for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- Provisions for the management and inspection of the identified engineering controls:
- Maintaining site access controls and Department notification; and
- The steps necessary for the Periodic Review and Certification of the institutional and/or engineering controls.

- b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
  - Monitoring of groundwater and sub-slab vapor to assess the performance and effectiveness of the remedy;
  - A schedule of monitoring and frequency of submittals to the Department;
  - Monitoring for vapor intrusion for any buildings occupied or developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- c. An Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
  - Compliance monitoring of treatment systems to ensure proper O&M as well as providing the data for any necessary permit or permit equivalent reporting;
  - Maintaining site access controls and Department notification; and
  - Providing the Department access to the site and O&M records.

#### 6. Green Remediation

Green remediation principals and techniques will be implemented to the extent feasible in the site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste.





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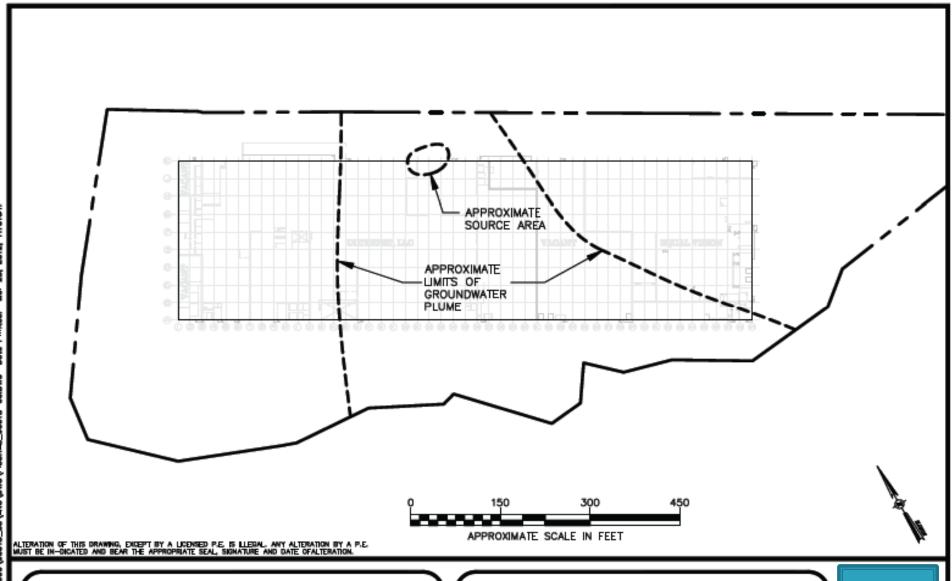
Dutchess County Office: 21 Fox Street, Poughkeepsie, NY 12601 Phone: (845) 454-3980

Orange County Office: 356 Meadow Avenue, Newburgh, NY 12550 Phone: (845) 567-1133

Capital District Office: 547 River Street, Troy, NY 12180 Phone: (518) 273-0055

Glens Falls Office: 100 Glen Street, Glens Falls, NY 12801 Phone: (518) 812-0513 Fuller Partners, LLC

# **Site Location Map**

136 Fuller Road City of Albany Albany County, New York 

CHAZEN ENGINEERING, LAND SURVEYING

LANDSCAPE ARCHITECTURE CO., P.C.

Office Locations:

Distribute County Office: 21 Fox Street. Poughteepale, New York 1280 Phone: (845) 454—3950 Captiel Statrict Office: 547 River Street Troy, New York 12180 Phose: (518) 273-0050 Morth Country Office: 100 Sten Street Glere Fells, New York 12801 Phone: (518) 812-0513 FULLER PARTNERS, LLC SITE

SOURCE AREA AND GROUNDWATER PLUME

136 FULLER ROAD CITY OF ALBANY, ALBANY CO., NEW YORK

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FIGURE 2

