

Higgins Disposal

New Jersey

EPA ID#: NJD053102232

EPA REGION 2

Congressional District(s): 07

Somerset

Franklin Township

NPL LISTING HISTORY

Proposed Date: 6/24/1988

Final Date: 8/30/1990

Site Description

The Higgins Disposal site is located on a 37.6-acre parcel on Laurel Avenue in Franklin Township, New Jersey. From the 1950s to 1985, the site owner operated a waste disposal business, including an un-permitted landfill, waste transfer station, and compactor. The owner's family currently maintains a residence on the site, as well as an equestrian facility (Hasty Acres Riding Club) and a truck repair shop. The site has approximately 10,000 people within a three-mile radius that relies on groundwater as a source of drinking water. A freshwater wetland is located 300 feet from the site as well as two on-site ponds that discharge into Dirty Brook, a tributary of the Delaware/Raritan Canal. Dirty Brook, located along the northern and southern property boundaries, is not used for irrigation or drinking water. The Delaware/Raritan Canal, located approximately three-miles downstream from the site, is used for fishing, boating, and swimming. Both the Delaware/Raritan Canal and the Millstone River, located approximately 1,500 feet west of the site, flow north and eventually discharge into the Raritan Bay.

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

Threat and Contaminants

Subsurface soil and groundwater are contaminated with a variety of organic and inorganic constituents. The source of this contamination comprises of several known and suspected burial areas on the property including a landfill. Nearby residents and the on-site residents utilize groundwater for drinking water and the groundwater is a recharge source for Dirty Brook and the Delaware/Raritan Canal, which is used for recreational purposes.

Cleanup Approach

This site is being addressed in two stages: removal actions addressing buried waste and contaminated subsurface soil and a long-term remedial phase focusing on contaminated ground water.

Response Action Status

Removal Actions: In 1990, EPA began a removal assessment, which identified one public area with elevated surface contaminants. EPA removed the contaminated soil in October 1992. In March 1993, upon the discovery of buried drums and laboratory glassware, EPA initiated a second removal action at the site. Initially, EPA restricted access to the area by installing security fencing and covering the area with tarps and soil. In April 1994, excavation of the known locations of buried material commenced. During the course of the removal action, EPA was able to identify a potentially responsible party (PRP) for the buried waste materials. In March 1998, EPA successfully negotiated an Administrative Order on Consent (ACO) with the identified PRP to complete the remaining removal activities at the on-site landfill. In June 1999, EPA and the PRP completed this final removal action.

Entire Site: EPA initiated Remedial Investigation field work at the site in the fall of 1992. Because removal of buried waste material was addressed through removal actions, the focus of the remainder of the remedial activities has been on the groundwater contamination at the site. A Remedial Investigation and Feasibility Study (RI/FS) Report, including a human health and ecological risk assessment, was presented to the public for review and comment during the spring of 1997 along with EPA's proposed plan for addressing ground water at the site. A Record of Decision to address the contaminated groundwater was signed on September 30, 1997. The remedy which was selected includes connecting residents down gradient of the site to a public water supply and the extraction of contaminated groundwater, with conveyance via a pipeline to the Higgins Farm Superfund site (located less than a mile away) for treatment and discharge to surface water.

After collecting additional information about the site geology and hydrology during the pre design phase, the PRP prepared and presented a focus Feasibility Study (FFS) report to EPA for modification of the groundwater remedy selected in the ROD. On December 9, 2002, EPA issued an Explanation of Significant Difference (ESD) which changed the remedy from off-site to on-site treatment of the contaminated groundwater. An availability session announcing the change in the remedy was provided to the public in March 2003.

Cleanup Progress

In October 1990, EPA performed a removal assessment at the site. As a result of this survey, 765 tons of polychlorinated biphenyl (PCB)-contaminated soil were excavated and shipped off-site for proper disposal.

In the Spring of 1993, during the course of Remedial Investigation field work, drums, plastic and glass containers, and cylinders were discovered buried in a field in the southwestern portion of the property.

In May 1993, EPA began a fund-lead Removal Action that resulted in the discovery of additional areas of buried waste at the site. The fund-lead Removal Action continued through 1996 and resulted in the removal of over 7,000 containers and 12,000 tons of contaminated soil. Post-excavation sampling of the prior removal revealed the presence of additional waste containers near the previously defined extent of the landfill.

In August 1998, EPA identified a PRP that initiated the second removal under the oversight of EPA's Removal Program. This removal was completed in July 1999 and resulted in the excavation of approximately 34,000 tons of contaminated material and over 16,000 containers (e.g., laboratory glassware, plastic and metal containers, and drums) from the landfill.

In September 1999, the PRP under EPA oversight completed the extension and connection of a potable water supply to the residences along Laurel Avenue and the Higgins residence. Subsequently, the PRP performed a pre-design investigation (PDI) for the final groundwater remedy from October 1999 to September 2000. The results of this investigation were used to evaluate the impact of the removal actions on the site groundwater as well as provide additional information in support of the design activities for the implementation of the groundwater remedy. The PDI report was submitted in February 2001.

Based on the PDI information along with the strong public opposition to the construction of a pipeline to Higgins Farm, and the inaccessibility to certain pipeline areas, the PRP submitted a focused Feasibility Study (FFS) in June 2001. The FFS stated that it would be more cost-effective and technically practical to pump and treat at this site instead of pumping the contaminated groundwater to the Higgins Farm plant for treatment. EPA approved the final FFS in September 2002. This FFS was used to modify the remedy selected in the September 1997 ROD.

EPA issued an Explanation of Significant Difference (ESD) on December 9, 2002. The ESD selected remedy called for on-site groundwater recovery and treatment of contaminated groundwater with treated water reinjection to the aquifer.

In January 2004, the PRP initiated pre-design activities for the groundwater remedy. Two recovery well boreholes were constructed and a pump test of the aquifer was performed. The results of the pump test were used in preparation of the design. A partial Consent Decree for the Remedial Design/Remedial Action was issued by EPA in September 2004.

In March 2005, the PRP submitted the final remedial design report and included the modification of the discharge of treated water from reinjection to the aquifer to surface water discharge. This report was approved by EPA on March 24, 2005. Then, in April 2005, EPA approved the remedial construction work plan submitted by the PRP. The third recovery well borehole construction activities began in June 2005. This was followed by the groundwater recovery and treatment system activities in August 2005. The system has been fully operation since February 2006.

With the start-up of the groundwater recovery and treatment system, the site remedy is construction complete. EPA issued a Preliminary Close-Out Report on June 27, 2006 and the PRP prepared and submitted an Interim Remedial Action Report in August 2006. This Interim RA Report which documents all of the construction activities of the groundwater recovery and treatment system was approved by EPA in September 2006.

The PRP continues to perform the long-term response activities including the quarterly operation and maintenance of the system and groundwater monitoring of the site.

Vapor Intrusion Study: In March 2006, EPA initiated a vapor intrusion investigation. Several residences along Laurel Avenue were sampled for air from beneath the basement slab. Then, as a follow-up in June 2006, air samples were collected from beneath the basement slab as well as from the homes indoor air. As confirmation, EPA collected additional samples from these homes in December 2006. The results revealed that the on-site groundwater plume, containing volatile organic compounds, was not impacting the indoor air in these homes. However, EPA did discover air containing volatile organics beneath the basement slab at one residential property. EPA continues to monitor this property on an annual basis.

Site Repositories

Mary Jacobs Memorial Library, 64 Washington Street, Rocky Hill, NJ 08553 (609) 924-7073

Franklin Township Public Library, 485 De Mott Lane, Somerset, NJ 08873 (732) 873-8700

U.S. EPA Records Center, Region 2, 290 Broadway, 18th Floor, New York , Ny 10007