

Ludlow Sand & Gravel

New York

EPA ID#: NYD013468939

EPA REGION 2

Congressional District(s): 23

Oneida

Paris

NPL LISTING HISTORY

Proposed Date: 12/1/1982

Final Date: 9/1/1983

Site Description

The 18-acre Ludlow Sand & Gravel site is a landfill and gravel pit located on a 130-acre parcel of land. Disposal at the site began in the early 1960s and included domestic wastes, septic tank effluent, industrial wastes such as dyes and waste oils, and animal parts from a meat processing plant. Area residents expressed concern in 1966 when large areas of the site were left uncovered and a strong odor could be detected at a considerable distance. In 1982, trace quantities of polychlorinated biphenyls (PCBs) were detected in the leachate pools located at the southern portions of the property. The District Court of Binghamton ordered the landfill closed and dumping ceased in 1988, although the gravel pit was still in operation. A New York State-designated wetland is located to the southeast of the site. The landfill is in a groundwater recharge zone to an aquifer along Sauquoit Creek, which serves as a major discharge point for groundwater flowing from this aquifer and is a tributary of the Mohawk River. The residents east of the landfill obtain their drinking water supply from the aquifer. The municipal water supply for the community of Clayville is obtained from ground water. The nearest residence is 1/2 mile from the landfill. Three residential wells are located within 1,000 feet of the site, and eight additional wells are 1,000 to 3,000 feet away.

Site Responsibility: This site is being addressed through Federal, State, and potentially responsible parties' actions.

Threat and Contaminants

The groundwater and landfill wastes are contaminated with volatile organic compounds (VOCs), heavy metals including chromium and nickel, PCBs, and phenols. Sediments contain VOCs and PCBs. The soil and surface water were contaminated with PCBs. Leachate pools contained PCBs and phenols. Residents near the site rely on private wells for drinking water. Although these wells are not contaminated, there was a possibility that chemicals migrating from the landfill could pollute them. Sediment from the wetlands was contaminated. There was a potential for people who accidentally ingest the sediments to suffer adverse health effects.

Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on source control and the cleanup of groundwater, surface water, and soils from adjacent areas.

Response Action Status

Source Control: In 1988, the EPA selected a remedy to contain the source of the contamination by: (1) consolidating approximately 10,000 cubic yards of contaminated soil and sediment adjacent to the landfill and disposing of it in the landfill and then placing either a clay or synthetic cover over it to prevent rain water from coming into contact with the buried materials; (2) collecting the leachate from seepage areas; (3) dewatering the landfill, if necessary, by using either a passive drain system or using groundwater extraction wells; (4) lowering the water table to prevent groundwater from coming into contact with the waste material; (5) treating the contaminated leachate and groundwater at an on-site facility, or if the volume of water is small, transporting the water and leachate to an approved federal facility; (6) fencing the site, including the wetlands; (7) controlling future use of the property by deed restrictions; and (8) monitoring the ground water, private wells, and surface water to ensure the cleanup has been effective. The cleanup was conducted by the potentially responsible parties pursuant to a Consent Decree with the State of New York. A plan was approved by the State in 1990 for the cleanup of the landfill and the wetlands. The cleanup was completed in 1991 and 1992. A report documenting the cleanup efforts was submitted by the PRPs in 1995.

Additional contaminated soils remain at the gravel pit. In March 2003, NYSDEC signed a ROD to address the

contamination of the gravel pit. The remedy selected by the EPA and NYSDEC includes the following: (1) implementing a pre-design delineation sampling program to determine the exact area to be grouted (vertically and horizontally); (2) performing a remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation, maintenance, and monitoring for the remedial action; (3) implementing soil bench-scale testing to determine the grout characteristics before grouting is implemented; (4) solidification of the area where PCBs concentration area above 10 ppm, using pressure grouting technology; (5) performing grout end point sampling and testing; (6) backfill the gravel pit; (7) installing two downgradient deep groundwater monitoring wells; and (8) implementing a groundwater monitoring program to ensure that contaminants have remained immobile and are not impacting the groundwater.

Cleanup Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were required at the Ludlow Sand & Gravel site while further investigatory studies were being completed and cleanup activities were started. Over 40,000 cubic yards (1,022,200 tons) of contaminated soils and approximately 15,000 cubic yards (24,000 tons) of sediments have been excavated from the adjacent wetlands and gravel pit and consolidated in the landfill; the leachate collected from the seepage areas; a drainage system installed and operated to dewater the landfill; and a final cap placed over the landfill. The collected water is being treated using a system built on the site. These actions have removed the potential for contact of the water with the contaminants and therefore, have prevented further migration of contamination from the landfill into the environment. To address the contaminated soils in the gravel pit, remedial design was completed in May 2007 and the construction activities were completed in September 2007.

Site Repositories

Utica Public Library, 303 Genesee Street, Utica, New York 13501

NYSDEC Region 7 Office, State Office Building, 207 Genesee Street, Utica, New York 13501