Special Seminar & Networking Opportunity
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In Partnership with NCEH/ATSDR

Characterizing Vapor Intrusion Exposures: Model Predictions and Field Observations

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Seminar: 10 – 11:30 am
Building 106 Rooms 1A/1B

Networking Lunch: 11:30 am- 1 pm
Building 106 Cafeteria

Centers for Disease Control & Prevention
Chamblee Campus
4770 Buford Highway NE
Atlanta, GA 30341-3717

The problem of vapor intrusion has been studied for decades (beginning with radon in the 1970s), but remains difficult for public health professionals to assess and manage. Characterization of vapor intrusion risks typically involves the collection of indoor air samples from affected buildings, and may also include sampling soil gas around and/or beneath the building of concern. Interpretation of field data and the assessment of vapor intrusion risks is widely recognized as challenging because concentrations in neighboring structures can vary dramatically and inconsistencies between expected versus measured results are commonly encountered.

To better understand vapor intrusion processes, a three-dimensional numerical model was developed to evaluate potentially important factors that might affect vapor intrusion risks. For instance, the model has been used to predict the effect of various site features and indicate where critical field data needs exist. This presentation will present a summary of knowledge gained through three-dimensional modeling efforts and will connect these results with field study data being collected at a vapor intrusion site near Boston, MA. The field study is in its preliminary stages; however the approach and initial sampling results offer insight about how to enhance vapor intrusion characterization efforts.

Dr. Pennell co-leads a long-term research project funded by the Superfund Research Program, NIEHS: *Low Concentration Vapor Exposures in Complex Systems and the Problem of Vapor Intrusion.* She also co-leads the Brown University SRP Research Translation Core (http://brown.edu/Research/SRP/). **She is happy to discuss ways in which the Brown SRP can collaborate with ATSDR, NCEH, and CDC at** <u>NO cost to us</u>.