Williams Property

New Jersey

EPA ID#: NJD980529945

EPA REGION 2

Congressional District(s): 02

Cape May

Swainton Middle

NPL LISTING HISTORY
Proposed Date: 12/31/1982
Final Date: 9/8/1983

Site Description

The Williams Property site is located in a rural/residential area of Swainton, Middle Township, Cape May County, New Jersey. The Site, an abandoned hazardous waste dump, encompasses approximately 10 acres. In August 1979, several hundred drums of liquid hazardous wastes were emptied onto the ground adjacent to the Williams residence. As a result, the soil and ground water were contaminated with high concentrations of volatile organic compounds (VOCs). The Williams' residential well was found to be contaminated and has been closed since 1985. The Williams house itself was condemned by the county health department following a fire in January of 1990. The remaining residences along Sigetown Road have been provided with municipal water. The private wells at these homes are no longer in use. Surface water bodies in the vicinity are used for recreation, and more than 60 people depend on ground water for drinking supplies. Municipal and private wells servicing about 4,900 people lie within 3 miles of the site. Ground water is also used for crop irrigation.

Site Responsibility:

This site is being addressed through a combination of Federal and State actions.

Threat and Contaminants

The site was found to be contaminated with phthalates, a plastics by-product, and VOCs including xylene and methylene chloride. EPA determined that the contaminated soil posed a significant risk to the local resident. As a result, all contaminated soil was excavated and removed. The ground water was found to be contaminated with VOCs and metals. Nearby resident drinking water was impacted by the contaminated ground water, while the contaminant plume continued to migrate toward other wells in the area. People who ingest or come into direct contact with the polluted water may be at risk. In addition, the site is in a rural, agricultural region near coastal wetlands and wildlife management areas that could be subject to contamination from the site runoff.

Cleanup Approach

The site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site. Response Action Status Initial Actions: In 1980, the State removed about 1,200 cubic yards of contaminated sludge and soil. Continued evidence of ground-water contamination forced the closing of the Williams well in 1985. Several contaminated drums and cylinders were removed to off-site EPA-approved locations for disposal.

Entire Site: The EPA selected a remedy for cleanup of the site in the 1987 Record of Decision (ROD) that included: (1) extraction and treatment of contaminated ground water and discharge of the treated ground water to the underlying aquifer; (2) excavation of contaminated soils and removal of the excavated soils to an off-site disposal facility for incineration; (3) backfilling the excavation withclean soil, regrading, and revegetating; and (4) providing an alternate water supply to nearby residents with polluted wells. A Removal Action was conducted by EPA from October 1990 through July 1991 to implement the soil remediation. Nearby residents were connected to the municipal water supply. In accordance with the selected remedy, approximately 1,500 tons of contaminated soils were excavated. Subsequently, the excavated soil was transported to a facility in South Carolina to be treated by incineration and the ash to be reused as a cement aggregate. Restoration and revegetation activities of the excavation area were completed as of May 1991. In addition, any 55-gallon drums, 5-gallon pails, and/or compressed gas cylinders found on the property were disposed of and warning signs and security gates were installed to minimize access to the site. Through a 1993 Cooperative Agreement with EPA, the New Jersey Department of Environmental Protection (NJDEP) took the lead for remediation of the contaminated ground water and performed the remedial design. The remedial design reflects changes made to the

ground-water remedy selected in the ROD as outlined in the Explanation of Significant Differences (ESD), dated February 11, 1993. The design provides for: (1) extraction of the contaminated ground water from the underlying aquifer; (2) primary treatment of the extracted ground water by biological treatment and carbon adsorption; (3) other minor treatment processes including the addition of hydrogen peroxide and sulfuric acid, an iron removal system, and ultra violet disinfection; and (4) reinjection of the treated ground water to the underlying aquifer. Following the completion of the design in June 1993, the NJDEP completed the remedial construction and began operations in 1995.

At this time, over 239 million gallons of contaminated ground water have been extracted, treated and reinjected to the aquifer. By Summer 2000, sampling showed that much of the contaminated plume appears to have been remediated. In response, the biological treatment unit was temporarily shut down in July 2000 along with one of the two ground water extraction wells. Operations will continue in abbreviated fashion using the single ground water extraction well and treatment by carbon adsorption until being terminated in summer 2002 when cleanup goals were ostensibly met. During the post-termination monitoring period, no concentration rebound in site chemicals of concern was observed in the ground water. However, abbreviated operations had to be re-started in 2003 after testing revealed a number of tentatively identified compounds (TICs) described as unknown chloro-organic phosphates, the concentration of one of which exceeded the state maximum for TICs. At this time, the state is working on identifying the TICs and establishing the ground water quality criteria for a future shutdown decision.

Site Facts: In 1984, Wheaton Industries, a party potentially responsible for the contamination notified the EPA of their willingness to conduct a study of the site and subsequently filed suit against the EPA and the NJDEP, seeking to enjoin the agencies from spending any monies for the study. In 1985, EPA found the scope of work submitted by Wheaton inadequate and thus informed Wheaton that the remedial investigation and feasibility study would proceed under a Cooperative Agreement with the NJDEP. EPA and the NJDEP later filed a cost recovery litigation case seeking reimbursement by Wheaton Industries of response costs incurred by the United States and the State of New Jersey in connection with the release and threatened release of hazardous substances at the Williams Property site. A settlement was reached among all parties in December 1993 when a Consent Decree was signed. As per the Consent Decree, Wheaton Industries paid the United States and the State of New Jersey a total of $4,000,000 for response costs incurred at the Williams Property site.

Cleanup Progress

Much of the contamination has been removed from the Williams Property site, greatly reducing the potential for exposure to hazardous materials while final cleanup activities continue to take place at the site. The second five-year review of the remedy conducted in 2006 found that the remedy at the site is protective of human health and the environment and will restore the groundwater aquifer to drinking water standards.

Site Repositories

Cape May County Health Department Crest Heaven Complex Cape May Court House, New Jersey 08210 and U.S.EPA Region II, 290 Broadway, New York, NY 10007-1866