

EPA Seeks Input for Community Involvement Plan

Pike and Mulberry Streets PCE Plume Site Martinsville. Indiana

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For more information

If you have questions or concerns about the Pike and Mulberry Streets PCE Plume site, contact these EPA team members:

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You may call EPA toll-free: 800-621-8431, 9:30 a.m. – 5:30 p.m., weekdays.

View documents related to the site at the information repository:

Morgan County Public Library
110 S. Jefferson
Martinsville

To learn more about the site, visit http://www.epa.gov/superfund/pike-mulberry-pce.

U.S. Environmental Protection Agency has conducted numerous investigations and testing at the Pike and Mulberry Streets PCE Plume site to determine if potentially harmful contaminants may be in groundwater, soil, and/or indoor air. The main contaminant of concern is tetrachloroethene, or PCE. Besides polluting soil and underground water supplies (groundwater), PCE can also cause an environmental problem called vapor intrusion. Vapor intrusion can occur when underground pollutants release gases that travel up through the dirt and seep into buildings through cracks and holes to cause indoor air pollution.

Community involvement plan

EPA is currently developing a Community Involvement Plan, or CIP, for the site. The purpose of a CIP is to provide EPA with information about community concerns and enhance communication between residents and EPA. Residents often provide valuable insight that assist the Agency with its cleanup decisions. Residents also help the EPA understand how the community wants to receive information and the type of information they would like to receive. This helps the Agency provide meaningful engagement opportunities to the public throughout the cleanup process at Superfund sites.

Site background

The site is primarily a 38-acre groundwater plume contaminated with PCE. A plume is a mass of contaminated underground water that often moves. The plume is centered near the intersection of Pike and Mulberry streets in Martinsville (see map, below) and flows downstream affecting the municipal wellfield and drinking water treatment plant. This wellfield is used by the city of Martinsville for its public drinking water supply. The city has been treating drinking water using activated carbon filtration since 2005 to remove PCE from its water.



Site history

The former Master Wear facility operated as an industrial dry cleaner in downtown Martinsville from 1986 to 1991. Its operations included laundering and dry-cleaning using PCE for commercial and institutional organizations. Between 1987 and 1991, multiple complaints of illegal dumping and mishandling of waste drums at the facility were reported to the Indiana Department of Environmental Management. Several spills and releases were also reported. EPA believes this facility is the main source of PCE to the site. Other industries and businesses, including several dry-cleaning facilities that operated historically in Martinsville, have also been identified as possible sources of PCE and other contaminants.

Various investigations have been performed in the past and a vital cleanup project called a "time critical removal action," was conducted from 2003 to 2008 at the facility to address contamination in soil, groundwater, and soil vapor. A time critical removal action must be initiated within six months of a determination that pollution poses an imminent threat to public health or the environment.

The removal action included installing treatment systems that used pressurized air and vacuum systems to remove contaminated gasses in the source area. Individual buildings threatened by vapor intrusion were also treated by installing sub-slab depressurization systems. These systems started operating in 2005 and were turned off in 2008 since indoor air, soil, and groundwater sample results showed that closure criteria had been met.

In 2010, groundwater testing indicated the PCE concentrations had increased again. PCE in samples from the municipal wellfield (before carbon treatment) had also increased since the shutdown of the soil treatment systems. These high concentrations of PCE were used to place the site on the Superfund program's National Priorities List in May 2013.

A cleanup investigation was conducted from April 2015 through January 2017. Groundwater, soil, and soil vapor samples were collected and tested for volatile organic compounds, or VOCs (contaminants that evaporate into the air). A vapor intrusion investigation was also conducted where sub-slab soil vapor, crawlspace air, and indoor air samples were collected.

Human health risk assessments were completed as part of the cleanup investigation. PCE and trichloroethene, or TCE, were found in groundwater, soil vapor and/or indoor air at some residential or commercial properties.

A study of cleanup alternatives and goals for the site was recently completed. A report detailing the findings of this study is expected to be finalized in 2019.

The federal Agency for Toxic Substances and Disease Registry, or ATSDR, released its public health consultation report, an "Analysis of Contaminants in Drinking Water and Indoor Air," on March 4, 2019. The public health consultation was conducted to determine if exposures to PCE and TCE in the groundwater plume could be harming people's health. ATSDR's findings were as follows:

- People's health is not likely to be harmed by PCE and TCE contaminants from the Pike and Mulberry Streets PCE Plume in their public drinking water supply.
- People's health may be harmed if they breathed these contaminants that evaporated into the air inside of some homes and businesses through the vapor intrusion process.
- ATSDR could not fully assess the potential health effects from exposures to chemicals in the drinking water from private residential wells contaminated with PCE and TCE currently or in the past. This was because officials did not have adequate information about whether people were exposed and at what levels.

To read the report in full, visit: www.atsdr.cdc.gov/HAC/pha/PikeMulberryStreetsP www.atsdr.cdc.gov/HAC/pha/PikeMulberryStreetsP WulberryStreetsP www.atsdr.cdc.gov/HAC/pha/PikeMulberryStreetsP www.

Next steps

Once the study of cleanup options is final, EPA will issue a proposed cleanup plan for the site as part of its public participation responsibilities under the federal Superfund law. EPA will not select its final interim cleanup plan until after it reviews comments received from the public at a hearing and public comment period.

What is PCE?

Tetrachloroethylene is a synthetic chemical that is widely used for dry cleaning and for degreasing metal. Exposure to very high levels of PCE can cause dizziness, skin irritation, headache, sleepiness, confusion, nausea, difficulty in speaking and even death. These symptoms usually occur in work environments when people have been exposed to high levels.

For more information on PCE, visit https://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=264&ti d=48.