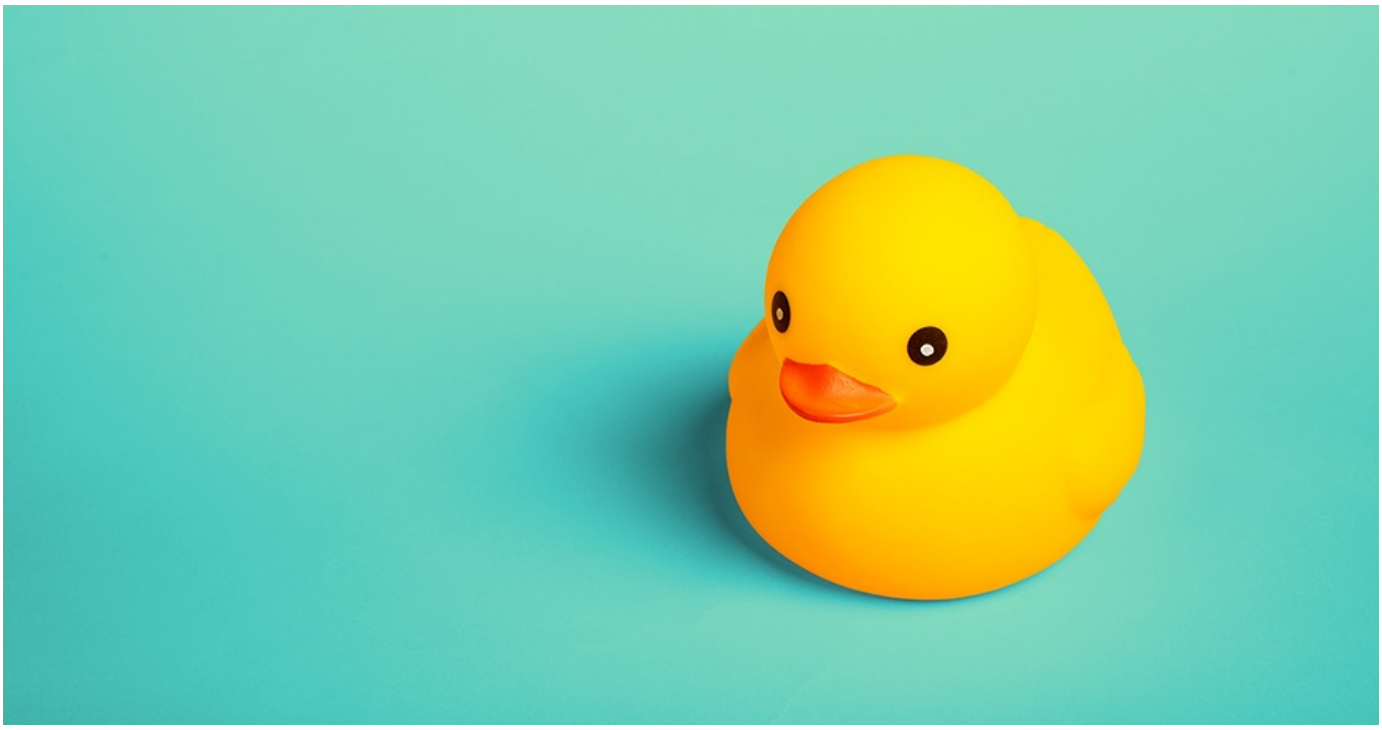

Publication

Fate and transport of vinyl chloride in soil vapor

A team of vapor intrusion and remediation experts at Haley & Aldrich — Bart Eklund, Rich Rago, Gina Plantz, Elie Haddad, Mark Miesfeldt, and Rick Volpi — have published a new peer-reviewed article in the journal Remediation, "Fate & transport of vinyl chloride in soil vapor."

Vinyl chloride (VC) is a common risk driver in vapor intrusion (VI) studies. At many sites, initial screening of groundwater and/or soil gas may suggest potential for indoor air impacts for VC at unacceptable levels. During follow-up site characterization, however, the VI pathway for VC is rarely, if ever, found to be complete. This paper sets forth a conceptual model for understanding these results and summarizes data from multiple field sites to illustrate the fate and transport of VC. The sites are drawn from various regions of the United States and cover a range of conditions. At these sites, VC was detected at relatively high concentrations in groundwater. It may also have been detected in deeper soil gas, but generally it was fully attenuated before reaching shallow soil depths. Indoor air results were consistently non-detect. The behavior is also discussed for sites with very shallow groundwater where VC was found in some sub-slab soil gas samples but not in the overlying indoor air.

Haley & Aldrich has obtained open access for this article, so there is no charge toread the full article. To understand how this might be applicable to your sites, please contact any of our experts listed above.

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