SMS Instruments, Inc.

New York

EPA ID#: NYD001533165

EPA REGION 2

Congressional District(s): 02

Suffolk

Deer Park

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

Site Description

SMS Instruments, Inc. is located in a light industrial area in Deer Park. The site consists of a one-story 34,000-square-foot masonry building on 1-1/2 acres. Approximately 80% of the lot is paved with asphalt. From 1971 to 1983, SMS Instruments, Inc. overhauled military aircraft components. Industrial wastes generated from degreasing and other refurbishing operations were discharged to a leaching pool on site. In addition to the leaching pool, other sources of contamination included a 6,000-gallon underground storage tank used for jet fuel storage and corroded and leaking drums stored outdoors in an unprotected area. More than 50 industrial facilities are located within a 1-mile radius of the site, and a large groundwater recharge basin is located adjacent to the eastern side of the site. The basin is located in the recharge zone of the Magothy aquifer, a sole source aquifer for Long Island. The Magothy aquifer is the only source of drinking water for the estimated 124,000 residents in the vicinity of the site. Approximately 17,000 residences are located within a mile of the site and several schools are situated to the south of the site. The headwaters of Sampawams Creek, which feeds into Guggenheim Lakes, lie a mile southeast of the site. Belmont Lake State Park is less than 2 miles to the southwest.

Site Responsibility: This site is has been addressed through Federal and State actions. At the completion of the Long-Term Remedial Action, the Federal Government transferred full responsibility for all Operation & Maintenance activities and associated costs to the State of New York on July 18, 2005.

Threat and Contaminants

Industrial wastes, from the metal degreasing and refurbishing operations, discharged to the leaching pool caused groundwater to become contaminated with volatile organic compounds (VOCs) including xylene, dichlorobenzene, chlorobenzene, and trichloroethylene. Exposure to contaminated groundwater through direct contact, ingestion or inhalation may pose a health threat. The Suffolk County Department of Health Services has indicated that residents in the vicinity of the site may maintain private wells for irrigation purposes, but not as a source of drinking water. These residences obtain their drinking water from a public water supply. The public water supplies are routinely tested to ensure compliance with state and federal drinking water standards.

Cleanup Approach

The site has been addressed in three stages: one immediate action and two long-term remedial phases focusing on cleanup of the entire site (soils and groundwater). In addition, an investigation of off-site groundwater contamination and potential upgradient sources of contamination was also conducted.

Response Action Status

Immediate Actions: The leaching pool was pumped out, filled with sand, and sealed in 1983. In addition, the underground jet fuel storage tank was removed in 1988.

Entire Site: In a September 1989 Record of Decision (ROD), EPA selected a remedy for the groundwater and soils at the site. The ROD calls for extracting and treating (air stripping) groundwater and re-injecting it back into the ground. This plan was subsequently revised to allow for treated groundwater to be discharged directly into the recharge basin adjacent to the site; soils were to be treated on-site by in-situ vacuum extraction to remove VOCs. The remedial design for the soil remediation was completed in June 1991. Construction of the soil vapor extraction (SVE) unit was completed in April 1992. The SVE unit operated from April of 1992 to November of 1993, when all soil cleanup levels were achieved. Subsequently, the soil treatment unit was dismantled and removed. The design of the groundwater

remediation system was completed in September 1992 and construction of the treatment plant was completed in June 1994. The system, which operated from June 1994 to September 2005, adequately treated contaminated groundwater such that the effluent contaminant concentrations were consistently below the required discharge levels. In May 2005, the EPA installed an airsparging system to remediate residual contamination in soil above and below the water table. As a result, contaminant levels decreased and NY State, which took over all responsibilities at the site on July 18, 2005, turned-off the groundwater treatment system. NY State subsequently had the groundwater treatment system dismantled and removed from the site. The State discontinued the operation of the airsparging system in 2007.

Off-Site Contamination: In May 1990, the EPA began an investigation to determine the nature and extent of groundwater contamination upgradient of the site. The field work was completed in December 1992. The study indicated that there were no upgradient off-site sources which affected the contamination at the site. A "No Action" Record of Decision for off-site groundwater contamination was signed on September 27, 1993.

Cleanup Progress

A 6,000-gallon underground tank which stored jet fuel failed a pressure test, and, as such, was removed in early 1988 by the owner at EPA’s request.

An SVE unit operated from April 1992 to November 1993 when the soil action levels specified in the ROD were achieved. Approximately 50,000 tons of contaminated soil were remediated.

A groundwater extraction and treatment system operated from June 1994 to September 2005. The system has a groundwater circulating capacity of 105 gallons per minute (gpm). Over the course of its operation, approximately 607 million gallons of groundwater have been processed/treated. The groundwater treatment system was dismantled and removed from the site in 2007.

In May 2005, the EPA installed and began operating an airsparging system to remediate residual contamination in soil above and below the water table. Operation and maintenance of this system was transferred to New York State on July 18, 2005. The State discontinued operation of this system in 2007 after determining that contaminant levels had decreased significantly due to the operation of the airsparging system.

EPA determined that all construction activities were completed at the site on January 31, 1996.

Site Repositories

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