

ILLINOIS POLLUTION CONTROL BOARD  
May 20, 2011

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STATE OF ILLINOIS  
Pollution Control Board

IN THE MATTER OF: )  
)  
TIERED APPROACH TO CORRECTIVE ) R11-9  
ACTION OBJECTIVES (TACO) (INDOOR ) (Rulemaking - Land)  
INHALATION): AMENDMENTS TO 35 ILL.)  
ADM. CODE 742 )

**HEARING OFFICER ORDER**

On November 9, 2010, the Illinois Environmental Protection Agency (IEPA) filed a rulemaking proposal to amend the Board's rules concerning the Tiered Approach to Corrective Action Objectives (TACO) (35 Ill. Adm. Code 742). IEPA proposes to add the indoor inhalation exposure route to TACO's risk-based methodology.

In this rulemaking, the first of two scheduled hearings was held in Springfield on March 29, 2011. The second hearing will be held in Chicago at 9:00 a.m. on May 24, 2011, and if business remains at the end that day, will continue at 9:00 a.m. on May 25, 2011. IEPA timely filed its prefiled testimony for the second hearing, as did the Site Remediation Advisory Committee (SRAC). The deadline for participants to prefile questions for the witnesses of IEPA and SRAC was May 12, 2011, but the Board received no prefiled questions.

Attached to this order are Board staff questions for the witnesses of IEPA and SRAC. These questions will be taken up at the second hearing. Given the fast-approaching second hearing, IEPA and SRAC are not required to present written responses to the attached questions before or at hearing. The hearing officer will of course provide opportunities for other participants attending the hearing to pose questions to these witnesses.

IT IS SO ORDERED.



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**ATTACHMENT TO HEARING OFFICER ORDER**

**May 20, 2011**

**Board Staff Questions for Second Hearing**

*Docket R11-9, Tiered Approach to Corrective Action Objectives (TACO)  
(Indoor Inhalation): Amendments to 35 Ill. Adm. Code 742*

**QUESTIONS FOR THE WITNESSES OF  
THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (IEPA)**

**Questions Based Upon United States Environmental Protection Agency (USEPA) Letter of  
8/12/10 to IEPA**

1. Please respond to the following questions posed in USEPA's August 10, 2010 letter to IEPA, attached as Exhibit 2 to the prefiled supplemental testimony of Gary King:
  - a. "In those cases where TACO cannot be applied due to the free product, won't IL EPA need to develop some guidance for data collection (i.e., soil gas, sub-slab soil gas, indoor air) to evaluate the potential vapor intrusion problem above free product if dwellings and buildings are already present?" Supp. PFT King, Exh. 2 at 4.
  - b. "[I]f the TACO procedure (and the J&E [Johnson & Ettinger] Model) cannot be applied in the free product situation, how would RO [remediation objective] values be established?" Supp. PFT King, Exh. 2. at 4.
  - c. "For a situation where contaminated vapors need to be addressed for off-site residential dwellings, how will an owner be capable of imposing a distance exclusion of 5 feet for soil and groundwater or the requirement for BCT [building control technology] on a residential land owner?" Supp. PFT King, Exh. 2 at 6.
2. In a footnote of USEPA's August 10, 2010 letter to IEPA, USEPA states that "OSWER [USEPA's Office of Solid Waste and Emergency Response] is committed to issuing the final VI [vapor intrusion] guidance by November 30, 2012. When this guidance becomes available, it is suggested that IL EPA could screen sites based on default empirical attenuation factors rather than relying solely on the J&E Model." Supp. PFT King, Exh. 2 at 6, n.1.
  - a. Conceptually, when "screen[ing] sites," what are the differences between doing so "based on default empirical attenuation factors" as opposed to "relying solely on the J&E Model"?
  - b. Would adding such "default empirical attenuation factors" to TACO in the future necessitate fundamental changes to the VI approach being proposed by IEPA in this rulemaking?

**Questions on Section 742.105, Applicability**

1. IEPA modifies its original proposal to “express[] more clearly” that “[n]either the building structure nor products within the building will be evaluated under the vapor intrusion pathway.” Supp. PFT, Nifong at 3. Specifically, IEPA’s Errata Sheet No. 2 now proposes that Section 742.105(i) read as follows: “An evaluation of the indoor inhalation exposure route under this Part addresses the potential of contaminants present in soil gas and groundwater to reach human receptors. It does not evaluate whether contamination within a building, either in the building structure itself or in products within the building, may be creating human health risks.” Errata No. 2 at 1. Please clarify whether contamination “in the building structure itself or in products within the building” would nevertheless be evaluated to establish background levels when sampling indoor air under Tier 3.

**Question on Section 742.935, Indoor Inhalation Exposure Route**

1. Regarding the proposed change to Sections 742.935(b)(3), (c)(3), and (d)(3) in Errata Sheet No. 2, should the phrase “soil parameters” simply be added to IEPA’s originally proposed language rather than replacing the phrase “soil types”? Errata No. 2 at 3.

**Question on a Cost Information Exhibit**

1. Exhibit 2 to the prefiled supplemental testimony of Heather Nifong is entitled “Costs Associated with Soil Vapor Investigations, Illinois Environmental Protection Agency.” Supp. PFT, Nifong, Exh. 2. On page 2 of Exhibit 2 under “Site 2,” the last sentence of the first paragraph states that “[t]he driver for this site was alleged orders.” *Id.* at 2. Should the final word read “odors”?

**Questions on Maintenance Requirements for BCT**

1. IEPA explains that it has “developed maintenance requirements for each of the four building control technologies allowed under Subpart L.” Supp. PFT, Nifong at 3. IEPA attached those requirements and states that they “would be used, as appropriate, in future No Further Remediation [NFR] letters issued by Illinois EPA.” *Id.* For each of the four BCT, the corresponding NFR maintenance requirement states, among other things, that “[i]f at any time the [given BCT] is rendered inoperable, the responsible party shall notify building occupants and workers in advance of intrusive activities, enumerating the contaminants of concern known to be present, and shall require building occupants and workers to implement protective measures consistent with good industrial hygiene practice.” Supp. PFT, Nifong, Exh. 5 at 1.
  - a. (i) Would BCT inoperability as contemplated here and in proposed Section 742.1200(e) cover both unplanned (*e.g.*, malfunction) and planned inoperability? (ii) What is contemplated by “intrusive activities”?

- b. Please compare IEPA's proposed approach with that of existing 35 Ill. Adm. Code 742.1100(d) on engineered barriers. For example, the former refers to "building occupants and workers" while the latter refers to "construction workers."
- c. (i) Upon a BCT becoming inoperable, should the responsible party also be required to notify IEPA? (ii) If so, should that notification requirement be in the NFR letter or the regulation (TACO or underlying programs), or both? (iii) Please discuss any similar notification requirements imposed under TACO or the underlying programs (*e.g.*, Leaking Underground Storage Tank Program, Site Remediation Program).

**QUESTIONS FOR THE WITNESS OF  
THE SITE REMEDIATION ADVISORY COMMITTEE (SRAC)**

**Questions on Indoor Air Sampling**

1. SRAC states that "[i]ndoor air sampling should not be required unless there is an established exposure pathway from the source to the Indoor Inhalation exposure route," adding that "[m]andatory indoor air sampling without establishing a completed pathway would be a technical leap that assumes a complete pathway in the absence of data." Supp. PFT, Martin at 4.
  - a. Please elaborate upon when indoor air sampling should be "required."
  - b. Please explain what is meant by a "completed pathway" and describe how one would be established?