TechDirect

Message #119: January 2007

Happy Holidays! We hope that everyone has a safe and prosperous 2007. Welcome to TechDirect. Since the December 1 message, TechDirect gained 156 new subscribers for a total of 26,736. If you feel the service is valuable, please share TechDirect with your colleagues. Anyone interested in subscribing may do so on CLU-IN at http://clu-in.org . All previous issues of TechDirect are archived there. The TechDirect messages of the past can be searched by keyword or can be viewed as individual issues.

TechDirect's purpose is to identify new technical, policy and guidance resources related to the assessment and remediation of contaminated soil, sediments and ground water.

Mention of non-EPA documents or presentations does not constitute a U.S. EPA endorsement of their contents, only an acknowledgment that they exist and may be relevant to the TechDirect audience.

Upcoming Live Internet Seminars

ITRC Perchlorate: Overview of Issues, Status, and Remedial Options - January 9. Improved analytical methodology has increased the known extent of perchlorate contamination in the U.S. A variety of remediation technologies are currently commercially available and being used for perchlorate remediation. This training, based on ITRC's Perchlorate: Overview of Issues, Status, and Remedial Options (PERC-1), explains why perchlorate is a hot topic in the environmental community including up-to-date information on sources, occurrences, toxicity and exposure, regulatory status and remediation alternatives. For more information and to register, see http://www.itrcweb.org or http://clu-in.org/studio .

Introduction to Nanotechnology - Applications and Implications for Superfund - January 18. This session will provide an introduction to definitions, forms and uses of nanotechnology. Superfund-related issues will be discussed including how these materials may be used to detect or treat contaminated media as well as recent efforts by the Environmental Protection Agency (EPA), the National Toxicology Program (NTP), and the National Nanotechnology Initiative (NNI) to characterize the risks these

materials may pose. The session will feature Dr. Nora Savage, at the EPA Office of Research and Development as well as Dr. Nigel Walker, at NTP, based at the National Institute of Environmental Health Sciences (NIEHS). The session will be moderated by Dr. William Suk, Director of SBRP at NIEHS. For more information and to register, see http://clu-in.org/studio .

ITRC Remediation Process Optimization Advanced Training - January 25. Remediation Process Optimization (RPO) is the systematic evaluation and enhancement of site remediation to ensure that human health and the environment are being protected over the long term at minimum risk and cost. The purpose of this ITRC training is to present an overview of the material covered in five technical fact sheets that ITRC's RPO Team produced to enhance site remediation optimization and decision-making. The training modules provide additional information and techniques to improve project schedules, effectively manage resources, emphasize risk, and discuss tools to efficiently cleanup contaminated sites. For more information and to register, see http://www.itrcweb.org or http://clu-in.org/studio .

ITRC Site Investigation and Remediation for Munitions Response Projects - January 30. This training provides an introduction and overview of the processes, tools, and techniques used in investigation and remediation. These concepts are illustrated using an example munitions response site. Major steps in each process are identified and key regulatory considerations discussed. This training also identifies additional sources for more detailed information on key aspects of investigation and remediation. State regulators and others who need to understand the general processes involved in these critical aspects of the munitions response process will benefit from this training. For more information and to register, see http://www.itrcweb.org or http://clu-in.org/studio .

ITRC An Overview of Direct-push Well Technology for Long-term Groundwater Monitoring - February 6. Direct-push wells have been used for temporary groundwater monitoring purposes for many years but are generally prohibited for use as long-term groundwater monitoring wells. Recent research indicates that direct-push wells are as well suited for long-term environmental groundwater monitoring purposes as conventionally constructed wells. This training introduces ITRC's The Use of Direct-push Well Technology for Long-term Environmental Monitoring in Groundwater Investigations (SCM-2, 2006), provides a background in the principles of direct-push wells, and presents the state of the art regarding recent research. For more information and to register, see

http://clu-in.org/studio .

Documents and Web Resources

Long-Term Monitoring Network Optimization Evaluation for Operable Unit 2, Bunker Hill Mining and Metallurgical Complex Superfund Site, Idaho (EPA 542-R-06-005). This report, by the EPA Office of Superfund Remediation and Technology Innovation, presents a description and evaluation of the groundwater and surface water monitoring program associated with the Bunker Hill Mining and Metallurgical Complex Superfund Site (Bunker Hill) Operable Unit (OU) 2. A monitoring network consisting of 77 groundwater monitoring wells and 18 surface water stations was evaluated to assess its overall effectiveness at achieving the OU2-specific monitoring objectives, and to (1) identify potential opportunities to streamline monitoring activities while still maintaining an effective monitoring program, and (2) identify data gaps that may require the addition of supplementary monitoring points (January 2006, 126 pages). View or download at http://clu-in.org/techpubs.htm .

Long-Term Monitoring Network Optimization Evaluation for Wash King Laundry Superfund Site, Lake County, Michigan (EPA 542-R-06-004). This EPA report presents a description and evaluation of the groundwater monitoring program associated with the Wash King Superfund Site located in Pleasant Plains Township, Lake County, Michigan. A monitoring network consisting of 44 groundwater monitoring wells and five groundwater extraction wells was evaluated to identify potential opportunities to streamline monitoring activities while still maintaining an effective monitoring program (June 2006, 89 pages). View or download at http://clu-in.org/techpubs.htm .

Pilot Region-Based Optimization Program for Fund-Lead Sites in EPA Region 3 (EPA 542-R-06-006). These 12 reports document the current (as of December 2005) and baseline site conditions and the results of streamlined optimization evaluations carried out at 12 sites in EPA Region 3. View or download at http://clu-in.org/techpubs.htm .

Vapor Intrusion Pathway: A Practical Guide (VI-1). This document was produced by the Interstate Technology and Regulatory Council (ITRC). It provides a generalized framework for evaluating the vapor intrusion pathway and describes the various tools available for investigation, data evaluation, and mitigation (January 2007, 173 pages). View or download at http://www.itrcweb.org/Documents/VI-1.pdf .

Vapor Intrusion Pathway: Investigative Approaches for Typical Scenarios (VI-2). This ITRC document is a supplement to Vapor

Intrusion Pathway: A Practical Guide (VI-1). The supplement describes applicable approaches for evaluating the vapor intrusion pathway in six typical scenarios (January 2007, 52 pages). View or download at http://www.itrcweb.org/Documents/VI-1A.pdf .

CLU-IN Field Analytic Technologies Area. For those of you familiar with the former Field Analytic Technologies Encyclopedia (FATE), the information contained there-in can be accessed directly on CLU-IN. We have posted the information at http://clu-in.org/char/technologies and are working to update each of the technology areas.

EUGRIS Corner. New Documents on EUGRIS, the platform for European contaminated soil and water information. See the following link to access the following documents: http://www.eugris.info/Whatsnew.asp . Almost 30 resources,projects and news items were added to EUGRIS 1 - 21 December 2006. Some examples include:

Environment Agency -UK (2006) Remedial Targets Methodology - Hydrogeological Risk Assessment for Land Contamination. This report describes the Environment Agency's recommended approach to assessing the risks associated with soil and groundwater contamination and for deriving site-specific remedial objectives that are protective of the water environment.

European Commission (2005) Risks to Health and the Environment Related to the Use of Lead in Products. TNO report STB-01-39 (Final), DG ENTR. Contract no. ETD/00/503273, which includes: Effect assessment: derivation of NOAELs (human) and NOAECs (environment); an inventory of lead uses, trends and emissions in the EU, divided by product group; and a Preliminary risk assessment.

Conferences and Symposia

Reminder! 2007 Conference on Design and Construction Issues at Hazardous Waste Sites, April 4 - 5, Philadelphia. This conference is hosted by the US EPA and the US Army Corps of Engineers. The conference will provide a forum for discussion between the private sector and the federal, state, local, and tribal governments regarding design and construction issues at hazardous waste sites, including effective methods, lessons learned, application of technologies, and field approaches. For more information or to register please see the conference website at http://hq.environmental.usace.army.mil/rdra-07 .

NOTE: For TechDirect, we prefer to concentrate mainly on new documents and the Internet live events. However, we do support an area on CLU-IN where announcement of conferences and courses

can be regularly posted. Currently there are 73 conferences and courses featured. We invite sponsors to input information on their events at http://clu-in.org/courses . Likewise, readers may visit this area for news of upcoming events that might be of interest. It allows users to search events by location, topic, time period, etc.

If you have any questions regarding TechDirect, contact Jeff Heimerman at (703) 603-7191 or heimerman.jeff@epa.gov. Remember, you may subscribe, unsubscribe or change your subscription address at http://clu-in.org/techdrct at any time night or day.