

# Vapor Intrusion



# Pathway: A Practical Guideline

#### **Course Overview**

Over the past ten years, vapor intrusion (VI) has become a significant environmental issue for regulators, industry leaders, and concerned residents alike. Vapor intrusion is characterized as the migration of volatile chemicals from the subsurface into overlying structures. The simplicity of this definition belies the magnitude of resources being expended to address this complex exposure pathway. This training is based on ITRC's national VI pathway guidance which was developed through the combined efforts of more than 100 professionals, including state and federal regulators, consultants, technology vendors, industry, and community stakeholders. The U.S. EPA is working with the ITRC to endorse this national VI guidance as a framework for updates to its 2002 draft VI guidance.

Led by internationally recognized experts, this 2-day ITRC classroom training will enable you to:

- Learn the latest strategies to conduct site screening and investigations
- ► Determine what tools are appropriate to collect quality data and evaluate the results
- ► Apply multiple lines of evidence to ensure quality decision-making
- ► Build solutions for VI issues through understanding of mitigation options
- Network with environmental professionals dealing with this interdisciplinary and complex pathway

Interactive learning with hands-on exhibits, classroom exercises, and frequent Q&A sessions will reinforce these course objectives and contribute to a practical understanding of this difficult pathway.

# ITRC's Vapor Intrusion Guidance:

- Vapor Intrusion Pathway: A Practical Guideline (VI-1, January 2007)
- Vapor Intrusion Pathway: Investigative Approaches for Typical Scenarios (VI-1A, January 2007), a companion document

No cost download at:

http://www.itrcweb.org/VaporIntrusion

# **Class Dates & Location:**

October 7-8, 2008

Red Lion Hotel – Convention Center Portland, Oregon

Hosted by ITRC State Member

Oregon Department of Environmental Quality



45 regulators expected from Oregon plus many from other states

# **Registration Instructions**

To register, go to "Classroom Training" at <a href="https://www.itrcweb.org/crt.asp">www.itrcweb.org/crt.asp</a> and select the "Registration" link corresponding to the appropriate training course, location, and date. Follow the instructions to register and provide payment (if required). If you have questions after viewing the online registration information, please contact the ITRC Training Program at (402) 201-2419 or training@itrcweb.org.

**Cancellations:** If you must cancel and notify us on or before September 10, 2008, the registration fee will be fully refunded (Note: a \$75 processing fee may apply).

# Course Outline & Agenda

Tuesday, October 7

7:00 a.m.-8:00 a.m.

Participant check in

8:00 a.m.-5:00 p.m.

- Vapor Intrusion (VI) Pathway
- ▶ Investigative Framework
- Workplan Design
- Conceptual Site Model
- Investigative Tools & Exhibits

Wednesday, October 8

8:00 a.m.-5:00 p.m.

- Data Evaluation
- ▶ Background Sources
- Multiple Lines of Evidence
- Mitigation
- Application Exercises

Many networking opportunities

#### **Fees**

The course fee is \$795 with early bird registration of \$595 until September 1, 2008. This fee includes a student manual, copies of the associated ITRC guidance documents, and networking opportunities with refreshments.

**Note:** Fees are waived for state and local government. For federal government, students, community stakeholders, and tribal representatives, ITRC will offer a limited number of scholarships. More information is available on the registration webpage.

# **Course Instructors**

## John Boyer

New Jersey Department of Environmental Protection Trenton, New Jersey

Technical co-Lead for ITRC's Vapor Intrusion Project and Principal in developing vapor intrusion policy for **NJDEP** 

#### **Bill Morris**

Kansas Department of Health and Environment Topeka, Kansas

Technical co-Lead for ITRC's Vapor Intrusion Project and KDHE's Quality Assurance Officer and point of contact for vapor intrusion issues

# Blayne Hartman, Ph.D.

H&P Mobile Geochemistry Carlsbad, California Author/editor for vapor intrusion and soil gas guidance for U.S. EPA, CA-EPA, ITRC, DOD, API, ASTM, and more than 25 separate state documents

## Todd McAlary, P.E., P.G.

GeoSyntec Consultants

Ontario, Canada

Technical Director of one of the world's largest studies of subsurface vapor intrusion

#### David Folkes, P.E.

EnviroGroup, Ltd

Centennial, Colorado

Project Manager of one of the largest vapor intrusion sites in the country since 1998, and has worked on over 30 other vapor intrusion projects across the U.S.

# Continuing Education Information

A certificate of participation will be provided to interested participants indicating 16 professional development hours. Please check with your organization or appropriate licensing board for their requirements and if they will accept this ITRC training course.

## Who should attend?

Regulatory staff involved in remediation programs, members of the regulated community with remediation projects or problems, remediation consultants, public stakeholders, and others interested in gaining a better understanding of the vapor intrusion pathway should attend this training class. Space is available for 150 participants and may be limited by sector to ensure participant diversity.

# Training Location & Accommodations

Red Lion Hotel Portland Convention Center

1021 NE Grand Avenue

Portland, Oregon 97232

Reservations must be made by September 10, 2008 to guarantee the group rate of \$106 plus tax. Please call (800) 343-1822 and mention, "ITRC," to get the room rate. Participants are responsible for arranging and paying for their lodging. Overnight parking is \$10/day for hotel guests and day-time parking is free for commuter participants. More lodging information is available on the registration page at: www.itrcweb.org/crt.asp.

# Transportation Information

The closest major airport is the Portland International Airport (PDX). From the airport there are several ground transportation options, including MAX rail, taxi, rental car, and shuttle. More information can be found on the registration page at: www.itrcweb.org/crt.asp.

# **ADA** (Americans with Disabilities Act) Information

If you require special accommodation to fully participate in this seminar, please contact the ITRC Training Program at (402) 201-2419 or training@itrcweb.org at least four weeks prior to the course start date.

#### Future classes

ITRC plans to offer this classroom training course at various locations throughout the U.S. from 2009 - 2011. As classes are scheduled information will be available at www.itrcweb.org/crt.asp.



For more information about ITRC and its available products and services go to www.itrcweb.org



#### **ITRC Federal Partners**







U.S. Department U.S. Department U.S. Environmental of Defense Protection Agency

Established in 1995, the Interstate Technology and Regulatory Council (ITRC) is a state-led coalition working together with federal partners, industry, academia, and stakeholders to achieve regulatory acceptance of innovative environmental technologies and approaches.

ITRC operates as a committee of the Environmental Research Institute of the States (ERIS), a Section 501(c)(3) public charity that supports the Environmental Council of the States (ECOS) through its educational and research activities aimed at improving the environment in the United States and providing a forum for state environmental policy makers. Including membership from all 50 states, ITRC is funded primarily by the U.S. Department of Energy, the U.S. Department of Defense, the U.S. Environmental Protection Agency as well as through the ITRC Industry Affiliates Program (IAP).