Richardson Hill Road Landfill Site

New York

EPA ID#: NYD980507735

EPA REGION 2

Congressional District(s): 23

Delaware

Richardson Hill Road, 2 1/2 miles southeast of Sidney Center

NPL LISTING HISTORY
Proposed Date: 6/1/1986
Final Date: 7/1/1987

Site Description

The site consists of two sections designated as the North Area and the South Area. The South Area contains an 8-acre landfill (which contains a former waste oil disposal pit), South Pond, and a portion of Herrick Hollow Creek. Surface water from the landfill drains into a marsh and South Pond through a drainage ditch. Water from South Pond drains through a sediment trap weir system and a beaver dam into Herrick Hollow Creek, which eventually flows into the Delaware River, which flows into the Cannonsville Reservoir on the west branch of the Delaware River. The Cannonsville Reservoir is part of the Delaware watershed system, supplying drinking water to the New York City metropolitan area. The North Area includes two disposal trenches (approximately 70 ft by 70 ft) and a man-made surface water body called North Pond. Water from North Pond drains through a series of beaver dams into Carr's Creek, a tributary to the Susquehanna River. From 1964 through 1969, the Bendix Corporation disposed of hazardous wastes and waste oil at the landfill. In 1982, EPA sample results indicated the presence of polychlorinated biphenyls (PCBs), trichloroethylene (TCE), and vinyl chloride at the site.

Approximately 50 residences are located within a one-mile radius of the site. All residences within the immediate vicinity of the site get their water from private wells or springs. Three seasonal homes are directly downslope from the site. The shallow ground water supplying the three homes is contaminated with organic compounds. The potentially responsible parties (PRPs) installed treatment units on the wells at two of the homes and replaced the third well with a deeper well.

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

Threat and Contaminants

Volatile organic compounds (VOCs) and PCBs have contaminated the site's soil. Ground water at the site contains oily wastes and VOCs, including dichloroethene and TCE. PCBs and solvents have been found in the surface water of South Pond and sediments in South Pond and Herrick Hollow Creek. Also, fish in local streams and animals that depend on those surface water resources could become contaminated. In June of 1998, the New York State Department of Health (NYSDOH) reported a health advisory for consumption of brook trout caught in the Herrick Hollow Creek. To minimize potential adverse health impacts, NYSDOH recommended that adults eat no more than one meal (one-half pound) per week of brook trout from the Herrick Hollow Creek. NYSDOH also recommended that women of childbearing age, infants and children under the age of 15 should not eat any fish species from the Herrick Hollow Creek. After the release of this information, the PRPs posted signs along the length of the Herrick Hollow Creek reflecting the advisory.

Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase directed at cleaning up the entire site.

Response Action Status

Immediate Actions: In 1993, in response to a fish kill in South Pond attributable to the seep of contaminants from the oil disposal pit, the PRPs excavated highly contaminated sediments from South Pond (the excavated sediments are being temporarily stored on-site in lined storage cells), seep interceptor collection basins were installed upgradient of South Pond, a sediment trap weir system was installed at the outlet of South Pond to prevent the downstream migration of contaminated sediments, and treatment systems were installed on two residential water supplies. Following the detection of contamination in an additional private water supply in 1997, it was replaced with a deeper well.

During the summer of 1999, the PRPs erected fencing around the landfill to prevent exposure of trespassers to surface soil contamination, and in the fall, the PRPs constructed a sediment weir trap in Herrick Hollow Creek, approximately a mile south of the South Pond, to minimize the migration of contaminated sediment further downstream. During the remedial construction, both sediment weir traps were removed along with the contaminated sediment in the South Pond and the Herrick Hollow Creek.

The contaminated soil and sediment excavation, disposal cell construction, and landfill cap construction have been completed and the groundwater management system is operating. Additional groundwater investigation was conducted from 2007 to 2008 which showed contamination located southeast of the groundwater interceptor trench. Subsequenly, a recovery well was installed in this area.

The selected remedy called for groundwater extraction via a collection trench located immediately downgradient from the landfill, followed by treatment. Based upon the results of a hydrogeologic investigation conducted from 2007 to 2008, it was determined that while the groundwater extraction trench was capturing contamination emanating from the landfill, groundwater contamination located downgradient from the trench was only being marginally influenced by the trench. To address this contamination, an extraction well was installed in this area. The water is being treated at the existing treatment facility. To prevent dewatering the nearby wetland, the groundwater is being extracted at a low rate and on an intermittent basis. This modification to the remedy was documented in the September 2008 Explanation of Signaficant Differences for the site. All remedial construction has been completed.

Since hazardous substances remain at this site, pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, Section 121(c), EPA must conduct five-year reviews. The first five-year review, which was completed in September 2007, found that the implemented actions at the site protect human health and the environment in the short term; however, in order for the site to be protective in the long term, a final ground water remedy for the eastern portion of the site needed to be implemented. As was noted above, a final ground water remedy for the eastern portion of the site has been implemented.

Entire Site: In 1987, the PRPs started a remedial investigation and feasibility study (RI/FS) to determine the nature and extent of site contamination and to evaluate remedial alternatives. Upon completion of the RI/FS in 1997, EPA signed a Record of Decision (September 30, 1997), selecting a remedy for the site, including the excavation/dredging of contaminated soil and sediment, on- and off-site disposal, on-site disposal cell construction, installation of landfill cap, and ground water extraction via wells and a ground water interceptor trench, and treatment. The ground water extraction and treatment system has been in operation since 2004. The contaminated soil and sediment excavation, on- and off-site disposal, on-site disposal cell construction, and installation of landfill cap were completed in 2006. The restoration of Herrick Hollow Creek (where contaminated sediments were removed) was completed in late Summer 2008.

Site Facts: The PRPs signed a Consent Order with EPA in 1987 in which they agreed to perform an RI/FS. Additionally, under a 1993 Consent Order and a Unilateral Administrative Order, the PRPs undertook a removal action to partially excavate the waste oil pit and install a leachate collection system to prevent leachate from seeping into the adjacent pond. On September 22, 1998, EPA concluded Consent Decree negotiations with the PRPs related to the performance of the design and implementation of the remedy called for in the Record of Decision. Upon lodging of the Consent Decree by the U.S. District Court on February 16, 1999, the design commenced. On June 4, 1999, the Consent Decree was entered in U.S. District Court (approved by the Judge).

The Sidney Landfill site, also on the NPL, is located directly across the street and due east of the Richardson Hill Road Landfill site.

Cleanup Progress

By installing treatment systems on the affected private wells in the area, excavating all of the contaminated sediment and soil outside of the landfill perimeter, installing a leachate collection system to prevent leachate from seeping into the adjacent pond, installing a groundwater trench and extraction system to cut off the source contamination to the sediment and groundwater downstream of the landfill, extracting and treating contaminated groundwater from the North Area, installing a fence around the landfill, issuing a health advisory related to the consumption of Brook Trout, and posting signs along the length of the Herrick Hollow Creek reflecting the advisory, the potential for exposure to hazardous materials has been greatly reduced.

Site Repositories

Sidney Memorial Public Library, 8 River Road, Sidney, New York 13838

EPA Region 2 Superfund Records Center, 290 Broadway, 18th Floor, New York, New York 10007-1866