

GE Moreau

New York

EPA ID#: NYD980528335

EPA REGION 2 Congressional District(s): 20

Saratoga
South Glens Falls

NPL LISTING HISTORY
Proposed Date: 12/1/1982
Final Date: 9/1/1983

Site Description

The GE Moreau site is located just west of Fort Edward Road in the Town of Moreau, Saratoga County, New York, approximately 40 miles north of Albany and less than one mile from the Hudson River. The site is in a semi-rural area and includes a 10-acre fenced hazardous waste containment/ treatment system area on the western end of a 26-acre property owned by the General Electric Company (GE). The surrounding area includes residences, undeveloped land, a utility right of way, and a former sand pit. From 1958 to 1968, the site was used by GE for the disposal of industrial waste. A 30- by 40-foot pit at the site received approximately 452 tons of waste material, including trichloroethylene (TCE), polychlorinated biphenyls (PCBs), spent solvents, oils, sludge, and other miscellaneous waste. The dirt roads at the site were also treated with PCB-contaminated oil as a dust suppressant. A 4,800-foot long by 2,000-foot wide ground water plume, containing TCE and other volatile organic compounds (VOCs), emanates from the former disposal pit and flows southward under homes along Bluebird Road. The plume continues southward under undeveloped land owned mostly by the Town of Moreau (i.e., park land and the Moreau Elementary School nearby to the west) and the Village of Fort Edward (watershed property), where it discharges at the base of an escarpment into Reardon Brook. A downstream air stripper treats the water in Reardon Brook, which then flows into the Village of Fort Edward reservoir system. Approximately 14,300 people are served by the ground water in this semi-rural area.

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

Threat and Contaminants

The ground water and surface water is contaminated with VOCs. The soil is contaminated with VOCs and PCBs. Prior to the construction of the containment system, people could have been at risk if they were exposed to or accidentally ingested contaminated soils.

Cleanup Approach

This site is being addressed in two stages: initial actions and a long-term phase focusing on the cleanup of the entire site.

Response Action Status

Initial Actions: In 1978, approximately 100 cubic yards of contaminated soils were removed from the pit area for off-site disposal. The pit was covered with a soil mix to reduce exposure and potential volatilization, and the area was fenced and posted. Also, as a temporary measure, activated carbon filter systems were installed in nearby homes where drinking water was contaminated with VOCs.

Entire Site: In 1985, General Electric (GE), the potentially responsible party, installed a containment system consisting of a soil-bentonite slurry wall and cap around the disposal pit (the PCB-contaminated soils from the roads were excavated and placed within the containment system before it was capped). GE also installed an air stripper on Reardon Brook to treat contaminated ground water after it discharges to surface water.

Following the performance of a remedial investigation and feasibility study (RI/FS) to determine the nature and extent of the contamination related to the site and to identify and evaluate cleanup alternatives, on July 13, 1987, EPA issued a Record of Decision (ROD), selecting the following actions to clean up the site: (1) utilization of the existing containment system to contain the source of ground water contamination; (2) continued treatment of the contaminated ground water by the air stripper on Reardon Brook; (3) continued monitoring of 18 downgradient wells to determine the effectiveness of

the slurry wall and monitoring of 33 wells to determine any changes in the size and direction of the contaminant plume;(4) removal of 8,600 cubic yards of PCB-contaminated soils from the site roads, etc. and placement in the containment system; (5) provision of a public water supply to approximately 100 nearby residences; and (6) review of the cleanup action at least every five years by EPA to assure that human health and the environment are protected. The ROD also recommended that the Town of Moreau establish institutional controls to restrict the withdrawal of ground water in the vicinity of the plume until ground water standards are met.

Cleanup actions at the site were completed in 1990 and maintenance and monitoring are ongoing to ensure the effectiveness of the containment system. The air stripper on Reardon Brook is operated by the Village of Fort Edward.

In February 1994, EPA issued an Explanation of Significant Differences (ESD) for enhancement of the containment system. The enhancement called for periodic dewatering of the containment system (i.e., removal of water through a well inside the containment system) to maintain an inward gradient across the slurry wall and thereby reduce exfiltration. The initial dewatering of the containment system was performed from 1994-1996 and a second dewatering of the containment system was performed from 2003-2004.

In October 1994, EPA completed an evaluation of the selected remedy for the clean up of the ground water and issued an ESD that waived the cleanup standards for ground water within the plume, based upon the technical impracticability of attaining those standards within a reasonable time period. The waiver does not change the cleanup standards required for Reardon Brook after treatment by the air stripper.

On March 31, 1997, EPA issued a Preliminary Close-Out Report to document the completion of construction activities at the site (including completion of the containment system enhancement) in February 1997.

On May 8, 2001 the Town of Moreau adopted regulations containing institutional controls and restrictions on ground water usage within a reasonable buffer area around the plume. In addition, the Town extended the public water supply to include all dwellings in the vicinity of the plume.

In late 2002, concerns arose nationwide that under certain conditions, TCE and other VOCs might vaporize from contaminated ground water and rise up through the soils to enter buildings. In response, 12 residences along Bluebird Road (located over and near the ground water plume) and the Moreau Elementary School (near the plume) were tested for vapor intrusion. None was found. Other areas of testing included a small ponded area in a sand pit adjacent to the site and soil gas testing at a nearby planned subdivision.

Five-year reviews are undertaken at sites to ensure that cleanups protect public health and the environment and that they function as intended by site decision documents. In February 1994, September 1998, September 2003, and September 2008, EPA issued five-year review reports, which concluded that the remedy remains protective of human health and the environment. The next five-review is planned for September 2013.

Site Facts: In 1983, GE signed an order with EPA to install and maintain activated carbon filters at nearby residences impacted by site contamination, to conduct an RI/FS, to design and construct the remedy selected by EPA for the site, and to conduct post-cleanup operation and maintenance at the site. Under an EPA Administrative Order in 1985, GE placed PCB-contaminated soils within the containment system..

Cleanup Progress

All cleanup actions have been or are being implemented at the GE/Moreau site. The site no longer poses a threat to nearby residents or the environment. GE is required to operate, maintain, and monitor the remedy at the site.

Approximately 100 residences located nearest to the site were initially connected to a public water supply system. These residences were subsequently incorporated into a new water district which extends well beyond the area of the site, and which is connected to a regional water supply system to insure reliability. To address the PCB-contaminated surface soils at the site, approximately 14,000 tons of the contaminated soils were disposed of within the containment system before it was capped. In addressing the gradual loss of the inward ground water gradient on the containment system, from rainwater infiltration over time, approximately 4.3 million gallons of contaminated ground water were removed from inside the slurry wall from 1994-94. The water was treated on-site and disposed of off-site. A second enhancement (dewatering) of the system was conducted from 2003-2004 and approximately 1.1 million gallons were removed from the containment system, treated, and disposed of on-site. The air stripper at Reardon Brook continues to treat approximately 215 million gallons per year of contaminated water; it is expected to operate for more than 200 years.

Site Repositories

Crandall Library, 251 Glen Street, Glens Falls, NY 12801

Moreau Town Hall, Town Clerks Office, 61 Corner of Hudson & 5th Streets, South Glens Falls, NY 12801

Fort Edward Library, 23 East Street, Fort Edward, NY 12801

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