

More Vapor Sampling Planned Around Landfill Site

South Dayton Dump and Landfill

Moraine, Ohio

December 2011

For more information

EPA will host two availability sessions to share information about the vapor intrusion study and next steps:

Tuesday Dec. 6, 6:30 p.m.

Wednesday, Dec. 7, 10 a.m.

Moraine Civic Center
3050 Kreitzer Road
Moraine, Ohio

EPA contacts

For general questions or comments:

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Region 5 toll-free: 800-621-8431,
9:30 a.m. – 5:30 p.m., weekdays

On the Web

www.epa.gov/region5/cleanup/soda/yt0n

Read the documents

The official information repository on the South Dayton Dump and Landfill site containing documents you can review is located at:

Montgomery County Library

Kettering - Moraine Branch
3496 Far Hills Ave.
Kettering

Beginning the week of Dec. 5, the U.S. Environmental Protection Agency and contractors working for the parties potentially responsible for contamination will inspect three additional buildings as part of a vapor intrusion study at the former South Dayton Dump and Landfill in Moraine. Vapor intrusion occurs when chemicals in the ground or underground water supplies (called “ground water” in environmental terms) give off gases that can rise up through the soil and seep into buildings through foundation cracks and holes, causing unsafe indoor air pollution.

Earlier inspections were done in June at other site buildings, and now the actual vapor intrusion sampling equipment will be installed and testing conducted at all the buildings involved in this study.

Businesses and buildings

The businesses and buildings involved in the vapor intrusion study are located within and next to the 80-acre former South Dayton Dump and Landfill located west of Dryden Road and to the north of East River Road in Moraine.

Vapor intrusion generally occurs when volatile chemicals from contaminated ground water or contaminated soil move into an overlying building. In extreme cases the vapors may accumulate in occupied buildings to levels that may pose a safety hazard to workers or residents in

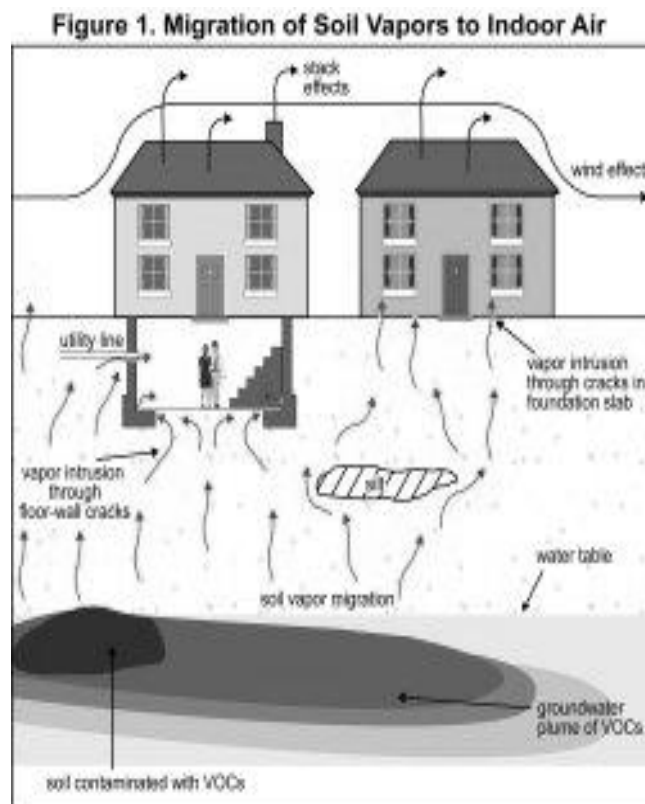


Figure 1 shows the vapor intrusion process. Pollutants in contaminated soil or underground water (ground water) supplies give off gases. These vapors can rise through gaps in the soil and seep into buildings causing hazardous indoor air pollution. Testing in the soil below the surface and indoor air samples can confirm or deny the existence of a vapor intrusion problem.

the buildings.

Two parts

There are two parts to the South Dayton Dump and Landfill vapor intrusion study. The first part is to drill small one-inch holes into the foundation of each structure and collect samples of soil gas below the building to see if the fumes contain chemicals at high enough concentrations to pose a potential indoor air threat to building occupants. This is known as sub-slab sampling.

The second part of the study is to go back to locations where high levels of contaminants were detected to collect another round of sub-slab soil gas samples, as well as indoor air samples. Depending on the indoor air results, mitigation systems that reduce gas levels can be installed. If contaminants are not detected or detected at low levels, another round of sub-slab soil gas as well as indoor air sampling will be collected during the summer.

Next steps

Here is EPA's anticipated schedule over the next several months for the vapor intrusion investigation:

December 2011

- Plan exactly where sub-slab samples will be collected within each study building.
- Use private utility locators to make sure planned sampling locations are not placed over utility lines and wires.
- Begin drilling holes in foundations and installing sampling ports.

January 2012

- Connect soil sampling canisters to sub-slab sampling ports and collect samples over an eight-hour period for businesses and 24 hours at a nearby residence.
- Send samples to lab for analysis.

February 2012

- Evaluate sub-slab data and make plans to re-test soil gas and indoor air samples at locations that detected potentially high concentrations of contaminants.

March 2012

- Collect a second round of sub-slab and indoor air samples.

May 2012

- Share sampling results with property and business owners. Make plans to install mitigation systems or take other measures to lessen health risks in buildings where high levels of contaminants were detected inside.

June 2012

- Install mitigation systems or other measures to ease vapor intrusion issues. Conduct another round of sub-slab and indoor air testing where no or only low levels of contaminants were detected to make sure concentrations remain steady.
- Develop a plan to monitor mitigation systems and other protection measures to confirm that building occupants are safe from pollutants.