

Hercules, Inc. (Gibbstown Plant)

New Jersey

EPA ID#: NJD002349058

EPA REGION 2 Congressional District(s): 01

Gloucester
Gibbstown

NPL LISTING HISTORY
Proposed Date: 12/30/1982
Final Date: 9/8/1983

Site Description

The Hercules, Inc. (Gibbstown Plant) is a former organic hydroxide/peroxide manufacturing facility situated on 350 acres in Gloucester County. Operations at the plant ceased and the structures associated with manufacturing activities were demolished in 2010. An unlined solid waste disposal area which was used by DuPont prior to 1952 and then by Hercules from 1952 to 1974, is located on the site. The companies disposed of waste materials from manufacturing processes, including waste resulting from the production of aniline, in two unlined disposal pits. In 1980, the U.S. Geological Survey conducted tests of the aquifer beneath the site. The groundwater was found to be contaminated with volatile organic compounds (VOCs).

Hercules is located on the banks of the Delaware River. Clonmell Creek runs through the site and discharges into the Delaware River. Approximately 13,000 people live within a 3-mile radius of the site. Area residents are served by municipal water wells.

Site Responsibility: This site is being addressed through federal, state, and potentially responsible parties' actions

Threat and Contaminants

The groundwater at the site was found to be contaminated with benzene, cumene, phenols, and lead. The soil was found to be contaminated with VOCs and heavy metals, including lead. Area residents are supplied with water by municipal water wells that do not contain contaminants above health-based levels. However, if the contamination in the aquifer migrates, these wells may be threatened.

The solid waste disposal area has been determined not to be a major source of groundwater contamination. Consolidation of the waste in the disposal area under an impermeable cap (currently underway), in conjunction with perimeter fencing, will minimize the potential for human and wildlife exposure.

Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on the cleanup of the solid waste disposal area and cleanup of the process plant area.

Response Action Status

Solid Waste Disposal Area: Hercules, under state monitoring, has completed an investigation to determine the nature and extent of contamination in the solid waste disposal area. Eleven monitoring wells have been installed in this area as part of this investigation. A Record of Decision (ROD), selecting a remedy for the contamination in the solid waste disposal area was issued by the State in January 1996. The selected remedy includes consolidation of miscellaneous waste in the solid waste disposal area on the two existing tar pits, capping of the waste, and covering the contaminated sediment in the North Ditch with a layer of clean imported fill. Implementation of this remedy commenced in March 2010 and is expected to be completed by mid-2012.

Plant Process Area: Hercules Inc., under State monitoring, is treating contaminated groundwater and has conducted an investigation of the nature and extent of contamination in and around the manufacturing plant area. Additional focused investigations of site contamination and an ecological risk assessment are being conducted. An evaluation of alternatives for the remediation of the manufacturing plant area will be conducted by Hercules Inc.

Site Facts: In 1984, Hercules commenced operation of a groundwater extraction and treatment system in the Plant Process Area of the site. An Administrative Order on Consent (ACO) was issued by the State in 1986 to Hercules to investigate the nature and extent of site contamination, evaluate cleanup alternatives for both areas of the site, and continue the operation of the groundwater extraction and treatment system. Another ACO was issued by the State in October 1996, which requires Hercules to design and implement the remedy selected in the ROD.

In September 2009, the PRP signed an ACO with EPA to undertake the above-noted investigatory work in the plant process area under EPA oversight. It is anticipated that this work will be completed in mid-2012.

Cleanup Progress

Operation of the groundwater extraction and treatment system in the Plant Process Area of the site has minimized the migration of site-related groundwater contamination, thereby mitigating contamination of municipal wells which provide drinking water for residents in the vicinity of the site. To date, the system has recovered and treated over 2 billion gallons of contaminated groundwater. Continued operation of the system will mitigate impact to municipal wells in the future.

Implementation of the remedy selected for the Solid Waste Disposal Area of the site will minimize the potential for direct contact with the waste material through consolidation of the waste and installation of a cap over the waste material.

Site Repositories

Greenwich Public Library, 411 Swedesboro Road, Gibbstown, NJ 08027-1727

EPA Region 2 Superfund Records Center, 290 Broadway, 18th Floor, New York, NY 10007-1866