

Mannheim Avenue Dump

New Jersey

EPA ID#: NJD980654180

EPA REGION 2

Congressional District(s): 02

Atlantic

Galloway Township

NPL LISTING HISTORY

Proposed Date: 12/1/1982

Final Date: 9/1/1983

Deletion Date: 8/28/2007

Site Description

The 2-acre Mannheim Avenue Dump site is located in Galloway Township. The site was a landfill where approximately 300 drums (11,400 pounds) of degreasing sludge from Lenox China were disposed of in a 15-foot pit during the 1960s and, possibly, into the early 1970s. This waste was compacted into approximately 35 mounds and was covered with soil. Leaded waste, plaster molds, and china and clay forms also were mixed in with the mounded waste piles. An aquifer that provided the source of water for local residents lays 20 to 30 feet below the site. Approximately 1,300 area residents depended on shallow groundwater under the site for drinking water, the majority of which came from private wells. A public school well was located in the vicinity of the site. The nearest residence was 1/10 mile from the site.

Site Responsibility: This site was addressed through Federal, State, and potentially responsible parties' actions

Threat and Contaminants

The underlying aquifer contained trichloroethylene (TCE) and toluene from the site disposal areas. To address the contaminated ground water, a ground water pump and treat system was constructed and operated from 1994-1996 which effectively reduced TCE levels in the ground water. EPA, NJDEP and Lenox continued to sample and monitor ground water monitoring wells and residential wells at the site. During a 1993 site soil sampling event, TCE was not detected, and lead was detected at levels well below New Jersey Department of Environmental Protection (NJDEP) action levels.

Cleanup Approach

The site was addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

Response Action Status

Immediate Actions: In 1985, the parties potentially responsible for the site contamination removed approximately 25,000 pounds of asphaltic sludge from soil mounds for incineration. Approximately 2,700 cubic yards of residual contaminated soil remained. Other activities completed in 1985 include installing a fence around the site and sampling waste piles. The potentially responsible parties performed on-site sampling and installed monitoring wells, under EPA oversight, beginning in 1986. In 1989, the potentially responsible parties removed soil mounds containing residual lead and TCE contaminants from the site to an approved facility.

Entire Site: Under EPA and NJDEP supervision, the parties potentially responsible for the site contamination conducted an investigation to determine the nature and extent of contamination at the site. In 1990, EPA selected a remedy for cleanup of the site which included: extraction of the contaminated groundwater from the aquifer, on-site treatment using air stripping, and discharge of the treated groundwater into the aquifer; short-term monitoring of the groundwater during the engineering design of the treatment system; long-term monitoring of the groundwater during cleanup; and installation of individual carbon adsorption treatment units at residences, if monitoring indicates that groundwater contamination threatens residential wells. The engineering design for the cleanup began in late 1991. Construction of the ground water-pump and treat remediation system was completed in August 1994. The ground water-pump and treat system operated from 1994 through 1996. The system was turned off after ground water data indicated that TCE levels in the influent to the treatment plant were consistently below the clean-up standard of 1 ppb. During operation of the system, effluent from the treatment plant met the established cleanup level for TCE. From 1990 through 2004, fourteen

residential drinking water wells located downgradient of the site were monitored in addition to the other monitoring wells. Sampling indicated that site-related contaminants had not migrated in the groundwater to threaten the residential wells.

Site Facts: The NJDEP sent Information Request Letters to the parties potentially responsible for site contamination in 1983 and 1984. A Unilateral Administrative Order was issued to Lenox, Inc. and Galloway Township by EPA and the State of New Jersey. This Order required these two parties to remove contaminants from the site. In 1988, EPA entered into an Administrative Order on Consent with Lenox, Inc. and the Township of Galloway to perform the site investigation and evaluate the most effective cleanup methods. In 1991, the parties entered into a Consent Decree with EPA to perform site cleanup activities.

Cleanup Progress

Approximately 25,000 pounds of degreasing sludge was excavated and disposed of off-site. Construction of the ground water-pump and treat remediation system began in April 1994 and was completed in August 1994. The pump and treat system consists of three extraction wells, two installed in the deep aquifer, and one in the shallow aquifer. The system extracted and treated approximately 40 gallons per minute of ground water. The treated effluent was then released in leaching pools which recharged the aquifers. The treatment system effectively treated the TCE concentration to below the required cleanup level of 1 part per billion. After 18 months of operation, the responsible parties petitioned EPA to turn off the treatment plant, because the influent groundwater entering the treatment plant was below the cleanup level of 1 part per billion of TCE. During its 2 years of operation, over 30 million gallons of contaminated groundwater were treated. After a thorough review of the groundwater data, EPA allowed the treatment plant to be shut down and for a reduction in the groundwater monitoring frequency, over time. Groundwater monitoring results for 2002 and 2003 indicated that TCE levels were below the 1 part per billion for drinking water standard in all monitoring wells. In its second Five-Year Review of the site in 2004, EPA found the remedy to be protective of human health and the environment. In 2007, based on the review of all site data, EPA and NJDEP determined that the groundwater at the site had been cleaned up to drinking water standard and the aquifer, restored. With the aquifer restored, EPA set about deleting the site from the National Priorities List. On June 28, 2007 EPA published a Notice of Intent to delete the site from the National Priorities List in the Federal Register. On August 28, 2007, the site was officially deleted from the National Priorities List.

Site Repositories

Atlantic County Library, Galloway Twp Branch, 306 East Jimmie Leeds Road, Galloway, N.J. 08205 and U.S. Environmental Protection Agency, Region II Superfund Record Center 290 Broadway, Room 1828 New York, NY 1007-1866