

Vapor Intrusion

Evolving challenges and solutions

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Milestones

1st Area-wide VI Sites under EPA investigation: Redfield CO, Endicott NY

Nat'l organizations stress MLE approach (ITRC, API)

Anticipated release of EPA VI GD; MPCA VI GD modifications

EPA OSWER Draft VI GD

MPCA PRP VI GD

ASTM & MPCA MERLA VI GD

EPA OUST begins Petro VI GD development

MPCA VI TSD Published

Late 1990's

2002

2005

2007

2008

2009

2010

2015



Lessons Learned

- ❑ Persistence of elevated concentrations in soil gas
- ❑ Variability in time and space
- ❑ Uncertainty of investigation and mitigation results
- ❑ Vapor Intrusion main driver
- ❑ Communication challenges
- ❑ Emerging risks



Getting it right

- ❑ Robust Conceptual Site Models & multiple lines of evidence
- ❑ Emphasis on sub-slab soil gas data
- ❑ High technical quality of SSDs (Design > Install > Monitor)
- ❑ MPCA off-site and expedited responses
- ❑ Collaboration between redevelopment and remediation
- ❑ Clarity of long – term maintenance responsibility
- ❑ Chemical VI safe building = Radon safe building
- ❑ Communication, communication, communication.....



Coming Soon

- ❑ Recommended best practices
 - SSDs
 - Communications

- ❑ Following the radon trail

- ❑ Guidance revision (incl. ISV updates)

