



EPA Issues Vapor Intrusion Guidance

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Vapor Intrusion (VI) is the migration of vapors from contamination in the ground into overlying buildings and structures. It's no secret that regulatory agencies have increased their focus on VI over the last decade. Moreover, under ASTM E1527-13, a Phase I Environmental Site Assessment must consider whether VI at the property being assessed could be a concern.

EPA recently released two technical guidance documents concerning assessment at sites where VI is a potential concern. The guidance documents are intended to promote national consistency, and it's expected that many states will either adopt or revise their own VI guidance documents to reflect EPA's approach.

The *Technical Guide for Addressing and Mitigating the Vapor Intrusion Pathway From Subsurface Vapor Sources to Indoor Air* is applicable to all sites being addressed under federal cleanup statutes. The document addresses assessments, sampling, exposure scenarios, risk assessments, mitigation and remediation. The *Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Sites* addresses VI related to petroleum contamination from USTs. These documents replace EPA's 2002 draft Vapor Intrusion Guidance. Note that EPA has included a Vapor Intrusion Screening Level calculator on its website which allows users to input certain parameters to determine whether a site "screens out" and is unlikely to pose a health concern from VI.

A notable change from EPA's 2002 Guidance is that EPA has abandoned its deference to OSHA indoor air levels in non-residential buildings. Now EPA claims broad authority to protect workers from indoor air contamination and indicates that its risk-based standards, as opposed to OSHA's permissible exposure limits, should be used in evaluating health risks to workers from VI in non-residential buildings. The guidance states that "EPA does not recommend using OSHA's PELs for purposes of assessing human health risks to workers" through VI.

Whether EPA can change OSHA's promulgated indoor air levels on its own may be subject to legal challenge.

What's the bottom line? Vapor Intrusion will continue to be a big issue at sites with volatile organic

compound contamination in the subsurface, such as solvents and petroleum. The guidance documents will likely increase the cost of due diligence, as more and more buyers of commercial property require VI assessments. Lawsuits are also more likely as VI risks come to light that were previously unknown.

Guidance documents: epa.gov/oswer/vaporintrusion.

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