



Delaware Department of Natural Resources & Environmental Control  
Site Investigation and Restoration Branch  
Policy and Procedures

Subject: Policy concerning the investigation, risk determination and remediation for the Vapor Intrusion pathway

Issued: March 2007

---

The Department of Natural Resources and Environmental Control Division – Site Investigation and Restoration Branch (DNREC-SIRB) adopts this policy to provide guidance and consistency in the evaluation of vapor intrusion risk from investigation to remediation.

### **Definition of Vapor Intrusion**

Acute Exposure – Exposure to a chemical or situation for a short period of time. (EPA 2007).

Vapor Intrusion (VI)- is the migration of volatile chemicals from the subsurface into overlying buildings. Volatile chemicals may include volatile organic compounds, select semi-volatile organic compounds and some inorganic analytes such as mercury and hydrogen sulfide. Methane should be considered where it is appropriate (ITRC 2007).

Preferential Pathway- An increased component of soil gas flow into a building due to natural conditions (gravel, etc.) or manmade conditions (utility corridors, sumps, drains, pits or elevator shafts, etc.) The presence of any of these does not necessarily indicate that a preferential pathway exists. (ITRC 2007)-

Chemicals of Potential Concern (COPC) - Chemicals that are potentially site-related and whose data are of sufficient quality for use in the quantitative risk assessment (EPA Risk Assessment Guidance for Superfund, Vol. I Part A, 1989).

Contaminants of Concern (COC) - chemicals or contaminants determined to be present at the site in sufficient concentrations to present a health risk (HSCA Guidance 1994).

Remedial Action – the containment, contaminant mass or toxicity reduction, isolation, treatment, removal, cleanup, or monitoring of hazardous substances released into the environment, or the taking of such other actions as may be necessary to prevent, minimize, or mitigate harm, or risk of harm to the public health, welfare, or the

