



Technical Bulletin for PA Vapor Intrusion Investigations

This Technical Bulletin is provided to summarize PA Vapor Intrusion Investigation services provided by Alpha Analytical, Inc. These services are designed to support work conducted in accordance with the PADEP Land Recycling Program Technical Guidance Manual (TGM) dated January 2019, and the revised Vapor Intrusion Section of this TGM issued in March 2021, and the Land Recycling Program (Act 2) Medium Specific Concentrations (MSCs) Vapor Intrusion Screening Value Tables revised in November 2021. Refer to the PA DEP Vapor Intrusion Guidance.

- PADEP published the revised Vapor Intrusion Section of the Land Recycling Program Technical Guidance Manual (TGM) in March 2021. Refer to: Land Recycling Program TGM Section IV: Vapor Intrusion.
- PADEP published a Vapor Intrusion Guidance Frequently Asked Questions (FAQs) document in March 2021. Refer to: <u>Vapor</u> <u>Intrusion Guidance Frequently Asked Questions (FAQ's) - MARCH 2021</u>.
- PADEP published the revised Land Recycling Program (Act 2) the Medium Specific concentrations (MSCs) in November 2021. The Vapor Intrusion Screening Tables are updated when the numeric values used to calculate the Act 2 MSCs are revised via Chapter 250 rulemaking. Refer to: <u>Vapor Intrusion Screening Value Tables</u> (Excel) –

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 MSCs include all media Groundwater, Soil, Soil Gas, and Indoor Air. Alpha Analytical has the products, services, and experience to address all aspects for a Vapor Intrusion Investigation following PADEP guidance. These include:

- Standard Vapor Intrusion compounds of concern are typically reported by EPA Method TO-15, these include the PADEP short list of chlorinated solvents and petroleum products. These are at: <u>VI Screening Value Short List</u> (PDF). These are suggested as a minimum for initial investigation. However, the consultant/remediation professional is responsible for determining the project compound list based on a conceptual site model.
- 2. Alpha Analytical routinely calibrates for a longer list of compounds and can, when requested, can provide site specific target compounds.
- 3. Semi-Volatile and other compounds (such as PCBs) that require sorbent sample collection or other techniques may be considered on a project specific basis. Analytical issues include PQLs and RLs to meet screening levels.

Alpha Analytical provides the Services and Data Management Tools for successful project completion. These include:

- NELAP accreditation to support PA Vapor Intrusion investigations (PADEP does not offer certification for air methods)
- Standard Data Report of results and summary QC, with additional reporting options available upon request.
- Alpha Analytical courier service covers major cities in Pennsylvania.
- Standard 5-Business Day Turnaround for VOCs by TO-15
- · Largest inventory of Media for VOCs in the Northeast.

Additional Resources

Alpha Analytical Data Merger provides a regulatory criteria screening tool to assist in evaluating project sample analytical data relative to the PA Act 2 Vapor Intrusion Screening Values (revised in November 2021), as listed below:

| PA-VI-IA-NR | Pennsylvania Nonresidential Indoor Air Statewide Health Standard Vapor Intrusion Screening Values Criteria per Land Recycling Program Technical Guidance Manual for VI effective November 20, 2021 |
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| PA-VI-IAR | Pennsylvania Residential Indoor Air Statewide Health Standard Vapor Intrusion Screening Values Criteria per Land Recycling Program Technical Guidance Manual for VI effective November 20, 2021 |
| PA-VI-NSG-CR | Pennsylvania Converted Residential Near-Source Soil Gas Statewide Health Standard Vapor Intrusion Screening Values Criteria per Land Recycling Program Technical Guidance Manual for VI effective November 20, 2021 |
| PA-VI-NSG-NR | Pennsylvania Nonresidential Near-Source Soil Gas Statewide Health Standard Vapor Intrusion Screening Values Criteria per Land Recycling Program Technical Guidance Manual for VI effective November 20, 2021 |
| PA-VI-NSG-R | Pennsylvania Residential Near-Source Soil Gas Statewide Health Standard Vapor Intrusion Screening Values Criteria per Land Recycling Program Technical Guidance Manual for VI effective November 20, 2021. |
| PA-VI-SSG-CR | Pennsylvania Converted Residential Sub-Slab Soil Gas Statewide Health Standard Vapor Intrusion Screening Values Criteria per Land Recycling Program Technical Guidance Manual for VI effective November 20, 2021. |
| PA-VI-SSG-NR | Pennsylvania Nonresidential Sub-Slab Soil Gas Statewide Health Standard Vapor Intrusion Screening Values Criteria per Land Recycling Program Technical Guidance Manual for VI effective November 20, 2021 |
| PA-VI-SSG-R | Pennsylvania Residential Sub-Slab Soil Gas Statewide Health Standard Vapor Intrusion Screening Values Criteria per Land Recycling Program Technical Guidance Manual for VI effective November 20, 2021 |
| PA-VI-IA-NR | Pennsylvania Nonresidential Indoor Air Statewide Health Standard Vapor Intrusion Screening Values Criteria per Land Recycling Program Technical Guidance Manual for VI effective November 20, 2021. |

Expert Assistance for all aspects of Air Testing and regulatory requirements for Vapor Intrusion investigations.

How to Reach Us

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