

NATIONAL PRIORITIES LIST (NPL)

Final Site

September 2008

EAST TROY CONTAMINATED AQUIFER | Troy, Ohio

Miami County

Site Location:

The East Troy Contaminated Aquifer is located in the eastern portion of the City of Troy along the west side of the Great Miami River. Contaminated ground water is moving primarily northeast toward the Great Miami River and Troy's East Well Field.

▲ Site History:

At least two distinct ground water plumes have been detected. The ground water plumes are contaminated with volatile organic compounds (VOCs), including tetrachloroethene (PCE), trichloroethene (TCE) and cis-1,2-dichloroethene (cis-1,2-DCE). Since 2001, the State of Ohio has had an order with a potentially responsible party to operate a source control system, which partially captures contaminants from leaving an industrial property in the area. Other sources of VOC contamination have not been identified and are uncontrolled. Ohio EPA and U.S. EPA are working to find a comprehensive solution to address the ground water plumes, additional source areas, and any potential issues related to vapor intrusion.

Site Contamination/Contaminants:

The contaminants of concern in the two ground water plumes are PCE, TCE, and cis-1,2-DCE. PCE and TCE are both commonly used to degrease manufacturing equipment. PCE is also used in the dry cleaning industry. Cis-1,2-DCE is a breakdown product of PCE and TCE.

Potential Impacts on Surrounding Community/Environment:

The City of Troy obtains drinking water from two municipal well fields. There are five water wells in the East Well Field and five water wells in the West Well Field. The contaminated ground water plumes are moving toward Troy's East Well Field. The municipal system supplies water to approximately 28,000 people. In addition, vapor intrusion from the ground water plumes is a concern for residents living in the area.

Response Activities (to date):

U.S. EPA and Ohio EPA have conducted assessment work for the ground water plumes and source areas. Ohio EPA currently has an order with a potentially responsible party to operate a source control system, which partially captures contamination from one of the ground water plumes. In 2007, at the request of the city and Ohio EPA, U.S. EPA installed vapor mitigation systems in 16 residences and a school within the contaminated area.

Need for NPL Listing:

Applicable federal and state cleanup programs were evaluated to determine the best program to clean up this site. The State of Ohio referred the site to U.S. EPA because a long term comprehensive solution is needed to protect the City of Troy's municipal wells and to eliminate vapor intrusion concerns. The NPL program provides the best approach to investigate and address all of the contamination sources and associated plumes at this site to protect human health and the environment. U.S. EPA received a letter of support for placing this site on the NPL from the state.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at http://www.atsdr.cdc.gov/toxfaq.html or by telephone at 1-888-42-ATSDR or 1-888-422-8737.