

Why the need for this fact sheet?

The issue of vapor intrusion (VI) is being raised more and more in communities located near hazardous waste cleanup sites across the country. In response to this interest, EPA has developed this fact sheet to answer some of the most commonly asked questions.

What is vapor intrusion?

When chemicals or petroleum products are spilled on the ground or leak from underground storage tanks, they can give off gases, or vapors, that can seep inside buildings. The vapors move through the soil and seep through cracks in basements, foundations, sewer lines and other openings. Vapor intrusion is a concern because vapors can build up to a point where the health of residents or workers in those buildings could be at risk.

What vapors might be entering my home, and how would they get there?

- Common examples of vapors are from gasoline or diesel fuel, dry cleaning solvents, and industrial degreasers.
- Common sources are petroleum leaks from underground storage tanks.
- This type is usually associated with a gasoline odor.
- Solvents from other commercial and industrial sites are usually odor-free.
- Vapors also are given off by common household products, which are a more likely source of indoor air problems than leaks or spills. Examples include:
 - paints, paint strippers or thinners
 - cigarette smoke
 - moth balls
 - air fresheners
 - new carpeting and furniture
 - solvents
 - stored fuel
 - dry-cleaned clothing

What are the health concerns with vapor intrusion?

- Health effects vary, based on person, exposure and chemical type.
- For more information on the health risks of Vapor Intrusion please visit the Agency for Toxic Substance and Disease Registry (ATSDR) Vapor Intrusion Health Risks Evaluation at: <http://go.usa.gov/Yntd>

How is vapor intrusion discovered?

- A variety of samples are collected near a contaminated site first.
- If no contamination is found near a site, we know there is no possibility of vapors moving outward.
- If contamination is found near a site, depending on the type, the search may be widened to include samples closer to, or on your property.
- A summa canister (Figure 1) collects samples from outside air and indoor air for a determined period of time. A summa canister is approximately the size of a basketball.
- Also, samples are taken from under the home's foundation; these are called slab, or sub-slab samples.

What happens if a problem is found?

- The most common solution is to install a radon mitigation (reduction) system (Figure 2), also know as an active sub-slab depressurization system (SSDS). An SSDS essentially prevents vapors beneath a slab from entering a building or home.

What can I do to improve indoor air quality?

Consider these tips to improve indoor air quality in your home:

- Don't buy more chemicals than you need.
- Store unused chemicals in appropriate containers in well-ventilated areas.
- Don't make your home too air tight. Fresh air helps prevent chemical build-up and mold growth.
- Fix all leaks promptly, as well as other moisture problems that encourage mold.
- Check all appliances and fireplaces annually.
- Test your home for radon. Test kits are available at hardware and home improvement stores.
- Install carbon monoxide detectors.



The EPA is dedicated to providing you with timely and accurate information about our work. If you have any questions or concerns, please do not hesitate to contact us.

Information Links

Agency for Toxic Substance and Disease Registry (ATSDR) Vapor Intrusion Health Risks Information:
<http://go.usa.gov/Yntd>

EPA Vapor Intrusion Website:
<http://go.usa.gov/v5K>

EPA Superfund Vapor Intrusion FAQs:
<http://go.usa.gov/v57>

Chem Fab
<http://www.epa.gov/superfund/chemfab>

Figure 1



Summa Canister

Figure 2



Mitigation System

Contact Us!

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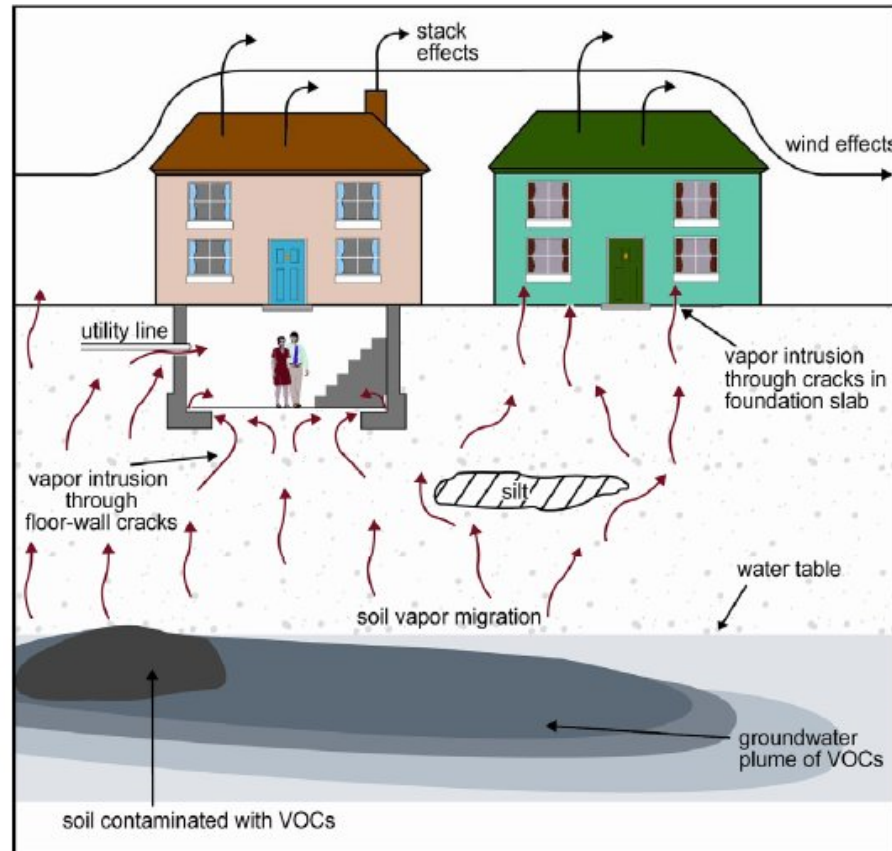
Superfund Hotline
1-800-424-9346

To learn more about the
Chem Fab Site, scan the QR
Code with your smartphone
or visit the website below:

[www.epa.gov/superfund/
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Chem Fab Superfund Site



Conceptual Diagram of Vapor Intrusion

U.S Environmental Protection Agency, Region 3
Serving Delaware, Maryland, Pennsylvania, Virginia, West Virginia, and the District Of Columbia

U.S. ENVIRONMENTAL PROTECTION AGENCY
Vapor Intrusion Information