

Vapor Intrusion Guidance for Brownfield Projects managed under the Voluntary Oversite and Assistance Program Tennessee Underground Storage Tanks and Solid Waste Disposal Control Board Meeting 8/3/2022 Justin Meredith

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This document is guidance only and does not create legal rights or obligations. Agency decisions in any particular case will be made applying applicable laws and regulations to the specific facts. TDEC decision-makers retain the discretion to adopt or approve investigation and mitigation approaches for VOAP Brownfield project sites on a case-by-case basis that differ from this guidance document, where appropriate.



Why a VOAP VI Guide?

- Division of Remediation
 - Hazardous Substance Cleanups in Tennessee
 - National Priority List Sites (National Superfund), State Responsible Party Sites, Dry Cleaner Environmental Response Program, VOAP/Brownfields
 - All have Vapor Intrusion sites but...
- A VI Guidance needed for Brownfield Projects in the VOAP Program
 - Numbers Over a 100 active VOAP sites at any given time <u>in each</u> of the three Grand Divisions
 - Brownfield Projects often are built on properties impacted by past use of VOCs
 - Short redevelopment time frames



VI in the Brownfield world

- In a practical sense the question is:
 - Is mitigation needed or not?





A Little on the Development

- After developing a First Draft
 - DoR-VOAP Regional Coordinators review
 - All DoR staff review
 - OGC review
 - Official External review period (two months)
 - Over 100 comments
 - Comments from Tennessee Chamber, Environmental Consultants, Industry
 - Draft Presented at DoR Statewide Staff Meeting
 - Draft Presented at Environmental Show of the South
 - Second OGC review



Guidance Overview

- Scoping and Planning
- Sampling and Characterization
- Risk Analysis
- Vapor Intrusion Mitigation
- Post-Installation Performance Monitoring



Example Figure (Mitigation New Construction)

Lower Risk					Higher Risk
Cancer Risk	1E-06		1E-05	1E-04	
	Mitigation Not Required			Mitigation Required Passive or Active Systems Acceptable	Mitigation Required Active System or Passively Vented System with Ability to Convert to Active System
Hazard Index	0).1	1.0		3.0
			1.0		
Lower Risk					Higher Risk





- Guidance for DoR staff that will also be useful for voluntary parties enrolled in the VOAP
- Help with a streamlined, consistent, and protective approach across the State
- Reduce bottlenecks and internal review time
 - Having to remobilize to the site to collect additional data
 - Guessing what DoR needs to make determinations
 - Unnecessary meetings



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