
Vapor Intrusion

What the Future Holds

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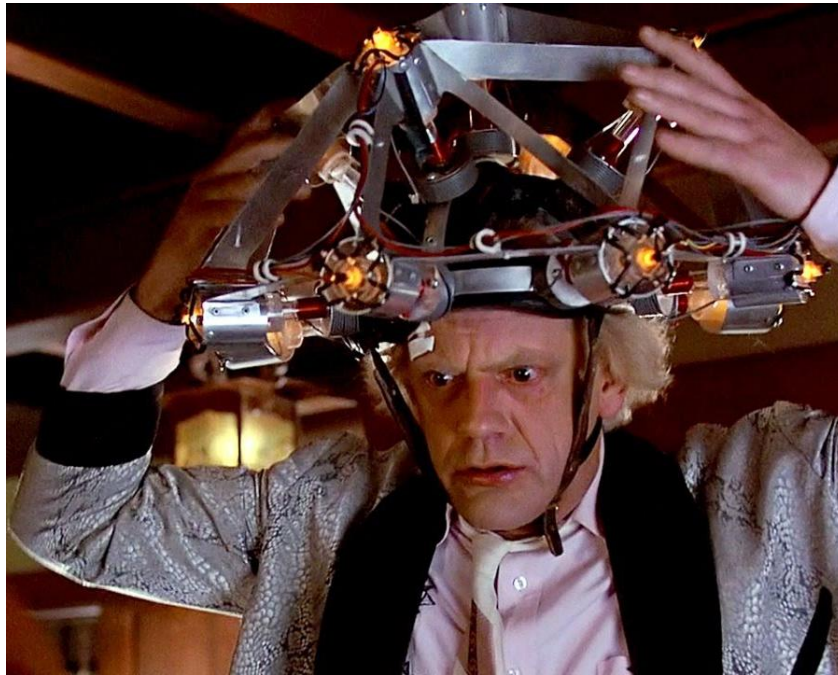
January 15, 2015



Minnesota Pollution Control Agency

More sites with risk to address using state resources

More
indoor air
sampling



Importance
of
communication

Clarifying of Vapor Intrusion Best Management Practices

Vapor Intrusion Roadmap for 2015

Test drive and evaluate BMP's

- Vapor Intrusion BMP's

2009-2010

Jan 2015

Jan 2016

- ISVs
- Vapor intrusion guidance documents

- Update guidance
- Stakeholder input
- Finalize update

Vapor Intrusion Best Management Practices

- ▶ Vapor Mitigation BMP
- ▶ Public Communication BMP, factsheets

Vapor Intrusion Guidance

The screenshot shows the Minnesota Pollution Control Agency website. The navigation menu includes Home, Air, Water, Waste, Regulations, Living Green, Quick Links, and Data. The 'Waste and Cleanup' section is active, and the breadcrumb trail is Home > Waste > Waste and Cleanup > Cleanup. The main content area is titled 'Cleanup' and lists various topics. A blue box highlights 'Vapor Intrusion Best Management Practices', which includes a list of links: 'Your health and vapor intrusion (Minn. Dept. of Health)', 'Understanding your vapor intrusion testing results fact sheet - coming soon', 'Vapor Intrusion Mitigation Best Management Practices- coming soon', 'Public Communication for Vapor Intrusion Best Management Practices - coming soon', and 'Example Final Property Summary Report - coming soon'. Below this, a section titled 'Vapor intrusion guidance' lists related topics: 'Remediation Division guidance and policy (SLV, CAD guidance policy)', 'Petroleum Remediation Program: Guidance documents for underground storage tank and aboveground storage tank release cleanup', 'Emergency response', 'Analysis of carcinogenic polynuclear aromatic hydrocarbons (cPAH)', 'Disposal of mercury contaminated soil in Minnesota landfills', 'Green and sustainable remediation', and 'Offsite reuse of fill materials'.

BMP- Active Mitigation System Installation

- ▶ Pre-mitigation diagnostic testing
to inform system installation
- ▶ Post-mitigation diagnostic testing
to verify pressure field
- ▶ **Post mitigation indoor air and sub-slab sampling.**
- ▶ Make up air to combustion appliances
- ▶ Contractor certification
 - National Radon Proficiency Program (NRPP)
 - National Radon Safety Board (NRSB)

Indoor Air Sampling

- ▶ Mitigation decisions based on on sub- slab sampling data

Indoor Air

- ▶ Post-mitigation indoor air sampling
 - ▶ Is the mitigation system operating effectively, preventing possibility of vapor intrusion?
- ▶ Pre-mitigation indoor air sampling
 - ▶ Is a mitigation system needed?



Determining Need for Expedited Action

- ▶ **Typical expedited actions**
 - ▶ Indoor air sampling
 - ▶ Mitigation system installation

- ▶ **Information for determining expedited action**
 - ▶ Sampling results, primarily sub-slab
 - ▶ Basement conditions
 - ▶ Sensitive population present

Skilled and Coordinated Communication

A Primary Concern Is for Health

Feelings of anxiety, fear, confusion, helplessness, victimization, anger, outrage

Questions such as

Will I be affected?

What should be done to protect me?

How can I know I am safe?

Sensitive Population Present?



Contact MDH with questions about your health and vapor intrusion:

Site Assessment and Consultation Unit

Call (651) 201-4897

Email to health.hazard@state.mn.us

- ▶ women who are pregnant or may become pregnant
- ▶ infants and young children
- ▶ elderly persons
- ▶ people living with chronic disease or compromised immune system

MDH Information Resources

www.health.state.mn.us/divs/eh/hazardous/index.html

- ▶ *Vapor Intrusion*
- ▶ *Your Health and Vapor Intrusion*
- ▶ *Volatile Organic Compounds in Your Home*
- ▶ *Trichloroethylene (TCE) and Vapor Intrusion*
- ▶ *Trichloroethylene: Screening Values & Measurement*

Contact Site Assessment and Consultation Unit for information or questions:

- ▶ phone (651) 201-4897 or (800) 657-3908
- ▶ email to health.hazard@state.mn.us



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