



# ASTM's Vapor Intrusion Standard and Real Estate Transactions

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Vapor intrusion of contaminants into structures has become an issue of increasing concern. Given the number of petroleum impacted facilities alone in the State of Florida and the limited funds for assessment and cleanup, the concern of vapor intrusion is understood. Regulatory officials in Florida are giving this issue a closer look.

On March 1, 2008 ASTM International issued a new standard covering the assessment of vapor intrusion into structures involved in real estate transactions. The new standard includes existing and planned structures that chemical(s) of concern may migrate into as the result of a vapor intrusion condition. ASTM International says that this standard practice is a voluntary supplement to ASTM's E 1527-05 Standard Practice for Environmental Assessments.

A vapor intrusion condition is defined as "the presence or likely presence of any chemical(s) of concern in the indoor air environment of existing or planned structures on a property caused by the release of vapor from contaminated soil or groundwater either on the property or within close proximity to the property, at a concentration that presents or may present an unacceptable health risk to occupants". Chemical(s) of concern is defined as "a chemical in the subsurface environment that is known or reasonably expected to be present, that can potentially migrate as a vapor into an existing or planned structure on a property, and that is recognized as having the potential for an adverse impact on human health". Another critical term in this practice is potential vapor intrusion condition which is defined as "the potential for the presence or likely presence of any chemical(s) of concern in the indoor air environment of existing or planned structures on a property caused by the release of vapor from contaminated soil or groundwater either on the property or within close proximity to the property, at a concentration that presents or may present an unacceptable health risk to occupants".

The objective of the standard (ASTM E2600-08 Standard Practice for Assessment of Vapor Intrusion into Structures on Property Involved in Real Estate Transactions) is to establish a good and customary practice to perform a vapor intrusion assessment on a property involved in a real estate transaction. It was developed as a voluntary supplement to ASTM's E1527-05 Standard Practice for Environmental Assessments.

The million dollar question for consultants, legal experts, lenders and landowners alike is whether vapor intrusion is in fact a recognized environmental condition as defined by ASTM E 1527-05 The Standard Practice for Phase I Environmental Assessments. A recognized environmental condition is defined in ASTM 1527-05 as "the presence or likely presence of any hazardous substances or petroleum products on a target property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the target property or into the ground, groundwater, or surface water of the target property". However, indoor air quality is a non-scope consideration in ASTM E 1527-05 and ASTM E 2600-08. Regardless of how courts decide this issue, the health and safety of building occupants is the concern.

ASTM E 2600-08 provides for a tiered approach to perform a vapor intrusion assessment. The first two tiers are initial screenings used to determine if a potential vapor intrusion condition exists. Tier 3 is the process of confirming if a vapor intrusion condition exists, and Tier 4 is the preparation of mitigation alternatives.

FER personnel can perform a vapor intrusion assessment in accordance with ASTM E2600-08 Standard Practice for Assessment of Vapor Intrusion into Structures on Property Involved in Real Estate Transactions. Please contact one of our offices for information. ■