Sealand Restoration, Inc.

New York

EPA ID#: NYD980535181

EPA REGION 2

Congressional District(s): 24

St. Lawrence

Lisbon

NPL LISTING HISTORY
Proposed Date: 10/26/1989
Final Date: 8/30/1990

Site Description

The Sealand Restoration, Inc. site, located in the Village of Lisbon, covers 210 acres. The site, formerly a dairy farm, was acquired by Sealand Restoration in 1977, and was operated as a waste disposal facility. Petroleum wastes were landfilled in a disposal cell near the southern site boundary or spread on the ground surface in the central and northern parts of the site. Three areas are being addressed—a land spread area, an empty drum storage area, and a disposal cell located 100 yards from a wetland.

Approximately 1,000 people reside within 3 miles of the site.

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

Threat and Contaminants

On-site ground water is contaminated with heavy metals and volatile organic compounds (VOCs), including benzene, trichloroethene, 1,1,1-trichloroethane, toluene, and acetone. Surface water was found to be contaminated with aluminum, iron, lead, manganese, and zinc. Low levels of polychlorinated biphenyls (PCBs), pesticides, phenols, and heavy metals were found in soils in the land spread area. Direct contact with or ingestion of on-site contaminated ground water may pose a health threat.

Cleanup Approach

The site is being addressed in two phases: interim source control measures and long-term remedial measures.

Response Action Status

Interim Source Control: Surficial wastes were removed from the cell disposal area in 1984 and from the drum storage area in 1986 and 1987 by the County of St. Lawrence using funds appropriated by the New York State Legislature. From 1989 to 1990, the New York State Department of Environmental Conservation removed contaminated soils, buried drums, and wastewater from the cell disposal area. The disposal cell was subsequently backfilled with clean soil and was covered with a multilayered cap.

Entire Site: A remedial investigation and feasibility study to determine the nature and extent of on-site ground water, surface water, and sediment contamination and to evaluate remedial alternatives, as necessary, was completed in August 1995. A Record of Decision (ROD) was signed in September 1995, calling for ground water extraction and treatment.

The design of the selected remedy commenced in October 1997. Since testing indicated that the selected ground water extraction system called for in the ROD would not be an effective means of remediating the contaminant plume, EPA issued an Explanation of Significant Differences in October 2001 to modify the remedy. Instead, a permeable reactive barrier (a subsurface structure which allows groundwater to naturally flow through a permeable media which is capable of removing contaminants from the groundwater), combined with natural attenuation, will be used to restore the ground water to federal and state standards. The design of the permeable reactive barrier (PRB) was approved in September 2002. Construction commenced in November 2003. Due to difficulties with the construction of the PRB, the installation was discontinued and the installation method was modified. Construction recommenced in June 2005 and was completed in July 2005.

In March 2006, low levels of contamination was detected in a monitoring well located within the PRB. It continued to be detected in subsequent sampling events. Because of concern that the presence of contamination in this well might indicate a breach in the PRB, monitoring wells were installed immediately upgradient and downgradient of wall at this location in April 2008. Samples from the new wells and well within the wall showed that the upgradient well had high VOC concentrations as was expected, the well within the wall had much lower concentrations than the upgradient well (and slightly lower than the previous sampling event), and the downgradient well had no detections. These results suggest that the low-level VOC concentrations in wall are not affecting the performance of the PRB. All site monitoring wells will continue to be sampled on a semi-annual basis.

Five-year reviews are undertaken at sites to ensure that implemented remedies protect public health and the environment and that they function as intended by site decision documents. In August 1998 and August 2003, EPA issued Five-Year Review reports, which concluded that interim source control remedy at the site is protective of human health and the environment and the final remedies, when completed, will render the site fully protective of human health and the environment.

The third five-year review was issued in August 2008 and concluded 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, institutional controls to prevent the installation of drinking water wells at the site and restrict activities which could affect the integrity of the remedy still need to be implemented. The potentially responsible parties (PRPs) were not successful in their attempts to obtain a deed restriction on the property because of uncertainties in the ownership of the property. Therefore, the PRPs will file a notice to successors-in-title. This notice will accompany the deed and alert prospective buyers of the site property of the fact that there are restrictions on the future use of the property and explain those restrictions.

Site Facts: In 1993, because contaminants found in on-site soil or ground water samples were also found in nearby residential well samples, as a precautionary measure to ensure that nearby residents would not be exposed to site-related contaminants, EPA issued a Unilateral Administrative Order to the PRPs, requiring that they supply bottled water for drinking and cooking. Subsequent analytical results of residential well samples collected by EPA and the New York State Department of Health (NYSDOH), however, indicated that contaminated ground water at the site had not migrated to and was not impacting residential wells. In addition, it was determined that the levels of contamination in the private wells had decreased significantly. Consequently, EPA notified the PRPs that continued distribution of bottled water was no longer required; delivery of bottled water was terminated in 1995. Following the discontinuation of the bottled water delivery, NYSDOH collected and analyzed drinking water samples from private wells in the area (in 1996 and 1997); no contaminants were detected in any of these samples.

Negotiations with the PRPs related to the design and implementation of the selected ground water remedy were completed in September of 1997 and a settlement was reached.

Cleanup Progress

By removing 1,445 drums, 6,435 tons of contaminated soil, and 375,000 gallons of liquid from the disposal cell area, and backfilling the disposal cell with clean soil and covering it with a multilayered cap, the possibility of being directly exposed to hazardous materials at the site has been greatly reduced. The installation of a PRB is addressing the ground water contamination.

Site Repositories

Lisbon Town Hall, Lisbon, NY 13658

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