ATSDR’s Public Health Consultation

Pike and Mulberry Streets PCE Plume Superfund Site

The Agency for Toxic Substances and Disease Registry (ATSDR) released its public health consultation report, an “Analysis of Contaminants in Drinking Water and Indoor Air,” for the Pike and Mulberry Streets PCE Plume Superfund Site in Martinsville, Indiana, on March 4, 2019.

The public health consultation was conducted to determine if exposures to tetrachloroethylene (PCE) and trichloroethylene (TCE) in the groundwater plume could be harming people’s health. The report explains ATSDR’s findings about exposure to PCE and TCE in drinking water and indoor air and presents ATSDR’s recommendations to protect health.

Key Findings

Background

- In 2002, the Martinsville Water Utility (MWU) discovered one of its wells was contaminated due to migration of solvents from the Masterwear industrial site (a dry-cleaning facility that operated from 1986-1991) to the municipal drinking water wellfield. In 2005, MWU installed a chemical treatment system to remove solvents from municipal drinking water.
- In 2003-04, U.S. Environmental Protection Agency (EPA) performed indoor air sampling at 35 commercial properties in the immediate vicinity of Masterwear. Between 2004 and 2008 Indiana Department of Environmental Management (IDEM) conducted a removal action at Masterwear and nearby properties.
- EPA placed the Pike and Mulberry Streets PCE Plume site on the Superfund National Priorities List (NPL) in May 2013 and began extensive groundwater and soil gas testing to understand the nature of the contaminant plume.

Public Health Actions Taken

- MWU installed a chemical treatment system to remove PCE and TCE from city drinking water in 2005.
- EPA has taken steps to reduce people’s exposures at properties where indoor air contaminants are elevated due to evaporation from the groundwater plume. EPA tested homes and commercial properties in January 2016 at homes and commercial properties where PCE and TCE could potentially evaporate into indoor air and has acted to mitigate exposures where people’s health may be harmed by breathing contaminated air.

Conclusions

- 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 a process called vapor intrusion.
- 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 because we do not have adequate information about whether people were exposed and at what levels.
Recommendations

ATSDR recommends that appropriate agencies take the following actions:

- MWU maintain the municipal water treatment system. Keep the public apprised of any potential changes to the water source or treatment;
- EPA, Indiana State Department of Health (ISDH), and IDEM conduct a well use survey and inventory to determine if anyone is using a contaminated private well for general household purposes. Advise residents to use treated municipal water instead.
- ATSDR and ISDH educate residents about potential health risks associated with drinking potentially contaminated private well water;
- EPA continue investigating the vapor intrusion pathway and people’s exposures to PCE and TCE in their homes and places of business;
- EPA implement a long-term indoor air sampling and management plan for homes and businesses potentially affected by the PCE plume now and in the future;
- EPA take proper action, as needed, to reduce people’s exposure to PCE and TCE.

Next Steps

- ATSDR will continue to work with federal, state, and local agencies to implement the recommendations for this site.
- ATSDR will continue to communicate with community members to gather and address community health concerns.

For More Information

About ATSDR visit [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov) or contact the agencies below for more information about the site:

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