

North Sea Municipal Landfill

New York

EPA ID#: NYD980762520

EPA REGION 2

Congressional District(s): 01

Suffolk

Southampton

NPL LISTING HISTORY

Proposed Date: 10/1/1984

Final Date: 6/1/1986

Deletion Date: 9/27/2005

Site Description

The 130-acre North Sea Landfill is an inactive municipal landfill owned and operated by the Town of Southampton. It accepted refuse, construction debris, and septic system waste from 1963 to 1995. The landfill consists of four areas: Cell #1, Cell #2, Cell #3, and former septic sludge or scavenger lagoons. All cells are now permanently closed. Cells #2 and #3 are not part of the NPL site; these cells are regulated by the New York State Department of Environmental Conservation under its municipal waste landfill closure program. The 14 scavenger lagoons were decommissioned in 1986 and have subsequently been filled with clean fill. As part of the Superfund investigation, the site is divided into two Operable Units (OUs). Operable Unit (OU) 1 addresses Cell #1 and 14 former septic sludge or scavenger lagoons. OU2 includes the groundwater contamination at and downgradient of the landfill as well as its impact on Fish Cove, a nearby surface water body. The area within 1 mile of the landfill is residential, with a population of approximately 1,500 people. In 1979, about a dozen private wells located within the area of groundwater contamination were closed by the State and an alternate water supply was provided. The site is located near the southern shore of Little Peconic Bay in an area with extensive ponds, coves, and wetlands. Groundwater ultimately discharges into Fish Cove of the Peconic Bay. The Peconic Bay system is a major recreational resource in this region.

Site Responsibility:

This site has been addressed through Federal and Potentially Responsible Party (PRP) actions

Threat and Contaminants

The unlined Cell #1 and the scavenger lagoons have been addressed and are no longer threats to the groundwater and surface water. A groundwater monitoring program and investigation delineated a plume of ammonia, iron and manganese migrating from Cell #1 toward Fish Cove. The work plan for studies to ascertain whether this discharge impacts biota in Fish Cove was revised to include additional analytical work and bioassay tests. This study was conducted in September 2001, and the results were reviewed. Additional sampling in the Fish Cove area was conducted in July 2004. The study did not reveal any impact to the diverse aquatic community that exists within the southeast region of Fish Cove.

Cleanup Approach

This site has been addressed in three stages: an initial action and long-term remedial phases which focused on cleanup of Cell #1 and the former sludge lagoon area.

Response Action Status

Initial Action: Temporary emergency water was provided until 1981, when affected homes were connected to the public water supply. The sludge lagoons were decommissioned in 1986; approximately 100,000 cubic yards of solid contents were removed. After this removal, an additional two feet of soil was excavated. The excavated materials were dried out and mixed with sand and later used in Cell # 2 as daily cover material. The sludge lagoons were backfilled to grade, with sandy loam.

Cell #1 and Former Sludge Lagoon Area: A Record of Decision (ROD) for OU1 was signed on September 29, 1989. The ROD called for closure of Cell #1 by constructing a landfill cap and perimeter gas venting system, and confirmatory sludge and soil sampling to assure that no hazardous materials were leaching from the sludge lagoons. The confirmatory

sampling of soil/sludge was conducted in January 1992; no contaminated sludge was found. The Town of Southampton completed the detailed engineering design for closure of Cell #1 in September 1992. Construction of the remedy was completed in January 1995. The Town is performing long-term operation and maintenance of the Landfill.

Off-Site Contamination: The Town of Southampton conducted an investigation into the nature and extent of the off-site groundwater contamination. The investigation included installing additional monitoring wells and resampling all existing wells. A ROD for OU2 was signed on September 28, 1992 which called for no action for the on- and off-site groundwater contamination because levels found were within EPA's acceptable risk range. Additional studies were conducted by the Town in September 2001 to assess water quality conditions in Fish Cove. EPA received the sampling report for this effort in May 2002, and submitted comments on the report in June 2002. A revised report and response to comments were received in August 2002 and reviewed by EPA. The Town of Southampton conducted additional sampling in the Fish Cove area in July 2004. The study did not reveal any impact to the diverse aquatic community that exists within the southeast region of Fish Cove.

Site Facts: In 1987, the EPA and the Town of Southampton executed an order requiring the Town to conduct a study to define the extent of site-related contamination and to identify potential site cleanup actions. In 1991, EPA and the Town of Southampton executed a Consent Decree requiring the Town to implement the Record of Decision for Cell #1 and the confirmatory sampling of former sludge lagoons.

Cleanup Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that, with the provision of alternative water to residents formerly using contaminated private wells, no other immediate actions are required at the North Sea Municipal Landfill site. All three landfill cells have been closed in accordance with New York State, Part 360 Landfill Closure requirements. In addition, the removal of 100,000 cubic yards of material from the sludge lagoons and the capping of the 14-acre Cell #1 landfill has greatly reduced the potential for exposure to contaminants, as well as the generation of leachate and the continuing release of contaminants into the aquifer.

A second Five-Year Review was conducted in September 2003. The Five-year Review report recommended that 1) repair and re-seeding in some areas of the cap to maintain a uniform vegetative cover; 2) removal of tree saplings on the caps; 3) repair a small drainage channel area with exposed geotextile and clearing of the drainage channel to allow for proper drainage and erosion prevention; and 4) clearing of the silt/sediment in the diversion swales and downchutes in areas of low flow and ponding.

A Corrective Action plan was prepared by the Town's consultant to address the above operation and maintenance issues. A site inspection was conducted on July 7, 2004 to address the follow-up correction action items. The Town has removed vegetative growth at the downchutes and discharge structure and sediments in the basins. In September 2008, EPA conducted the third Five-Year Review which indicated that the remedy still remains protective of human health and the environment.

Site Repositories

Southampton College, Reference Department, 239 Montauk Highway, Southampton, New York 11968-4100, Telephone No. (631) 287-8379

The Rogers Memorial Library (Reference Department), 91 Coopers Farms Road, Southampton, New York 11968-4002, Telephone No. (631) 283-0774

U.S. E.P.A. Region 2, Superfund Record Center, 290 Broadway, Room 1828, New York, NY 10007-1866, Telephone No. (212) 637-4308