
EXPLANATION OF SIGNIFICANT DIFFERENCES

DUPONT-STAUFFER SITE



City of Newburgh / Orange County / Site No. 336009 / June 2007

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

1.0 Introduction

The purpose of this Explanation of Significant Difference (ESD) is to document a change in the selected remedy for the DuPont-Stauffer Site. The 17 acre DuPont-Stauffer Site is located in the City of Newburgh, Orange County (See Figure 1 attached).

In August of 2006, the New York State Department of Environmental Conservation (NYSDEC) signed a Record of Decision (ROD) which selected a remedy consisting of excavation, characterization and off-Site disposal of the identified waste types, construction of an engineered Part 360 cap for consolidation of all remaining waste fill types in the North Landfill area, and soil cover for all excavated areas. The selected remedy included the excavation, characterization and off-site treatment/disposal of all waste fill identified in the South Landfill as characteristic hazardous waste. This remedy also included the excavation and consolidation of all remaining waste fill in the South Landfill within the North Landfill Area, under an engineered cap that meets the substantive requirements of Part 360 solid waste regulations. The selected remedy is based on the results of the Supplemental Remedial Investigation (SRI) and an evaluation and compilation of remedial alternatives that were evaluated in the Proposed Remedial Action Plan (PRAP).

The subject of this ESD is the requirement that South Landfill wastes characterized as hazardous waste be disposed off-site at a permitted hazardous waste disposal facility. The change to the remedy identified by this ESD will allow the excavated South Landfill waste which is characterized as hazardous waste to be pre-treated within the South Landfill area to meet the requirements of the Land Disposal Restrictions (LDRs) pursuant to 40 CFR Part 268 and 6 NYCRR Part 376, with subsequent off-site disposal at a solid waste facility, if the treatment has demonstrated that it is a solid waste and meets all the criteria pursuant to the LDR regulations specified above. If the waste remains hazardous after pre-treatment and does not meet the statutory requirements, then the waste will be disposed off-site as a hazardous waste at an appropriate facility. This modification of the remedy may potentially reduce the off-site disposal costs of the South Landfill wastes. Previously, the August 2006 ROD only allowed for off-site disposal and treatment of the South Landfill Waste Material at a hazardous waste facility. All other parts of the remedy and requirements described in the August 2006 ROD remain the same.

This Explanation of Significant Differences (ESD) will become part of the Administrative Record for this site. The information here is a summary of what can be found in greater detail in existing documents that have been placed in the following repositories:

City of Newburgh Planning Office
City Hall, 83 Broadway
Newburgh, NY 12250
Phone: (845)769-7300
Hours: M -F, 8:30am-4:00pm

Newburgh Free Library
124 Grand Street
Newburgh, New York 12250
Phone: (845)563-3601
Call for Hours

NYSDEC Region 3 Office
21 South Putt Corners Road
New Paltz, New York 12561
Attn: Mike Knipfing
Phone: (845) 256-3174
M-F, 8:30 am-4:45 pm by appt.

2.0 SITE DESCRIPTION AND ORIGINAL REMEDY

2.1 Site History, Contamination, and Selected Remedy

The DuPont-Stauffer Landfill Site is located on Pierces Road in a mixed light industrial/residential area of the City of Newburgh. The site is completely fenced and is situated on a 38 acre parcel of land however, the area of waste disposal covers approximately 17 acres. The landfill is bordered on the east by the former Newburgh City Landfill, Interstate I-84 to the north, Gidneytown Creek to the west and South Street to the south. Residential properties border Gidneytown Creek to the west and light industrial facilities are present on Pierces Road and South Street. Old Pierces Road is an unused paved road that separates the northern and southern portions of the site. The area south of Old Pierces Road includes an area referred to as the South Landfill. This portion of the site contains a few gravel areas and concrete platforms and is overgrown with grasses, scrub brush, and small trees. The North Landfill portion of the site consists of heavily wooded and vegetated terrain.

E.I. DuPont de Nemours and Company (DuPont) purchased the manufacturing facility from the Fabrikoid Company of Newburgh in 1911. The main manufacturing areas were located on South Street with waste disposal occurring at the landfill on Pierces Road. DuPont used nitrocellulose to coat fabrics from the late 1950s to the early 1960s when vinyl replaced nitrocellulose as the coating agent. Coated fabric was primarily used in manufacturing of automobile car seats and interiors. Stauffer Chemical (Stauffer) purchased the site from DuPont in 1967. Stauffer continued production of coated fabrics and also produced PVC sheeting until January 1979, when operations at the plant were shut down. The manufacturing facility (FCIP) was purchased by Creek Industrial Center in 1979 with Stauffer Chemical Company retaining ownership of the landfill.

Data collected during the test pit excavations and soil boring installation activities in the North and South Landfill areas were used to determine the nature and extent of the landfill waste. Six (6) distinct waste fill types were identified in the North Landfill (Waste fill Types A through F). One common waste fill type was identified in the South Landfill. The waste fill types, their lateral extent, and approximate size in acres are shown on the attached Figure 2. The total extent of waste fill covers approximately 17 acres.

The single fill type in the South Landfill is an ash material, with other miscellaneous debris (glass, wood, and brick), which has elevated levels of metals, as well as polycyclic aromatic hydrocarbons (PAHs) typical of any product of combustion. The metal cadmium is present in select areas of the South Landfill ash at levels which exceed the Toxic Characteristic Leaching Procedure (TCLP) regulatory level of 1 ppm, indicating this waste material is a characteristic hazardous waste and must be treated, managed and disposed of accordingly. The majority of the waste encountered at the South Landfill is found at or just below the surface.

The components of the remedy selected in August 2006 are as follows:

- The excavation, characterization and off-site treatment/disposal of all the Waste Fill Type D in the North Landfill area and the South Landfill waste where the metals exceed characteristic hazardous waste regulatory levels in the ash. Disposal will be at a permitted hazardous waste disposal facility.
- The excavation of all waste remaining in the South Landfill area and the waste areas in the North Landfill property where Waste Fill Types A, B, C, E and F were historically disposed of. The waste from these areas will be consolidated to the northern portion of the North Landfill area where the waste fill Type A is currently disposed.

- The North Landfill area where the wastes consolidation would occur will be capped with an engineered cap designed to the substantive requirements of 6 NYCRR Part 360 solid waste regulations for landfills and caps.
- All of the Waste Fill Type areas of the site that are excavated as well as all areas where surface soils would remain above SCGs/area background would be covered with a minimum of one (1) foot of soil meeting the requirements of NYSDEC TAGM 4046, or area background, with appropriate seeding and grading to establish a vegetated cover and demarcation layer from the surface and subsurface soils. New building foundations or a paving system may also be used in place of the soil cover if acceptable to the NYSDEC. The extent of the soil cover will be determined by sampling during the remedial design.
- Since the remedy results in contamination above unrestricted levels remaining at the site, an institutional control in the form of an environmental easement will be required for the remedy; and a site management plan (SMP) will be developed and implemented.

3.0 CURRENT STATUS

DuPont-Stauffer is to conduct an in-situ stabilization pretreatment evaluation program, approved in March 2007, for the South Landfill Waste area in the summer of 2007. A pre-design waste delineation of the site will also be conducted prior to the submittal of the Sitewide Remedial Design.

4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCES

4.1 New Information

DuPont and Stauffer requested that the Department and NYSDOH allow the companies to evaluate the possibility of pre-treatment of the South Landfill area wastes to meet the requirements of the LDRs as required under 40 CFR Part 268 and 6 NYCRR Part 376 and if successful, dispose of the wastes at a solid waste facility in lieu of a more costly hazardous waste facility.

4.2 Comparison of Changes with Original Remedy

The South Landfill Waste Material, once excavated and characterized may be pre-treated within the confines of the South Landfill area to meet the LDR requirements of 40 CFR Part 268 and 6 NYCRR Part 376 and if demonstrated to the NYSDEC that the waste can be classified as a solid waste, it may then be disposed off-site at a non-hazardous waste facility. If the waste remains hazardous after treatment and does not meet the statutory requirements described above, then the waste will be disposed off-site as a hazardous waste at an appropriate facility. Previously, the August 2006 ROD only allowed for the off-site disposal and treatment at a hazardous waste facility, with no on-site treatment of the South Landfill Wastes. This modification of the remedy may allow the possibility of a reduction of the off-site disposal costs of the South Landfill wastes.

The remediation goals for this site as stated in the August 2006 ROD and for this Explanation of Significant Differences (ESD) are to eliminate or reduce to the extent practicable:

- Exposure to the surface and subsurface waste and contaminated soils and other identified waste fill types in the North and South Landfill areas;
- The potential for exposure to on-site soil vapor and groundwater.
- The potential for degradation to the Gidneytown Creek due to runoff from the site.

The ROD, as modified by this ESD remains protective of public health and the environment and also meets the remediation goals originally included in the August 2006 ROD. The New York State Department of

Health concurs with the modified remedy.

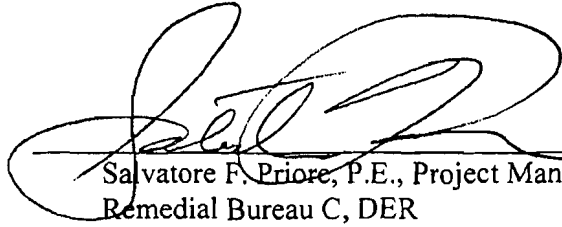
5.0 SCHEDULE AND MORE INFORMATION

Completion of pre-design investigations and the in-situ pilot stabilization evaluation program for the South Landfill is tentatively scheduled for the summer/fall of 2007. Remedial Construction work is tentatively scheduled to begin in 2008.

Interested persons are invited to contact the NYSDEC's Project Manager for this site to obtain more information or have questions answered. The project manager for this site is Salvatore F. Priore, P.E.. Mr. Priore can be contacted in writing at 625 Broadway, Albany, New York, 12233-7014; by telephone at (518) 402-9662; or by email at sfpriore@gw.dec.state.ny.us.

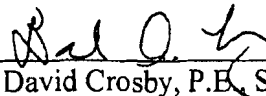
6/6/07

Date


Salvatore F. Priore, P.E., Project Manager
Remedial Bureau C, DER

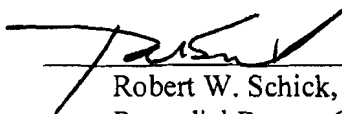
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Date


David Crosby, P.E., Section Chief
Remedial Bureau C, DER

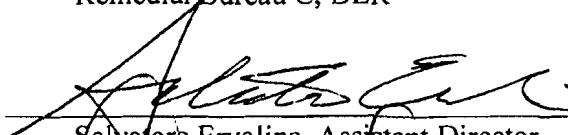
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Date


Robert W. Schick, P.E., Director
Remedial Bureau C, DER

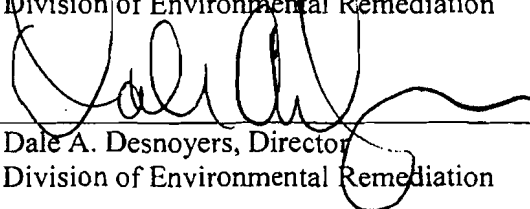
6/13/07

Date


Salvatore Ervolina, Assistant Director
Division of Environmental Remediation

JUN 14 2007

Date


Dale A. Desnoyers, Director
Division of Environmental Remediation



Legend

- Property Fence
- South Landfill



0 250 500 1,000 1,500 2,000 Feet

DuPont - Stauffer Landfill
Newburgh, New York

Figure 1 October 2006