Health and Safety Programs.

Is It Safe?

MAUL FOSTER ALONGI

© 2025 Maul Foster Alongi, Inc

Industrial Hygiene.

- What is it?

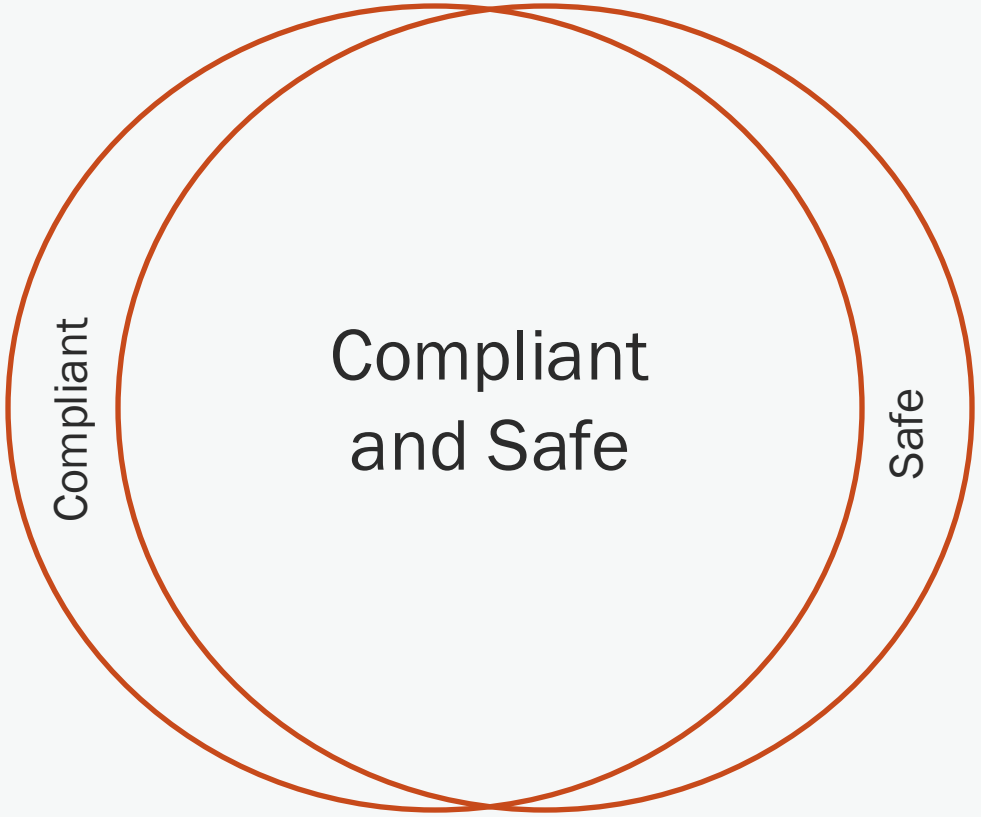
MAUL FOSTER ALONGI

99% of My Work is Answering Three Questions and Doing One Thing.

1. Is it compliant?
2. Is it safe?
3. What should I do?
4. Help me do what I should do.

MAUL FOSTER ALONGI

Compliant vs. Safe.



MAUL FOSTER ALONGI

What is “Compliant?”

1. I won’t get a ticket?

2. I follow the letter of the law?

3. I follow the intent of the law?

MAUL FOSTER ALONGI

Question: Is it Compliant?

Is it compliant for a worker in Oregon to perform a task with methylene chloride that results in an 8-hour time-weighted average (TWA) exposure of 3 parts per million (ppm)?

For reference, the OR-OSHA action level is 12.5 ppm, the PEL-TWA is 25 ppm and the ACGIH TLV-TWA is 50 ppm.

Partial Answer.

OR-OSHA says this is compliant.

MAUL FOSTER ALONGI

More Complete Answer.

The 2016 Lautenberg Act granted EPA more authority and responsibility to regulate chemical risks under TSCA. EPA banned most uses of methylene chloride in the 2024 final rule. For the small number of allowable uses, employers must develop and implement a workplace chemical protection program (WCPP) and achieve compliance with the existing chemical exposure control limit (ECEL) of 2 ppm (8-hour TWA).

Question: Is it Safe?

Is it safe for a worker in Oregon to perform a task with trichloroethylene (TCE) that results in a TWA exposure of 5 ppb (0.005 ppm or about 27 ug/m3)?

For reference, the OR-OSHA PEL for TCE is 100 ppm and the ACGIH TLV is 10 ppm.

MAUL FOSTER ALONGI

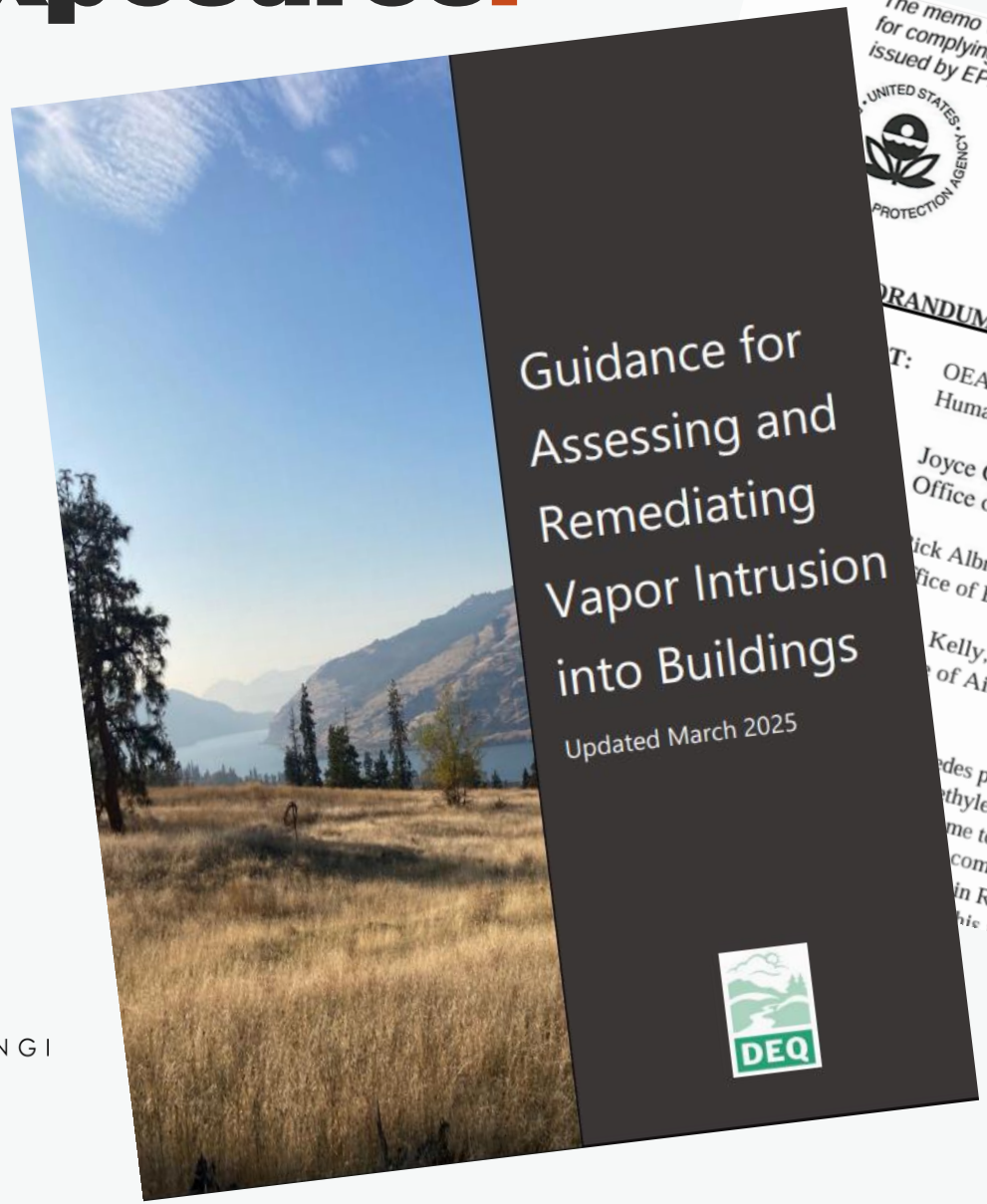
Is This Another EPA TSCA Thing?

EPA proposed to ban TCE and for the small number of allowable uses proposed an interim ECEL for TCE of 0.2 ppm. Even 0.2 ppm is significantly higher than 5 ppb.

The rule is tied up in court, and therefore it's not enforceable.

MAUL FOSTER ALONGI

TCE Exposures.



The memo version provided here has had the formatting changed in order to meet the State of Washington's directive for complying with the Americans with Disabilities Act. However, the content is identical to the original document issued by EPA.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

RANDUM

DEC 13 2012

OFFICE OF
ENVIRONMENTAL ASSESSMENT

T: OEA Recommendations Regarding Trichloroethylene Toxicity in Human Health Risk Asse ssments

Joyce C. Kelly, Director
Office of Environmental Assessment

ick Albright, Direct or
ffice of Environment al Cleanup

Kelly, Director
of Air, Waste & Toxics

edes previous communications from this office regarding the selection of
thylene (TCE) in human health risk assessments, including a September
me to Dan Opalski, then the director of the Office of Environmental
communicated our recommendations in recent
in Region 10, as we will do with these new recommendations.
his memorandum with your staff who are involved with the

MAUL FOSTER ALONGI

Acute Action Level?

Oregon DEQ adopted an acute vapor intrusion risk-based concentration for TCE of 6.3 ug/m^3 or about 1.2 ppb.

- Our scenario was 5 ppb or about 27 ug/m^3, which is more than 4 times higher than this level.

MAUL FOSTER ALONGI

TCE Exposures.

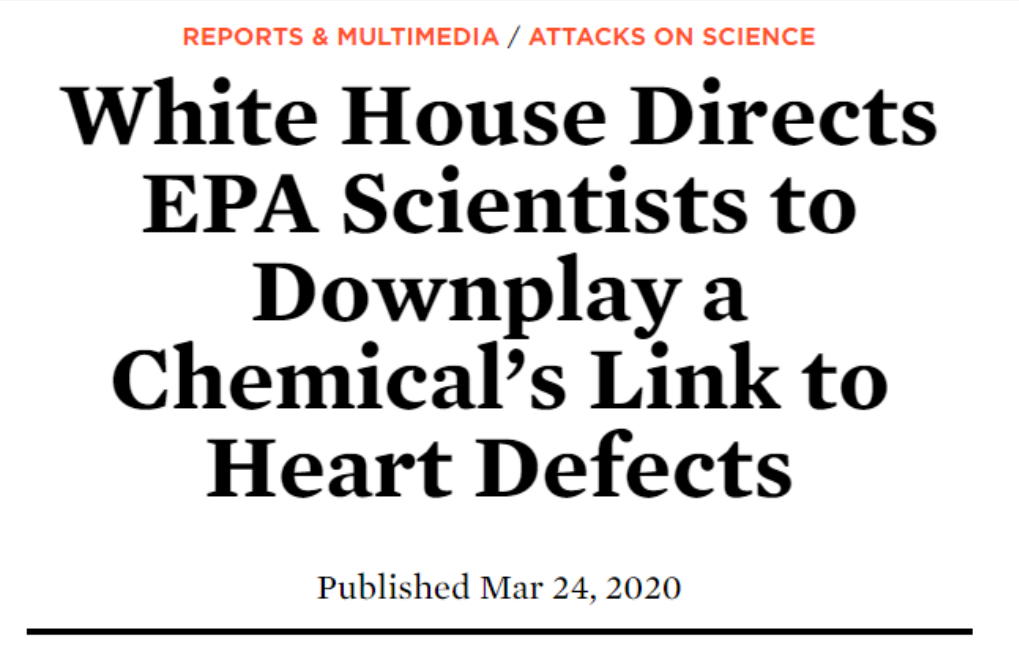
Table A. Vapor Intrusion General Response Matrix for Indoor Air

Indoor Air Concentration (Attributed to VI)[a] – Acute Exposure[1]			
No Data	**≤ acute RBCair**	**> acute RBCair to ≤ 3x acute RBCair[e]**	**> 3x acute RBCair[e]**
Monitor Initiate sub-slab and/or indoor air sampling if vapor intrusion is suspected.	**Monitor/ No Action** Use LOEs to determine need for additional sampling.	**Accelerated Response** • Evaluate and implement interim mitigation measures[b] within a few weeks. • Confirm effectiveness through monitoring. • Public outreach recommended.[d]	**Urgent Response** • Evaluate and implement interim mitigation measures[b,c] within a few days. • Confirm effectiveness through monitoring. • Public outreach recommended.[d]

MAUL FOSTER ALONGI

TCE Risk Evaluation.

There have been a lot of heated arguments about the potential for TCE to cause fetal heart malformations.



REPORTS & MULTIMEDIA / ATTACKS ON SCIENCE

White House Directs EPA Scientists to Downplay a Chemical's Link to Heart Defects

Published Mar 24, 2020

MAUL FOSTER ALONGI

Is Vapor Intrusion the Same?

DEQ's rules would apply to an environmental source of exposure, e.g., vapor intrusion.

If there's an indoor source because workers are using TCE, the DEQ guidance wouldn't apply.

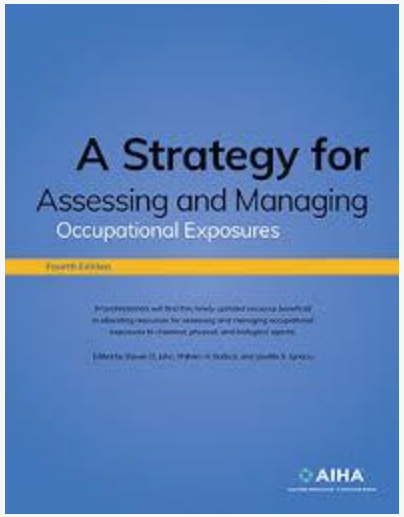
Some Legitimate Questions.

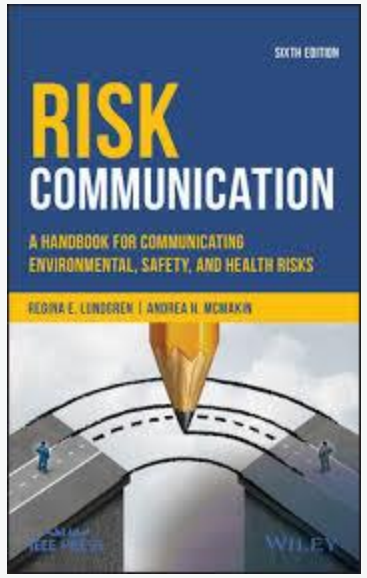
1. Does the employer have access to credible information that will help refine the risk assessment?
2. Can an employer feasibly prevent women of childbearing age from being exposed to TCE? What are the risk management options?
3. Are there competing risks?
4. What's the plan for risk communication? How will this be perceived regardless of the regulations and science?

MAUL FOSTER ALONGI

Is It Safe?

There's a whole world of risk sciences out there that's far more complicated than "check the PEL or TLV."





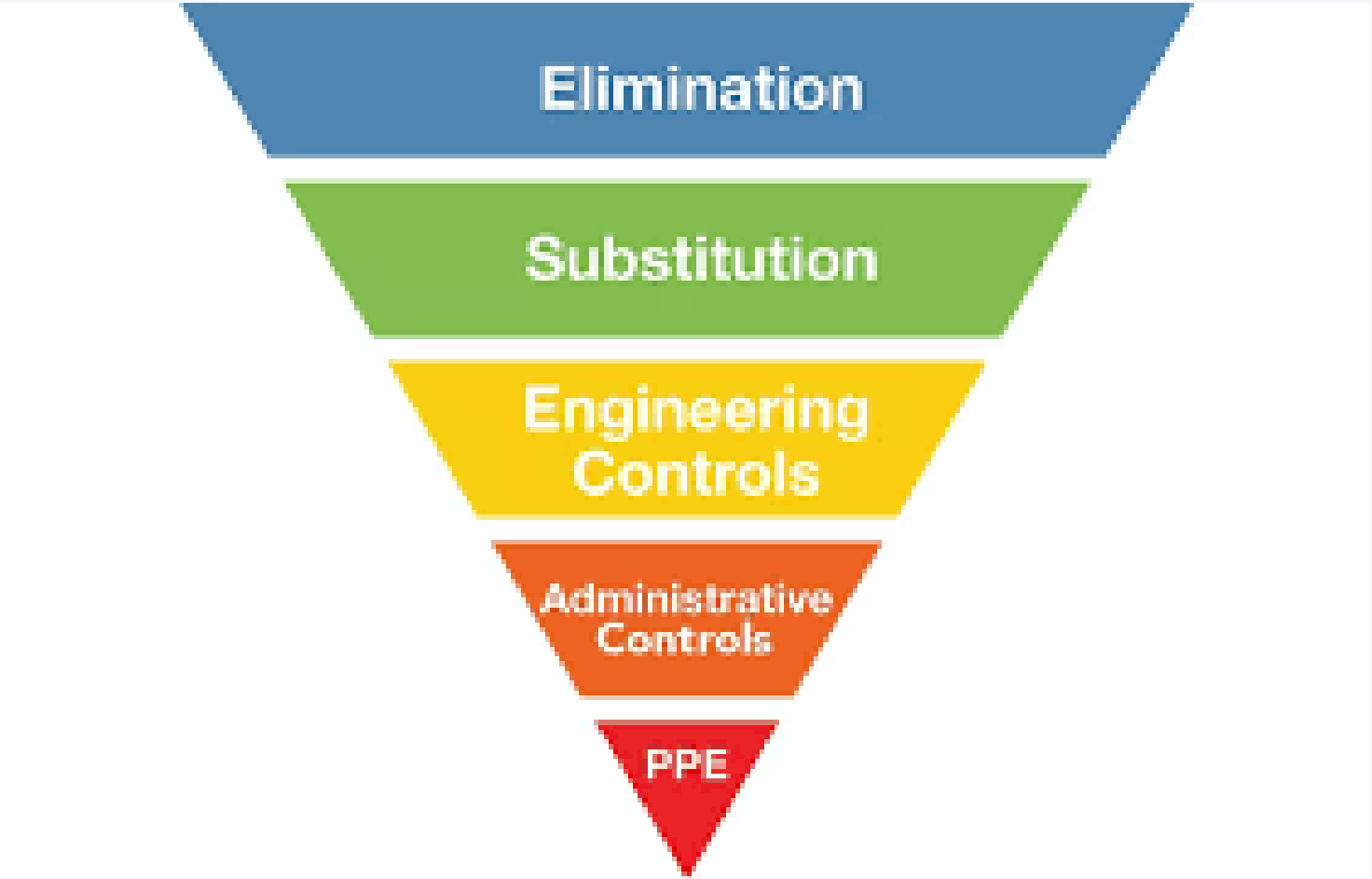
MAUL FOSTER ALONGI

What Should You Do?

Your specific course of action should be guided by a clear understanding of the applicable rules AND current science AND an awareness of how the risk will be perceived.

MAUL FOSTER ALONGI

Hierarchy of Controls.



MAUL FOSTER ALONGI