

Message #114: August 2006

Welcome to TechDirect! Since the July 1 message, TechDirect gained 194 new subscribers for a total of 25,490. 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 Solicitation

People, Prosperity and the Planet - Searching for Green Technologies. Do you have an idea for a cutting-edge technology that could protect the environment while growing the economy? The U.S. Environmental Protection Agency (EPA) is offering college professors and their students an opportunity to turn ideas into reality through its P3 (People, Prosperity and the Planet) grants competition. EPA's P3 is a student design competition for sustainability. Previous P3 winners have already taken their innovations to the next level including starting successful businesses, winning additional awards, and providing environmental solutions to developing countries. The P3 request for ideas will be open from August 15 to December 21, 2006. Interdisciplinary student teams will compete for \$10,000 grants to research and develop their design projects during the 2007-2008 academic year. EPA expects to award approximately 100 new grants from the eligible applications in the summer of 2007. For more information, see <http://www.epa.gov/P3> .

Upcoming Internet Seminars

ITRC Overview of Direct-push Well Technology for Long-term Groundwater Monitoring ♦ August 3. 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> .

ITRC Radiation Risk Assessment: Updates and Tools ♦ August 10. The ITRC has developed a document, *Determining Cleanup Goals at Radioactively Contaminated Sites: Case Studies* (RAD-2, 2002), that examines the factors influencing the variations in cleanup level development at various radioactively contaminated sites. This document underscores the need for radiation risk assessment training to enhance consistency in risk assessment application. The document also acknowledges the differences between the 'dose approach' used at some sites and EPA's 'risk-based approach'. Since most radioactively contaminated DOE and DOD sites are developing cleanup goals under CERCLA authority, there is a need for a training course that clarifies the variations between these approaches and elaborates on the methodology used to develop risk-based remediation goals. To meet this need, this training course has been collaboratively developed by the ITRC Radionuclides Team and EPA's Superfund Office. The focus of this training is EPA's new radiation risk assessment tools, which can facilitate better decision making for accelerated cleanups. For more information and to register, see <http://clu-in.org/studio> .

Uses of Spatial Analysis and Decision Assistance (SADA) ♦ August 15. Spatial Analysis and Decision Assistance (SADA) is free software that incorporates tools from environmental assessment fields into an effective problem solving environment. These tools include integrated modules for visualization, geospatial analysis, statistical analysis, human health risk assessment, ecological risk assessment, cost/benefit analysis, sampling design, and decision analysis. This seminar will highlight the tools used, but is not a tutorial for the software. For more information and to register, see <http://clu-in.org/studio> .

New Documents and Web Resources

Technology Reference Guide for Radiologically Contaminated Surfaces (EPA-402-R-06-003). The U.S. EPA Office of Radiation

and Indoor Air (ORIA) developed this Technology Reference Guide for Radiologically Contaminated Surfaces to help identify surface decontamination technologies that can effectively remove radiological contaminants from building, structure, and equipment surfaces. These technologies may also be useful in the removal of non-radiological contaminants, such as hazardous metals, from surfaces. This Guide is designed to provide easy access to critical information on technologies that are commercially available (March 2006, 150 pages). View or download at

<http://www.epa.gov/radiation/docs/cleanup/402-r-06-003.pdf>.

Assessing the Human Health Risks of Trichloroethylene: Key Scientific Issues (ISBN: 0309102839). This report was produced by the National Research Council. The NRC committee was asked to examine issues critical to developing an objective, realistic, scientifically based health risk assessment for trichloroethylene. It was asked to focus on hazard characterization and mode of action for trichloroethylene toxicity; possible approaches to synthesize epidemiologic data for characterization of hazard; human susceptibility in different subpopulations or life stages; evidence for effects from exposure to trichloroethylene alone compared with that for effects from mixtures of chemicals that include trichloroethylene; physiologically based pharmacokinetic (PBPK) modeling; dose-response assessment; and issues related to quantitative assessment of cancer and non-cancer risks. The report provides guidance in three major categories: hazard characterization, PBPK modeling, and dose-response assessment (July 2006, 472 pages). The complete report can be viewed and ordered online at

<http://www.nap.edu/catalog/11707.html#toc>. The 28-page executive summary is also available for free download, see http://newton.nap.edu/execsumm_pdf/11707.

Survey of Munitions Response Technologies. The Strategic Environmental Research and Development Program (SERDP), Environmental Security Technology Certification Program (ESTCP), and the Interstate Technology Regulatory Council (ITRC) jointly developed this Munitions Response Technology document. This document provides an overview of the current status of technologies used for munitions response (MR) actions and, where possible, evaluates and quantifies their performance capabilities. It provides project managers and regulators an understanding of the performance capabilities of available technologies under real-world site conditions. Detailed observations and critical considerations in the application of munitions technologies are discussed, with particular emphasis on detection technologies (June 2006, 216 pages). View or download at <http://clu-in.org/techpubs.htm>.

Remediation Case Studies and Technology Assessment Reports Fact Sheet: June 2006 (EPA 542-F-06-004). This fact sheet was produced by the Federal Remediation Technologies Roundtable. It describes the status of cost and performance activities, including recent additions of completed case studies and reports. A total of 716 reports are now available. These reports represent a wide spectrum of technology deployment in the field, ranging from pilot-scale demonstrations to full-scale applications at single sites and at multiple sites (June 2006, 6 pages). View or download at <http://clu-in.org/techpubs.htm>. For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

Technology News and Trends (EPA 542-N-06-004). This regular newsletter for environmental professionals features a combination of articles on innovative, in-situ technologies for the characterization and treatment of soil, sediment, and ground water. This issue of Technology News and Trends looks back to find lessons learned from projects described in earlier issues of the newsletter. These site-specific updates encompass expanded field operations, the results of longer-term monitoring, techniques for system optimization, and progress toward cleanup closure (July 2006, 8 pages). View or download at <http://clu-in.org/techpubs.htm>. For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

Measurement and Monitoring: 20th Quarterly Literature Search. This service is provided by the U.S. EPA Office of Superfund Remediation and Technology Innovation as a part of its Measurement and Monitoring for the 21st Century Initiative. EPA has identified 16 areas related to waste site cleanup where significant technology needs exist and, thus, require research and or technology demonstration to help advance new tools to address these needs. The 20th quarterly update of literature contains new citations related to the needs areas (June 2006, 87 pages). View or download at <http://clu-in.org/programs/21m2/>.

EUGRIS Corner: EUGRIS is a portal for soil and water management in Europe. It provides structured access to information, based on topic or country for example, helping you to quickly find the information you need. EUGRIS operates as a community of registered people and organizations who co-operate to supply the latest information for the benefit of everyone. New on EUGRIS:

- European Commission (2006) Water and Soil European Research - Catalogue of projects. This catalogue provides contact details, abstracts and web links for EC funded research, development and demonstration projects related to soil and water, supported under the Framework 6 programme.

- Waste & Resources Action Programme (2006) Uses of compost in regeneration and remediation of brownfield sites in the UK. This report describes the extent of economically marginal brownfield land in the UK (primarily England and Wales) and the possibilities for compost application to this land for remediation, restoration and landscaping purposes.
- Atkins Global ATRISKSOIL SSV Website. Atkins has developed Soil Screening Values (SSVs) applicable to the UK for common contaminants not currently covered by SGVs issued by Defra and the Environment. The SSVs are available on-line through this website and can be applied to a wide-range of land contamination problems as a consistent decision-making tool.

For more information, see <http://www.eugris.info/Whatsnew.asp> .

Conferences and Symposia

Alternative Covers for Landfills, Waste Repositories, and Mine Wastes: Design, Modeling, Construction, and Monitoring Workshops. These 2 ♦ day workshops are intended to teach consultants and engineers how to design and submit quality proposals for ET covers, and to teach regulators how to evaluate those proposals. Participants will get an understanding of the hydraulic properties of these covers, how to optimize designs with models, and how to ensure that the final product is environmentally protective. Topics will include alternative cover design, construction, operation, and monitoring, including discussions of regulatory issues, soil physics, plant-soil-water relations, hydraulic balance, saturated/unsaturated water movement, and computer modeling. Regional case studies will be emphasized. Study results and lessons learned from the U.S. EPA Alternative Covers Assessment Program will be discussed. Course dates and locations: September 26-28, Austin, TX; October 16-18, Chicago, IL; November 28-30, Denver, CO; and January 23-25, 2007, Riverside, CA. For the course outline and registration information, see <http://www.landfillcover.dri.edu/> .

Land Revitalization Summit -October 30- November 1, Austin, Texas. U.S. EPA Region 6 will host its first cross program Land Revitalization Summit to promote land revitalization as a part of State and Federal cleanup programs. The meeting will allow state agencies, municipalities, developers, lenders, brokers, and others to discuss ways that government can better assist in achieving faster, protective cleanups that will support redevelopment. The Region is now evaluating agenda topics and soliciting speakers for the meeting. For agenda and registration information, see <http://www.lrs Summit.com>,

or call Kathy Thomas at (214) 665-2229, or email LRsummit@epa.gov.

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 86 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.