

Vapor Intrusion Assessment & Mitigation



Navigating and Eliminating Risk Exposures

Vapor Intrusion (VI) is the migration of contaminant (volatile organic compounds, methane, and/or radon) into building structures from the subsurface. Over the years VI assessment, regulatory guidance and requirements, and mitigation has evolved at a rapid pace. Determining the correct approach for your site is critical. Do you need mitigation? If so, what is required? What is needed?

GES has a nationwide team to assist you with your VI assessment, exposure risk analysis, and if necessary, VI mitigation design. Since our founding in 1985, we have provided VI services for a variety of client types – industrial, commercial, developers, and builders – and designed and implemented over 200 mitigation systems across North America. GES is prepared to provide you with expert leadership and VI mitigation design for your site.

VI Assessment/Evaluation

No two sites are exactly alike and determining the correct VI assessment approach will be based on a site-specific evaluation. At GES, we believe that the site evaluation must reflect a holistic approach to develop the appropriate site-specific solution. GES works with properties zoned as industrial, commercial, residential, retail, and institutional; brownfields and redevelopments; and new and existing construction. Understanding the conceptual model, local and state regulations and requirements, and development goals, are critical to providing the correct assessment for your property.

VI Mitigation

There are various types and methods of VI mitigation. GES will review the assessment data, construction plans, development goals, and regulatory guidance and requirements to develop the best and most practical VI mitigation approach for each site. Our team of skilled engineers and scientists will be dedicated to the initial design, installation oversight, and any ongoing operations, maintenance, and monitoring (OM&M) of the system. Mitigation systems can range from a passive venting system, to contaminant sub-slab vapor barriers, to fully active mitigation systems, or a combination of techniques. Selecting the right vapor barrier for your project is critical. GES and our partners are experts at navigating and complying with the numerous building codes (building, plumbing, mechanical, and electrical) that VI systems can trigger.

Service Capabilities

- VI Assessment/evaluation (soil gas, sub-slab vapor, and indoor air)
- Risk assessment
- Engineered VI mitigation design and specification (passive and active)
- Certified VI mitigation installation oversight
- Pilot testing
- System OM&M
- Performance confirmation
- Emergency VI mitigation
- Regulatory expertise and interaction