

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER:)
)
PROPOSED AMENDMENTS TO) R09-9
TIERED APPROACH TO CORRECTIVE) (Rulemaking-Land)
ACTION OBJECTIVES)
(35 Ill. Adm. Code 742))
)

Pre-filed Questions for March 2009 Hearing

Raymond T. Reott hereby submits the following additional pre-filed questions to be addressed in the course of the scheduled March 2009 hearing.

Questions for Illinois EPA Witnesses

1. Which studies or data, if any, submitted to the Board correlate the proposed predicted indoor concentrations in the Johnson & Ettinger model to actual indoor air sampling? Of those studies, which correlate the proposed model to actual indoor sampling at sites in Illinois?
2. Why should depth to contamination matter for the outdoor inhalation pathway where the outdoor inhalation pathway for contamination deeper than 10 feet is excluded based upon 10 feet of any overlying clean soil, even sand, 35 Ill. Admin. Code 742 §1105(c)(3)(C)(iii), but not matter in Tier 1 for the proposed indoor inhalation pathway?
3. What are the assumptions used in the Johnson & Ettinger model?
4. Which of the assumptions in the Johnson & Ettinger model have the highest sensitivity in terms of the values proposed by the agency in its Tier 1 Table G?
5. What is the basis for believing that the chosen assumptions reflect representative Illinois conditions for the various parameters?
6. Is the default porosity value chosen for the model for Tier 1 representative of typical Illinois soil conditions? Is the FOC value selected as a default condition in the proposed model for Tier 1 representative of typical Illinois soil conditions? (Illinois EPA's Proposed Amendments, 35 Ill. Admin. Code §742, Appendix C, Table M)

7. Did the agency review any of the articles critical of the cumulative conservative assumptions of the Johnson & Ettinger model such as those published by USEPA? (See USEPA, Sept. 2005, J. Weaver and F. Tillman, Uncertainty and the Johnson-Ettinger Model for Vapor Intrusion Calculations; USEPA, Sept. 2005, F. Tillman and J. Weaver, Review of Recent Research on Vapor Intrusion). If so, why are those criticisms not appropriate to consider as the Board evaluates whether to adopt regulatory standards based on the Johnson & Ettinger model?
8. Why is Illinois EPA proposing to apply the Johnson & Ettinger model to Illinois LUST sites when USEPA recommends against its use for LUST sites?
9. Why is Illinois proposing to use the Johnson & Ettinger model in other contexts where USEPA does not recommend its use such as sites with buried pipelines where significant lateral flow of vapors occurs and sites with very shallow groundwater where the groundwater wets the building foundation? (USEPA's User Guide for Evaluating Subsurface Vapor Intrusion into Buildings, Feb. 22, 2004, p. 69-70).
10. What is the effect on the Tier 1 values in Table G of assuming that the default building has a basement rather than slab on grade construction?
11. Did Illinois EPA review any studies of typical building size in Illinois before choosing the assumed dimensions in the proposed rule?

Pre-Filed Questions for Geokinetics

12. What is the relative cost of using a 60 mil vapor barrier at typical sites compared to the 6 and 10 mil barriers referenced in the proposed rule and your testimony?
13. What is Geokinetics experience with testing indoor air quality for contaminants for vapors from subslab soil and/or groundwater contamination? Would a system of interior air quality standards (as suggested by Versar in its February 24, 2009 comment letter) be workable in Illinois?
14. Has Geokinetics ever compared its indoor air monitoring quality data to the predicted values from the Johnson and Ettinger Model?
15. Does Geokinetics have any experience with the costs of the various Building Control Technologies referenced in the proposed rule?

Respectively submitted,

Reott Law Offices, LLC

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Certificate of Service

I, Raymond T. Reott, certify that I electronically filed a copy of the Pre-filed Questions for March 2009 Hearing with the Illinois Pollution Control Board on March 4, 2009 and served it on the electronic service list:

/s/ Raymond T. Reott

Raymond T. Reott