

Storage Tank Advisory Committee Meeting
June 2, 2015

Vapor Intrusion Guidance Update

- Releases of volatile and some semi-volatile regulated substances to soil or groundwater can result in intrusion of these regulated substances into indoor air. The resulting impacts to indoor air may pose a threat to human health in existing or future inhabited buildings.
- § 250.312 states that a Statewide health standard final report must include an assessment of the vapor intrusion (VI) pathway. A site-specific standard exposure pathway assessment inclusive of the VI is required by § 250.404, and risk assessments are performed pursuant to § 250.405.
- At any time in the VI evaluation process, mitigation measures may be used for existing inhabited buildings to eliminate unacceptable risks associated with VI under the Statewide health and site-specific standards.
- If the site is a petroleum release to surface or subsurface soil where full site characterization has not been performed in association with an excavation, then the remediator may attain the Statewide health standard by following the sampling and statistical test requirements for excavations described in Section 250.707(b)(1)(iii).
- VI screening values have been updated for soil, groundwater, and indoor air and new screening values have been calculated for sub-slab soil gas and near-source soil gas.
- Bioattenuation of petroleum substances is accounted for by the use of proximity distances for petroleum-only releases. Petroleum-only sites that do not have screening value exceedences within 30 horizontal or six vertical feet need no further VI evaluation unless they are impacted by preferential pathways. Petroleum-only sites with separate-phase liquids use a vertical proximity distance of 15 feet.
- Guidance is provided on creating a conceptual site model (CSM), where and how to apply screening values, evaluating VI using a combination of standards, evaluating preferential pathways, using OSHA programs to evaluate VI, and addressing Chapter 250 requirements under both the Statewide health standard and the site-specific standard.
- Additional information is provided in the appendices regarding how the screening values were calculated, how to use VI modeling, and guidance on VI sampling methods.