

Gradient Corporation



NEWS ALERT

MADEP Auditing PCE Vapor Intrusion Sites

The Massachusetts Department of Environmental Protection (MADEP) is auditing waste sites that were 'closed' (*i.e.*, Response Action Outcome was filed) prior to April 2006, and where tetrachloroethylene (PCE) was detected in groundwater. We understand that MADEP has audited 600 sites and identified approximately 100 sites requiring additional analyses. These audits are:

- Driven by a concern that some PCE sites potentially pose significant risks to human health because these closures relied on a Method 1 GW-2 Standard for PCE of 3,000 µg/l, which was lowered to 50 µg/l in April 2006; and
- Expected to require follow-up actions at selected sites, including soil vapor/indoor air sampling and site-specific risk assessments, to better understand human health risks.

PCE Vapor Intrusion Risk Drivers

Understanding vapor intrusion-related human health risks attributable to PCE and other chlorinated organics is a challenging process. The following strategic questions need to be considered:

- Measure vs. Model – Given the numerous household sources of chlorinated organics, when is it appropriate to measure indoor air concentrations?
- Model Sensitivity – Which site-specific parameter values should be quantified to reliably model indoor air concentrations?
- PCE Toxicity – Since PCE toxicity has been under review by several regulatory agencies for a number of years, what are the appropriate toxicity values that should be used in a site-specific risk assessment?

Gradient can help you evaluate these issues. Please contact us if you would like more information.

For more information on [Gradient's Vapor Intrusion-Related Services](#), contact:

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Gradient Corporation is a nationally renowned consulting company offering expertise in toxicology, risk assessment, environmental chemistry, and fate and transport. We have significant experience in vapor intrusion evaluations, risk assessment, and communicating scientific analyses results to the public.



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