



United States
Environmental Protection
Agency

November 2002
EPA530-F-02-052
www.epa.gov/osw

Evaluating the Vapor Intrusion into Indoor Air

The Environmental Protection Agency (EPA) issues a draft guidance to help determine if the vapor intrusion exposure pathway poses a significant risk to human health.

Action

EPA issues a draft guidance that provides current technical and policy recommendations on determining if the vapor intrusion pathway poses an unacceptable risk to human health at cleanup sites. This guidance is not intended to provide recommendations for delineating extent of risk or eliminating risk.

The guidance is suggested for use at the Resource Conservation and Recovery Act (RCRA) Corrective Action sites, National Priorities List and Superfund Alternative sites and Brownfields sites, but is not recommended for use at Subtitle I Underground Storage Tank sites at this time.

EPA recommends that program implementers consider the use of this draft guidance as a screening approach in implementing the RCRA and CERCLA programs. Although the document is still in draft and EPA is requesting comment on it, it has gone through extensive agency review, and believe it is a technically sound product. While we hope to receive useful comments that will result in improvements when the draft is finalized, we believe the document in its current state provides the best guidance and information currently available on these issues. Implementers should remember, of course, that this document serves as guidance only and should not be construed in any fashion as mandatory.

Vapor intrusion is a rapidly developing field of science and policy. This draft guidance is intended to aid in evaluating the potential for human exposure from this pathway given the state-of-the-science at this time. EPA will continue to explore this area in efforts to improve the state-of-the-science of this complex exposure pathway. A workgroup of EPA and State representatives is currently being organized to evaluate this pathway over the next several years. As the state-of-the-science improves, this guidance will be revised as appropriate.

EPA and State site managers are encouraged to contact EPA's Office of Solid Waste to join the workgroup and/or provide the workgroup with relevant site information

that can be added to the Office of Solid Waste and Emergency database to facilitate these efforts.

Background

In December 2001, EPA issued the draft RCRA Environmental Indicator Supplemental Guidance for Evaluating the Vapor Intrusion Into Indoor Air Pathway. The current guidance replaces the 2001 document, but does not replace the State guidance.

Vapor intrusion is the migration of volatile chemicals from the subsurface into overlying buildings. Volatile chemicals in buried wastes and/or contaminated groundwater can emit vapors that may migrate through subsurface solid and into air spaces of overlying buildings.

In extreme cases, the vapors may accumulate in dwellings or occupied buildings to levels that may pose near-term safety hazards, acute health effects or aesthetic problems. In most cases, however, the chemical concentrations are low, or depending on site-specific conditions, vapors may not be present at detectable concentrations.

For More Information

This fact sheet, the *Federal Register* notice, and other documents related to this action are generally available on the Internet when the rule is published. See: <<http://www.epa.gov/correctiveaction/eis/vapor.htm>>. For additional information, contact the RCRA Call Center. Callers within the Washington Metropolitan Area must dial 703-412-9810 or TDD 703-412-3323 (hearing impaired). Long-distance callers may call 1-800-424-9346 or TDD 1-800-553-7672.