**Vapor Intrusion Fact Sheet**

**Indoor Inhalation Exposure Route at SRP Sites**

How do I investigate a site with volatile chemical contamination under the Site Remediation Program for the indoor inhalation pathway?

The site investigation for the indoor inhalation pathway is no different than the current requirements for an investigation under the existing Site Remediation Program. The contamination must be fully delineated and the investigation must determine the nature, concentration, direction and rate of movement, and extent of the contaminants of concern at the remediation site and the significant physical features of the remediation site and vicinity that may affect contaminant fate and transport and risk to human health, safety and the environment. Characteristics of the source would include the chemicals of concern, variability in the concentrations, and depth to contaminated soil and groundwater. The investigation must provide the full nature of the contamination of both soil and groundwater. If soil gas sampling is required to further characterize the site, see soil gas sampling collection protocol.

Do I have to sample soil gas for all the volatile chemicals listed in 35 Ill. Adm. Code 742.Appendix A, Table J?

No, just volatile chemicals identified as contaminants of concern for your site.

If a groundwater sample exceeds the Tier 1, Appendix B, Table H groundwater ROs for the indoor inhalation pathway, will the site still qualify for an NFR letter?

Yes, if the site meets the Tier 1, Appendix B, Table H soil gas remediation objectives at the property boundary and no other pathways are a concern, then the site is eligible for an NFR letter. This is because soil gas data is a more reliable indicator than groundwater data for predicting exposure from the indoor inhalation exposure route.

If both soil gas and groundwater samples exceed Tier 1, Appendix B, Table H, can the site obtain an NFR?

Yes, a Remediation Applicant could choose a pathway exclusion under 742.312 and accept an institutional control that requires either, 1) no building or associated man-made pathway above the area of soil gas or groundwater contamination or 2) a building control technology (BCT) meeting the requirements of Subpart L.

What is required of a Remediation Applicant for groundwater contamination at off-site properties in terms of the indoor inhalation groundwater pathway?

Under the SRP, only the on-site contamination needs to be actively remediated to qualify for an NFR letter. The NFR letter issued by the SRP will not, however, release the site or any responsible party from off-site liability.

Can a demonstration be made proving the groundwater contamination is coming from an off-site source to exclude the Indoor Inhalation pathway if groundwater is my only concern?

No, the pathway cannot be excluded for this reason. The Illinois EPA cannot issue an NFR letter under the SRP unless the remediation site is considered safe for human health and the environment for the intended land use. If groundwater contamination is coming from an off-site source, the indoor inhalation exposure route must still be addressed.

Can a site have an institutional control requiring a BCT or no building limited to only a portion of the property?

Yes, based on the site characterization data, areas on the site base map in the No Further
Remediation (NFR) letter would be delineated with the restrictions identified. Where volatile COCs meet the most stringent Tier 1 ROs on a portion of the remediation site, these areas could be identified on the site base map of the NFR with no restrictions.

This fact sheet is for general information only and is not intended to replace, interpret, or modify laws, rules, or regulations.

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