



Environmental Management & Consulting

New York State Department of Health Updates Vapor Intrusion Guidance

The New York State Department of Health (NYSDOH) recently updated its guidance criteria for evaluating the potential threat for vapor intrusion caused by contaminated media. ***Keep reading to see how these changes can affect your property...***

NYSDOH's 2006 Guidance for Evaluating Soil Vapor Intrusion in the State of New York (2006 Guidance) provides recommendations for soil vapor intrusion based on matrices that compare sub-slab to indoor air contaminant concentration levels. The recent update includes significant changes to these matrices such as the addition of a new compound (methylene chloride), a new matrix for vinyl chloride, and more stringent criteria for certain compounds.

NYSDOH defines soil vapor intrusion as the process by which volatile chemicals migrate from a subsurface source into the indoor air of building. Soil vapor is found in the pore spaces between soil particles and can migrate into buildings through openings in the foundation (i.e., cracks in basement slabs or sidewalls, utility penetrations, etc.). The migration of these volatile chemicals into living spaces can be a direct threat to human health.

Actions recommended in the NYSDOH matrices are based on the relationship between sub-slab vapor concentrations and corresponding indoor air concentrations. These actions include:

- ✓ ***“No Further Action”***
- ✓ ***“Take reasonable and practical actions to identify source(s) and reduce exposures”*** (source likely due to indoor/outdoor air, not soil vapor); determine the source of chemical contamination and taking reasonable and practical action to reduce exposure.
- ✓ ***“Monitor”*** to evaluate whether indoor air or sub-slab vapor concentrations have changed. Monitoring may also be appropriate to determine whether existing building conditions (e.g., positive pressure HVAC systems) are maintaining the desired mitigation.
- ✓ ***“Mitigate”*** to minimize current or potential exposure; common mitigation methods include sealing preferential pathways, installing a sub-slab depressurization system (SSDS), or adjusting the pressurization of a building in addition to monitoring the indoor air and sub-slab vapor concentrations. NYSDOH may consider this as an interim measure prior to remediation or an engineering control as part of post-remediation Site Management.

These changes may affect your property if it will be developed or is in post-remediation Site Management under regulatory programs such as the New York State Department of Environmental Conservation (NYSDEC) or New York City Mayor's Office of Environmental Remediation (NYCOER). Even if you have a property that is not currently under NYSDEC or NYCOER oversight, the recent changes may create potential liability issues and/or complicate future real estate transactions (i.e. refinancing, property sale, etc.).

Some ways FLS can help you...

- ✓ Determine how the changes affect your property and provide recommendations based on your priorities.
- ✓ Perform an evaluation of existing vapor mitigation measures (such as a SSDS) and current soil conditions to identify if there are ways to reduce the system and/or if there is an opportunity to remove the system entirely, particularly if bulk contamination was removed and current concentrations no longer pose a threat to human health and the environment.
- ✓ Prepare a cost analysis to show how removing or reducing vapor mitigation measures affects your operational costs.

FLS has been successful in reducing Site Management responsibilities for many clients and reducing their financial burden by evaluating current conditions and working with regulators to evaluate the threat of vapor intrusion. At numerous sites, we are working with our clients and the regulatory agencies to switch from active to passive SSDS and in some cases remove the SSDS requirement entirely by showing that either the site is no longer a threat or that engineering controls block the pathway for intrusion.

For additional information on how these updates impact your property and how FLS can help you manage your environmental costs and liability please contact Mark Hutson at our New York City office at 212-675-3225 or mark@flemingleeshue.com.

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