TECHNICAL GUIDANCE DOCUMENT



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Vapor Intrusion Investigation Documentation

Office of Land Quality

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This document provides an example template for documenting site and structure-specific information relevant to potential vapor intrusion investigations. It serves as a record of the sampling event for each structure and details site-specific information that may be used in determining or recommending a remedy. The template uses a staged approach that seeks only that information relevant to each stage of a typical vapor intrusion investigation.

Part I gathers general site information. Part II documents structure-specific information, including sampling locations. Part III addresses potential background sources.

Vapor Intrusion Investigation Documentation Part I: General Information

	rt I for each sampling event (may involve multiple st	ructures)				
Release	For Known Source(s):						
	Site Name (if applicable)		Site Number				
	Address of Investigation:						
	Course not Image						
Chemicals	Check all that apply:	☐ Source not known Check all that apply:					
	117	☐ Chlorinated solvents ☐ Petroleum hydrocarbons ☐ Unknown					
		doleum nydrocarbons 🗖 On	KIIOWII				
	,	☐ Other (specify):					
Rationale	Condition(s) prompting investigation (check all that apply):						
	□ Odor complaint						
	☐ Ground water contamination levels						
	☐ Soil contamination levels						
	☐ Other (specify):						
Weather	Precipitation ≤ 12 hours prior to sampling? □ Yes □ No						
	Outside temperature range:	°F to °F					
Personnel	Sampler(s)	Affiliation	Telephone				
	Preparer	Affiliation	Telephone				
	Tieparei	Aimation	Тетерноне				
	Laboratory:						

Vapor Intrusion Investigation Documentation
Part II: General Structure Characteristics and Sampling Information
Complete a separate Part II for each structure

Compieie a sepa	raie Pari II jor each structure					
	☐ Residential ☐ Non-residential ☐ Multi-unit	Year Constructed:				
	Floors at/above grade:	Ceiling Height (feet):				
	Sensitive population? ☐ No ☐ Yes (specify): Surrounding area: ☐ Bare soil/Vegetation ☐ Impervious ☐ Mixed ☐ Basement ☐ Crawl space ☐ Slab on grade (check all that are applicable)					
Basement	Depth of basement floor below ground surface (feet):					
(if applicable)						
	Floor is \square Dirt/stones \square Slab \square Other (specify):					
	Walls are ☐ Block ☐ Poured ☐ Other (specify):					
	Floor sealed? \(\sigma\) Yes \(\sigma\) No	Walls sealed? ☐ Yes ☐ No				
	Sump? Yes No	Water in sump? ☐ Yes ☐ No				
	Floor cracks? \(\sigma\) Yes \(\sigma\) No	Wall cracks? ☐ Yes ☐ No				
Heating	System type (<i>check all that apply</i>):					
	☐ Hot air circulation ☐ Hot air radiation ☐ Steam radiat	ion 🗆 Wood				
	☐ Heat pump ☐ Hot water radiation ☐ Kerosene ☐ Elec	etric baseboard				
	☐ Other (<i>specify</i>):					
	Is system operating? □ Yes □ No					
	System Comments:					
	Fuel type (check all that apply):					
	rosene					
	□ Natural gas □ Electric □ Oil □ Wood □ Coal □ Kerosene □ Other (specify):					
Other	Whole house fan? ☐ Yes ☐ No	Septic? □ Yes □ No				
	Well? □ Yes □ No					
	Sub-slab vapor/moisture barrier? ☐ Yes ☐ No ☐ Don't Know					
	If yes, what kind:					
Instructions for Occupants followed? ☐ Yes ☐ No						
	If not, describe modifications:					

Part II: Structure	Characteristics a	and Sampling	Information co	ontinued	
		Sample I	Location Sketch		

ID	Type ¹	Floor	Room	Vol (mL)	Time (hrs)	Method ²

¹ IA = indoor air SS = sub-slab SGe = exterior soil gas CS = crawl space NS = near-slab exterior ² TO-14A; TO-15; TO-15SIM; TO-17; Other (specify)

Vapor Intrusion Investigation DocumentationPart III: Indoor Air Background Investigation

Complete	e a sepa	rate Part III for any structure with suspected background source			
Structure	address:				
Potential background contaminant(s):					
□ Yes	□ No	Do structure occupants smoke? If yes, last time someone smoked in structure:			
☐ Yes	□ No	• •			
		If yes, is a vehicle usually parked in the garage?			
□ Yes	□ No	If yes, are gas cans or gas-powered equipment stored in the garage? Do structure occupants have clothes dry cleaned?			
		If yes, how often:			
☐ Yes	□ No	If yes, last time newly dry cleaned clothes brought home: Occupants use solvents at place of employment?			
□ 1 C3	— 110	If yes, what types:			
		If yes, are their clothes washed away from home?			
☐ Yes	□ No				
		If yes, which pesticides: If yes, when:			
☐ Yes	□ No	Has there ever been a fire in the structure?			
		If yes, when:			
☐ Yes	□ No	Painting or staining in the building in the last six months?			
		If yes, when:			
		If yes, which rooms:			

Vapor Intrusion Investigation DocumentationPart III: Indoor Air Background Investigation *continued*

Indoor Chemical Inventory

D-44-1 C	I(-)	Removed
Potential Sources	Location(s)	prior to sampling?
		Y/N/NA
Gasoline storage cans		
Gas powered equipment		
Kerosene storage cans		
Paint/thinner/stripper		
Cleaning solvents		
Oven cleaner		
Carpet/upholstery cleaner		
Other cleaning products		
Moth balls		
Polish/wax		
Insecticide		
Nail polish/polish remover		
Hairspray		
Cologne/perfume		
Air fresheners		
Indoor fuel tank		
Wood stove or fireplace		
New furniture/upholstery		
New carpeting/flooring		
Hobby chemicals: glues, paints, lacquers, darkroom chemicals, etc.		
Scented trees, wreaths, potpourri, etc.		
Other		