

Community Meeting

EPA, MDEQ and DPHHS will host an informational meeting on the Billings PCE Superfund site.

When: November 1, 2023, at 6:00 PM.

Where:

Broadwater Elementary
415 Broadwater Ave
Billings, MT 59101



Contact Information

U.S. EPA Region 8

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Web Links

EPA website to learn more about the Superfund program:
www.epa.gov/superfund

EPA website for more information about Billings PCE site:
www.epa.gov/superfund/billings-pce

Find Information About:

- The Billings PCE Superfund Site
- Upcoming Activities
- Project contacts for EPA, DEQ, and DPHHS
- Web links on Superfund, vapor intrusion, and chemicals of concern
- The November 2023 public meeting



Billings PCE Superfund Site Update

What is Superfund?

Superfund is EPA's program for cleaning up some of America's most contaminated land and responding to environmental emergencies, oil spills and natural disasters.

The Site

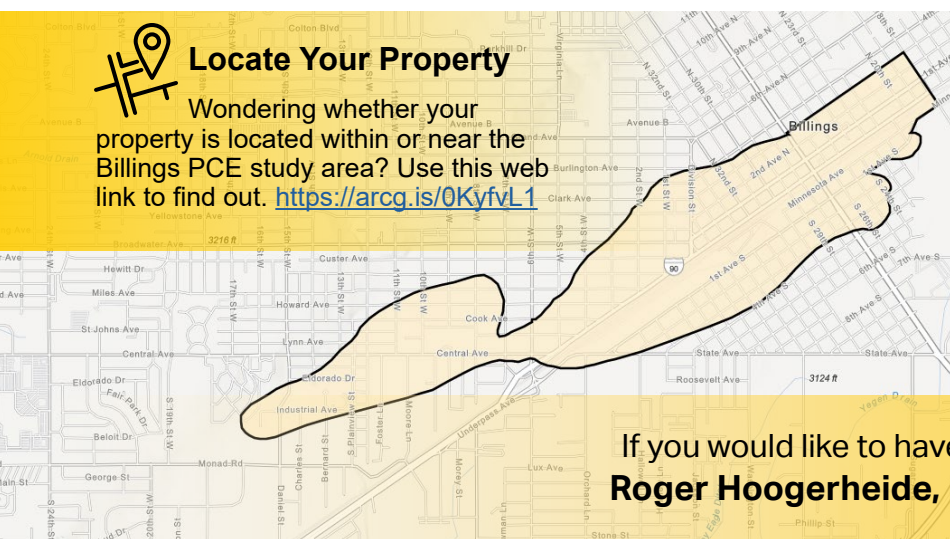
The Billings PCE Superfund Site (Site) consists of shallow groundwater contamination, extending from 24th and Central Avenue approximately three miles, east-northeast, through several mixed-use neighborhoods to the east of downtown Billings. The contamination consists mainly of chlorinated solvents from historic laundry and dry cleaning businesses. Contaminated groundwater may produce indoor air concerns. In September 2021, the Environmental Protection Agency (EPA) added the Site to the Superfund National Priorities List, making the Site eligible for federal funding to expand environmental investigation and cleanup activities.

Contamination

The primary contaminants of potential concern at the Site are chlorinated volatile organic chemicals (VOCs) including tetrachloroethene (also known as perchloroethene or PCE), trichloroethene (TCE), dichloroethene (DCE), and vinyl chloride. These contaminants can evaporate (i.e. volatilize) from shallow groundwater and contaminated soils underneath buildings and enter the indoor air through a process commonly called "vapor intrusion." These vapors can be inhaled and may pose short-term and long-term risks to public health. While groundwater is not used in Billings as drinking water, coming into contact with contaminated irrigation water may pose a health concern. Contaminated soils may pose a health concern to on-Site workers who contact affected soils. Contaminated soils may also continue to be a source of contamination for the groundwater plume if not addressed.

Locate Your Property

Wondering whether your property is located within or near the Billings PCE study area? Use this web link to find out. <https://arcg.is/OKyfvL1>



What is Vapor Intrusion?

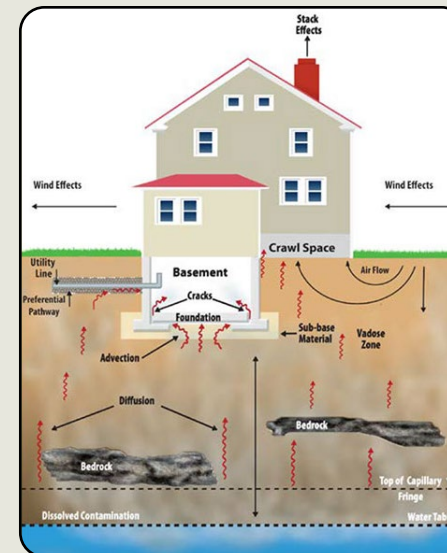
Vapor intrusion is a way that VOCs in soil or groundwater can enter buildings and contaminate air inside the structure (indoor air). Chlorinated VOCs are liquids that can evaporate and become vapors capable of moving through the air and soil. When a chemical is released, either from a spill above ground or leak underground, it has the potential to enter groundwater and travel through the soil and water underground. If that chemical is volatile, it can become a vapor, and seep through openings, like cracks in basements, foundations, sewer lines, or into nearby buildings.

Factsheet: What is vapor intrusion?
<https://www.atsdr.cdc.gov/vapor-intrusion.html>

Why is Vapor Intrusion Important to Me?

When vapors enter indoors, you can be exposed by breathing indoor air. This exposure may cause health effects, depending on the type and amount of chemical, as well as how often and how long you are exposed.

A person exposed to high amounts of PCE and TCE vapors for a short amount of time might experience dizziness, headaches, nausea, and poor coordination. A person exposed to lower amounts of PCE and TCE vapors over a longer period of time might experience more serious long-term health effects.



While groundwater is not used for potable water in the City of Billings, a person may be exposed to these chemicals if they drink water from a contaminated irrigation well or use contaminated irrigation water for purposes such as watering houseplants, filling a pool, or playing in sprinklers.

Completed Activities

- March-April 2022** – Collected indoor air, crawl space air, sub-slab vapor and soil gas samples in 48 structures to determine if these structures are significantly impacted by vapor intrusion.
- May and October 2022** – Collected groundwater samples from approximately 80 monitoring wells and 40 residential irrigation wells to better determine the underground locations and concentrations of potential contaminants during high-water and low-water seasons.

August 2022 – Collected 103 soil gas samples to delineate the soil gas plume. Thirty-five samples were collected from the municipal sewer lines to determine if potential contaminants may be entering structures by moving through sewer lines or utility corridors.

October-November 2022 – Sampled crawlspace air and/or sub-slab vapor from 112 structures to determine if these structures were being impacted by vapor intrusion.

January-March 2023 – Screened 146 structures using EPA's Trace Atmospheric Gas Analyzer (TAGA) mobile laboratory. This information was used to determine if these structures are being impacted by vapor intrusion and to characterize the Site. A public meeting was held on January 17th.

March-June 2023 – Worked with homeowners to install vapor mitigation systems (similar to radon mitigation systems) at 15 impacted structures. Another 10 structures are anticipated to receive vapor mitigation systems in November.

May 2023 – Conducted groundwater sampling from existing monitoring wells and approximately 12 irrigation wells and collected soil gas samples. Sample results will inform evaluation of cleanup alternatives to address groundwater contamination.

October 9th-13th 2023 – Collected additional groundwater samples from existing monitoring wells.

Upcoming Activities

November 2023 – EPA plans to conduct a groundwater investigation using membrane-interface probe/Hydropunch™ technology. This allows investigators to collect representative groundwater samples without requiring the installation of groundwater monitoring wells.

Fall 2023 – The Agencies will prepare the Feasibility Study to address the indoor air contamination exposure pathway. The Feasibility Study is the way Agencies conduct the development, screening, and detailed evaluation of cleanup alternatives. Once finalized, EPA will issue a Proposed Plan detailing the preferred cleanup alternative for public review and comment. The Proposed Plan is anticipated to be issued in early Spring 2024.

If you would like to have your house or business tested for vapor intrusion or your irrigation well sampled, contact: **Roger Hoogerheide, EPA Remedial Project Manager** e: hoogerheide.roger@epa.gov | t: (406) 422-9725