

GUIDANCE COUNCIL

ITRC Offers Free Environmental Tools To Empower Regulators



When faced with a work plan that proposes to use an innovative environmental technology application or approach, many state regulators have turned to resources produced by the Interstate Technology and Regulatory Council.

By Mavis D. Kent, George Nicholas and Michael B. Smith

Lynda Provencher, a Vermont project manager, received a proposal to inject 10 percent to 15 percent hydrogen peroxide into the subsurface of groundwater to initiate a reaction with contaminants.

She had limited experience with this technology—in situ chemical oxidation (ISCO)—but still, she questioned the technical basis of the proposal. She turned to the Interstate Technology and Regulatory Council (ITRC) for help.

“The ITRC guidance gave me background information on ISCO, and it informed me of the questions to ask and the issues to be concerned about with this technology at this site,” she said.

Her concerns led to a third-party review, which confirmed her concerns.

“The ITRC guidance was valuable because it started me on a process that ultimately led to a better decision—in this case, a decision to reject the proposal,” she said.

Vermont is just one state to benefit from the expertise at the ITRC.

About the ITRC

ITRC is affiliated with the Environmental Research Institute of the States, a 501(c)3 nonprofit educational subsidiary of the Environmental Council of the States.

With free guidance documents and online training courses on a broad range of topics, the ITRC strives to empower state regulators

ITRC Fall Training Sessions

April 10	Remediation Process Optimization Advanced Training
April 19	Characterization, Design, Construction, and Monitoring of Bioreactor Landfills
April 24	Planning and Promoting Ecological Land Reuse of Remediated Sites
April 26	Evaluating, Optimizing, or Ending Post-Closure Care at Municipal Solid Waste Landfills
May 8	Vapor Intrusion Pathway: A Practical Guideline
May 15	Radiation Risk Assessment: Updates and Tools
May 17	An Overview of Direct-Push Well Technology for Long-Term Groundwater Monitoring
June 5	Radiation Site Cleanup: CERCLA Requirements and Guidance
June 7	Protocol for Use of Five Passive Samplers
June 14	Risk Assessment and Risk Management: Determination and Application of Risk-Based Values
July 19	Vapor Intrusion Pathway: A Practical Guideline
Aug. 9	Perchlorate: Overview of Issues, Status, and Remedial Options
Aug. 16	Remediation Process Optimization Advanced Training
Sept. 6	An Overview of Direct-Push Well Technology for Long-Term Groundwater Monitoring
Sept. 11	Protocol for Use of Five Passive Samplers
Sept. 18	Vapor Intrusion Pathway: A Practical Guideline
Sept. 20	Real-Time Measurement of Radionuclides in Soil
Oct. 11	Characterization, Design, Construction, and Monitoring of Bioreactor Landfills
Oct. 16	Evaluating, Optimizing, or Ending Post-Closure Care at Municipal Solid Waste Landfills
Oct. 18	Risk Assessment and Risk Management: Determination and Application of Risk-Based Values
Nov. 15	Planning and Promoting Ecological Land Reuse of Remediated Sites
Nov. 29	Protocol for Use of Five Passive Samplers

Course dates are subject to change. Additional course topics and training dates may be added pending completion of training development in new topic areas. Check www.itrcweb.org throughout the year for the latest information.

to make informed decisions, helping states improve protection of the environment and human health while lowering training costs.

ITRC's documents and training are developed through a unique and proven collaborative process. For more than 10 years, ITRC has brought state environmental regulators and other members of the national environmental community together to research technologies and approaches to solve tough environmental problems. ITRC technical teams include members representing 48 state environmental agencies, and a diverse mix of regulators, industry consultants and representatives from federal agencies, universities and public stakeholder groups. The teams seek common ground as they collaborate on projects to streamline decision-making and approval processes for using new environmental technologies and innovative approaches.

The diverse teams work toward consensus on the technical and

regulatory issues involved in applying technologies/approaches at sites. This helps ensure that ITRC's documents and training apply across a broad-based environmental community of states, industry consultants, site owners and federal agencies.

ITRC technical teams are formed to address projects related to specific environmental contaminants and/or the decision framework for applying innovative remediation technologies and approaches. They've produced documents ranging from technical overviews of innovative technologies to case studies of their application and technical/regulatory guidance documents for applying technologies. In all, ITRC has published nearly 80 documents in 30 topic areas, including 36 technical/regulatory guidance documents on 18 topics.

Overcome the Learning Curve

Michael Behrens, an environmental engineer in Nebraska, needed to know about alternative landfill covers. Nebraska's Department of Environmental Quality received a proposal to use an alternative cover for a large landfill that was closing.

He found guidance in an ITRC document, Technical and Regulatory Guidance for Design, Installation, and Monitoring of Alternative Final Landfill Covers.

"I needed to evaluate the facility's Construction Quality Assurance (CQA) Plan for documenting, and eventually certifying, that the alternative cover would be constructed as described in the permit application," Behrens said. "During my initial review, I recommended that the facility use the ITRC guidance to refine their CQA Plan. I believe that the ITRC guidance helped us and the facility to agree on not only a good CQA Plan, but also the best way to construct a high-quality, high-performing landfill cover."

Cut the Cost of Doing Business

John Mellow, who oversees munitions response cleanup activities at the former Tobyhanna Artillery Range and the Tobyhanna Army Depot in eastern Pennsylvania, had no experience with geophysical prove-outs at unexploded ordnance (UXO) sites.

Mellow got the guidance he needed from ITRC. He and other staff members in the Pennsylvania Department of Environmental Protection learned how geophysical prove-outs can be used to evaluate technologies for identifying and locating buried munitions.

"Using the guidance as my primary resource, I shortened my research time as I gained an understanding of the purpose and scope of prove-outs," he said.

Streamline Decisions

ITRC guidance can help responsible parties and regulators find common understanding, thereby streamlining the approval process and cutting costs.

The Georgia Environmental Protection Division is reviewing a former training range at Fort Gordon to determine the site characterization and sampling goals for the site, according to Chris Hurst, formerly with the division. He said the state is using an ITRC product, Characterization and Remediation of Soils at Closed Small Arms Firing Ranges (SMART-1).

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The Interstate Technology Regulatory Council offers online training for many of its programs.

“Sharing this guidance with the Fort Gordon project manager established a common understanding of the state’s expectations for this site and will, therefore, accelerate the investigative process,” he said.

Online Training

ITRC technical teams also develop and present free online training courses based on specific technical/regulatory guidance documents. ITRC documents and training can help state regulators accelerate their learning curve and cut research time so they can make technically sound decisions that result in better environmental protection. The ITRC Web site, www.itrcweb.org, provides instructions for downloading and ordering documents; registering for its free interactive, online training courses; and viewing archives of past training courses.

Since 1999, more than 35,000 participants have tuned in for live, real-time training on 35 different topics. ITRC online courses are interactive. They reach a geographically dispersed audience of regulators, consultants, site owners and others, creating a unique forum for the exchange of technical and regulatory information. Because the courses are based on ITRC guidance documents, they reflect the consensus opinion of a broad-based environmental community drawn from states, federal agencies,

the private sector and citizen stakeholders. The online courses are accessible and convenient, and they help state environmental agencies save on training costs.

Order or download copies of ITRC documents at www.itrcweb.org, under “Guidance Documents.” To learn more about ITRC’s live online courses and to register, visit the “Internet-Based Training” page. Registration opens four to six weeks in advance of a course offering.

Through the cooperation of the U.S. Environmental Protection Agency’s Technology Innovation Program, ITRC presents its online courses, which last about two hours, at no cost to participants; however, registration is required. If you have questions after completing the online registration, call the ITRC at (402) 201-2419, or send an e-mail to training@itrcweb.org.

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