BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	R11-9
PROPOSED AMENDMENTS TO)	(Rulemaking-Land)
TIERED APPROACH TO CORRECTIVE)	
ACTION OBJECTIVES (TACO))	
(INDOOR INHALATION))	
(35 Ill. Adm. Code 742))	
)	

NOTICE

Clerk

Illinois Pollution Control Board James R. Thompson Center 100 W. Randolph, Suite 11-500 Chicago, Illinois 60601 (Via Federal Express)

Matthew J. Dunn, Chief Environmental Enforcement/Asbestos Litigation Division Illinois Attorney General's Office 500 South Second Street Springfield, Illinois 62706 (Via First Class Mail)

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Richard McGill Hearing Officer Illinois Pollution Control Board 100 W. Randolph, Suite 11-500 Chicago, Illinois 60601 (Via Federal Express)

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the Illinois Environmental Protection Agency's ("Illinois EPA") Comments to Proposed Second Notice Opinion and Order, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Kimberly A. Geving

Assistant Counsel

Division of Legal Counsel

DATE: January 30, 2013

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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)	

Illinois EPA's Comments to Proposed Second Notice Opinion and Order

NOW COMES the Illinois Environmental Protection Agency ("Illinois EPA"), by one of its attorneys, Kimberly A. Geving, and pursuant to 35 Ill. Adm. Code 102.108 submits these Comments in response to the Proposed Second Notice Opinion and Order of the Illinois Pollution Control Board ("Board"), dated January 10, 2013.

In its January 10, 2013 order, the Board proposed several substantive changes to the indoor inhalation amendments as they were originally proposed by the Illinois EPA and requested public comments on a number of issues. The Illinois EPA, by way of these comments, will provide its position and justification on those issues that it believes are critical to the proposal.

I. The 100-Foot Source-Building Horizontal Separation Distance Issue

The Illinois EPA respectfully requests that the Board revise its Proposed Second Notice Opinion and Order by removing the 100-foot source-building horizontal distance separation required for pathway exclusion under Section 742.312(b)(1)(A) and for use of remediation objectives under Tiers 1 and 2. The lateral distance requirement may have been a well-intentioned effort by the Board to ensure health protectiveness of the remedy, but in effect,

¹ Sections affected include 742.500(c)(1), 742.505(b)(2)(C) and (D), 742.505(c)(5)(B) and (C), 742.515(a)(1), 742.600(l)(1), 742.700(e)(1), 742.805(e)(1), footnote i of 742.Appendix B.Table H, footnote i of 742.Appendix B.Table I, and footnote a of 742.Appendix C.Table L.

the requirement for an additional "setback" is superfluous, misapplied, lacks scientific basis, and is a threat to the economic reasonableness of this proposal. The reasons for the Illinois EPA's objection to the 100-foot separation distance are the same for both pathway exclusion and the use of remediation objectives under Tiers 1 and 2, so our comments below apply equally to both scenarios.

A. The 100-Foot Separation Distance Undermines the Legitimacy of Site

Characterization

In both Section 742.120 and Section 742.300(b), the regulations are clear: characterization of the extent and concentrations of the contaminants of concern must be performed before pathway exclusion or remediation objectives may be applied. Such characterization is a critical step in the overall TACO process, and Sections 742.225, 742.227, and 742.305 do describe certain site characterization requirements, but the rules for sample locations, sampling frequency and compliance demonstrations are all managed by the individual cleanup programs.

The Site Remediation Program ("SRP") regulations require that the phase II assessment determine the nature, concentration, direction and rate of movement, and extent of the contaminants of concern (740.420(b) and 740.430(d)) prior to developing remediation objectives for a site. The Leaking Underground Storage Tank ("Leaking UST") Program regulations at 35 Ill. Adm. Code 734. Subpart C require a site investigation to define the extent of contamination resulting from the UST release; submittal of a site investigation completion report that includes, in part, information regarding existing and potential migration pathways and exposure routes; and submittal of a corrective action plan designed to mitigate any threat to human health, human

safety, or the environment and addressing all media impacted by the UST release (35 Ill. Adm. Code 734.335).

Under these two programs, site evaluators are required to delineate the extent of contamination. This means that the area of the contamination is known from actual data and modeled data – not just the contaminant source area, but all the way to the edge of the contaminant plume. The horizontal separation distance proposed by the Board extends the area of contamination by 100 feet in all directions without any technical justification and does not provide any additional protection to human health and the environment.

B. <u>USEPA Applies 100-Foot Separation Distance as Screening Tool and</u>
Recommends Professional Judgment

USEPA's Draft Guidance is notably outdated and a long-anticipated revision has been delayed in large part due to emerging scientific studies and new empirical data that complicate previously accepted ideas. The more recent Region 5 USEPA Vapor Intrusion Guidebook (October 2010 USEPA Region 5 Vapor Intrusion Guide Book, Author: USEPA.

http://www.clu-in.org/issues/default.focus/sec/Vapor_Intrusion/cat/Policy_and_Guidance/) uses the 100-foot separation only in the context of an initial screening distance not taking into account the site specific circumstances (geology, depth to impacts, contaminants of concern, etc.). The USEPA Vapor Intrusion Guidebook stresses the multiple lines of evidence approach, which is supported by defining the extent of impacts, groundwater flow direction, site specific geologic data and observations at the site (i.e., actual data). Even the 2002 USEPA Draft Guidance recommends this approach when it states on page 16 that, "The distance suggested above (100 feet) may not be appropriate for all sites (or contaminants) and, consequently, we recommend

that professional judgment be used when evaluating the potential for vertical and horizontal vapor migration."

Under the SRP and Leaking UST Program regulations, cleanup program participants are required to define the extent of the impacts (complete site characterization) and, in doing so, evaluate the geology prior to excluding any pathway or evaluating remediation objectives. With a complete site characterization, professional judgments can be made as to the risk posed by the vapor intrusion route and what properties and receptors are affected. Requiring a 100-foot separation distance to achieve compliance as proposed by the Board is inconsistent with USEPA's approach and should be removed.

C. Michigan and Wisconsin Use 100-Foot Separation Distance as Screening Tool

The Board stated in its Proposed Second Notice Opinion and Order² that the use of a 100-foot separation distance is supported by Michigan and Wisconsin (Op. at 32). While Michigan and Wisconsin do recommend a 100-foot separation distance between buildings and contamination for screening purposes, neither state imposes a 100-foot setback on final decisions regarding the protectiveness of the remedy.

Michigan's "Guidance Document for the Vapor Intrusion Pathway," May 2012 Draft,
Section 3.2.2 states, "The purpose of a VI receptor survey is to document the location of current
or possible future receptors within a 100 foot radius from vapor sources (Section 3.2.1) defined
as the preliminary screening area." Section 4.1 of the guidance document states, "The number of
soil gas samples needed and the overall investigation strategies for a soil gas investigation will
depend upon the geometry (i.e., shape and extent) of vapor sources, the location of receptors, and
the size and complexity of the site, as well as the specific program requirements for which the

² Hereafter cited to as "(Op. at)."

soil gas investigation is being completed." Michigan applies the 100-foot radius as a screening tool only and relies on analytical data from soil gas samples to confirm the location of current and potential receptors. Nowhere in the document does Michigan use the 100-foot radius guideline as either a compliance point or as an institutional control.

Wisconsin's guidance document, "Addressing Vapor Intrusion at Remediation & Redevelopment Sites in Wisconsin (RR-800)," dated July 2012, states in Section IV, "Vapor intrusion 'pathway screening' is used to determine whether or not the potential for vapor intrusion exists on or off a contaminated property. If screening indicates the possible existence of a vapor pathway, the next step is to conduct an appropriate site investigation of the pathway(s)." Wisconsin defines the screening criteria as: any buildings overlying a source; any buildings within 100 feet; any buildings overlying a chlorinated volatile organic chemical ("CVOC") groundwater plume; or CVOC vapors that have the potential to enter preferential pathways into the building. The guidance document also states, "If vapor intrusion pathway screening indicates the potential for vapor intrusion, a plan for site specific vapor sampling should be developed." As in the Michigan document, Wisconsin's guidance uses the 100-foot separation distance as a screening tool only, not for purposes of achieving compliance.

D. No Scientific Basis Exists for Imposing a 100-Foot Setback at All Sites

The horizontal separation distance seems to imply that soil gas migrates laterally, akin to the fate and transport model used in RBCA equation R26, located in 35 Ill. Adm. Code 742. Appendix C, Table C, to predict groundwater movement for the groundwater ingestion exposure route. However, lateral migration of contaminants in soil gas has not been shown in the current research by USEPA. In January 2013, USEPA's Office of Underground Storage Tanks published the results of a database study in which a key finding is the use of *vertical*

separation distances as a screening tool for dissolved sources and free-phase sources at petroleum hydrocarbon-contaminated sites. Recommending a *lateral* separation distance was beyond the scope of the report because of the uncertainty associated with delineating a petroleum hydrocarbon source near existing or future buildings (pages 62-63). See *Evaluation of Empirical Data to Support Soil Vapor Intrusion Screening Criteria for Petroleum Hydrocarbon Compounds* (EPA 510-R-13-001).

The Board noted in its Proposed Second Notice Opinion and Order that USEPA's 2002

Draft Guidance cites empirical data from Colorado confirming no significant indoor air

concentrations in residences greater than one house lot, a distance presumed to be approximately

100 feet (Op. at 31). Colorado selected 100 feet not based on multi-site comparative analyses of
soil gas and groundwater data, but because that distance marks a convenient legal property

boundary. There is no scientific justification to extrapolate this finding to support a 100-foot
setback distance in Illinois.

E. <u>Indiscriminate Use of 100-Foot Separation Distance Contradicts TACO</u>

Imposing a one-size-fits-all additional 100-foot radius to the known extent of contamination would repudiate the intent of 35 Ill. Adm. Code 742, which is to allow site-specific decisions to remedy, manage and control environmental risk while assuring human health protection. As stated in Section 742.100, "The purpose of these procedures is to provide for the adequate protection of human health and the environment based on the risks to human health posed by environmental conditions while incorporating site related information."

F. 100-Foot Separation Distance Compromises the Economic Reasonableness of the Indoor Inhalation Pathway Proposal

Implementation of the separation distance requirement as proposed by the Board would have widespread economic consequences, affecting cleanup program participants, site owners, off-site property owners, potential developers, state and local transportation agencies and Illinois EPA. Five specific negative impacts are identified below, but this list is by no means exhaustive.

i. Many additional environmental land use controls (ELUCs) and highway authority agreements (HAAs) would be required.

ELUCs and HAAs would have to be secured for off-site properties located within the 100-foot setback, even though the site characterization results show no measured or modeled contamination in those areas. For example, if a leaking UST site measures 100 feet x 100 feet, the use of Tier 1 or Tier 2 or, less commonly, pathway exclusion under 742.312(b)(1)(A) would require institutional controls at four off-site properties and/or roadways as a result of any on-site soil gas remediation objective exceedence, no matter how minor.

ii. The additional resources needed to secure new ELUCs and HAAs would be onerous to cleanup program participants, off-site property owners, transportation agencies, and the Illinois EPA.

From a review of randomly selected leaking UST sites at which ELUCs were used as institutional controls, Illinois EPA has determined that the costs of the personnel hours billed to the UST Fund to secure and record each ELUC ranged from \$1000 to \$5000. These amounts understate the costs incurred by UST owners or operators because legal fees are not payable from the UST Fund and, therefore, are not known to the Illinois EPA. In addition, an off-site property owner oftentimes requests payment from the UST owner or operator in consideration for entering into an agreement (so-called settlement costs). The Illinois EPA has no knowledge

of the details of these third-party transactions but suspects the amounts involved cover a wide range and are well into the tens of thousands of dollars per off-site property.

Moreover, securing off-site institutional controls greatly increases the amount of time required to obtain a No Further Remediation ("NFR") Letter. Such lengthy delays may disrupt and even result in abandonment of plans for property transactions or site redevelopment. Even at the scale at which the Illinois EPA is operating now, the process is complicated. Once the site investigation and characterization are complete, the cleanup program participant begins by identifying the impacted off-site property owners. Identification of a highway authority requires little effort, as the authority is generally limited to the City, the County, or the Illinois Department of Transportation (IDOT). However, identifying private property owners can be problematic and requires searches of the county recorder's and tax assessor's records. Once identified, the cleanup program participant must then make contact with these off-site property owners, who may reside out of state or out of country. Further, ownership of the off-site property may be encased in a trust or sophisticated investment vehicle requiring negotiators to navigate multiple layers of management before finding the person with the appropriate legal authority to accept an ELUC. Face-to-face negotiations in these instances may also incur considerable travel expenses. Review time of HAAs varies considerably, but some IDOT HAA reviews have taken as long as three years for final approval. Once an ELUC agreement or HAA is reached, the environmental consultant for the cleanup program participant still has additional drafting, reporting, and recording costs.

If the 100-foot separation distance is required, the Illinois EPA believes the Leaking UST Program would come to a standstill; that is, closures would drop drastically. This is because every UST owner or operator relying on pathway exclusion under 742.312(b)(1)(A) or

remediation objectives under Tier 1 or 2 would be affected by the 100-foot setback and struggle to comply with the imposition of multiple institutional controls. Such a significant decline in site closures would affect Illinois EPA's cooperative agreement with USEPA that covers administrative costs to run the Leaking UST Program in Illinois. Over the past several years, the Leaking UST Program has met or exceeded its commitment to the USEPA, averaging 850 closures annually, which keeps Illinois EPA in excellent standing. If the Illinois EPA is unable to meet its federal commitment for site closures, future funding for the Leaking UST Program would be jeopardized.

For off-site property owners or highway authorities who refuse to accept an ELUC or HAA, the cleanup program participant would have to either continue negotiating or actively remediate the contamination. Any postponement or delay in achieving compliance could subject the cleanup program participant to enforcement action initiated by the Illinois EPA. The remediation of soil gas contamination – meaning excavation and disposal of contaminated soil with replacement of clean soil, as well as remediation of contaminated groundwater – could entail huge sums of money. The cost, either to the UST Fund (if the UST owner or operator is subject to Leaking UST Program regulations and deemed eligible to access the UST Fund) or to the Remediation Applicant enrolled in the SRP, could be extremely burdensome.

It should be noted, too, that imposition of the 100-foot separation distance would reverse the positive results of efforts made by the UST Task Force (established by House Joint Resolution 39), which culminated in Public Act 96-0908. These changes to the Environmental Protection Act, effective on June 8, 2010, were aimed at keeping the UST Fund solvent by expanding the use of risk-based decision making allowed under TACO in Leaking UST Program cleanups. In particular, UST owners or operators seeking payment from the UST Fund were

directed, in part, to use Tier 2 remediation objectives for the site where the release occurred to achieve compliance.

Previous testimony by Illinois EPA that the indoor inhalation exposure route would be the "driver" of site cleanups on only a small percentage of sites would no longer be correct if the proposed 100-foot setback remains in place. (See Op. at 93 to Tr. 1 at 105).

The costs borne by the UST Fund would be substantial, and an UST owner's or operator's total costs for securing ELUCs and HAAs necessary to meet the 100-foot requirement would be significantly higher than the \$22,000 cost for a soil gas investigation to which Brian Martin previously testified (See Op. at 91 to Martin PFT2 at 4 and *Id.* at 4-5; Tr.1 at 109). Also, most off-site property owners would not feel comfortable signing an ELUC without legal representation, which would place a financial burden on them if the expense was not addressed by the UST owner or operator.

iii. Increased cost to achieve an NFR Letter may discourage responsible parties from enrolling in the SRP.

Remediation Applicants will be reluctant to enter the SRP if required to extend the area of compliance 100 feet beyond the defined extent of contamination. Those who do enter the SRP will likely spend more time and resources to address contamination under Tier 3 in order to avoid the 100-foot requirement under Tiers 1 and 2. As in the Leaking UST Program, the SRP Remediation Applicants do not have control of the off-site properties within the 100-foot radius and, therefore, will incur additional expenses from consultant and attorney fees, compensating off-site property owners to sign ELUCs, and additional review time for Illinois EPA staff despite the fact that soil gas and groundwater samples demonstrate that off-site contamination is not a threat.

iv. The need for ELUCs would unnecessarily raise health concerns among off-site entities outside of the measured or modeled extent of contamination.

The separation distance would require notification to off-site properties of potential contamination; site evaluators would need to enter the off-site buildings to assess the foundations and their associated man-made pathways to ensure they are properly sealed; and ELUCs would have to be secured even though site characterization does not show the adjacent properties are at risk. Many of these off-site property owners are not environmentally savvy and may not realize the ELUC is a precaution only and not a confirmed threat of contaminant exposure to themselves or their building occupants. The genuine alarm or stress that may be experienced by off-site property owners in such cases is unwarranted.

v. Off-site property values would decline due to the ELUC stigma and off-site compliance with ELUCs may diminish.

Even now, many property owners are reluctant to enter into ELUCs because of the perception that something is wrong with their property and the fear that any future property owner could be held liable for that contamination. The arbitrariness of the 100-foot separation distance compounds this problem for people looking to sell their property. How would a seller explain the need for such an ELUC in the absence of any technical justification?

The 100-foot requirement may also begin to cast doubt on the authority of NFR Letters with ELUCs issued by the Leaking UST Program and the SRP. Currently, these documents contain maps showing the area of contaminant impact and where the institutional controls or engineered barriers must be maintained to ensure health protectiveness. Compliance with the terms of NFR Letters has been strong over the years because of the specificity of these requirements and people's understanding of the ELUC's purpose in preventing exposure. As

proposed by the Board, the maps in the new NFR Letters would show a 100-foot overlay beyond the measured or modeled extent of contamination. If the 100-foot radius seems arbitrary to Illinois EPA, it will surely appear arbitrary to property owners and may diminish the strength and validity of the other conditions placed on the NFR Letters for all exposure routes.

II. The Similar-Acting Chemical Provisions Issue

The Illinois EPA believes that the similar-acting chemical provisions should not apply when developing soil gas and groundwater remediation objectives for the indoor inhalation pathway under Tier 1, 2, or 3. It is Illinois EPA's intent to apply the similar-acting chemical provisions to environmental media to which someone is actually being exposed. Section 742.505(b)(3) sets forth the requirements regarding mixtures of similar-acting chemicals in Class I groundwater at the point of human exposure for Tier 1 evaluations. Section 742.805(c) sets forth requirements regarding mixtures of similar-acting chemicals in Class I groundwater at the point of human exposure for Tier 2 evaluations. During testimony given by Illinois EPA in support of the mixture rule (R97-12(B)), Dr. Hornshaw stated that "there is an additional layer of conservatism built into the inhalation and the soil component of the groundwater ingestion exposure route soil objectives due to the assumptions made regarding transport in soil" (Tr.1 at 21). In other words, human exposure to soil contaminants for the soil component of the groundwater ingestion exposure route is not direct; the contaminants in the soil must be transported to groundwater for ingestion. This factor offers a layer of safety. The same can be said for the volatile chemicals in soil gas and groundwater for the indoor inhalation pathway. No one is being exposed to the volatile chemicals in soil gas and groundwater until those volatile chemicals are inside a building. The soil gas and groundwater are just a means of transport for the volatile chemicals to reach a point of human exposure inside a building. Once the volatile

chemicals are inside a building, and someone is exposed to the chemicals by inhaling the air in the building, then the similar acting provisions are applied to the indoor air that is being inhaled if calculating indoor air remediation objectives as allowed under Tier 3.

This parallels the approach that the Illinois EPA has taken with the soil component of the groundwater ingestion pathway. In this pathway, similar acting chemical provisions are not applied to the soil remediation objectives. The soil is a means of transport for the chemicals to reach the groundwater. Once the chemicals reach the groundwater, and someone is exposed to the groundwater by drinking it, then the similar acting chemical provisions are applied to the groundwater that is being consumed.

III. The Soil Vapor Saturation Limit Issue

The Board solicited public comment on whether soil gas remediation objectives capped at the "soil vapor saturation limit" (C_v^{sat}) account for the presence of free product (i.e., non-aqueous phase liquids or "NAPLs"). In TACO, the modified J&E model as well as the existing SSL and RBCA models operate on the similar assumption that a two-phase system does not exist. These models assume an equilibrium between contaminant concentrations that exist as vapors in soil pores, contaminants that adhere to soil particles, and contaminants that dissolve into water within soil pores. For soil, a two-phase system is assumed to occur when the concentration of any organic contaminants of concern exceeds its soil saturation limit or C_{sat} . The proposed modification to the C_{sat} definition is more specific on this point: " C_{sat} means the contaminant concentration at which the absorptive limits of the soil particles, the solubility limits of the available soil moisture, and **saturation of soil pore air** have been reached. Above the soil saturation concentration, the assumptions regarding vapor transport of air and/or dissolved phase transport to groundwater (for chemicals that are liquid at ambient soil temperatures) do not

apply, and alternative modeling approaches are required (emphasis added)." The definition of C_v^{sat} applies this same principle to the soil vapor phase: "the maximum vapor concentration that can exist in the **soil pore air** at a given temperature and pressure (emphasis added)." As required in proposed Section 742.717(i), soil gas remediation objectives for the indoor inhalation route cannot exceed the soil vapor saturation limit; otherwise, the assumptions of the modified J&E model would be violated. Proposed Section 742.222 provides methods for determining the soil vapor saturation limit and parallels Section 742.220, which is used for determining the soil saturation limit. In addition, as the Board clarified, a groundwater remediation objectives greater than a chemical's solubility is not allowed for the indoor inhalation pathway (Op. at 62-63). The limits C_{sat} , C_v^{sat} , and solubility must all be satisfied and taken together should preclude a two-phase system. The Illinois EPA believes that no additional requirements are necessary.

IV. Advection Determinations Using Soil Gas Instead of Soil

As noted by the Board, USEPA's concerns with the Illinois EPA's original vapor intrusion proposal (R09-9) centered on the lack of an advection component. For this reason, the Illinois EPA was particularly careful in developing the requirements for use of the new Tier 1 tables for the indoor inhalation exposure route, i.e., Section 742.Appedix B, Tables H and I, in the current proposed rule (R11-9).³

Advection describes the migration of contaminants caused by differences in pressure gradients between the inside of a building and the soil nearest the building foundation. As noted by USEPA in its *User's Guide for Evaluating Subsurface Vapor Intrusion Into Buildings* (2004), the advective force has no influence on contamination located farther than 5 feet away from a building foundation.

³ The Illinois EPA intended Section 742.Appendix B, Table H to be an allowable choice for all sites addressing this pathway and appreciates the Board's clarification of the issue.

The Illinois EPA deliberately selected "soil" and "groundwater" as the two media by which a site evaluator determines whether the mode of contaminant transport is both advection and diffusion or just diffusion. We respectfully request that the Board replace its Proposed Second Notice use of "soil gas" with "soil" in Sections 742.505 and 742.515 for the reasons stated below.

The Board stated that its decision to use soil gas instead of soil "is consistent with the skepticism over determining vapor intrusion risks based on volatile chemical concentrations in soil." (Op. at 38). The Illinois EPA agrees with the skepticism over soil data used solely to calculate health risk, which is why any proposal to use soil remediation objectives for the indoor inhalation exposure route must be evaluated under Tier 3. However, a determination for purposes of advection that no soil or groundwater contamination within 5 feet of a building foundation exceeds the Tier 1 most stringent remediation objectives for the existing pathways (located at Section 742.Appendix B, Table A) is **not** a determination of compliance to qualify for an NFR Letter under the indoor inhalation pathway. Instead, it is a determination that the transport of contaminated vapors from the subsurface is limited to diffusion only migration. A Tier 1 remediation objective compliance determination for the indoor inhalation exposure route is made separately at a later date by comparing soil gas and groundwater samples collected elsewhere at the site to the remediation objectives in Section 742. Appendix B, Table I. That is, anyone who qualifies and chooses to use Table I (diffusion only), must demonstrate compliance using near-slab soil gas samples, exterior soil gas samples collected at the footprint of a potential building, or both, as well as groundwater samples.

The Illinois EPA selected soil instead of soil gas as the more appropriate medium in the advection determination for three reasons. First, the use of soil data supports the multiple lines

of evidence approach preferred by USEPA. Second, soil sample results are a reliable and robust way to delineate the area of contamination, especially in regards to vertical profiling (e.g., soil borings obtain multiple samples at spaced intervals to give a cross-sectional view of the contaminant plume). Third, for the majority of sites, soil data are the first sample results to be obtained and, for a strategic site evaluator, are an early indicator for how to address the indoor inhalation exposure route. For example, if the soil data show that advective transport would occur (i.e., soil contamination is present 5 feet or less from any existing or potential building or man-made pathway), then the site evaluator may choose to install a building control technology ("BCT") as a final remedy rather than achieve the more conservative remediation objectives in Section 742. Appendix B, Table H (diffusion and advection). Such a choice would eliminate the time and expense of collecting soil gas data.

V. School Notice Requirements

The Board requested that the Illinois EPA fact sheet for school sites include the following information: 1) an explanation of how the new indoor inhalation exposure route can be addressed at sites for which NFR Letters or the like were issued without this new pathway having been evaluated properly or at all; 2) a way to contact the Illinois EPA for further information; 3) links to the Illinois EPA's publicly-searchable SRP and Leaking UST Program databases; and 4) a link to the Illinois EPA webpage where the SRP School List and the Leaking UST School List are located. The Illinois EPA concurs with these requests.

In regards to the notice requirement for BCT inoperability at schools, the Illinois EPA would like to recommend a change to the language it originally proposed in its First Notice comments. As written, Section 742.1200(e)(3) requires, "For a school, the site owner/operator shall notify..." After further discussion, the Illinois EPA thinks this requirement should say

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instead, "For a school, the school administrator shall notify..." The site owner/operator may also

be the school administrator, but at properties where this is not the case, the requirement for

notification is best placed on the school administrator. This is because the school administrator

has direct oversight of the building and is the entity most responsible for daily operation and

maintenance of the BCT.

VI. Conclusion

In conclusion, the Illinois EPA respectfully requests that the Board make the changes

suggested by the Illinois EPA prior to second notice for the reasons stated above.

WHEREFORE, the Illinois EPA submits its Comments to the Board's Proposed

Second Notice Opinion and Order for its consideration.

ILLINOIS ENVIRONMENTAL

PROTECTION AGENCY

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Dated: January 30, 2013

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PROOF OF SERVICE

l, the undersigned, on oath state that I have served the attached <u>Comments to</u>

<u>Proposed Second Notice Opinion and Order</u> upon the persons to whom they are directed,
by placing a copy of each in an envelope addressed to:

Dorothy Gunn, Clerk Illinois Pollution Control Board James R. Thompson Center 100 W. Randolph, Suite 11-500 Chicago, Illinois 60601 Mitchell Cohen Chief Legal Counsel Illinois Dept. of Natural Resources One Natural Resources Way Springfield, Illinois 62702-1271

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and mailing them (First Class Mail- except to the Clerk of the Board and the Hearing Officer, to whom they went Federal Express) from Springfield, Illinois on January 30,

2013, with sufficient postage affixed as indicated above.

SUBSCRIBED AND SWORN TO BEFORE ME This 30th day of January, 2013.

Boehner

Notary Public

OFFICIAL SEAL
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