

Scientific Chemical Processing

New Jersey

EPA ID#: NJD070565403

EPA REGION 2

Congressional District(s): 09

Bergen
Carlstadt

NPL LISTING HISTORY

Proposed Date: 12/1/1982

Final Date: 9/1/1983

Site Description

The Scientific Chemical Processing site covers 6 acres and is located in a light industrial area of Carlstadt. This site is a former waste processing facility that accepted various wastes for recovery and disposal. About 375,000 gallons of hazardous substances were stored on site in tanks, drums, and tank trailers. The site shut down operations in 1980 in response to a court order. Some company officials received fines and jail terms for illegally dumping hazardous waste. From 1979 to 1980, drums and contaminated soil were removed. The site is now vacant. An interim remedy (consisting of a slurry wall, infiltration barrier, and dewatering system), which temporarily eliminates direct contact with contaminated materials and controls off-site migration of contamination from on-site soils and shallow ground water, is in place. The site is located within a coastal wetlands management area, bordered on the northeast by Peach Island Creek, a tidal waterway. Local surface water is used for recreation and industrial water supplies. Several private residences are within a mile of the site. All nearby businesses and residences are believed to be on public water supplies. The population within a 2-mile radius is approximately 14,500.

Site Responsibility: This site is being addressed through a combination of Federal, State, and potentially responsible parties' actions.

Threat and Contaminants

On-site ground water and soil contamination includes volatile organic compounds (VOCs) including benzene, chloroform, and trichloroethylene (TCE); PCBs; polycyclic aromatic hydrocarbons (PAHs) including naphthalene; and heavy metals. Off-site sediment contamination along Peach Island Creek includes VOCs, phenol, PAHs, petroleum hydrocarbons, heavy metals, and the pesticide dieldrin. Surface water contamination in Peach Island Creek includes VOCs, petroleum hydrocarbons, and heavy metals. The site is entirely fenced and bordered by Peach Island Creek on the northeast side, thereby reducing public access. The potential health risks to individuals who may come in contact with site pollutants, specifically those who accidentally contact contaminated soils, surface waters, ground water, and sediments, have been temporarily reduced by the interim remedy. The potential threat to coastal wetlands by site contaminants has also been reduced by the interim remedy.

Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases. The first long-term remedial phase focuses on cleanup of the on-property, shallow ground water and soil, while the second focuses on cleanup of the deeper aquifer and off-property ground water contamination.

Response Action Status

Immediate Actions: To address the immediate threats posed by the contaminants, Inmar Associates, the property owner, removed 55 tanks and one tank trailer under New Jersey Department of Environmental Protection supervision between 1985 and 1986.

On-Site Ground Water and Soil: Under EPA oversight, the potentially responsible parties began conducting an investigation in 1985 to determine the type and extent of on-site ground water and soil contamination. In 1990, the EPA selected an interim remedy to address the contaminated on-site ground water and soil which includes construction of a slurry wall, infiltration barrier, and ground water collection system to retrieve ground water for treatment off site. This interim remedy, which was completed in June 1992, is intended to contain the contamination until a permanent remedy can be implemented. A statutory Five-Year Review was issued for the interim Remedy in September 1998. The

Five-Year Review indicated that during the development of the final remedy, the current use of the property or potentially impacted ground water do not indicate a need for any further immediate actions. In August 2002 EPA selected a remedy for the on-site soils. The remedy consisted of the following: air stripping followed by solidification of the soil hot spot; installation of a landfill cap over the entire fill area; improvement and upgrading of the existing interim ground water recovery system and sheet pile wall; and implementation of institutional controls.

In July 2004 EPA reached a settlement with the responsible parties to undertake the soil remedy and the remedial design prepared by the responsible parties was approved by EPA in June 2007. Field work for the remedial action was initiated in April 2008 and is currently ongoing.

Off-Site Ground Water: The parties potentially responsible for the contamination began an investigation in 1988, under EPA oversight, to determine the type and extent of contamination in the off-site ground water, and to identify alternative technologies for the cleanup. The results of the investigation showed that off-site contamination appears to be more extensive than had been previously thought. The investigation was continued and expanded to determine the full extent of off-site contamination, and a feasibility study to explore various cleanup options is currently being prepared.

Site Facts: A Federal District Court trial resulted in the conviction of three corporate officials of Scientific Chemical Processing on charges arising from the disposal of bulk solvents into the Newark, New Jersey sewer systems and drummed wastes into Lone Pine Landfill. In September 1985, the EPA issued an Administrative Order on Consent to 108 respondents for the performance of an investigation to determine the type and extent of contamination at the site and to identify alternative technologies for the cleanup. In October 1985, the EPA issued a Unilateral Administrative Order to an additional 31 respondents, requiring them to cooperate with the 108 parties and to participate in the investigation. A civil complaint against Inmar was filed by the United States in January 1987. The complaint sought reimbursement for EPA's oversight costs as well as penalties for violation of the EPA's Administrative Order. A settlement was reached in 1988. In September 1990, EPA issued a Unilateral Administrative Order requiring 43 respondents to implement the interim remedy. The interim remedy was completed in June 1992.

Cleanup Progress

The owner of the property addressed immediate threats posed by the Scientific Chemical Processing site by removing 55 contaminated tanks and a tank trailer under EPA oversight. An interim remedy which is intended to reduce migration of the contamination from on-property ground water and soil until a final remedy is implemented is in place. The interim remedy consists of a cap, dewatering system, and a slurry wall. The interim remedy has included the collection and off-site disposal of over 450,000 gallons of contaminated water since 1992. A treatability study to evaluate potential remedial alternatives for the contaminated on-site soil was completed in 2000, and in August 2002 EPA selected a final remedy for the on-site soils and ground water. In 2004, an agreement was reached with the potentially responsible parties to design and implement the remedy; the design was completed in June 2007, and remedial action contractor was selected in January 2008. Implementation of the final remedy began in April 2008 and should be completed in 2009.

Extensive investigations of the off-site ground water have been conducted by the potentially responsible parties. Pilot studies of potential remedies will be conducted and then a feasibility study will be finalized. A final remedy for the off-site ground water should be selected in 2010.

Site Repositories

William E. Demody Free Public Library, 420 Hackensack Street, Carlstadt, New Jersey