



Nyanza Chemical Waste Dump

Ashland, Mass.

Site Description

The 35-acre Nyanza Chemical Waste Dump site is located in the Town of Ashland, Mass., 22 miles west of the City of Boston. In 1983, EPA added the site to the National Priorities List. Operations at the site included the production of chemical dyes and dye intermediates; these activities continued from 1917 to 1978. During that time, large quantities of industrial wastewater containing high levels of acids, organic chemicals and metals (notably mercury) were generated and disposed of in unlined sludge lagoons, underground vaults and, in some cases, directly to the ground surface (on Megunko Hill). After listing the site, EPA created three operable units (OUs) to address surface soils, groundwater and the adjacent "eastern wetlands." Assessment activities of the eastern wetlands led to the identification of its hydraulic connection to the Sudbury River through a system of creeks and outfalls. As a result, EPA created OU4 (Sudbury River) in 1993. It is estimated that, over the course of Nyanza's operations, as many as 100,000 pounds of mercury were discharged to the river.

Current Site Status and Cleanup Actions to Date

- Initial long-term cleanup activities focused on source control and the creation of a landfill (OU1) for excavated material from lagoons and other waste disposal units. This OU was completed in 1992, and operation and maintenance activities have been transferred to the State.
- Groundwater (OU2) long-term cleanup activities (OU2) have consisted of monitoring the groundwater plume, and the evaluation and construction (in 2007) of vapor mitigation system in 40 homes. Wellhead treatment systems were constructed in 2013 at two locations where non-aqueous phase liquid is still present.
- From 1999 to 2001, long-term cleanup activities were initiated and completed in the eastern wetlands (OU3); excavated sediments were placed within the existing landfill.
- Since its creation in 1993, the Sudbury River (OU4) has consisted of numerous investigations including multiple human health and ecological risk assessments. The risk requiring action is from the consumption of mercury-contaminated fish.
- In 2010, EPA selected a combination remedy including monitoring and thin-layer sand capping. The extent of the thin layer cap is an 84-acre former reservoir that has the highest mercury concentrations in sediment as well as in fish.
- In April 2013, the final Remedial Action Work Plan (i.e., the Remedial Design) was submitted.
- EPA has determined that all unacceptable human exposure pathways have been eliminated, and therefore, under current conditions, human exposure is under control site wide.

Unfunded Action

Fiscal Year 2013 work that was not funded involved installation of the thin-layer sand cap.

Current Funding Status

To date, EPA has spent approximately \$42 million on construction work at the site.

For more information on this site, please read the [Nyanza Chemical Waste Dump site information](#) on the Region 1 Superfund website.