Alpha Analytical Technical Bulletin















Analytical Methods and Services for PADEP Vapor Intrusion Investigations

Alpha Analytical has provided this Technical Bulletin in support of Vapor Intrusion Investigations conducted under the PADEP Act 2 Land Recycling Program (25 Pa. Code Ch. 250; amended August 2016) and PADEP Land Recycling Program Technical Guidance Manual for Vapor Intrusion into Buildings from Groundwater and Soil under Act 2 (published November 2016; effective January 2017).

Compound List

PADEP Statewide Health Standards includes over 100 compounds that have sufficient volatility to be considered in Vapor Intrusion investigations. PADEP's full list of Vapor Intrusion Screening Values used for vapor intrusion pathway evaluation of Groundwater, Soil, Soil Gas and Indoor Air may be grouped into four analytical categories discussed below.

Alpha Analytical Approach

- 1. Standard VI compounds of frequent concern are typically be reported by EPA Method TO-15, which includes the PADEP short list of chlorinated solvents and Appendix F Table IV-9 short list of petroleum products.
- 2. Additional EPA Method TO-15 compounds that are often calibrated for, but not typically reported, may be reported as requested.
- 3. Compounds supported by TO-15 but not included in standard calibration mixes, may be requested as library search and reported as tentatively identified compounds.
- 4. Semi-Volatile and other compounds (such as PCBs) that require sorbent sample collection or other techniques may be discussed on a project specific basis. Analytical issues include PQLs and RLs to meet screening levels. Physical/chemical properties make it unlikely that these compounds will volatilize and be detectable in soil gas or indoor samples. *Note: The consultant/remediation professional is responsible for determining the project compound list.*

Alpha Analytical Service and Data Management Tools

- •NELAP accreditation to support PA Vapor Intrusion investigations (as PADEP does not offer certification for air methods)
- •Standard Data Report of results and summary QC, with additional reporting options available upon request
- •Ground courier services in southeastern and central PA
- •Standard 5-Day Turnaround for final results
- •Secure online Data Merger platform to streamline criteria checker review of results against PADEP Vapor Intrusion Screening Values
- •Large inventory of high quality sampling equipment including: fused silica lined air canisters, flow controllers with sage locks and quick connect fittings, and digital gages.

Additional Resources

Web link to PADEP Vapor Intrusion web page: http://www.dep.pa.gov/Business/Land/LandRecycling/Standards-Guidance-Procedures/Guidance-Technical-Tools/Pages/Vapor-Intrusion.aspx



How to reach us

