



White Chemical Corp. Superfund Site Newark, New Jersey

Site Description

[White Chemical Corp.](#) is a 4-acre site located in Newark, New Jersey. Its surrounding area contains residential, commercial and industrial structures within a half-mile radius of the White property, including Newark Liberty International Airport, Conrail and Amtrak rail lines, and U.S. Routes 1 and 9.

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 operated at the site until 1990, manufacturing a variety of acid chlorides, brominated organics, mineral acids, and fire-retardant compounds. Improper drum storage and mishandling of chemicals led to their release and the subsequent contamination of soil and groundwater. EPA listed the site on the National Priorities List in 1991, with the record of decision (ROD) for operable unit 1 (OU 1) issued that same month.

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 runoff. There is potential for immediate redevelopment of the site upon completion of the cleanup.

Site Status and Cleanup Actions to Date

- The OU 1 ROD addressed the stabilization of the site and the removal of leaking drums and other chemical-waste containers. The ROD also required additional investigations to fully characterize the nature and extent of contamination in all media and to evaluate additional remedial measures.
- The OU 2 ROD was issued in 2005. It addressed the contaminated surface and sub-surface soils as well as the demolition and disposal of buildings and aboveground storage tanks. During the OU 2 remedial action, approximately 23,000 tons of soil was excavated and disposed of off-site. Site restoration was completed in 2009 and included the placement of clean fill in excavation areas and the placement of 3-inch stone bedding over the entire site.
- The OU 3 ROD, issued in 2012, addresses contaminated groundwater. Field activities revealed the presence of volatile organic compound (VOC) contamination within the overburden and bedrock aquifers. The contaminants of concern, which are frequently detected at high concentrations at the White Chemical property include 1,2-dichloroethane, trichloroethylene (TCE), 1,2-dibromoethane (also known as ethylene dibromide), perchloroethylene (PCE), 1,1,2-trichloroethane, and 1,1,2,2-tetrachloroethane.
- The selected remedy for OU 3 will treat the overburden aquifers and select areas of the bedrock aquifer that are known to be contaminated from past operations at the former White Chemical facility. These areas will be treated through in-situ bioremediation via injections of amendment into the treatment areas.
- From May to December 2014, a pre-design investigation and pilot study were conducted for OU 3. This concluded that a combination of sodium lactate and EHC amendments, via both hydraulic and pneumatic amendment delivery methods, would provide for the most effective treatment.
- In September 2012, EPA initiated the remedial design under an interagency agreement with the U.S. Army Corps of Engineers. The remedial design was completed in September 2016.

Unfunded Action

The unfunded fiscal year 2017 work includes in-situ bioremediation of the groundwater in the overburden aquifer to address areas with 1,2-dichloroethane and/or TCE exceeding concentrations of 1,000 micrograms per liter, 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 contamination in order to assess groundwater migration, and the use of an Applicable or Relevant and Appropriate Requirements waiver for portions of the groundwater at the site due to a technical impracticability.

Funding Status

To date, EPA has incurred approximately \$46 million in charges for cleanup work.