

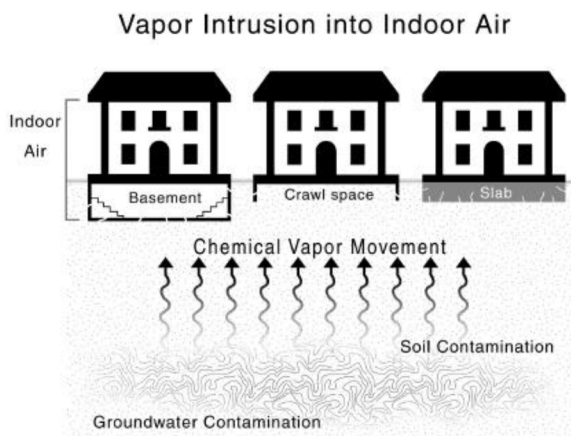


EPA's Vapor Intrusion Guide October 2015

This fact sheet provides basic information about the *OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* [OSWER Publication 9200.2-154, June 2015] (“the Guide”), which may be useful for EPA staff, state and tribal agencies, local governments and community organizations, environmental professionals, and persons without specific environmental knowledge and expertise.

What is vapor intrusion?

Vapor intrusion refers to the migration of chemical vapors from any underground source into structures (e.g., homes, businesses, schools).



Where and when is vapor intrusion a potential concern?

Vapor intrusion is a potential concern wherever buildings or other enclosed structures are located near an underground source of vapor-forming contamination. A wide variety of chemical contaminants can give off vapors, which can migrate towards and enter buildings or other enclosed structures as a component of a gas. Chemical contamination in the ground can arise from spills and releases above the ground surface, in addition to releases directly into the subsurface.

Why is vapor intrusion a potential concern?

Vapor intrusion is one of many potential ways that people may come into contact with hazardous vapors while performing their day-to-day indoor activities. Depending upon building- and site-specific circumstances, concentrations of chemical vapors arising in structures from vapor intrusion may threaten human health or safety. When human health or safety is threatened by vapor intrusion, response action is warranted.

Why did EPA publish this Guide for vapor intrusion assessment and mitigation?

EPA has statutory authority and responsibility to assess and, if warranted, mitigate vapor intrusion at hundreds of sites with subsurface contamination by vapor-forming chemicals. The Guide was published to promote national consistency and enhanced approaches in how the vapor intrusion pathway is addressed at contaminated sites within EPA's jurisdiction.

How does EPA have authority to address vapor intrusion?

The sources of EPA authority and requirements for addressing subsurface vapor intrusion are the relevant federal statutes and regulations, which include the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund law) as amended (“CERCLA”) and the corrective action provisions of the Resource Conservation and Recovery Act as amended (“RCRA”).

Where and when is EPA's vapor intrusion Guide to be used? Does it pertain only to contamination by chlorinated solvents?



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This Guide is intended for use at sites within EPA's jurisdiction that are being evaluated pursuant to CERCLA or RCRA corrective action, sites subject to EPA's brownfield grants, and certain federally operated facilities, where vapor intrusion may be of potential concern. The Guide pertains to all of the various vapor-forming chemicals that may occur as subsurface contaminants at these sites, which include many non-chlorinated compounds (petroleum hydrocarbons, for example) and compounds that are not used as solvents.

How does EPA's Guide differ from our 2002 draft guidance?

This Guide reflects recent scientific developments and additional EPA experience since our draft guidance was released in 2002, which have led to enhanced approaches for evaluating and managing vapor intrusion. These enhanced approaches include allowing more flexibility in the sequencing of subsurface and interior/indoor sample collection, allowing more flexibility in sampling durations and methods to take advantage of technical developments, describing specific methodologies for evaluating indoor air contamination arising from sources other than vapor intrusion, and using multiple lines of evidence in evaluating and making decisions about vapor intrusion. The Guide also describes response actions (including building mitigation options) for addressing vapor intrusion, and discusses when institutional controls are appropriate to address the vapor intrusion pathway.

How does EPA's Guide work with guidance prepared by other entities?

EPA's Guide reflects the current state of the science and is appropriate for its intended scope and purpose. EPA recommends that state agencies that have delegated authority to implement CERCLA or RCRA consider the Guide when implementing their state-specific guidance for vapor intrusion assessment and

mitigation, if any. EPA anticipates that some states, tribes, and local governments will find the Guide useful for their respective cleanup and land revitalization programs also.

How does EPA's Guide work with standards for real estate transactions?

EPA's Guide does not aim or intend to offer recommendations for vapor intrusion assessments that private parties choose to conduct as part of real estate transactions. Nor does this Guide modify existing EPA guidance regarding landowner liability protection (e.g., All Appropriate Inquiries, the *bona fide* prospective purchaser provision). On the other hand, EPA anticipates that private parties and environmental professionals will find EPA's Guide useful for understanding EPA's recommendations and expectations for assessment and cleanup.

On-line Resources

To obtain the Guide, please visit EPA's web site at:

<https://www.epa.gov/vaporintrusion/technical-guide-assessing-and-mitigating-vapor-intrusion-pathway-subsurface-vapor>

Additional information about EPA's cleanup and land revitalization programs and our authorizing statutes is available at:

<http://www2.epa.gov/aboutepa/about-office-solid-waste-and-emergency-response-oswer>

Additional information about assessing the likelihood of contamination on a property is available at:

<https://www.epa.gov/brownfields/brownfields-all-appropriate-inquiries>