



ITRC Vapor Intrusion Guidance

Vapor intrusion is the migration of volatile chemicals from the subsurface into overlying buildings and has become a significant environmental issue nationwide. ITRC's Vapor Intrusion Team—composed of experts from state and federal agencies, environmental consultants, and industry leaders—developed the following guidance documents and training courses:

- *Vapor Intrusion Pathway: A Practical Guide* (VI-1, January 2007)
- *Vapor Intrusion Pathway: Investigative Approaches for Typical Scenarios* (VI-1A, January 2007)
- *Vapor Intrusion Pathway: A Practical Guideline Internet Based Training* (IBT)
- *Vapor Intrusion Pathway: A Practical Guideline Two-Day Classroom Training Course*

The documents and training courses provide an overview of the vapor intrusion pathway and information on the evaluation process, investigative tools, and mitigation approaches. The training course uses typical scenarios to illustrate the process. Please see www.itrcweb.org for more information or to download free copies of the documents.

State Ownership: Building, Accepting and Using ITRC's Vapor Intrusion Products

The high number of states showing ownership of ITRC products indicates that ITRC has effectively educated state regulatory personnel on vapor intrusion across the country.



Highlights

More than 30 states report using ITRC's vapor intrusion guidance document in at least one of the following ways:

- As a basis to develop state guidance
- As a reference within state guidance
- As a tool to directly assist with site activities
- As a resource for state staff and consultants/contractors

ITRC has trained **more than 4,100 people** from across the nation on vapor intrusion (41% are state regulators)

Measures of Success

Maine used the ITRC vapor intrusion technical guidance to develop its vapor intrusion policy.



Arizona is using the ITRC vapor intrusion technical guidance within the state agency to evaluate vapor intrusion issues at sites.

Alabama incorporated the ITRC vapor intrusion technical guidance into its risk-based corrective action guidance manual.



Minnesota recently updated its state vapor intrusion guidance documents for remediation programs; the ITRC vapor intrusion technical guidance was listed as a primary citation in the state document for discussing developing conceptual site models for vapor intrusion, vapor intrusion remediation strategies, and the investigative process.

New Jersey's vapor intrusion guidance was developed prior to the release of the ITRC vapor intrusion technical guidance; however, the New Jersey Department of Environmental Protection (NJDEP) used a number of the ITRC vapor intrusion team members for input and review. Early drafts of the ITRC document were used to finalize the NJDEP vapor intrusion guidance. NJDEP regularly uses the ITRC technical guidance in its reviews of vapor intrusion investigations and remediation projects.



Vapor intrusion is a growing issue for the State of Wyoming as it develops its Orphan Site Program. The state attended the ITRC vapor intrusion training classes and will incorporate the ITRC guidance into the Orphan Site guidelines and procedures.

The New Hampshire Department of Environmental Services vapor intrusion guidance was modeled after the ITRC vapor intrusion technical guidance document which presents a multiple line of evidence approach to assessing the vapor intrusion pathway.



The Utah Department of Environmental Quality used the ITRC vapor intrusion technical guidance as a tool to assess vapor intrusion at a drycleaning site to identify and delineate a plume adjacent to a church and nearby residences. The ITRC guidance was used in reassessing the site and the information was useful for investigative steps.

Florida used the ITRC vapor intrusion technical guidance to establish a basis for a preliminary vapor intrusion study on drycleaning solvents.

