Superfund Construction Project – Funding Pending

White Chemical Corporation Superfund Site
Newark, New Jersey

Site Description

White Chemical Corporation is a nearly 4.5-acre site in the city of Newark, Essex County, New Jersey. The site's surrounding area contains residential, commercial and industrial structures within a half-mile radius of the property, including Newark Liberty International Airport, Conrail and Amtrak rail lines, and U. S. highway Routes 1 and 9. EPA placed the site on the National Priorities List in 1991.

Historically, the property was used for industrial purposes dating back to the 1930s; it has had numerous owners/operators. In 1983, White Chemical Corporation leased the property and conducted chemical manufacturing operations until 1991. Improper drum storage, including open, leaking, and fuming drums, as well as mishandling of chemicals, led to their release and the subsequent contamination of soil and groundwater.

Site Status and Cleanup Actions to Date

- EPA issued a 1991 record of decision (ROD), which entailed a removal action to stabilize the site and to remove leaking drums and other chemical waste containers. The removal action was completed in 1991. The 1991 ROD also required additional investigations to fully characterize the nature and extent of contamination in all site media and to evaluate additional remedial measures.
- A 2005 ROD was issued, which addressed the contaminated surface and sub-surface soils, and the demolition and disposal of buildings and above-ground storage tanks; in implementing this remedial action, approximately 23,000 tons of soil was excavated and disposed of off-site. Site restoration was completed in April 2009 and included the placement of clean fill in excavation areas and the placement of 3-inch stone bedding over the entire site.
- A third ROD, issued in 2012, specifically addresses contaminated groundwater. Remedial investigation and feasibility study field activities revealed the presence of VOC contamination within the overburden and bedrock aquifers. The contaminants of concern, which are frequently detected at high concentration levels at the White Chemical property, include: 1,2-DCA, TCE, 1,2-dibromoethane (EDB), PCE, 1,1,2-TCA, and 1,1,2,2-tetrachloroethane.
- The selected remedy for groundwater will treat the overburden aquifers, which are known to be contaminated the former White Chemical facility's past operations, and select areas of the bedrock aquifer, through in-situ bioremediation via injections of amendment into the treatment areas. The remedial design for the groundwater remedy was completed in 2016.
- Currently, the land is vacant, undeveloped and comprised of a properly graded lot containing clean fill and stone to prevent erosion and aid in surface water run-off. Once cleanup is complete, the site will be available redevelopment.

Project Pending Funding, as of the end of Fiscal Year 2020

The work includes in-situ bioremediation of the overburden aquifer's groundwater to address areas with 1,2-DCA and/or TCE exceeding concentrations of 1,000 µg/L, and treatment of the bedrock aquifer in an effort to decrease contaminant mass to the extent practical. The work also includes: the establishment of a classification exemption area to minimize the potential for exposure to contaminated groundwater; the implementation of a long-term sampling and analysis program to monitor the site's contamination to assess groundwater migration; and, the use of an applicable or relevant and appropriate waiver for portions of the site's groundwater due to technical Impracticability.

Funding Through Fiscal Year 2020

EPA has provided approximately $32 million for cleanup activities at the site.