

Islip Municipal Sanitary Landfill

New York

EPA ID#: NYD980506901

EPA REGION 2

Congressional District(s): 02

Suffolk

Blydenburgh Road, Long Island

NPL LISTING HISTORY

Proposed Date: 1/1/1987

Final Date: 3/30/1989

Site Description

The Islip Municipal Sanitary Landfill Superfund site covers approximately 55 acres in the Town of Islip. This landfill is part of a 109 acre complex operated by the Islip Resource Recovery Agency. The surrounding area is entirely residential, except for a golf course immediately to the east of the landfill. The Town has operated the landfill since 1963. In 1978, fifty or more 55-gallon drums containing a mixture of tetrachloroethene and other liquids were allegedly disposed of at the site. This is the only reported case of hazardous waste disposal at the site. The sanitary landfill stopped receiving wastes in December 1990. The methane gas within the landfill is being collected in extraction wells and directed to generators, where the gas is either burned to generate electricity, or directed to flares. According to tests conducted in 1980 by the Suffolk County Department of Health Services, private wells adjacent to the landfill were contaminated with volatile organic compounds (VOCs). In response to this, the Town of Islip connected these residents to a permanent public water supply in 1981. A resident located downgradient of the site was being supplied with bottled water until 1992 when the permanent hookup to public water supply was completed. An estimated 75,000 people draw drinking water from Suffolk County Authority public supply wells located within 3 miles of the landfill. A day care center and a former school are located nearby.

Site Responsibility: This site is being addressed through a combination of State and Potentially Responsible Party (PRP) actions

Threat and Contaminants

The groundwater is contaminated with VOCs. Site contaminants have been detected in the shallow (Glacial) aquifer and in the underlying deeper (Magothy) aquifer. These aquifers are the sole sources of drinking water in Suffolk County. The exposures of greatest concern would be from inhalation of volatile contaminants through showering and ingestion of contaminated groundwater; however, residents obtain their drinking water from a public water supply which is routinely monitored to ensure compliance with the State and Federal drinking water standards

Cleanup Approach

The site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Entire Site: The Town of Islip, under an order from New York State, investigated the nature and extent of contamination and identified alternatives for cleanup. A Record of Decision (ROD) that describes the remedy selected for cleanup of the site was signed in September 1992. The major components of the selected remedy include capping the landfill and treating the most contaminated portion of the aquifer. Preparatory work for the installation of the fifty-two acre landfill cap commenced in early 1993; construction of the cap was completed in 1994 using multiple geosynthetic and natural layers. The cap is currently in the Operations and Maintenance (O&M) phase; maintenance activities are ongoing. The design of the groundwater pump and treat system was completed in March 1995. The construction of the system was initiated in the summer of 1995 and completed in 1996. The groundwater extraction and treatment system began operation in September 1996, at a capacity of 350 gpm (gallons per minute). It is estimated that the groundwater system will need to be operated for several more years. All scheduled site construction has been completed.

Site Facts: On December 18, 1990, the Town of Islip ceased landfilling of municipal solid wastes at the site. A complete closure program for the entire landfilled area, including capping, methane recovery, groundwater treatment, and groundwater monitoring activities, is being implemented, as required by the Town's Consent Order with New York State.

Cleanup Progress

Assuming a waste thickness for the landfill of approximately 50 feet (as estimated from site maps), the total volume of waste capped and removed from human exposure is 4 million cubic yards. The capping of the landfill has greatly reduced the potential for exposure to contaminants, and has also reduced both the generation of leachate and the release of contaminants into the aquifer. Based on the assumption that the groundwater extraction and treatment system has been fully operational from September 1996 until present, approximately 2.27 billion gallons of contaminated water have been treated.

Construction at the site was determined to be complete on April 8, 1998.

Site Repositories

- Central Islip Public Library, 33 Hawthorne Avenue, Central Islip, New York, Contact: Front Desk
- Islip Town Clerk's Office, 655 Main Street, Islip, New York
- Islip Resource Recovery Agency, 40 Nassau Avenue, Islip, New York
- NYSDEC Region 1 Office, Building 40, State University of New York, Stony Brook, New York