
FACT SHEET

EXPLANATION OF SIGNIFICANT DIFFERENCES

SWEDEN-3 CHAPMAN SITE



Town of Sweden / Monroe County / Registry No. 8-28-040A / January 2009

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

Introduction:

The purpose of this notice is to update the current status of the long-term site management cleanup program being conducted at the Sweden-3 Chapman site and to inform you about a change in the site remedy. The Sweden-3 Chapman site is located in a rural/residential area off of Beadle Road in the Town of Sweden, Monroe County, New York (refer to Figure 1 and Figure 2). The property includes a former landfill/waste disposal area which covers approximately two acres. Land use in the vicinity of the Sweden-3 Chapman site is a mixture of residential property and wooded lands.

In March 1994, the New York State Department of Environmental Conservation (NYSDEC) signed a Record of Decision for the site. The main elements of the selected remedy were excavation and treatment of volatile organic compound contaminated soils on site using low temperature thermal desorption, collection of groundwater encountered during excavation for on-site treatment and disposal, and construction of a landfill cap. Construction of the Record of Decision remedy was completed in 1999. Long-term maintenance of the landfill cap and groundwater monitoring followed and is still in progress.

Groundwater monitoring since 1999 has determined that the Record of Decision remedy has achieved remedial goals in areas to the north of the landfill, but groundwater standards have not been met in the areas to the northeast of the landfill. As a result, an additional state-funded investigation was conducted in October 2003. Based on the results of that investigation, high concentrations of volatile organic compound contamination were discovered in soils below the northeastern edge of the landfill cap. As such, an Explanation of Significant Differences was issued by the NYSDEC in February of 2006 that outlined a modified remedial action which would obtain the remedial goals originally outlined in the Record of Decision. In general, the modified remedy consisted of excavation and on-site stockpiling of approximately 2800 cubic yards of contaminated soil for on-site treatment along with treatment of the groundwater using chemical oxidation. The soil stockpile and groundwater would be monitored for five years to verify the effectiveness of this alternative.

From December 2007 thru July 2008, the NYSDEC performed additional site characterization activities to verify the suitability of the February 2006 Explanation of Significant Differences remedy and provide the details necessary for the design, construction, operation and maintenance, and monitoring of the remedial program. The additional site characterization activities revealed a decrease of approximately 50 percent in the estimated volume of impacted soil requiring remediation. As a result, the alternatives presented in the Explanation of Significant Differences were re-evaluated.

The purpose of this Explanation of Significant Differences is to describe how the contaminated soils remaining along the northeastern edge of the landfill cap will now be addressed during remediation. The change to the February 2006 Explanation of Significant Differences remedy now includes the excavation and off-site disposal of approximately 1,500 cubic yards of contaminated soil.

Description of Significant Differences:

New Information

As part of remedial design investigations completed in July 2008, the NYSDEC conducted soil, groundwater, and soil gas sampling within and surrounding the northeastern edge of the landfill cap. A major objective was to better define the nature and extent of the volatile organic compound contaminated soils area requiring excavation. As a result of the site characterization activities, the contaminated area to be excavated was determined to be approximately 1,500 cubic yards (an area measuring 35 feet by 50 feet by 18 feet - refer to attached Figure 3). Limits of the excavation were estimated using remedial action objectives from the 1994 Record of Decision and February 2006 Explanation of Significant Differences.

Comparison of Changes with February 2006 Explanation of Significant Differences Remedy

February 2006 Explanation of Significant Differences Remedy - This remedy consists of the excavation and on-site remediation of volatile organic compound contaminated soil identified along the northeastern edge of the landfill cap to prevent future groundwater contamination.

Based on findings of the October 2003 supplemental investigations, approximately 2,800 cubic yards of contaminated soil (an area measuring 70 feet by 60 feet by 18 feet) would be excavated and treated on site using passive soil vapor extraction. Prior to backfilling the excavation with imported clean soil, a non-toxic chemical (e.g., potassium permanganate) solution would be pumped into the excavated area and a gravel layer would be placed at the bottom of the excavation area. This solution would either react with and eliminate the contaminants or would convert them into non-hazardous compounds. In addition to this, a riser pipe would be placed at the bottom of the excavation that would extend above the ground surface. This riser pipe would be used for future injections of permanganate solution, if necessary. The soil vapor extraction treatment system and groundwater would be monitored for five years to verify the effectiveness of this alternative. Following soil vapor extraction treatment the excavated soils would be properly disposed of off site.

January 2009 Explanation of Significant Differences Remedy - This remedy consists of the excavation and off-site disposal of volatile organic compound contaminated soil along the northeastern edge of the landfill cap.

The February 2006 Explanation of Significant Differences states that both the on-site soil vapor extraction treatment/chemical oxidation remedy and the excavation with off-site disposal/chemical oxidation remedy would achieve the remediation goals of eliminating all significant threats to the public health and the environment. In 2006, on-site treatment/chemical oxidation was primarily chosen as the selected remedy based on cost. However, when re-evaluated with the reduced volume of contaminated soils, off-site disposal has now been determined to be the less expensive alternative. Off-site disposal would also take less time to implement and would not require an active operation and maintenance phase due to the elimination of the on-site soil vapor extraction system.

Similar to the February 2006 Explanation of Significant Differences remedy, this remedy also requires that a potassium permanganate solution be pumped into the excavated area and that a gravel layer with a riser pipe be placed at the bottom of the excavation area prior to backfilling the excavation with imported clean soil. Moreover, since the extent of impacted groundwater has remained the same and there have not been any significant changes in the groundwater constituent concentrations since the time when the February 2006 Explanation of Significant Differences was issued, chemical oxidation in conjunction with long-term monitoring is still retained as the remedy for groundwater and the landfill cap.

Summary of Major Elements of the January 2009 Remedy:

1. Excavation and off-site disposal of approximately 1500 cubic yards of contaminated subsurface soil to an approximate depth of 18 feet. The goal is to excavate the soils until cleanup goals, as originally included within the Record of Decision, are achieved. Once achieved, the excavated areas will be backfilled with clean soil.
2. Pumping of a non-toxic chemical (e.g., potassium permanganate) solution into the excavated area. Placement of a layer of gravel at the bottom of the excavation. Installation of a riser pipe extending from the bottom of the excavation to the ground surface.
3. Installation of six additional monitoring wells to be sampled as part of the existing long-term groundwater monitoring and landfill cap maintenance program.

The remedy, as modified by this Explanation of Significant Differences, is protective of human health and the environment and meets the goals originally included in the March 1994 Record of Decision and February 2006 Explanation of Significant Differences. The New York State Department of Health concurs with the modified remedy.

Project Schedule and More Information:

Remedial design investigations of the soil, groundwater, and soil gas at the site were completed by the NYSDEC in 2008. It is the intention of the NYSDEC to initiate and complete remedial construction activities in 2009. Long-term site management of the groundwater and landfill cap will continue uninterrupted.

The information here is a summary of what can be found in greater detail in documents that have been placed in the following document repositories:

<p>Seymour Public Library 116 East Avenue Brockport, New York 14420 (585) 637-1050 Monday - Thursday: 10 a.m. - 9 p.m. Friday: 10 a.m. - 6 p.m. Saturday: 10 a.m. - 3 p.m. Sunday: 1 p.m. - 4 p.m. (October - May) http://www.seymourlibraryweb.org/</p>	<p>NYSDEC Central Office - Albany Div. of Environmental Remediation 625 Broadway, 12th Floor Albany, New York 12233-7017 Attn: David Chiusano, Project Manager (518) 402-9814 (888) 459-8667 (Toll Free) Monday - Friday: 7:30 a.m. - 3:30 p.m.</p>	<p>NYSDEC Region 8 Office 6274 East Avon-Lima Road Avon, New York 14414 (585) 226-5349 Attn: Bart Putzig By Appointment Only</p>
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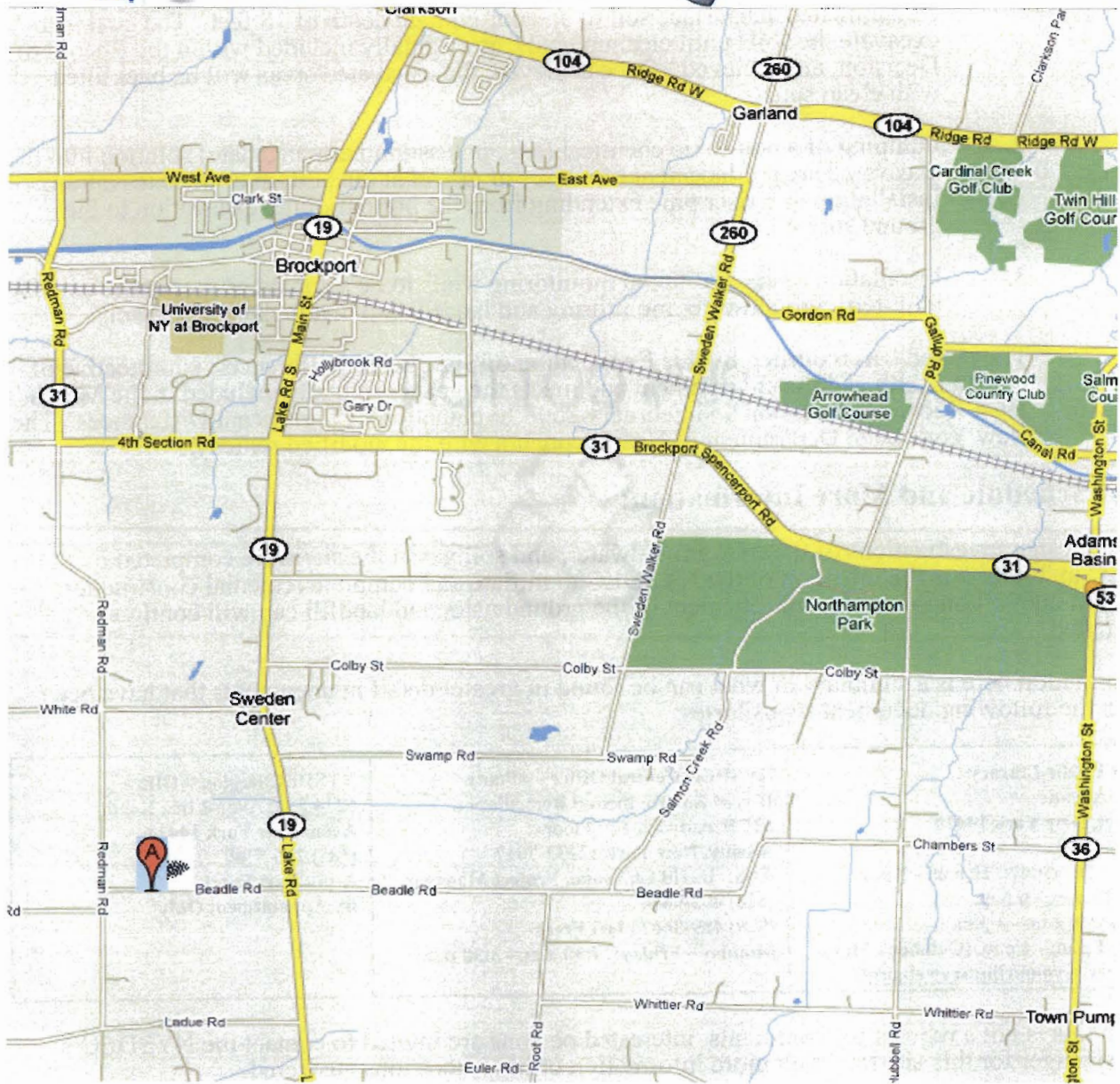
Although this is not a request for comments, interested persons are invited to contact the NYSDEC's Project Manager for this site to obtain more information or have questions answered.

➤ For Technical Questions About the Explanation of Significant Differences, Contact:

David Chiusano, Project Manager
NYSDEC Central Office
625 Broadway, 12th Floor
Albany, NY 12233-7017
(518) 402-9814

➤ For Site-Related Health Questions About the Explanation of Significant Differences, Contact:

Mrs. Julia Kenney, Bureau of Environmental Exposure Investigation
New York State Department of Health, Flanigan Square
547 River Street, Room 300
Troy, NY 12180-2216
(800) 458-1158, ext. 27860

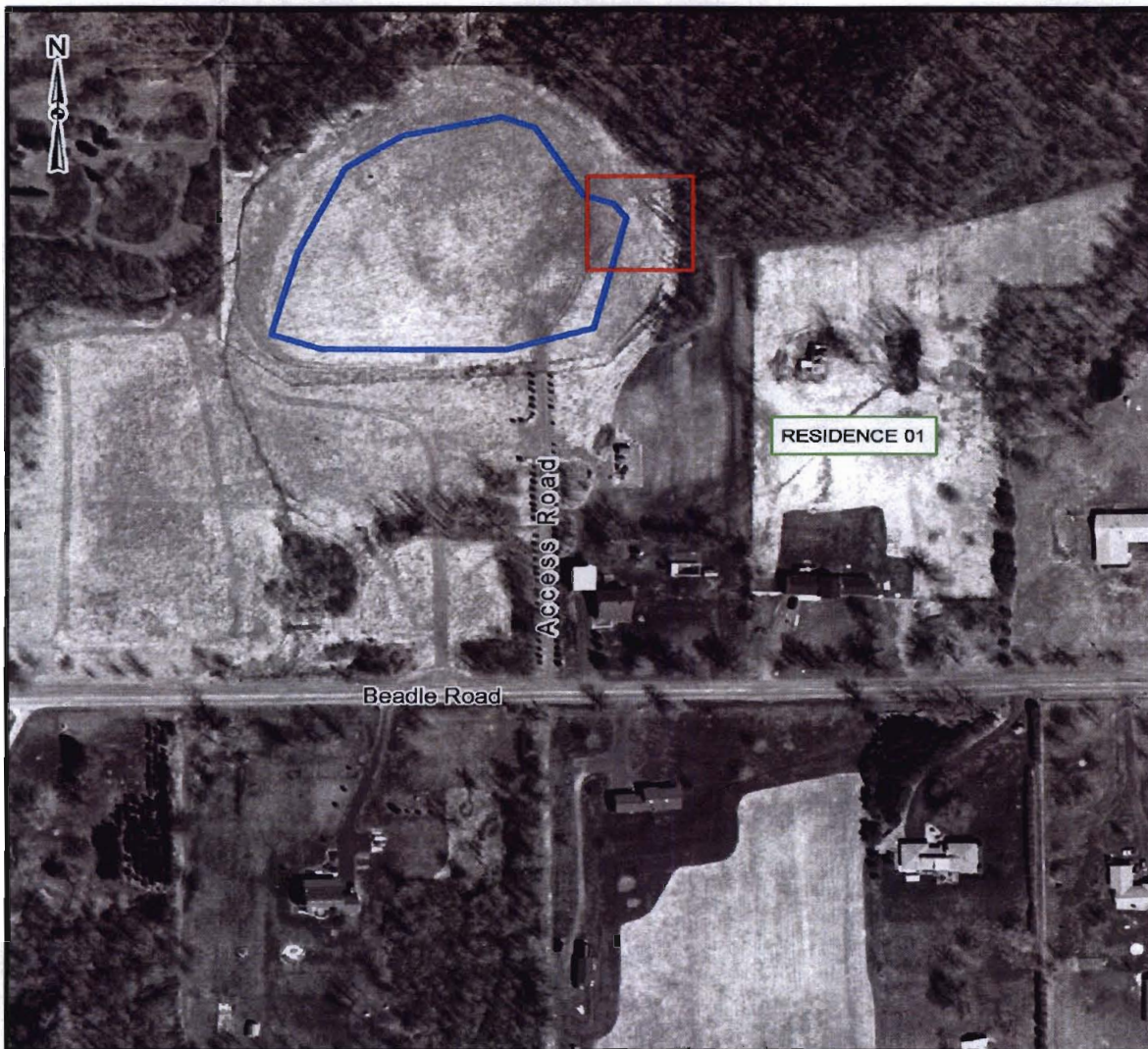




**FIGURE 1 - SITE LOCATION MAP
SWEDEN-3 CHAPMAN SITE
SITE NO. 8-28-040A**

SWEDEN-3 CHAPMAN SITE



FIGURE 2 - SITE VICINITY



 		SWEDEN-3 CHAPMAN SITE (8-28-040A) BASIS OF DESIGN REPORT SWEDEN, NEW YORK			FIGURE 3 REMEDIAL DESIGN FOCUS AREA		
PROJECT MGR: CJC	DESIGNED BY: MJS	CREATED BY: MJS	CHECKED BY: MES	SCALE: AS SHOWN	DATE: SEPTEMBER 2008	PROJECT NO: 14474.27	FILE NO. GIS/PROJECTS/ FIGURE4.MXD