DERP Forum

Strengthening Relationships with our Regulatory Partners

St. Louis, Missouri May 8-9, 2019

Cal-EPA Unified Approach for Evaluating Vapor Intrusion (Supplemental Guidance)

Defense Environmental Restoration Program Forum

Dan Gallagher
Department of Toxic Substances Control
California Environmental Protection Agency



May 9, 2019

California Vapor Guidance Documents

Site Characterization

Advisory – Active Soil Gas Investigations (2003, 2012, 2015)

Evaluation of Vapor Intrusion Risk

- 1) Interim Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (2005, 2011)
- 2) Interim Framework for Assessment of Vapor Intrusion at TCE-Contaminated Sites in the San Francisco Bay Region (2014)

Mitigate Indoor Air Exposure

Vapor Intrusion Mitigation Advisory (2009, 2011)

Public Participation

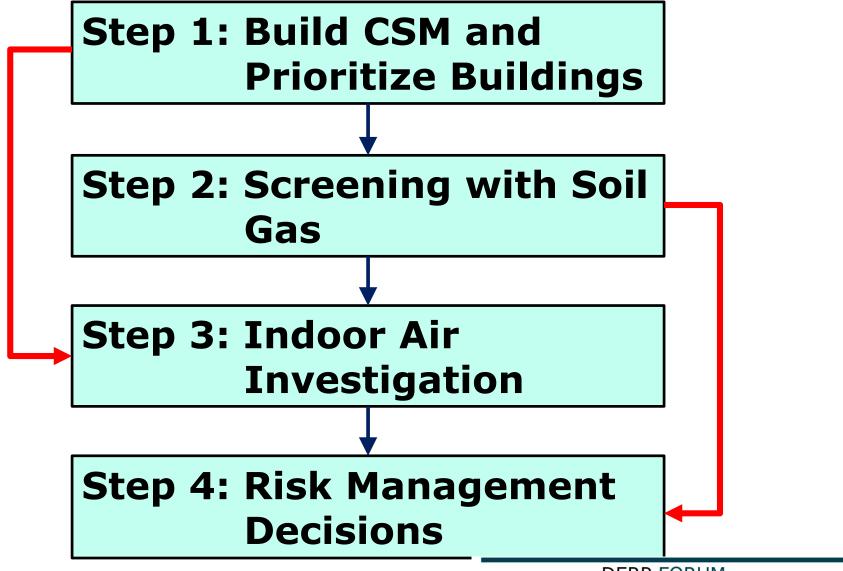
Public Participation Strategy for Vapor Intrusion Sites (2011)

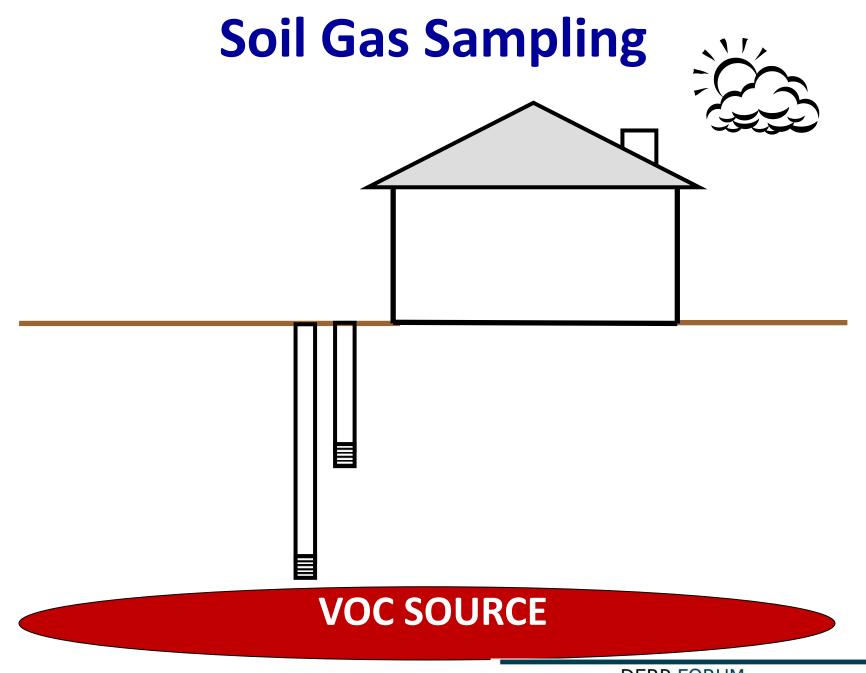
Remediation of Vapor Source

Remediation of Chlorinated VOCs in Vadose Zone Soil (2010)

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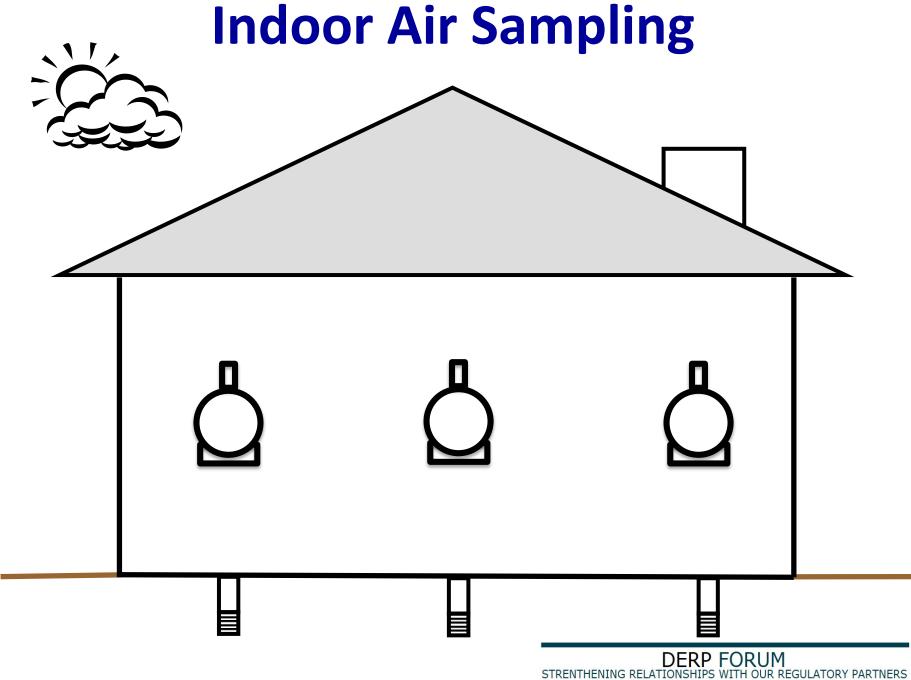
Four Step Process





Screening with Soil Gas Data

- 1. Each building should have a soil gas probe, located on the side nearest the source
- 2. Place the soil gas probe close to the building
- 3. Collect soil gas samples from two depths:
 - Near the contaminant source
 - Half-way between source and ground surface
- 4. Sample the soil gas twice to evaluate seasonality

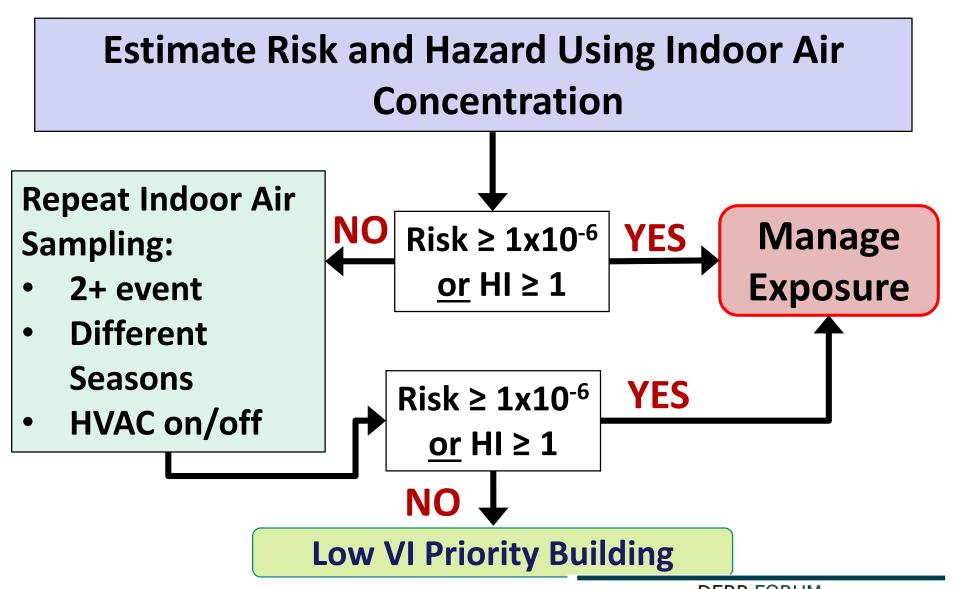


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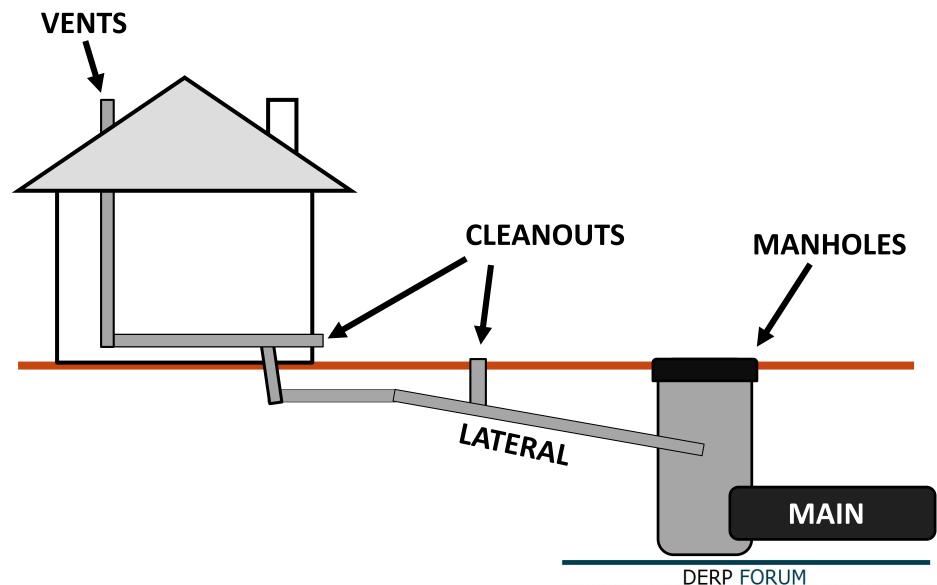
Indoor Air Investigations

- 1. Co-located indoor air and subslab at:
 - Location of occupants
 - Slab penetrations
 - Near the release area
- 2. Three or more locations recommended
- 3. Long sampling duration (passive?)
- 4. Collect other lines of evidence: cross slab pressure and sewers samples

Indoor Air Investigation



Sewer Sample Locations



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