



# Vapor Intrusion: EPA HQ: Update & Status

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**Federal Remediation Technologies Roundtable  
2009 Meeting  
November 10, 2009**

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Technology Innovation



# Recent EPA Products

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- National Forum on Vapor Intrusion
  - Held January 2009 in Philadelphia
  - <http://www.epa.gov/osp/hstl/stlworkshops.htm>
- Engineering Issue: Indoor Air Vapor Intrusion Mitigation Approaches (EPA/600/R-08/115)
  - <http://www.epa.gov/ORD/NRMRL/pubs/600r08115/600r08115.pdf>
- Operational and Functional Determination and the Transfer of Fund Lead Vapor Intrusion Mitigation Systems to the State
  - <http://www.epa.gov/superfund/cleanup/postconstruction/operate.htm>



# VI Products in Development

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- Vapor Intrusion Database
- Background Levels of Contaminant Vapors
- Conceptual Site Model
- Draft TCE Toxicity Values for Risk Assessment and the Vapor Intrusion Pathway
- Policy for Vapor Intrusion in Non-Residential Settings
- Vapor Intrusion FAQs
- Vapor Intrusion Roadmap
- OIG Recommendations



# Vapor Intrusion Database

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- Draft spreadsheet database of paired observations: groundwater-, soil gas-, subslab-, and crawlspace-to-indoor air
  - EPA VIF Reviewed
  - External Peer Review - Summer 2009
  - Regional Review Fall - 2009
  - Public Release - Spring 2010 (March?)



# Background Levels of Contaminant Vapors

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- Compilation of background indoor air concentrations in residential buildings for consideration when interpreting vapor intrusion data.
  - VIF Review - Winter 2008/2009
  - External Peer Review - Summer 2009
  - Regional Review - Fall 2009
  - Public Release - Spring 2010 (March?)



# Conceptual Site Model

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- Theoretical overview of vapor intrusion processes and pathways under various scenarios
  - VIF Review - Winter 2008/2009
  - External Peer Review - Summer 2009
  - Regional Review - Fall 2009
  - Public Release Spring - 2010 (March?)



# Draft TCE Toxicity Values for Risk Assessment and the Vapor Intrusion Pathway

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- Primarily focused on California EPA and New York State Dept of Health
  - Signed 1/15/2009, withdrawn later
  - Cancer tox values in Regional Screening Level Tables (RSL)
  - Non-cancer values planned for inclusion in RSL
  - Planned re-issue without VI component
- Breaking News: Draft TCE Reassessment released Nov. 3
  - Cancer SSL: 0.6 ug/m<sup>3</sup> (IUR 4E-06 per ug/m<sup>3</sup>)
  - Non-Cancer: 5 ug/m<sup>3</sup> (RfC of 5 ug/m<sup>3</sup>)



# Policy for VI in Non-Residential Settings

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- Provide guidance to EPA personnel in determining when to address potential vapor intrusion (investigations) in non-residential settings
  - Completed DoD & OSHA review
  - OSWER AA Signature – Spring 2010 (?)





# Vapor Intrusion FAQs

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- Regional & HQ workgroup developed VI FAQs to support RPMs
  - Approximately 55 FAQs
  - Internal Review (OGC, targeted RPMs) – June 2009
  - Regional Review – Fall 2009



# Vapor Intrusion Roadmap

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- Document to affirm the applicable portions of the 2002 VI Guidance along with technical updates and complimentary OSWER VI products



# OIG VI Investigation

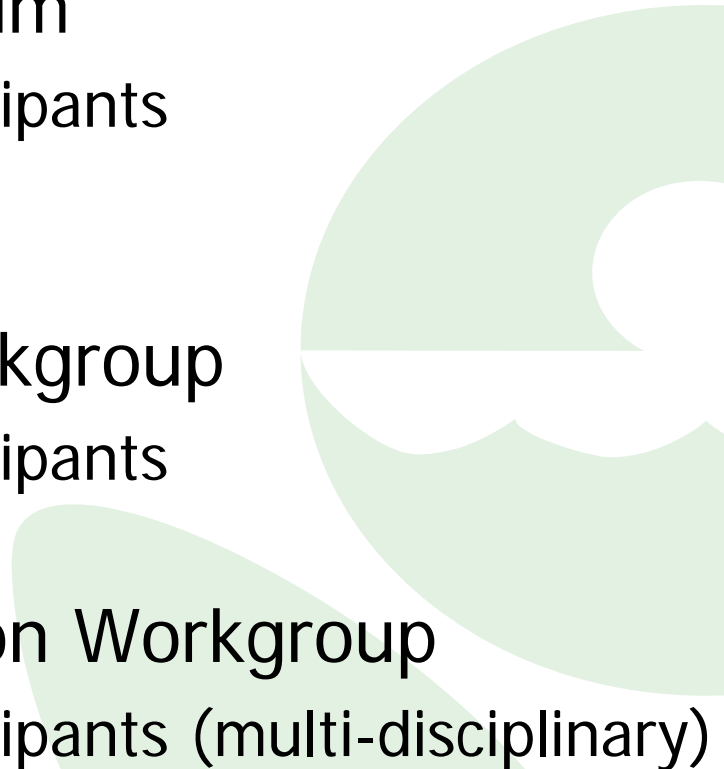
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- Interviewed HQ & Regional Offices
  - Program strategy, inventories, technical
- Draft Report to EPA - July 2009
- EPA Response - October 2009
  - Recommendation #1 by Summer 2010
  - Recommendation #2 by Fall 2012



# Vapor Intrusion Workgroups

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- Vapor Intrusion Forum
    - Regional & HQ participants (multi-disciplinary)
  - VI Enforcement Workgroup
    - Regional & HQ Participants
  - ORCR Vapor Intrusion Workgroup
    - Regional & HQ participants (multi-disciplinary)
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# EPA HQ Contact

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