



Carolina's

Environmental Consultants & Contractors

Vapor Intrusion

Bulletin March 2008

ASTM Issues New Standards for Assessment of Vapor Intrusion into Structures on Real Estate Property

Vapor Intrusion

Gas stations, dry cleaners, auto repair facilities are sources of possible vapor intrusion. While the presence of these facilities does not automatically mean that vapor intrusion is present, more lenders and renters are concerned with the effects of vapors on building occupants.

Indoor air quality can be tested through analysis or the risk can be assessed with the new ASTM standard "Standard Practice for the Assessment of Vapor Intrusion into Structures on Property Involved in Real Estate Transactions" (ASTM E-2600-08).

Vapor Intrusion has emerged as a significant environmental and liability issue for property owners, buyers, sellers, developers, and lenders of commercial real estate assets in recent years. The new standard defines good commercial and customary practices for conducting a Vapor Intrusion Assessment on properties that are the subject of a real estate transaction. ASTM E 2600-08 may be used as a supplement to the standard Phase I Environmental Site Assessment (ASTM E 1527-05) or as a standalone investigation.

Increased Liability Protections

Liabilities faced by parties legally or financially connected to properties with Vapor Intrusion issues extend beyond remedial obligations to a host of statutory and common laws, property diminution of value, claims, and toxic tort exposure lawsuits from on-site personnel.

A pro-active approach to Vapor Intrusion Assessments in a property transaction or in the management of a property will help mitigate and control exposures to liabilities and the material impact to a property's value. Understanding the potential for Vapor Intrusion at the front end of a new construction project or in the redevelopment of an urban infill site could positively or negatively impact the future of the project.

Four Tier Process

The new Vapor Intrusion standard requires a four-tier process that considers contaminate impacts to soil or groundwater and a means of entry into structures. The standard is conservative in nature as it presumes that a Vapor Intrusion Condition exists at a property until it can be affirmatively ruled out by an environmental professional.

- Tier 1-A site screened if a record search (ASTM E 1527-08) indicates that there are no sources of contamination within certain search distances.
- Tier 2-Site not ruled out in Tier 1, analysis of existing or new analytical data for soil and groundwater as compared to risk based concentrations.
- Tier 3-Vapor Intrusion not ruled out as a pathway in Tier 2, a Vapor Intrusion Investigation required following relevant regulatory agency guidance or requirements.
- Tier 4-Identify mitigation options based on risk. Can include institutional controls, engineering controls (source removal/treatment), and building designs (barriers and/or venting).

For more information, please contact: Nina G. Marshtein, P.G.
nmarshstein@scsengineers.com
www.scsengineers.com

For more information, visit www.scsengineers.com and click on: **ASTM E 2600-08 "Overview"** - a 20 minute presentation that provides greater detail on the benefits and requirements of the new Vapor Intrusion Standard.