



*Benefits of the Interstate Technology & Regulatory Council*

# EPA Region X and the ITRC

April 2004

***Facts about ITRC involvement in Region X***

States in EPA Region X: Alaska, Idaho, Oregon, Washington, Tribal Nations

State Engagement Coordinator (ITRC) OR: Mavis Kent

State Points of Contact (POCs)  
AK: Not a state ITRC member  
ID: Joseph Nagel  
OR: Deborah Bailey  
WA: Dean Yasuda

Team Leads:  
Dib Goswami Wetlands  
Dib Goswami Small Arms (SMART)

Number of people trained in Region X: 451 Internet training participants  
203 Classroom training participants

Number of members: 25 Members  
6 Interested parties

Teams with membership from Region X:  
Alternative Landfill, Brownfields, Contaminated Sediments, DNAPL, Diffusion Samplers, In Situ Bioremediation (ISB), MTBE, Mitigation Wetlands, Radionuclides (RADS), Remediation Process Optimization (RPO), Risk Assessment (Risk), Unexploded Ordnance (UXO), SC&M, Small Arms

***Examples of Document and Training use in Region X***

***Alaska Firefighters Benefit from the ITRC following Colorado Wildfire Season***

In one of the worst fire seasons in decades in 2002, some of Colorado’s wildland firefighters faced not only intense fires due to severe drought conditions but also potential encounters with unexploded ordnance (UXO). The ordnance experts on hand did not have the training or experience to fight wildland fires and the firefighters did not have training or experience with unexploded ordnance. While the tree smoldered, suppression response options were considered.

All involved agreed that the firefighters assigned to the area should receive specialized training. But where could they get this training on short notice? After firefighters were briefed on ordnance identification, they entered the area to extinguish the fire. The Camp Hale project team put together a 'boot strap plan' to respond to the immediate situation and to prepare for future situations by training the firefighters. Fortunately, the ordnance hazard identification and safety consideration portion of ITRC's UXO Basic Training course had already been developed and contained exactly the type of information needed.

The ITRC training course that was developed has been given at three sites including at the Bureau of Land Management's Alaska Fire Service in Fairbanks, Alaska. The Alaska Fire Service, operating out of Fort Wainwright, has jurisdiction over firefighting for central Alaska including a large number of military ranges with UXO.

The training is "highly professional and informative," according to one of the smokejumpers who has attended this training. "In previous years, the EOD [explosive ordnance disposal] had offered similar training, but it was beneficial for the firefighters to receive the civilian perspective on the risks as well as the national perspective that could be brought by the ITRC training," according to Tami DeFries, Military Zone Fire Management Officer, Alaska Fire Service.

### ***State of Washington Regulatory Guidance Set Using ITRC Team Knowledge Base***

In the State of Washington, the Department of Ecology was interested in providing regulatory guidance concerning the effective and appropriate implementation of Passive Diffusion Bag Samplers (PDBs). The Diffusion Sampler Team provided a wealth of information, including detailed responses to specific questions that had been raised regarding issues with the ITRC PDBs draft Technical Regulation Guidance Document, PDBs Training Presentation, User's Guide, Position Paper and Decision Analysis.

A representative of the State of Washington requested expert guidance concerning PDBs technical documents and information to respond to a number of questions and concerns regarding the contents of the document. The Diffusion Sampler team, especially through its team leader George Nicholas and ITRC staff Barry Weand and Walter Berger, replied in detail to these questions and provided the ITRC CD entitled "Diffusion Sampler Resource" which will be cited by the Washington Department of Ecology in its monitoring guidance.

In this situation, the synergy of ITRC experts knowledgeable in the field of Diffusion Samplers was leveraged to provide enough technical information and concurrence to enable the guidance provided by the Diffusion Sampler team to be used and cited by the State of Washington. The ITRC website is linked to the Department website as an information resource.

"The CD is exactly what I needed in terms of useful information for those of us at the state level-excellent job for a very informative tool. Also, the information on the website was great," according to the DOE representative.

The Diffusion Sampler team has developed several documents including a training presentation and an extensive CD with multiple references to diffusion sampling and the appropriate implementation.

One specific application of PDBs technology is at the Port of Vancouver former Swan Manufacturing Company site, where electric wall heaters were manufactured. Trichloroethene (TCE) in source soil was excavated and stockpiled and treated with vapor extraction and heated air injection. PDBs are used during quarterly ground water monitoring for TCE and another contaminant Tetrachloroethylene, also known as Perchloroethene (PCE). PDBs are used in about 50% of the 43 monitoring wells. There is a cost savings when using PDBs compared to low flow sampling with submersible pumps through decreased capital costs for pumps, maintenance, storage, and rental fees for generators and other field gear. Cost savings also come from less labor time for well purging, sampling, equipment decontamination, purge and decontamination water handling and disposal analytical costs. There are no costs for water storage containers and no site management issues to provide space and security for waste water storage. Operating savings can be estimated at \$5,000 - \$10,000 per year.

Without the direct involvement of the ITRC experts on the issue, the State would not have been in a position to refer users to the ITRC guidance information, resulting in less clarity and guidance in cleanup monitoring. In the specific case of Port Washington Swan Manufacturing Site, the Port of Vancouver would be incurring additional costs associated with traditional techniques for monitoring contaminants.

### **Examples of ITRC involvement with projects in Region 10**

Steve Piet with the Idaho National Engineering and Environmental Lab (INEEL) is an active participant of the Alternative Landfill Covers team. He provided valuable text and insights into long term stewardship issues associated with Alternative final Covers. The issues Mr. Piet addressed were associated with the potential failure modes of alternative final covers, the risk associated with the failure modes, and monitoring programs to address the failure modes and reduce the associated liabilities and risks.

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Don Pettit of the Oregon Department of Environment is familiar with a surface wetlands site in Oregon which has been in operation for 20 years. It was installed to treat metals and Polycyclic Aromatic Hydrocarbons (PAHs). The metals have accumulated in the bottom sediments and may be bioaccumulating in the macro-invertebrates and may threaten a frog species. They are in the process of remediating the site. Mr. Pettit was particularly interested in the potential of using subsurface wetlands as opposed to surface wetlands. This may be an option on this site and will certainly be an option on future sites posing a similar exposure problem. "It would have been nice to have had the Constructed Treatment Wetlands dry run training and associated document two years ago when we were first designing a remediation system for this old site," Mr. Pettit explained.

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The Idaho National Engineering and Environmental Lab (INEEL) and Lawrence Berkeley National Lab (LBNL) announced on the ITRC website workshops on earth science issues. The first workshop in September 2003 addressed the following topics: (1) imaging and visualization of buried wastes; (2) determination / estimation of preferred flow paths; and (3) monitoring of engineered barriers. The focus of the workshops is to develop strategies on how new technology and engineering can become state-of-the-art practice. The broadly based consensus will be used to define a substantial national investment in subsurface geo-science and geo-engineering research.

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Stephanie Pingree of the Department of Conservation in Alaska, meanwhile, participated in the Risk Assessment internet training and sees a large potential for monetary savings in the state of Alaska by use of information gained in the training session. “I am confident savings over \$100,000 can occur because of this training,” she states.

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Both guidance documents and internet training related to Natural Attenuation have been useful to Nancy Gramlich of the Oregon Department of Environmental Quality. She has used information at a site with radium in which monitoring is being continued in order to demonstrate the breakdown of products through natural attenuation.

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***Whom can I contact to learn more about these examples of ITRC success?***

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### ***What is ITRC about?***

ITRC is a state-led coalition working together with industry and stakeholders to achieve regulatory acceptance of environmental technologies. ITRC consists of 42 states, the District of Columbia, multiple federal partners, industry participants, and other stakeholders, cooperating to break down barriers and reduce compliance costs, making it easier to use new technologies, and helping states maximize resources. ITRC brings together a diverse mix of environmental experts and stakeholders from both the public and private sectors to broaden and deepen technical knowledge and streamline the regulation of new environmental technologies. ITRC accomplishes its mission in two ways: it develops guidance documents and training courses to meet the needs of both regulators and environmental consultants, and it works with state representatives to ensure that ITRC products and services have maximum impact among state environmental agencies and technology users.

### ***When would I Benefit from ITRC?***

ITRC is all about environmental cleanup—getting the right technology or strategy applied to the situation at hand. Many times that “right technology” is a new technique, approach, or device that leads to faster, better, more cost-effective cleanup strategies. Often finding and implementing the “right” technology or strategy requires innovation on the part of the site manager and industry consultant. Approving the “right” technology may require state environmental offices to change their decision-making process. ITRC teams, documents, and training courses not only provide information but also foster interaction within the environmental community. You would benefit from ITRC whenever you wish to explore better methods of site characterization and remediation because ITRC resources will lead to more efficient decision-making with an increased level of confidence and trust. ...

### ***How is ITRC useful to EPA Region 10?***

So what is being accomplished through ITRC involvement? How do we measure success within the framework of environmental cleanup? Protection of human health and protection of the environment are two of ITRC’s critical goals. Our accomplishments and success include:

- Assistance to the community
- Acceleration of cleanup—Cutting approval time
- Decreasing the cost of cleanup—Slashing remediation costs
- Knowledge transfer to facilitate cleanup—Finding better solutions and transferring technologies
- Building expertise industry- and nationwide
- Paving the way for new technologies
- Long-term management of cleanup sites
- Institutional innovation—Breaking down regulatory barriers

Measures of ITRC success include the extent to which guidance documents are used in deploying specific technologies at specific sites (product use) in Region 10, the degree to which ITRC helps create acceptance of innovative technologies as regular practice rather than as an extraordinary occurrence (institutional change), and the effectiveness of the synergy created in the environmental community as ITRC teams collectively address cleanup issues from various perspectives.

### ***Why Should I use ITRC resources?***

As described by the examples in this document, ITRC saves time and money and result in better environmental protection. Working to bring together regulators, project managers, environmental consultants and state representatives, ITRC is a catalyst, providing a network of experts and industry leaders to think creatively about cleanup issues and how best to solve them.

A complete list of ITRC documents and training opportunities is available on [www.itrcweb.org](http://www.itrcweb.org)!