

# Hooker-102nd Street

## New York

EPA ID#: NYD980506810

### EPA REGION 2

#### Congressional District(s): 29

Niagara

East of Griffin Park in Niagara Falls

#### NPL LISTING HISTORY

Proposed Date: 12/1/1982

Final Date: 9/1/1983

Deletion Date: 8/5/2004

## Site Description

The 102nd Street Landfill consists of two land parcels totaling 22.1 acres. Occidental Chemical Corporation, formerly Hooker Chemical and Plastics Corporation, owns 15.6 acres, and the remaining 6.5 acres are owned by Olin Chemical Corporation. The site is located adjacent to the Niagara River and south of the Love Canal. A portion of the filled area of the site is an extension of the original Love Canal excavation. The larger portion of the landfill was operated from 1943 until 1971. During that time, about 23,500 tons of mixed organic solvents, organic and inorganic phosphates, and related chemicals were deposited at the landfill. Brine sludge, fly ash, electrochemical cell parts and related equipment, and 300 tons of hexachlorocyclohexane process cake, including lindane, were deposited at the site. The smaller portion of the site operated as a landfill from 1948 to about 1970, during which time 66,000 tons of mixed organic and inorganic chemicals were deposited. In addition, about 20,000 tons of mercury brine and brine sludge, more than 1,300 tons of a mixture of hazardous chemicals, 16 tons of mixed concrete boiler ash, fly ash, and other residual materials were disposed of at the site. Griffin Park, which includes a boat-launch area, is immediately to the west of the site. There is limited residential development to the west of Griffin Park and to the east of the site.

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

## Threat and Contaminants

Ground water contains volatile organic compounds (VOCs) including benzene and toluene; semi-volatile organics such as chlorinated benzenes, phenols, and chlorophenols; pesticides; chlorinated dioxins and furans; and heavy metals including arsenic, cadmium, and mercury. Niagara River sediments contained semi-volatile organics, pesticides, and mercury. Soils and fill contain VOCs, semi-volatile organics, pesticides, chlorinated dioxins and furans, metals, and phosphorus. The storm sewer contained VOCs, semi-volatile organics, pesticides, and mercury. On-site cleanup workers risked harmful exposure through accidental ingestion of contaminated soils, or by inhaling and coming in direct contact with contaminated soils, ground water, and sediments. People were also at risk by eating contaminated fish from the river. The most significant off-site health threat was from contaminants that became airborne during work activities at the site. There is no public access to the site.

## Cleanup Approach

The site was addressed in two phases: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

#### Response Action Status

Immediate Actions: In 1972, the site was capped, a fence was erected on three sides, and a bulkhead along the Niagara River was installed.

Entire Site: The parties potentially responsible (PRPs) for site contamination, under EPA and New York State Department of Environmental Conservation (NYSDEC) supervision, conducted an investigation into the nature and extent of contamination at the site, including the landfill residues, off-site fill, shallow ground water, liquid waste, off-site soil, river sediments, and storm drains. The investigation was completed in 1990. In September 1990, the EPA selected a remedy which includes the installation of a synthetic-lined cap; consolidation of off-site soils beneath the cap; surrounding the waste mass with a slurry wall; dredging and incineration of highly contaminated sediments; dredging, dewatering and consolidation, beneath the cap, of the remaining contaminated sediments; recovery and treatment of

ground water; incineration of any recovered DNAPL(dense non-aqueous phase liquids); monitoring; and restricting access to the site by installing additional fencing. An Administrative Order, covering the remedial design and remedial action, was signed by the EPA in September 1991, and issued against the two potentially responsible parties, Occidental Chemical Corporation and Olin Chemical Corporation. The two parties agreed to comply with the Order. Design of the EPA-selected remedy was begun in October 1991. The Intermediate Engineering Report (IER) was approved by the EPA on August 31, 1993. However, certain concerns raised by the federal and state natural resource trustees caused the EPA to reexamine the remedial design as proposed in the IER. As a result of such reexamination, the September-1990 ROD was amended in June 1995. The amendment eliminated the incineration contingency whereby all highly contaminated sediments in the embayment would have to be incinerated if they were to remain outside the final positioning of the slurry wall. The slurry wall has since been re-designed so as to be positioned to run as close to the shoreline as is practical and still contain any migration of the NAPL plumes. Remedial action activity began in April 1996. The construction of the slurry wall was completed in 1996 along with excavation of contaminated sediments from the embayment. The installation of a permanent synthetic/clay cap over the landfill was completed during the 1997 construction season. The remedy for the site was completed in March 1999 when the forcemain system for pumping leachate from the landfill to the Love Canal Treatment Facility became operational. The forcemain system is pumping sufficient leachate from the landfill so as to maintain an inward gradient across the slurry wall. The leachate pumping system reached the steady-state phase in November 2000. A Preliminary Close-Out Report was signed by the EPA on September 2, 1999. A settling Consent Decree was approved and entered by a federal court in the pending lawsuit on October 1, 1999. Under the terms of the Consent Decree, the PRPs have reimbursed the EPA in the amount of \$6,800,000 for the EPA's past costs including interest. By means of a letter dated March 13, 2002, the EPA accepted the Companies' certification of completion of the remedial action, thereby transferring the enforcement lead for the oversight of the continuing operation and maintenance of the site to the NYSDEC from the EPA. The site was deleted from the National Priorities List (NPL) on August 5, 2004.

Site Facts: In 1979, the U.S. Department of Justice, on behalf of the EPA, filed a lawsuit against two parties potentially responsible for the site contamination to end the continuing discharges and to clean up on-site and off-site contamination. The parties, with EPA and State guidance, agreed to conduct a study into the nature and extent of site contamination and to recommend alternatives for the cleanup of the site. The Canadian government has shown a special interest in the site, since it abuts the Niagara River.

## **Cleanup Progress**

The construction of a circumferential slurry wall around the entire site, the installation of a leachate collection and pumping system, the installation of a permanent, synthetic/clay cap over the landfill, and the erection of new fencing to restrict access, have virtually eliminated the potential of exposure to contaminants at the 102nd Street Landfill Site. Data will be collected to verify that the discharge of contaminants into the Niagara River has been eliminated.

## **Site Repositories**

U.S. Environmental Protection Agency Western New York Public Information Office 186 Exchange Street Buffalo, New York 14204