

# Swope Oil & Chemical Co.

## New Jersey

EPA ID#: NJD041743220

### EPA REGION 2

Congressional District(s): 01

Camden

Pennsauken Township

#### NPL LISTING HISTORY

Proposed Date: 7/1/1982

Final Date: 9/1/1983

## Site Description

The Swope Oil & Chemical Company Site is located in an industrial area in northern Pennsauken Township. The 2-acre site is bordered by a railway and National Highway. The Swope Oil & Chemical Company, a chemical reclamation facility, operated from 1965 until 1979, processing solvents, oils, paints, and other chemical compounds. The site included one main building, a "distillation house", a drum storage area, an unlined lagoon, a diked tank farm, and an area containing buried sludge waste. The groundwater underlying the site is contaminated. Waste liquids and sludges were discharged to an excavated, unlined lagoon. Contaminated materials also were placed within a diked tank farm and in an exposed drum storage area. In 1975, after several inspections, Swope was cited by the State of New Jersey for operating without proper permits. Four years later, it was cited again, this time for failure to prepare, maintain, and implement a Spill Prevention, Containment, and Countermeasure Plan. The company ceased operations in late 1979. Approximately 17,000 people reside in the area and depend on groundwater from municipal wells. A municipal well, which is currently inactive, is located 175 feet south of the site.

Site Responsibility This site is being addressed through Federal and Potentially Responsible Party (PRP) actions.

## Threat and Contaminants

Surface soil was contaminated with polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), phthalates, and metals. The groundwater is primarily contaminated with VOCs. Subsurface soil, which was primarily contaminated with VOCs has been treated by Soil Vapor Extraction. These soils were sampled in 2006 and 2007 to determine if the soil continues to serve as a source of groundwater contamination. EPA is evaluating the sampling results. The contamination in the aquifer beneath the site could lead to drinking water contamination. The site is fenced and drinking water is supplied through a municipal system.

## Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on removal of contaminants and cleanup of the groundwater and soil.

#### Response Action Status

Immediate Actions: In 1984, in accordance with an Administrative Order on Consent, potentially responsible parties, with EPA oversight, removed lagoon sludge containing hazardous material, and drummed waste. In addition, a temporary cap was placed over contaminated sludge lagoons to prevent the further migration of contaminants. A security fence was built around the site.

Removal of Contaminants: In 1985, the EPA issued a Record of Decision (ROD) which selected the following cleanup methods for surficial contamination: (1) removal of tanks and buildings with off-site incineration, treatment, or disposal of tank contents, and off-site disposal of tanks and building debris; (2) construction of a cap at the site; (3) preparation of a supplemental investigation to determine the nature and extent of groundwater contamination and to identify alternatives for cleanup; (4) excavation of up to 1 1/2 feet of contaminated surface soil containing PCBs and off-site disposal; (5) excavation of up to 1 1/2 feet of PCB-contaminated soils below the lagoon and off-site disposal; and (6) sampling, excavation, and off-site disposal of contaminated soils containing PCBs from the parking lot area and along the railroad right-of-way adjacent to the lagoon.

In September 1991, EPA signed a ROD which selected a remedy for the treatment of contaminated subsurface soils

which are contributing to the contamination of groundwater. The selected remedy called for the in-place treatment of volatile and semi-volatile organic subsurface soil contaminants through soil vapor extraction with biodegradation. In addition, the groundwater was to be monitored to assess the impact of the site on groundwater. In July 1993, a judicial Consent Decree was entered which required that a group of (PRPs) design and implement the remedy selected in the 1991 ROD.

In September 2006, a Settlement Agreement was signed. Under this Agreement the PRPs began a Remedial Investigation and Feasibility Study (RI/FS) to identify contaminants in the groundwater and, if necessary, consider options for treatment.

Site Facts: Cleanup activities at the Swope Oil site are being conducted by a group of PRPs, collectively known as the Swope Oil Cleanup Committee, under monitoring by the EPA.

## Cleanup Progress

PRPs, with EPA oversight, have removed large quantities of the contaminated surficial materials and soils from the Swope Oil & Chemical Co. site, thereby mitigating the threats posed by exposure to these materials. As part of initial cleanup measures, PRPs removed 3,000 tons of lagoon sludge containing hazardous material, and drummed waste from the site. In addition, a temporary cap was placed over contaminated sludge lagoons to prevent the further migration of contaminants and a security fence was built around the site to restrict access.

As part of the surface cleanup effort, the PRPs have completed the following actions: excavation and off-site disposal of more than 24,000 tons of PCB-contaminated soils and backfilling of excavations; removal and disposal of 70 tanks and their contents; and, removal of associated hazardous liquids.

The soil vapor extraction system construction was completed in February 1997. The soil vapor extraction system was designed to treat approximately 245,000 cubic yards (392,000 tons) of soil. Over 20,000 pounds of volatile organic contaminants have been extracted from subsurface soils through operation of the soil vapor extraction system. In 2002, operation of the soil vapor extraction system was enhanced by the planting of poplar trees to dewater the near surface sediments, thereby increasing the systems efficiency. Remediation of the contaminated subsurface soils will lessen the site's contribution to groundwater contamination. The soil vapor extraction system ceased operation in September 2005.

EPA has postponed installation of a cap over the site, since the treatment of subsurface soils in place may make installation of the cap unnecessary. Currently, EPA is in the process of evaluating data submitted by the PRPs from soil borings they installed in 2006 and 2007 at the Site to determine if a cap remains necessary.

In addition, a groundwater monitoring program was initiated in December 1996. Data generated as part of the groundwater monitoring program will be utilized to determine whether active groundwater remediation is necessary at the site.

### Five-Year Review

Pursuant to Section 121(c) of the Comprehensive Environmental Response, Compensation and Liability Act, in September 2002, EPA conducted a five-year review of the selected remedies for this site to ensure that these remedies remain protective of public health and the environment. The five-year review concluded that the selected remedies are protective of public health and the environment. The five-year review showed that the soil vapor extraction system had removed contaminants in the soil that would eventually impact the groundwater.

The shallow and deep aquifers below the site remain contaminated. There is no current human exposure to the contaminants in the shallow groundwater because there is no potable water well within two miles of the site and residents of the area use a municipal water supply system, which applies appropriate treatment. Therefore the five-year review recommended that additional groundwater investigations be performed in order to determine what, if any, groundwater remediation is necessary.

A second Five-Year was completed in September 2007. There is contamination in the shallow and deep aquifers and the residents remain on a municipal water supply system. There is also no contact with soils on site. Therefore the systems in place remain protective.

## Site Repositories

Pennsauken Free Public Library 5605 North Crescent Boulevard Pennsauken, NJ 08110-1834 856-665-5959

US Environmental Protection Agency Records Center 290 Broadway, 18th Floor New York, NY 10007 (212) 637-4308  
Building Hours: Mon.-Fri. 9 a.m. - 5 p.m.