Friday, January 13, 2012

Comments: DRAFT Vapor Intrusion Assessment Work Plan Cabot Carbon/Koppers Superfund Site (November 30, 2011)

Pat Cline, TA; Protect Gainesville's Citizens

First, the efforts to evaluate this pathway, including the support of this effort by EPA, are appreciated. I realize the uncertainties and complexities of this type of evaluation, and the overall goal is to identify if some adjustments to ventilation systems may be advisable.

The literature on times for sampling can be complex.

- Concentrations of VOCs in the sub-slab samples may be higher during warmer seasons (July/August).
- It is generally recommended to sample during colder weather when the heating systems are on. This may not result in higher VOC concentrations, but would impact the differential pressures. Testing this pressure during the summers will likely not accurately identify potential flux into the building during the more conservative times when buildings are heated and not air conditioned.
- This is a factor to be considered in the conceptual model and interpretation of results. The frequency of the use of heating versus air conditioning (if these tend to reverse the potential flux) in this warmer climate zone may tend to reduce the overall frequencies of potential exposures.

There are potential elevated levels of organic materials beneath these buildings, and methane may be generated. The screening for methane is considered important at this site, not as much for toxicity as potential to impact overall advective flux. In this specific instance, sampling during the summers may in fact show an impact on differential pressures if methane is being generated.

There are many factors that influence the levels of VOCs and migration including soil moisture, depth to the water table, organic carbon content, etc. It is unclear if there is sufficient information currently available. If not, a boring to the water table (possibly immediately adjacent to the Winn-Dixie/Harbor Freight area) would provide a clearer understanding of the subsurface profile beneath the buildings.

The longer sampling interval recommended by EPA is appropriate for these samples and the reporting of the complete VOC list is also important.

Thank you for the opportunity to provide comments, and I look forward to seeing the results of this evaluation.