



## Velsicol Chemical Corporation Superfund Site St. Louis, Michigan

### Site Description

The [Velsicol Superfund site](#) in St. Louis, Michigan, encompasses a 52-acre land parcel that once hosted a chemical plant. The plant produced a wide variety of chemical products, including:

- fire retardants – hexabromobenzene (HBB), polybrominated biphenyl (PBB), and tris (2,3-dibromopropyl) phosphate (TRIS); and
- pesticides – dichlorodiphenyl trichlorethane (DDT) and 1,2 dibromo-3-chloropropane (DBCP).

A residential area is adjacent to the former plant site. The Pine River flows along the western and northern boundaries of the site into Mill Pond, where a hydroelectric dam is located about a quarter-mile to the east.

The plant closed in 1977. Demolition and decommissioning activities began in 1978. The aboveground site buildings were razed, and some structures were buried onsite, including storage tanks and process piping.

In 1982, Velsicol signed a consent judgement requiring installation of a slurry wall around the facility and a cap over the 52-acre site. The judgement did not address Pine River's sediments, and it gave Velsicol a release from any liability under CERCLA, RCRA and state environmental laws for this site, with a limited reopener. During the 1990s, monitoring showed the site remedy was not operating as designed and fish tissue concentrations within the Pine River showed high concentrations of DDT. The site is Superfund-lead due to Velsicol's bankruptcy.

### Site Status and Cleanup Actions to Date

- Due to high concentrations of DDT in fish tissue, EPA completed a fund-lead sediment cleanup in 2006 in the Pine River adjacent to the former chemical plant.
- In 2001, a remedial investigation/feasibility study began for the former plant site due to the original remedy's failure. EPA signed a record of decision in June 2012. The remedy includes in-situ thermal treatment, excavation of contaminated soils with off-site disposal, in-situ chemical oxidation, installation of a vertical barrier wall around the site, construction of a groundwater pump-and-treat system, and placement of a cap over the site.
- Two components of the site remedy are not located on the former plant site: soil cleanup of the residential area adjacent to the site for PBB and DDT contamination, and replacement of the city of St. Louis's drinking water supply system.
- The residential soil cleanup was completed in 2016. Approximately 44,000 tons of contaminated soil was excavated and disposed of in a landfill.
- Replacement of the drinking water supply system began in 2013. Construction is ongoing. However, the city was able to switch to the new water supply in the interim in October 2015.
- EPA is currently funding a remedial investigation/feasibility study downstream of the site within the Pine River.

### Unfunded Action

The unfunded fiscal year 2016 remedial action for the former plant site consisted of in-situ thermal treatment of source areas containing non-aqueous phase liquids.

### Funding Status

To date, EPA has spent approximately \$145 million on construction work at the site.