APPENDIX A: SUMMARY OF STATE VAPOR INTRUSION PRACTICES

The information presented in this appendix is based on a 2024–2025 survey of U.S. states conducted by the Interstate Technology & Regulatory Council (ITRC). This survey builds upon data previously published by Eklund et al. (2024). All data, when provided, are reported from the information provided by a representative of each state. Where data have not been provided, the cells have been left blank.

ITRC does not endorse or recommend specific values. Instead, it recognizes that each state and regulatory agency determines appropriate values based on their own regulatory framework and requirements.

The survey findings are summarized in the following tables:

- Table A-1. State-Identified Separation Distances
- Table A-2. Available Screening Values and Attenuation Coefficients
- Table A-3. Comparison of Residential Screening Levels for Select Vapor-Forming Chemicals (2025)

The differences observed in Table A-3 can be attributed to a variety of factors, including the following:

- Default assumptions regarding typical or representative building construction parameters used in generic conceptual site models
- Variability in toxicological data, chemical and physical properties, and exposure assumptions used in risk-based equations to derive health-based criteria
- Differences in the allowable risk levels for vapor-forming chemicals
- Consideration of whether a specific vapor-forming chemical is biodegradable

In addition to Tables A-1 through A-3, state-specific information is provided as individual pages. Users can directly access a compilation of Tables A-1 through A-3 and the state-specific information (Appendix A) by visiting **https://itrcweb.org/vapor-intrusion-toolkit/.**

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Table A-1. State-Identified Separation Distances (2024)

State	Petroleum			Chlorinated	
	Lateral (ft)	Distance Vertical (ft)	LNAPL Vertical (ft)	Lateral (ft)	Vertical (ft)
Alabama					
Alaska	30	4–10	--	100	--
Arizona					
Arkansas					
California	30[A]	10[B]	30	100	100
Colorado	30	5	15	100	--
Connecticut	10	10	--	100	30
Delaware	30	5	15 or 18	100	100
Florida	50	--	--	100	--
Georgia	30	5	15 or 18	100	--
Hawaii	100	15	30	100	--
Idaho	--	5	15	100	100
Illinois					
Indiana	6 (LNAPL = 15)	6	15	100	100
Iowa	500	--	--	--	--
Kansas	30	5	15 or 18	100	40
Kentucky					
Louisiana					
Maine	30	6	15	--	--
Maryland					
Massachusetts	30	15	--	30	15
Michigan	30	5	15	100	--
Minnesota	100	--	--	100	--
Mississippi					
Missouri	100	--	--	100	--
Montana	30	8	15 or 18	100	--
Nebraska	200	--	--	100	100
Nevada	--	--	--	100	100
New Hampshire	30	15	6	100	100
New Jersey	30	30	30	100	100
New Mexico			--	100	--
New York			--	100	--
North Carolina	LNAPL = 100	--	--	100	100
North Dakota			--	100	--
Ohio	30 or 100[C]	6	15	100	--
Oklahoma					
Oregon	30 or 100[D]	--	--	100	--
Pennsylvania	30	5	15	100	--
Rhode Island					
South Carolina	30	5	15		
South Dakota					
Tennessee					
Texas					

Table A-1. State-Identified Separation Distances (2024)

State	Petroleum			Chlorinated	
	Lateral (ft)	Distance Vertical (ft)	LNAPL Vertical (ft)	Lateral (ft)	Vertical (ft)
Utah	30	--	--	100	--
Vermont	30	6	15	100	100
Virginia					
Washington	30	6	15	100	--
West Virginia					
Wisconsin	30	5	15	100	--
Wyoming					

NOTES:

[A]For mixed petroleum/non-petroleum release sites, the 100-foot distance should be used during initial screening (California DTSC 2023)

[B]TPH being under 100 mg/kg (California DTSC 2023)

[C]30 (small sources) or 100

[D]30 (heating oil tank) or 100

SOURCE: California DTSC. 2023. "Supplemental Guidance: Screening and Evaluating Vapor Intrusion." https://dtsc.ca.gov/wp-content/uploads/sites/31/2023/02/VI_SupGuid_Screening-Evaluating.pdf.

Table A-2. Available Screening Values and Attenuation Coefficients

	Types of Generic Screening Values Available								Attenuation Coefficients				
State	Groundwater	Soil	Deep Soil Gas	Shallow Soil Gas / Subslab	Indoor Air	NAPL	Crawl Space	Utilities / Preferential Pathways	Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Spaces	Comments
Alabama	X		X	X	X								
Alaska	X			X	X				0.001	0.1	0.1	1	
Arizona	X		X	X	X								
Arkansas													
California	X	X		X	X		X		0.001; not evaluated by OPS	--	0.03	1	
Colorado	X; none for OPS	X; none for OPS		X	X	X	X	X	0.001	0.03	0.03	1	
Connecticut	X			X	X				0.0002	--	0.0013	--	
Delaware	X	X		X					0.001	0.03	0.03	--	
Florida									--	--	0.1	--	
Georgia									0.001	--	0.03	--	Alternative attenuation values allowed
Hawaii									--	--	0.0005	1	
Idaho									0.001	0.03	0.03	--	
Illinois	X			X									
Indiana			x	X	X		X	X	--	0.03	0.03	1	
Iowa	X	X		X									
Kansas									0.001	--	0.03	1	
Kentucky	X		X	X	X								
Louisiana	X		X	X	X								

State	Types of Generic Screening Values Available								Attenuation Coefficients				
	Groundwater	Soil	Deep Soil Gas	Shallow Soil Gas / Subslab	Indoor Air	NAPL	Crawl Space	Utilities / Preferential Pathways	Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Spaces	Comments
Maine									0.001	--	0.03	1	
Maryland*	X	X		X	X				0.001	--	0.05	--	
Massachusetts	X			X	X				--	--	0.014	--	
Michigan	X	X		X			X	X	0.001	0.03	0.03	1	
Minnesota				X					--	0.03	0.03	1	
Mississippi													
Missouri	X	X		X	X		X						
Montana	X	X		X	X				0.001	0.03	0.03	1	
Nebraska	X			X	X				0.001		0.03	--	
Nevada	X								0.001				
New Hampshire	X			X	X				0.0001	0.02	0.02	1	
New Jersey	X			X	X				--	--	0.02	--	
New Mexico				X					0.001	--	0.03	--	
New York				X	X				0.001				
North Carolina	X			X	X		X		0.001	--	0.03	1	
North Dakota	X	X		X	X				0.001				
Ohio									0.001	0.03	0.03	1	
Oklahoma													
Oregon	X			X	X				0.001	0.03	0.03	1	
Pennsylvania	X	X	X	X	X				0.0009	0.005	0.026	--	
Rhode Island	X	X							0.001				
South Carolina	X	X				X			NA	NA	NA	NA	NA
South Dakota													
Tennessee	X			X									
Texas					X								
Utah	X		X	X	X								
Vermont	X	X		X	X				0.001	0.03	0.03	1	

State	Types of Generic Screening Values Available								Attenuation Coefficients				
	Groundwater	Soil	Deep Soil Gas	Shallow Soil Gas / Subslab	Indoor Air	NAPL	Crawl Space	Utilities / Preferential Pathways	Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Spaces	Comments
Virginia	X	X		X	X	X			0.001	0.01	0.01	--	
Washington	X			X	X		X		0.001			1	
West Virginia	X	X											
Wisconsin	X		X	X	X	X	X	X	0.001	0.01	0.03	1	
Wyoming	X		X	X	X								

NOTES: OPS = Colorado Division of Oil and Public Safety
New Jersey indoor air values are Indoor Air Remediation Standards

Table A-3. Comparison of Residential Screening Levels for Select Vapor-Forming Chemicals (2025)

	Benzene			TCE			PCE			1,1- Dichloroethylene		
State	Groundwater (µg/l)	Soil Gas (µg/m^3)	Indoor Air (µg/m^3)	Groundwater (µg/l)	Soil Gas (µg/m^3)	Indoor Air (µg/m^3)	Groundwater (µg/l)	Soil Gas (µg/m^3)	Indoor Air (µg/m^3)	Groundwater (µg/l)	Soil Gas (µg/m^3)	Indoor Air (µg/m^3)
Alabama	16	120	3.6	5.2	70	2.1	58	1,400	42	196	7,000	210
Alaska	16	36	3.6	5	20	2	58	410	41	200	2,100	79
Arizona	1.6	12	0.36	1.2	16	0.48	15	367	11	196	7,000	210
Arkansas	1.6	12	0.36	1.2	16	0.48	15	367	11	195	7,000	210
California	0.42	3.2	0.097	1.2	16	0.48*	0.64	15	0.46	66	2,400	73
Colorado	1.6	12*	0.36	1.2	16	0.48	15	367	11	195	7,000	210
Connecticut	215	2,500	3.3	27	760	1	340	3,800	5	190	7,600	10
Delaware	1.6	12	0.36	0.52	7	0.21	5.8	140	4.2	19.5	700	21
Florida	--	3.1	0.31	--	--	--	--	--	--	--	--	--
Georgia	15.8	120	3.6	5.2	70	2.1	58	1,400	42	196	7,000	210
Hawaii	2,300	720	0.36	210	830	0.42	190	920	0.46	6,600	83,000	42
Idaho	44	12	0.36	1.2	16	0.48	15	367	11	195	7,000	210
Illinois	110	370	--	340	1,500	--	91	550	--	24,000	240,000	--
Indiana	5	40	4	5	20	2	5	400	40	7	2,000	200
Iowa	1,540	600,000	39.2	--	--	--	--	--	--	--	--	--
Kansas	1.58	120	3.6	5.2	70	2.09	58	1,400	41.7	195	7,000	209
Kentucky	1.59	12	0.36	1.19	15.9	0.478	14.9	360	10.8	195	6,950	209
Louisiana	1.6	12	0.36	1.2	16	0.48	15	367	11	195	7,000	210
Maine	--	120	3.6	--	70	2.1	--	1,400	42	--	7,000	210
Maryland	--	64	3.2	--	42	2.1	--	840	42	--	4,200	210
Massachusetts	1,000	160	2.3	5	28	0.4	20	98	1.4	80	56	0.8
Michigan	14*	110	--	6.2*	67	--	97*	1,400	--	67*	530	--
Minnesota	--	43	1.3	--	70	2.1	--	110	3.4	--	7,000	210
Mississippi	1.6	12	0.36	1.2	16	0.48	15	367	11	195	7,000	210
Missouri	1	190,000	4.98	1600	546,000	12.8	338	200,000	4.27	5,380	446,000	119
Montana	1.6	12	0.36	0.52	7	0.21	5.8	139	4.2	20	700	21
Nebraska	3.1	12	0.36	2.4	16	0.48	32	350	10	83	1,700	52
Nevada	--	--	--	5	--	2.1	50	--	32	--	--	--
New Hampshire	2,900	170	3.3	20	20	0.4	240	400	8	630	2,000	40

	Benzene			TCE			PCE			1,1- Dichloroethylene		
State	Groundwater (µg/l)	Soil Gas (µg/m^3)	Indoor Air (µg/m^3)	Groundwater (µg/l)	Soil Gas (µg/m^3)	Indoor Air (µg/m^3)	Groundwater (µg/l)	Soil Gas (µg/m^3)	Indoor Air (µg/m^3)	Groundwater (µg/l)	Soil Gas (µg/m^3)	Indoor Air (µg/m^3)
New Jersey	23	18	0.64	3	34	1.1	36	540	11	31	1,000	21
New Mexico	15.8	120	3.6	5.16	69.5	2.09	57.5	1,390	41.7	195	6,950	209
New York	--	--	--	--	6	0.2	--	100	3	--	6	0.2
North Carolina	1.6	12	0.36	1	14	0.42	12	280	8.3	39	1,400	42
North Dakota	--	--	--	--	--	--	--	--	--	--	--	--
Ohio	15.9	120	3.6	5.18	69.5	2.1	57.6	1,390	42	195	6,950	210
Oklahoma	15.8	120	3.6	5.2	70	2.1	58	1,390	42	195	7,000	210
Oregon	210	72	0.36	200	95	0.47	3,700	2,200	11	29,000	42,000	210
Pennsylvania	23	120	3.1	9	80	2.1	110	1,600	42	300	8,000	210
Rhode Island	140			540			150					
South Carolina	1.6 (5)	12 (NA)	0.36 (NA)	1.2	16	0.48	15	367	11	195	7,000	210
South Dakota	--	--	--	--	--	--	--	--	--	--	--	--
Tennessee	1.6	12	0.36	0.52	7	0.21	5.8	140	4.2	19.5	700	21
Texas	--	--	11	--	--	2.1	--	--	64	--	--	350
Utah	1.6	12	0.36	1.2	16	0.48	15	367	11	196	7,000	210
Vermont	0.92	4.3	0.13	0.82	6.7	0.2	1.5	21	0.63	270	6,700	200
Virginia	1.6	12	0.36	0.52	7	0.21	5.8	140	4.2	19.7	700	21
Washington	2.4	11	0.321	1.4	11	0.334	25	320	9.6	130	3,000	91.4
West Virginia	1.6	12	0.36	1.2	16	0.48	15	367	11	195	7,000	210
Wisconsin	16	120	3.6	5	70	2.1	5	1,400	42	200	7,000	210
Wyoming	1.6	12	0.36	1.2	16	0.48	15	367	11	196	7,000	210

NOTES: OPS = Colorado Division of Oil and Public Safety; New Jersey indoor air numbers are Indoor Air Remediation Standards

SOURCES: California DTSC. 2014. "Human Health Risk Assessment (HHRA) Note Number 5: Health-Based Indoor Air Screening Criteria for Trichloroethylene (TCE)." https://dtsc.ca.gov/wp-content/uploads/sites/31/2021/07/HHRA-Note-5-23-Aug-2014-2021-A.pdf. CalEPA OEHHA. 2018. "Trichloroethylene (TCE) in Indoor Air." November. https://oehha.ca.gov/sites/default/files/media/downloads/risk-assessment/fact-sheet-california-human-health-screening-levels-chhsls/tceindoorairfactsheet.pdf.

Table A-3. Comparison of Residential Screening Levels for Select Vapor-Forming Chemicals (2025)

	1,1,1- Trichloroethane			
State	**Groundwater (µg/l)**	**Soil Gas (µg/m^3)**	**Indoor Air (µg/m^3)**	**Criteria Notes**
Alabama	7,400	174,000	5,200	
Alaska	7,400	52,000	3,800	
Arizona	7,400	174,000	5,200	
Arkansas	7,400	174,000	5,200	
California	1,500	35,000	1,000	*In accordance with CalEPA/DTSC's HERO Note 5, rapid response concentrations have been established for TCE, including accelerated and urgent action levels of 2 and 6 µg/m³, respectively (California DTSC 2014; CalEPA/OEHHA 2018)
Colorado	7,400	174,000	5,200	*OPS allows 213,000 ug/m^3 for soil gas at 3 feet below floor and within 10 feet of structure, toward source
Connecticut	6,500	380,000	500	
Delaware	740	17,000	520	
Florida	--	--	--	
Georgia	7,400	174,000	5,200	
Hawaii	340,000	2,100,000	1,000	
Idaho	7,400	174,000	5,200	
Illinois	1,000,000	6,600,000	--	
Indiana	200	50,000	5,000	
Iowa	--	--	--	
Kansas	7,400	174,000	5,210	
Kentucky	7,420	174,000	5,210	
Louisiana	7,400	174,000	5,200	
Maine	--	173,333	5,200	
Maryland	--	106,000	5,300	
Massachusetts	4,000	210	3	
Michigan	8,700*	450	--	*Values do not address groundwater in contact
Minnesota	--	7,000	210	
Mississippi	7,400	174,000	5,200	
Missouri	102,000	56,600,000	1,131	
Montana	740	17,000	520	
Nebraska	3,600	43,000	1,300	
Nevada	--	--	--	
New Hampshire	27,000	50,000	1,000	

	1,1,1- Trichloroethane			
State	Groundwater (µg/l)	Soil Gas (µg/m^3)	Indoor Air (µg/m^3)	Criteria Notes
New Jersey	13,000	260,000	5,200	Indoor Air numbers are Indoor Air Remediation Standards
New Mexico	7,390	174,000	5,210	
New York	--	100	3	
North Carolina	1,500	35,000	1,000	
North Dakota	--	--	--	
Ohio	7,420	174,000	5,200	
Oklahoma	7,400	174,000	5,200	
Oregon	1,290,000	1,000,000	5,200	
Pennsylvania	12,000	200,000	5,200	
Rhode Island	3,100			The residential screening levels are what is currently on the books. New numbers are in draft and in the rule-making process.
South Carolina	7,400	174,000	5,200	Values in "()" are for PVI
South Dakota	--	--	--	
Tennessee	740	17,400	520	
Texas	--	--	5,300	
Utah	7,400	174,000	5,200	
Vermont	7,420	174,000	5,200	
Virginia	739	17,300	520	
Washington	5,400	76,000	2,290	
West Virginia	7,400	174,000	5,200	
Wisconsin	7,400	170,000	5,200	
Wyoming	7,400	174,000	5,200	

NOTES: OPS = Colorado Division of Oil and Public Safety

SOURCES: California DTSC. 2014. “Human Health Risk Assessment (HHRA) Note Number 5: Health-Based Indoor Air Screening Criteria for Trichloroethylene (TCE).” https://dtsc.ca.gov/wp-content/uploads/sites/31/2021/07/HHRA-Note-5-23-Aug-2014-2021-A.pdf. CalEPA OEHHA. 2018. “Trichloroethylene (TCE) in Indoor Air.” November. https://oehha.ca.gov/sites/default/files/media/downloads/risk-assessment/fact-sheet-californiahuman-health-screening-levels-chhsls/tceindoorairfactsheet.pdf.

State	Alabama	Last Updated:	8/27/2025
Agency	Alabama Department of Environmental Management	Abbreviation:	ADEM
Main Webpage	https://adem.alabama.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type			Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance		X	Mitigation
	Petroleum Vapor Intrusion Guidance			Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	Dissolved Groundwater Vertical	Nonaqueous Phase Liquid	Lateral	Vertical

Published risk-based target/screening levels for VI in various media available?					
	X	Groundwater		X	Indoor air
		Soil			NAPL
	X	Deep soil gas			Crawl space
	X	Shallow soil gas			Utilities/conduits

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	VISLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Space	Utilities/Conduits
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Alaska	**Last Updated:**	8/27/2025
Agency	Alaska Department of Environmental Conservation	**Abbreviation:**	ADEC
Main Webpage	https://dec.alaska.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	Mitigation
	Petroleum Vapor Intrusion Guidance		Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	0–1 Years

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	4–10	--	100	--

Published risk-based target/screening levels for VI in various media available?					
	X	**Groundwater**		X	**Indoor air**
		Soil			**NAPL**
	X	**Deep soil gas**			**Crawl space**
	X	**Shallow soil gas**			**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	105
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	0.1	0.1	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	Vapor barrier should be impermeable to the contaminants of concern
Designer qualification necessary to be met?	

State	Arizona	**Last Updated:**	8/27/2025
Agency	Arizona Department of Environmental Quality	**Abbreviation:**	ADEQ
Main Webpage	https://www.azdeq.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	Date not set

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?					
X	**Groundwater**		X	**Indoor air**
	Soil			**NAPL**
X	**Deep soil gas**			**Crawl space**
X	**Shallow soil gas**			**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only site-specific

Number of VOC screening levels available:	VISLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**

Notes:

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Arkansas	**Last Updated:**	8/27/2025
Agency	Arkansas Department of Energy & Environment	**Abbreviation:**	E&E
Main Webpage	https://ee.arkansas.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		**Specific Guidance Type**
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?					
	Groundwater			**Indoor air**	
	Soil			**NAPL**	
	Deep soil gas			**Crawl space**	
	Shallow soil gas			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	RSLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	No
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	California	**Last Updated:**	8/27/2025
Agency	California Environmental Protection Agency's (Cal/EPA's) Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB) or the San Francisco or Los Angales Regional Water Quality Control Boards (SFRWQCB or LARWQCB)	**Abbreviation:**	DTSC & State Waterboard or Regional Waterboards
Main Webpage	https://dtsc.ca.gov/vapor-intrusion/ ; https://www.waterboards.ca.gov/water_issues/programs/site_cleanup_program/vapor_intrusion/		

				Guidance Document (if available) Year:	2025
	Specific Guidance Type			**Specific Guidance Type**	
X	**Chlorinated Vapor Intrusion Guidance**		X	**Mitigation**	
	Petroleum Vapor Intrusion Guidance			**Public Stakeholder Document**	

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	NA

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	10	30	100	100

Published risk-based target/screening levels for VI in various media available?					
X	**Groundwater**		X	**Indoor air**	
X	**Soil**			**NAPL**	
X	**Deep soil gas**		X	**Crawl space**	
X	**Shallow soil gas**			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	69–152
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
001;not evaluated by OP	--	0.03	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	No*
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

*see https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/sitecleanup/2022_VIM_Guidance.pdf)

State	Colorado	**Last Updated:**	8/27/2025
Agency	Colorado Department of Public Health and Environment; Colorado Division of Oil & Public Safety	**Abbreviation:**	CDPHE; OPS
Main Webpage	https://cdphe.colorado.gov/;https://ops.colorado.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
X	**Chlorinated Vapor Intrusion Guidance**	X	**Mitigation**
X	**Petroleum Vapor Intrusion Guidance**		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No; (pending 2025 for OPS)

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	5	15	100	--

Published risk-based target/screening levels for VI in various media available?				
X; none for OPS	**Groundwater**		X	**Indoor air**
X; none for OPS	**Soil**		X	**NAPL**
X	**Deep soil gas**		X	**Crawl space**
X	**Shallow soil gas**		X	**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both; OPS uses soil gas if screening distance/factors violated, then sub-slab results, then indoor air as last resort.

Number of VOC screening levels available:	RSLs; OPS: 7
Non-residential criteria available:	No
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	0.03	0.03	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	No
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	15–30 depending on sub-slab VOC
Designer qualification necessary to be met?	

State	Connecticut	**Last Updated:**	8/27/2025
Agency	Department of Energy and Environmental Protection	**Abbreviation:**	DEEP
Main Webpage	https://portal.ct.gov/deep		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
10	10	--	100	30

Published risk-based target/screening levels for VI in various media available?					
	X	**Groundwater**		X	**Indoor air**
		Soil			**NAPL**
	X	**Deep soil gas**			**Crawl space**
	X	**Shallow soil gas**			**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	73
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.0002	--	0.0013	--	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Delaware	**Last Updated:**	8/27/2025
Agency	Department of Natural Resources and Environmental Control	**Abbreviation:**	DNREC
Main Webpage	https://dnrec.delaware.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
X	**Chlorinated Vapor Intrusion Guidance**	X	**Mitigation**
X	**Petroleum Vapor Intrusion Guidance**		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	5	15 or 18	100	100

Published risk-based target/screening levels for VI in various media available?					
	X	**Groundwater**			**Indoor air**
	X	**Soil**			**NAPL**
	X	**Deep soil gas**			**Crawl space**
	X	**Shallow soil gas**			**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	>190
Non-residential criteria available:	No
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	0.03	0.03	--	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Florida	Last Updated:	8/27/2025
Agency	Florida Department of Health	Abbreviation:	
Main Webpage	https://www.floridahealth.gov		

Guidance Document (if available) Year:	2025

	Specific Guidance Type			Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance		X	Mitigation
	Petroleum Vapor Intrusion Guidance			Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	Dissolved Groundwater Vertical	Nonaqueous Phase Liquid	Lateral	Vertical
50	--	--	100	--

Published risk-based target/screening levels for VI in various media available?					
	Groundwater			Indoor air	
	Soil			NAPL	
	Deep soil gas			Crawl space	
	Shallow soil gas			Utilities/conduits	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only site-specific

Number of VOC screening levels available:	8
Non-residential criteria available:	No
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Space	Utilities/Conduits
--	--	0.1	--	

Notes:	

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	No
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Georgia	Last Updated:	8/27/2025
Agency	Georgia Environmental Protection Division	Abbreviation:	EPD
Main Webpage	https://epd.georgia.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
X	Chlorinated Vapor Intrusion Guidance	X	Mitigation
X	Petroleum Vapor Intrusion Guidance		Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	Dissolved Groundwater Vertical	Nonaqueous Phase Liquid	Lateral	Vertical
30	5	15 or 18	100	--

Published risk-based target/screening levels for VI in various media available?					
	Groundwater			Indoor air	
	Soil			NAPL	
	Deep soil gas			Crawl space	
	Shallow soil gas			Utilities/conduits	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only site-specific

Number of VOC screening levels available:	RSLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Space	Utilities/Conduits
0.001	--	0.03	--	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	30
Designer qualification necessary to be met?	

State	Hawaii	**Last Updated:**	8/27/2025
Agency	Hawaii Department of Health	**Abbreviation:**	DOH
Main Webpage	https://health.hawaii.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
100	15	30	100	--

Published risk-based target/screening levels for VI in various media available?					
	Groundwater			**Indoor air**	
	Soil			**NAPL**	
	Deep soil gas			**Crawl space**	
	Shallow soil gas			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	

Number of VOC screening levels available:	72
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
--	--	0.0005	1	

Notes:

Additional Key Questions	
Recommend number of sampling events in guidance?	
Recommend number of sampling points in guidance?	
Does your state have a mechanism for long-term monitoring?	
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Idaho	**Last Updated:**	8/27/2025
Agency	Idaho Department of Environmental Quality	**Abbreviation:**	IDEQ
Main Webpage	https://www.deq.idaho.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		**Specific Guidance Type**
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
--	5	15	100	100

Published risk-based target/screening levels for VI in various media available?

	Groundwater		**Indoor air**
	Soil		**NAPL**
	Deep soil gas		**Crawl space**
	Shallow soil gas		**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	

Number of VOC screening levels available:	RSLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	0.03	0.03	--	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	
Recommend number of sampling points in guidance?	
Does your state have a mechanism for long-term monitoring?	
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Illinois	**Last Updated:**	8/27/2025
Agency	Illinois Environmental Protection Agency	**Abbreviation:**	IEPA
Main Webpage	https://epa.illinois.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		**Specific Guidance Type**
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?

X	**Groundwater**		**Indoor air**	
	Soil		**NAPL**	
X	**Deep soil gas**		**Crawl space**	
X	**Shallow soil gas**		**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	59
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**

Notes:

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Indiana	**Last Updated:**	8/27/2025
Agency	Indiana Department of Environmental Management	**Abbreviation:**	IDEM
Main Webpage	https://www.in.gov/idem/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
x	Chlorinated Vapor Intrusion Guidance	X	Mitigation
X	Petroleum Vapor Intrusion Guidance		Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
6 (LNAPL = 15)	6	15	100	100

Published risk-based target/screening levels for VI in various media available?					
	Groundwater		X	**Indoor air**
0	**Soil**			**NAPL**
X	**Deep soil gas**		X	**Crawl space**
X	**Shallow soil gas**		X	**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	148
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
--	0.03	0.03	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Iowa	Last Updated:	8/27/2025
Agency	Department of Natural Resources	Abbreviation:	Iowa DNR
Main Webpage	https://www.iowadnr.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type			Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance		X	Mitigation
	Petroleum Vapor Intrusion Guidance			Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	Dissolved Groundwater Vertical	Nonaqueous Phase Liquid	Lateral	Vertical
500	--	--	--	--

Published risk-based target/screening levels for VI in various media available?					
	X	Groundwater			Indoor air
	X	Soil			NAPL
	X	Deep soil gas			Crawl space
	X	Shallow soil gas			Utilities/conduits

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	4
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Space	Utilities/Conduits
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	No
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Kansas	**Last Updated:**	8/27/2025
Agency	Kansas Department of Health and Environment	**Abbreviation:**	KDHE
Main Webpage	https://www.kdhe.ks.gov/		

			Guidance Document (if available) Year:	2025
	Specific Guidance Type		**Specific Guidance Type**	
X	**Chlorinated Vapor Intrusion Guidance**	X	**Mitigation**	
X	**Petroleum Vapor Intrusion Guidance**		**Public Stakeholder Document**	

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	5	15 or 18	100	40

Published risk-based target/screening levels for VI in various media available?					
	Groundwater			**Indoor air**	
	Soil			**NAPL**	
	Deep soil gas			**Crawl space**	
	Shallow soil gas			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Lookup tables

Number of VOC screening levels available:	73
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	--	0.03	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Kentucky	Last Updated:	8/27/2025
Agency	Kentucky Department for Environmental Protection	Abbreviation:	KYDEP
Main Webpage	https://eec.ky.gov		

Guidance Document (if available) Year:	2025

	Specific Guidance Type			Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance		X	Mitigation
	Petroleum Vapor Intrusion Guidance			Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	Dissolved Groundwater Vertical	Nonaqueous Phase Liquid	Lateral	Vertical

Published risk-based target/screening levels for VI in various media available?				
X	Groundwater		X	Indoor air
	Soil			NAPL
X	Deep soil gas			Crawl space
X	Shallow soil gas			Utilities/conduits

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	VISLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Space	Utilities/Conduits

Notes:	

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Louisiana	**Last Updated:**	8/27/2025
Agency	Louisiana Department of Environmental Quality	**Abbreviation:**	Louisiana DEQ
Main Webpage	https://deq.louisiana.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	Date not set

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?					
X	**Groundwater**		X	**Indoor air**
	Soil			**NAPL**
X	**Deep soil gas**			**Crawl space**
X	**Shallow soil gas**			**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only site-specific

Number of VOC screening levels available:	VISLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	No
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Maine	**Last Updated:**	8/27/2025
Agency	Maine Department of Environmental Protection	**Abbreviation:**	Maine DEP
Main Webpage	https://www.maine.gov/dep/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	

Identified Separation Distances (in ft)

Petroleum			Chlorinated or Other	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	6	15	--	--

Published risk-based target/screening levels for VI in various media available?

	Groundwater		**Indoor air**
	Soil		**NAPL**
	Deep soil gas		**Crawl space**
	Shallow soil gas		**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	

Number of VOC screening levels available:	100
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance

Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Space	Utilities/Conduits
0.001	--	0.03	1	

Notes:

Additional Key Questions	
Recommend number of sampling events in guidance?	
Recommend number of sampling points in guidance?	
Does your state have a mechanism for long-term monitoring?	
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Maryland*	Last Updated:	8/27/2025
Agency	Maryland Department of the Environment	Abbreviation:	MDE
Main Webpage	https://mde.maryland.gov		

Guidance Document (if available) Year:	2025

	Specific Guidance Type			Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance		X	Mitigation
	Petroleum Vapor Intrusion Guidance			Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	Dissolved Groundwater Vertical	Nonaqueous Phase Liquid	Lateral	Vertical

Published risk-based target/screening levels for VI in various media available?					
X	Groundwater		X	Indoor air	
X	Soil			NAPL	
X	Deep soil gas			Crawl space	
X	Shallow soil gas			Utilities/conduits	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	RSLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Space	Utilities/Conduits
0.001	--	0.05	--	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Massachusetts	**Last Updated:**	8/27/2025
Agency	Massachusetts Department of Environmental Protection	**Abbreviation:**	MassDEP
Main Webpage	https://www.mass.gov/orgs/massachusetts-department-of-environmental-protection		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		**Specific Guidance Type**
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	15	--	100	100

Published risk-based target/screening levels for VI in various media available?					
	Groundwater			**Indoor air**	
	Soil			**NAPL**	
	Deep soil gas			**Crawl space**	
	Shallow soil gas			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	

Number of VOC screening levels available:	42
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
--	--	0.014	--	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	
Recommend number of sampling points in guidance?	
Does your state have a mechanism for long-term monitoring?	
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Michigan	**Last Updated:**	8/27/2025
Agency	Environment, Great Lakes, and Energy	**Abbreviation:**	EGLE
Main Webpage	https://www.michigan.gov/egle/		

			Guidance Document (if available) Year:	2025
Specific Guidance Type			**Specific Guidance Type**	
X	**Chlorinated Vapor Intrusion Guidance**		X	**Mitigation**
X	**Petroleum Vapor Intrusion Guidance**			**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	0-1 years

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	5	15	100	--

Published risk-based target/screening levels for VI in various media available?				
X	**Groundwater**			**Indoor air**
X	**Soil**			**NAPL**
X	**Deep soil gas**		X	**Crawl space**
X	**Shallow soil gas**		X	**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	141
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	0.03	0.03	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	No
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	Depends on liner diffusion coefficient for contaminant
Designer qualification necessary to be met?	

State	Minnesota	Last Updated:	8/27/2025
Agency	Minnesota Pollution Control Agency	Abbreviation:	MPCA
Main Webpage	https://www.pca.state.mn.us/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
X	Chlorinated Vapor Intrusion Guidance	X	Mitigation
X	Petroleum Vapor Intrusion Guidance		Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	Dissolved Groundwater Vertical	Nonaqueous Phase Liquid	Lateral	Vertical
100	--	--	100	--

Published risk-based target/screening levels for VI in various media available?					
	Groundwater			Indoor air	
	Soil			NAPL	
X	Deep soil gas			Crawl space	
X	Shallow soil gas			Utilities/conduits	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	62
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Space	Utilities/Conduits
--	0.03	0.03	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Mississippi	**Last Updated:**	8/27/2025
Agency	Mississippi Department of Environmental Quality	**Abbreviation:**	MDEQ
Main Webpage	https://www.mdeq.ms.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?					
	Groundwater			**Indoor air**	
	Soil			**NAPL**	
	Deep soil gas			**Crawl space**	
	Shallow soil gas			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	

Number of VOC screening levels available:	RSLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	
Recommend number of sampling points in guidance?	
Does your state have a mechanism for long-term monitoring?	
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Missouri	**Last Updated:**	8/27/2025
Agency	Department of Natural Resources, Division of Environmental Quality	**Abbreviation:**	DNR/DEQ
Main Webpage	https://dnr.mo.gov/about-us/division-environmental-quality		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		**Specific Guidance Type**
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	0–1 years

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
100	--	--	100	--

Published risk-based target/screening levels for VI in various media available?					
X	**Groundwater**		X	**Indoor air**	
X	**Soil**			**NAPL**	
X	**Deep soil gas**		X	**Crawl space**	
X	**Shallow soil gas**			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	40
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Montana	**Last Updated:**	8/27/2025
Agency	Montana Department of Environmental Quality	**Abbreviation:**	DEQ
Main Webpage	https://deq.mt.gov/		

			Guidance Document (if available) Year:	2025
Specific Guidance Type			**Specific Guidance Type**	
	Chlorinated Vapor Intrusion Guidance		X	**Mitigation**
X	**Petroleum Vapor Intrusion Guidance**			**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	8	15 or 18	100	--

Published risk-based target/screening levels for VI in various media available?				
X	**Groundwater**		X	**Indoor air**
X	**Soil**			**NAPL**
X	**Deep soil gas**			**Crawl space**
X	**Shallow soil gas**			**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	RSLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	0.03	0.03	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Nebraska	**Last Updated:**	8/27/2025
Agency	Nebraska Department of Environment and Energy	**Abbreviation:**	NDEE
Main Webpage	http://dee.ne.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	Mitigation
	Petroleum Vapor Intrusion Guidance		Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	Date not set

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
200	--	--	100	100

Published risk-based target/screening levels for VI in various media available?

X	**Groundwater**	X	**Indoor air**	
	Soil		**NAPL**	
X	**Deep soil gas**		**Crawl space**	
X	**Shallow soil gas**		**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	>200
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001		0.03	--	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Nevada	**Last Updated:**	8/27/2025
Agency	Nevada Division of Environmental Protection	**Abbreviation:**	NDEP
Main Webpage	https://ndep.nv.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
X	**Chlorinated Vapor Intrusion Guidance**	X	**Mitigation**
X	**Petroleum Vapor Intrusion Guidance**		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	1–2 years

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
--	--	--	100	100

Published risk-based target/screening levels for VI in various media available?					
X	**Groundwater**			**Indoor air**	
	Soil			**NAPL**	
	Deep soil gas			**Crawl space**	
	Shallow soil gas			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	2
Non-residential criteria available:	No
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001				
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	New Hampshire	**Last Updated:**	8/27/2025
Agency	New Hampshire Department of Environmental Services	**Abbreviation:**	NHDES
Main Webpage	https://www.des.nh.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type
X	**Chlorinated Vapor Intrusion Guidance**
	Petroleum Vapor Intrusion Guidance

	Specific Guidance Type
X	**Mitigation**
	Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	2026

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	30	--	100	100

Published risk-based target/screening levels for VI in various media available?

X	**Groundwater**	X	**Indoor air**
	Soil		**NAPL**
X	**Deep soil gas**		**Crawl space**
X	**Shallow soil gas**		**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	31
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.0001	0.02	0.02	1	

Notes:

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	New Jersey	**Last Updated:**	8/27/2025
Agency	Department of Environmental Protection	**Abbreviation:**	NJDEP
Main Webpage	https://dep.nj.gov/		

			Guidance Document (if available) Year:	2025
Specific Guidance Type			**Specific Guidance Type**	
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**	
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**	

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	30	30	100	100

Published risk-based target/screening levels for VI in various media available?				
X	**Groundwater**	X	**Indoor air**	
	Soil		**NAPL**	
X	**Deep soil gas**		**Crawl space**	
X	**Shallow soil gas**		**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	45
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
--	--	0.02	--	
Notes:	Indoor air numbers are Indoor Air Remediation Standards			

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	New Mexico	**Last Updated:**	8/27/2025
Agency	New Mexico Environmental Department	**Abbreviation:**	NMED
Main Webpage	https://www.env.nm.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		**Specific Guidance Type**
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	Date not set

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
		--	100	--

Published risk-based target/screening levels for VI in various media available?					
	Groundwater			**Indoor air**	
	Soil			**NAPL**	
X	**Deep soil gas**			**Crawl space**	
X	**Shallow soil gas**			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	118
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	--	0.03	--	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	No
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	New York	**Last Updated:**	8/27/2025
Agency	Department of Environmental Conservation	**Abbreviation:**	DEC
Main Webpage	https://dec.ny.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
X	Chlorinated Vapor Intrusion Guidance	X	Mitigation
X	Petroleum Vapor Intrusion Guidance		Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
		--	100	--

Published risk-based target/screening levels for VI in various media available?

	Groundwater		X	Indoor air
	Soil			NAPL
X	Deep soil gas			Crawl space
X	Shallow soil gas			Utilities/conduits

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	8
Non-residential criteria available:	No
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001				
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	North Carolina	**Last Updated:**	8/27/2025
Agency	North Carolina Deptartment of Environmental Quality	**Abbreviation:**	NCDEQ
Main Webpage	https://www.deq.nc.gov/		

			Guidance Document (if available) Year:	2025
	Specific Guidance Type		**Specific Guidance Type**	
X	**Chlorinated Vapor Intrusion Guidance**	X	**Mitigation**	
X	**Petroleum Vapor Intrusion Guidance**		**Public Stakeholder Document**	

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	2+ years

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
LNAPL = 100	--	--	100	100

Published risk-based target/screening levels for VI in various media available?				
X	**Groundwater**	X	**Indoor air**	
	Soil		**NAPL**	
X	**Deep soil gas**	X	**Crawl space**	
X	**Shallow soil gas**		**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	355
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	--	0.03	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	North Dakota	**Last Updated:**	8/27/2025
Agency	North Dakota Department of Environmental Quality	**Abbreviation:**	NDDEQ
Main Webpage	https://deq.nd.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	1–2 years

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
		--	100	--

Published risk-based target/screening levels for VI in various media available?					
X	**Groundwater**		X	**Indoor air**
X	**Soil**			**NAPL**
X	**Deep soil gas**			**Crawl space**
X	**Shallow soil gas**			**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	0
Non-residential criteria available:	No
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001				
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Ohio	Last Updated:	8/27/2025
Agency	Ohio Environmental Protection Agency	Abbreviation:	Ohio EPA
Main Webpage	https://epa.ohio.gov/home		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	Mitigation
X	Petroleum Vapor Intrusion Guidance		Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			Chlorinated or Other	
Lateral	Dissolved Groundwater Vertical	Nonaqueous Phase Liquid	Lateral	Vertical
30 (small sources) or 100	6	15	100	--

Published risk-based target/screening levels for VI in various media available?				
	Groundwater		Indoor air	
	Soil		NAPL	
	Deep soil gas		Crawl space	
	Shallow soil gas		Utilities/conduits	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	83
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	Deep Soil Gas	Shallow Soil Gas	Crawl Space	Utilities/Conduits
0.001	0.03	0.03	1	

Notes:	

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Oklahoma	**Last Updated:**	8/27/2025
Agency	Oklahoma Department of Environmental Quality	**Abbreviation:**	OKDEQ
Main Webpage	https://www.deq.ok.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		**Specific Guidance Type**
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?					
	Groundwater			**Indoor air**	
	Soil			**NAPL**	
	Deep soil gas			**Crawl space**	
	Shallow soil gas			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	RSLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**

Notes:	

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Oregon	**Last Updated:**	8/27/2025
Agency	Department of Environmental Quality	**Abbreviation:**	DEQ
Main Webpage	https://www.oregon.gov/DEQ/Pages/index.aspx		

			Guidance Document (if available) Year:	2025
	Specific Guidance Type		**Specific Guidance Type**	
X	**Chlorinated Vapor Intrusion Guidance**	X	**Mitigation**	
X	**Petroleum Vapor Intrusion Guidance**	X	**Public Stakeholder Document**	

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	Yes, March 2025

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	5	15	100	--

Published risk-based target/screening levels for VI in various media available?					
X	**Groundwater**		X	**Indoor air**	
	Soil			**NAPL**	
X	**Deep soil gas**			**Crawl space**	
X	**Shallow soil gas**			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Lookup tables

Number of VOC screening levels available:	>350
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	0.03	0.03	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	Minimum 30 mil (and adequate composition: low permeability, durable, chemical resistance)
Designer qualification necessary to be met?	

State	Pennsylvania	**Last Updated:**	8/27/2025
Agency	Department of Environmental Protection	**Abbreviation:**	DEP
Main Webpage	https://www.dep.pa.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
X	**Chlorinated Vapor Intrusion Guidance**	X	**Mitigation**
X	**Petroleum Vapor Intrusion Guidance**		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	5	15	100	--

Published risk-based target/screening levels for VI in various media available?

X	**Groundwater**	X	**Indoor air**
X	**Soil**		**NAPL**
X	**Deep soil gas**		**Crawl space**
X	**Shallow soil gas**		**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	119
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.0009	0.005	0.026	--	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	Vapor barriers should be chemically resistant to the COCs present and installed to the manufacturer recommendations
Designer qualification necessary to be met?	

State	Rhode Island	**Last Updated:**	8/27/2025
Agency	Rhode Island, Department of Environmental Management	**Abbreviation:**	RIDEM
Main Webpage	https://dem.ri.gov/		

	Guidance Document (if available) Year:	2025

	Specific Guidance Type		**Specific Guidance Type**
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	1–2 years

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?				
X	**Groundwater**		**Indoor air**	
X	**Soil**		**NAPL**	
	Deep soil gas		**Crawl space**	
	Shallow soil gas		**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables (in draft)

Number of VOC screening levels available:	43
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001				
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	South Carolina	**Last Updated:**	8/27/2025
Agency	South Carolina Department of Environmental Services	**Abbreviation:**	SCDES
Main Webpage	https://des.sc.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	Date not set

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	5	15		

Published risk-based target/screening levels for VI in various media available?

X	**Groundwater**		**Indoor air**	
X	**Soil**	X	**NAPL**	
	Deep soil gas		**Crawl space**	
	Shallow soil gas		**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	RSLs (8)
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
NA	NA	NA	NA	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes (NA)
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	NA
Designer qualification necessary to be met?	

State	South Dakota	**Last Updated:**	8/27/2025
Agency	South Dakota Department of Agriculture & Natural Resources	**Abbreviation:**	DANR
Main Webpage	https://danr.sd.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		**Specific Guidance Type**
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	

Identified Separation Distances (in ft)

Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?

	Groundwater			**Indoor air**	
	Soil			**NAPL**	
	Deep soil gas			**Crawl space**	
	Shallow soil gas			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	

Number of VOC screening levels available:	6
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance

Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**

Notes:

Additional Key Questions	
Recommend number of sampling events in guidance?	
Recommend number of sampling points in guidance?	
Does your state have a mechanism for long-term monitoring?	
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Tennessee	**Last Updated:**	8/27/2025
Agency	Tennessee Department of Environment & Conservation	**Abbreviation:**	TDEC
Main Webpage	https://www.tn.gov/environment.html		

			Guidance Document (if available) Year:	2025
Specific Guidance Type			**Specific Guidance Type**	
X	**Chlorinated Vapor Intrusion Guidance**		X	**Mitigation**
	Petroleum Vapor Intrusion Guidance			**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?				
X	**Groundwater**		**Indoor air**	
X	**Soil**		**NAPL**	
X	**Deep soil gas**		**Crawl space**	
X	**Shallow soil gas**		**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	VISLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Texas	**Last Updated:**	8/27/2025
Agency	Texas Commission on Environmental Quality	**Abbreviation:**	TCEQ
Main Webpage	https://www.tceq.texas.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		**Specific Guidance Type**
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?					
	Groundwater		X	**Indoor air**	
	Soil			**NAPL**	
	Deep soil gas			**Crawl space**	
	Shallow soil gas			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	>300
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**

Notes:	

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Utah	**Last Updated:**	8/27/2025
Agency	Utah Department of Environmental Quality	**Abbreviation:**	Utah DEQ
Main Webpage	https://deq.utah.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance
	Petroleum Vapor Intrusion Guidance

	Specific Guidance Type
X	**Mitigation**
	Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	--	--	100	--

Published risk-based target/screening levels for VI in various media available?					
	X	**Groundwater**		X	**Indoor air**
		Soil			**NAPL**
	X	**Deep soil gas**			**Crawl space**
	X	**Shallow soil gas**			**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	

Number of VOC screening levels available:	VISLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**

Notes:	

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	No
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Vermont	**Last Updated:**	8/27/2025
Agency	Agency of Natural Resources Deptartment of Environmental Conservation	**Abbreviation:**	DEC
Main Webpage	https://dec.vermont.gov/		

	Guidance Document (if available) Year:	2025

	Specific Guidance Type
X	**Chlorinated Vapor Intrusion Guidance**
X	**Petroleum Vapor Intrusion Guidance**

	Specific Guidance Type
X	**Mitigation**
	Public Stakeholder Document

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	6	15	100	100

Published risk-based target/screening levels for VI in various media available?

X	**Groundwater**	X	**Indoor air**
X	**Soil**		**NAPL**
X	**Deep soil gas**		**Crawl space**
X	**Shallow soil gas**		**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	16
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	0.03	0.03	1	

Notes:

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Virginia	**Last Updated:**	8/27/2025
Agency	Virginia Department Environmental Quality	**Abbreviation:**	VADEQ
Main Webpage	https://www.deq.virginia.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?					
X	**Groundwater**		X	**Indoor air**	
X	**Soil**		X	**NAPL**	
X	**Deep soil gas**			**Crawl space**	
X	**Shallow soil gas**			**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	>300
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	0.01	0.01	--	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	No
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Washington	**Last Updated:**	8/27/2025
Agency	Washington State Department of Ecology	**Abbreviation:**	Ecology
Main Webpage	https://ecology.wa.gov/		

			Guidance Document (if available) Year:	2025
	Specific Guidance Type		**Specific Guidance Type**	
X	**Chlorinated Vapor Intrusion Guidance**	X	**Mitigation**	
X	**Petroleum Vapor Intrusion Guidance**		**Public Stakeholder Document**	

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	6	15	100	--

Published risk-based target/screening levels for VI in various media available?				
X	**Groundwater**	X	**Indoor air**	
	Soil		**NAPL**	
X	**Deep soil gas**	X	**Crawl space**	
X	**Shallow soil gas**		**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	88
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001			1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	West Virginia	**Last Updated:**	8/27/2025
Agency	West Virginia Department of Environmental Protection	**Abbreviation:**	DEP
Main Webpage	https://dep.wv.gov/		

Guidance Document (if available) Year:	2025

	Specific Guidance Type		Specific Guidance Type
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	No

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?

X	**Groundwater**		**Indoor air**	
X	**Soil**		**NAPL**	
	Deep soil gas		**Crawl space**	
	Shallow soil gas		**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	RSLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**

Notes:

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	

State	Wisconsin	**Last Updated:**	8/27/2025
Agency	Wisconsin Department of Natural Resources	**Abbreviation:**	WI DNR
Main Webpage	https://dnr.wisconsin.gov/		

			Guidance Document (if available) Year:	2025
	Specific Guidance Type		**Specific Guidance Type**	
X	**Chlorinated Vapor Intrusion Guidance**	X	**Mitigation**	
X	**Petroleum Vapor Intrusion Guidance**		**Public Stakeholder Document**	

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	0–1 years

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**
30	5	15	100	--

Published risk-based target/screening levels for VI in various media available?				
X	**Groundwater**	X	**Indoor air**	
	Soil	X	**NAPL**	
X	**Deep soil gas**	X	**Crawl space**	
X	**Shallow soil gas**	X	**Utilities/conduits**	

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Only lookup tables

Number of VOC screening levels available:	VISLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	Yes
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**
0.001	0.01	0.03	1	
Notes:				

Additional Key Questions	
Recommend number of sampling events in guidance?	Yes
Recommend number of sampling points in guidance?	Yes
Does your state have a mechanism for long-term monitoring?	No
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	no specific thickness; use vapor barrier designed for COCs and tested for concentrations at site
Designer qualification necessary to be met?	

State	Wyoming	**Last Updated:**	8/27/2025
Agency	Wyoming Department of Environmental Quality	**Abbreviation:**	Wyoming DEQ
Main Webpage	https://deq.wyoming.gov/		

			Guidance Document (if available) Year:	2025
Specific Guidance Type			**Specific Guidance Type**	
	Chlorinated Vapor Intrusion Guidance	X	**Mitigation**	
	Petroleum Vapor Intrusion Guidance		**Public Stakeholder Document**	

If your state is considering the development or revision of vapor intrusion guidance, what is the timeline for its publication?	1–2 years

Identified Separation Distances (in ft)				
Petroleum			**Chlorinated or Other**	
Lateral	**Dissolved Groundwater Vertical**	**Nonaqueous Phase Liquid**	**Lateral**	**Vertical**

Published risk-based target/screening levels for VI in various media available?					
	X	**Groundwater**		X	**Indoor air**
		Soil			**NAPL**
	X	**Deep soil gas**			**Crawl space**
	X	**Shallow soil gas**			**Utilities/conduits**

Do you have criteria that are generically used (e.g., lookup tables) or is every site site-specific?	Stepwise approach using both

Number of VOC screening levels available:	VISLs
Non-residential criteria available:	Yes
Option available for site-specific attenuation factors:	No
Target cancer risk level:	
Target hazard quotient for potential non-cancer effects:	

Attenuation Values used in Guidance				
Groundwater	**Deep Soil Gas**	**Shallow Soil Gas**	**Crawl Space**	**Utilities/Conduits**

Notes:

Additional Key Questions	
Recommend number of sampling events in guidance?	No
Recommend number of sampling points in guidance?	No
Does your state have a mechanism for long-term monitoring?	Yes
Recommended differential pressure target for active mitigation systems (range or minimum) (Pa)	
Recommended vapor membrane thickness for passive mitigation systems (range or minimum) (mil)	
Designer qualification necessary to be met?	