

Fried Industries

New Jersey

EPA ID#: NJD041828906

EPA REGION 2 Congressional District(s): 12

Middlesex
East Brunswick Township

NPL LISTING HISTORY
Proposed Date: 10/1/1984
Final Date: 6/1/1986

Site Description

During the twenty five years Fried Industries operated at this location, the company manufactured floor finishing products, aqueous detergent solutions, adhesives, and algacides on this site in East Brunswick Township in Middlesex County. Fried Industries also produced chemical products from components such as toluene and 1,1,1-trichloroethane. At times, site facilities were leased to other companies for the manufacture of automotive antifreeze products. The site property occupies 26 acres and contains a pond, a marsh area, and several separate wetlands areas. A building complex also existed at the site prior to its demolition. The site is located in the northwest corner of East Brunswick Township on the border with the Borough of Milltown. The site was once the location of a sand and clay quarry. In 1983, EPA found that hazardous wastes were improperly stored on site, and that the soil was contaminated with volatile organic compounds (VOCs) and arsenic. Further examination of the site through 1984 revealed deteriorated buried drums as well as evidence of improper handling, storage, and disposal of hazardous materials. Conditions at the site resulted in contamination of the soil and ground water, with seepage into the ground, threatening the underlying Farrington Sand aquifer. About 7,000 people live in the adjacent Borough of Milltown; approximately 43,000 people live in the Township of East Brunswick.

Site Responsibility: This site is being addressed through Federal and municipal actions.

Threat and Contaminants

The ground water is contaminated with a number of VOCs, including benzene, toluene, xylenes, vinyl chloride and other contaminants. The soil was contaminated with VOCs and some heavy metals, in particular arsenic. People were at risk from direct contact with contaminated soil. They are also at risk of accidental ingestion of contaminated ground water. Prior to their removal, a large number of drums and chemical containers were found in and around the building complex. Since the start of cleanup operations at the site, the hazardous threats posed by asbestos and other contaminants contained in the building and the physical hazards caused by the unsafe conditions within the building itself were eliminated by dismantling the building complex. Most of the soil contamination was eliminated via a combined remedial-removal action that excavated portions of the site where buried drums and containers were located. Contamination from these sources found its way into the ground water, causing the aquifers to become contaminated. Since the site was greatly disturbed during the soil cleanup phase, additional data was required in order to determine the level of contamination still remaining in the ground water. The latest information indicated that the ground water is still contaminated, especially in the deep bedrock aquifer. Remedial Design work for a pump and treat system for the deep bedrock wells will begin in 2008.

Cleanup Approach

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

Response Action Status

Immediate Actions: In 1985, EPA pumped approximately 7,000 gallons of process and septic wastes from underground tanks and transported the wastes off-site for treatment and disposal. The Township of East Brunswick provided hookups to the public water supply for homes still using residential wells as their source of potable water. Of particular importance was the immediate action taken by EPA in 1989 to install a security fence around the building complex and to begin the removal of drums and laboratory bottles/containers from the site; EPA completed this work in February 1992. The removal of hazardous liquids, the providing of public water, and securing the site, greatly reduced the potential for

exposure to hazardous substances at the Fried Industries site until remedial activities are completed.

Entire Site: After completing a Remedial Investigation and Feasibility Study, EPA selected a remedy in a Record of Decision which was signed in June 1994. The remedy includes excavation and off-site treatment and disposal of arsenic-contaminated surface soil, demolition of the building complex, and extraction and chemical precipitation/activated carbon treatment of organics-contaminated ground water, followed by discharge to surface water. Design and implementation of the remedy is expected to be accomplished in three stages. The design for the demolition of the building complex was completed in October 1996, and the work was completed in February 1998. The design for the soils remedy was completed in May 1997, and the soils remediation work was completed at the end of June 1999. Contractor trucks began removing contaminated soil, drums, and miscellaneous debris from the Site in mid-January 1999. The soils remedy was conducted in conjunction with a removal action resulting in the removal of more than 600 buried drums, pails, and containers, approximately 12,200 tons of soil and debris, 1,250 tons of concrete, and nearly 600,000 gallons of ground water. The soil remediation/removal revealed a much greater volume of soils that needed to be excavated, as well as a large volume of contaminated ground water. Therefore, it was decided that a ground-water design based on the pre-excavation data would be flawed, and the ground-water design was placed on hold pending completion of the soil activities. Once the soil remediation/removal activities were completed and sufficient time was allowed for the ground-water to achieve near equilibrium conditions, it was decided to install additional wells and obtain additional ground-water monitoring data to provide a more reliable data baseline for ground-water design purposes.

Ground-water monitoring activities began in the late Fall of 2001 and the first round of monitoring data was obtained. This first round of data was outlined in the Data Summary Evaluation Report submitted in July 2002. Based on the information in this Report, the second round of work was carefully planned because of the complex hydrogeological features of the site, particularly in the deep bedrock aquifer. Work would include the drilling of an additional fifteen wells (seven deep bedrock wells) in addition to rehabilitating four of the already existing deep wells. The contractor prepared a Work Plan Addendum, which was submitted in May 2004. It included taking samples from the Transco property downgradient of the Fried property. The second round of ground-water samples was obtained. The preliminary results were available in the Spring of 2005. Based on the data, the contractor developed a Pathways Analysis Report in July 2005, which led to a draft Groundwater Risk Assessment dated October 2005. All of the data obtained during this study was incorporated into the draft Site Conceptual Model submitted in October 2005. The Risk Assessment and the Site Conceptual Model were reviewed by EPA and approved. The Site Conceptual Model document was finalized in September 2006. The contractor completed the Alternatives Analysis Report, which recommends a pump and treat system for the deep bedrock aquifer. Three additional monitoring wells must be installed downgradient of the property on the other side of Bog Brook in order to complete the deep bedrock plume definition. The surface aquifer will undergo Monitored Natural Attenuation (MNA). EPA will meet with Township officials to discuss the findings as EPA begins work on the design.

Enforcement Status

In 1984, EPA informed the site owner that EPA would conduct an investigation to determine the nature and extent of site contamination. Based on a Consent Decree signed by the owner, all manufacturing and production operations were ended by late 1985. The site owner was also asked to leave the site premises, and did so in 1989. Several potentially responsible party (PRP) searches were conducted for this site, but no viable PRPs were identified.

Cleanup Progress

In the mid-1980s, the Township placed nearby residences still using private wells as their source of potable water onto public water supplies. This action eliminated much of the potential threat from contaminated ground water. Beginning in 1989, EPA installed a security fence and removed approximately 1400 above ground drums and 4000 laboratory bottles/containers from the site; EPA completed this work in February 1992. This removal action eliminated the immediate danger caused by volatile and corrosive substances found in these containers. The completed demolition of the building complex has eliminated the physical danger to trespassers caused by the deteriorated state of the main building and surrounding structures, as well as removing the potential health hazards resulting from the presence of asbestos in the building. The soils remedy, conducted in conjunction with a removal action, has resulted in the removal of more than 600 buried drums, pails, and containers, approximately 12,200 tons of soil and debris, 1,250 tons of concrete, and nearly 600,000 gallons of contaminated groundwater. Completion of these soils activities has resulted in the elimination of the primary sources of contamination at the Fried Industries site, as well as removing potential hazards caused by soil contaminated by these sources.

EPA is now evaluating the final study document that will lead to the Remedial Design for the ground water remedy.

Site Repositories

East Brunswick Library, Jean Walling Civic Center, East Brunswick, NJ 08816-0218