

## Message #94: December 2004

Welcome to TechDirect. Since the November 1 message, TechDirect gained 202 new subscribers for a total of 20,629. 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/techdirect> . 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.

The purpose of TechDirect is to identify new technical, policy and guidance resources related to the assessment and remediation of contaminated soil 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.

### ***Solicitations***

**SERDP Proposal Solicitation.** The Strategic Environmental Research and Development Program (SERDP) funds environmental research and development through a competitive process. Because both government and private sector parties may compete for SERDP funds, there are two announcements for each solicitation: (1) a Call For Proposals to the federal sector and (2) a Broad Agency Announcement (BAA) for the private sector. SERDP is requesting proposals for two programs - the CORE program and the SEED program. The Core solicitation was released on November 10, 2004 and provides funding in various amounts for multi-year projects. This year's Core Solicitation pre-proposals from the non-federal sector are due January 6, 2005, and federal proposals are due via your Executive Working Group member March 10, 2005. SEED is a separate solicitation for SERDP Exploratory Development (SEED) proposals. SEED proposals are, by definition, limited to a maximum of \$100K and a period of performance of one year. The FY 2006 SEED solicitation was released on November 10, 2004. All SEED proposals are due March 10, 2005. Both programs seek proposals that respond to their specific Statements of Need. For full information and instructions for submitting proposals, see

<http://www.serdp.org/funding/funding.html> .

**FY 2005 Special ESTCP Solicitation.** The DoD Environmental Security Technology Certification Program (ESTCP) special

solicitation, for fiscal year 2005 was released on November 18, 2004, to fund demonstration projects for UXO wide assessment demonstration projects. The objective of this effort is to delineate target areas, eliminate uncontaminated land from the inventory (i.e. no further action), and collect quality data to enhance planning, risk assessment and support future contracting. There are three distinct avenues to participate in the program based on your type of organization: DoD organizations, non-DoD federal organizations, and private sector organizations. Due date for proposals and pre-proposals is Wednesday, December 22, 2004. For further information, complete instructions, and frequently asked questions, see <http://www.estcp.org/opportunities/solicitations> .

## ***Upcoming Internet Seminars***

**ITRC Geophysical Prove Out - December 7, 2005.** Geophysical systems are used to detect surface and subsurface anomalies, (i.e. unexploded ordnance (UXO) and/or discarded military munitions) during geophysical surveys of munitions response sites. These systems are tested, evaluated and demonstrated by a site-specific geophysical prove-out (GPO). Information collected during the implementation of the prove-out is analyzed and used to select or confirm the selection of a geophysical system that can meet the performance requirements established for the geophysical survey. This training introduces the purpose and scope of GPOs, provides examples of goals and objectives associated with GPOs, and presents detailed information needed to evaluate the design, construction, implementation and reporting of GPOs. To register, see, <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

## ***New Documents***

**Cleaning Up the Nation's Waste Sites: Markets and Technology Trends - 2004 Edition (EPA 542-R-04-015).** This document was produced by the EPA Office of Superfund Remediation and Technology Innovation. It provides a overview of the US market for the cleanup of sites contaminated with hazardous waste and petroleum products. The report covers the Nation's seven major cleanup markets, namely Superfund, RCRA Corrective Action, DoD, DOE, USTs, Civilian Federal Agencies, and State Voluntary cleanup programs. The information it presents is intended to support those who are developing, commercializing, and marketing new cleanup technologies to meet the future demand. In addition to providing estimates of future cleanup efforts across the Nation, the report provides insightful analyses of each of the seven market segments.

In addition, the report also includes analyses of remediation needs in three market “niches,” each of which presents a specific set of remediation challenges—the cleanup of former manufactured gas plant (MGP) and other coal tar sites, mining sites, and drycleaner sites; and two specific issues that affect hazardous waste sites in most remediation programs—site characterization technology, and the remediation of dense non-aqueous phase liquids (DNAPLs). 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.

**Demonstration of Two Long-Term Groundwater Monitoring Optimization Approaches (EPA 542-R04-001a).** This report, published by the EPA Office of Superfund Remediation and Technology Innovation, summarizes the results of a demonstration of optimization methods to improve the design of long-term groundwater monitoring programs. The report discusses the results of application of two different long-term groundwater monitoring optimization (LTMO) methods including: The Monitoring and Remediation Optimization System (MAROS) software tool; and The Three-Tiered Monitoring Network Optimization (MNO) approach. The two methods were applied at three different sites (the Fort Lewis Logistics Center, the Long Prairie Groundwater Contamination Superfund site, and Operable Unit D at McClellan Air Force Base). The primary goals of this demonstration project were to highlight current strategies for applying optimization techniques to existing long-term monitoring programs, and to assist site managers in understanding the potential benefits associated with monitoring program optimization (November 2004, 63 pages). Note that this is the summary document. The full report with appendices (763 pages) is also available. View or download at <http://clu-in.org/techpubs.htm> .

**DNAPL Remediation: Selected Projects Approaching Regulatory Closure (EPA 542-R-04-016).** This paper was produced by the EPA Office of Superfund Remediation and Technology Innovation. It is a status update on the use of DNAPL source reduction remedial technologies, and provides information about recent projects where regulatory closure has been reached or projects that are approaching regulatory closure, following source reduction. Information is presented about the challenges associated with DNAPL remediation, the types of in situ technologies used, and data and findings concerning the relative effectiveness of field applications of these technologies. Appendix A contains project profiles for eight field applications that illustrate some of the findings presented in this paper (November 2004, 34 pages). View or download at <http://clu-in.org/techpubs.htm> .

**Emerging Technologies for the In Situ Remediation of PCB-Contaminated Soils and Sediments: Bioremediation and Nanoscale Zero-Valent Iron.** This document was prepared by Alex Mikszewski, a National Network of Environmental Management studies grantee, under a fellowship from the U.S. Environmental Protection Agency. This report reviews emerging technologies for the in situ remediation of PCB-contaminated sediments and soils to assess their viability for future employment (August 2004, 30 pages). View or download at <http://clu-in.org/techpubs.htm> .

**Phytoremediation Field Studies Database for Chlorinated Solvents, Pesticides, Explosives, and Metals.** This document was prepared by two undergraduate students under internships with United States Environmental Protection Agency (EPA). Ana Hoffnagle was sponsored by the University of Arizona and Cynthia Green was sponsored by the Environmental Careers Organization. The paper briefly explains the concept of phytoremediation, details phytoremediation site considerations, and summarizes the successes and failures of field-scale sites where phytotechnologies have been applied or proposed (August 2004, 168 pages). View or download at <http://clu-in.org/techpubs.htm> .

**Frequency and Extent of Dispenser Releases at Underground Storage Tank Facilities in South Carolina. (EPA-510-R-04-004).** This report presents the results of information collected and analyzed from underground storage tank (UST) closure and assessment reports at sites in South Carolina. EPA gathered and analyzed dispenser sampling data from South Carolina's Department of Health and Environmental Control's UST assessment and closure files to determine the frequency and extent of releases from dispensers, and whether the data showed any patterns of dispenser releases. The primary audiences for this report are state and regional underground storage tank staff and managers interested in learning about the frequency and extent of dispenser releases. The report describes the background, purpose, methodology used, quality assurance and quality control procedures applied, results of the study, and conclusions. It also provides supporting information in the appendices (September 2004, 32 pages). View or download at <http://www.epa.gov/swerust1/pubs/dispenser.pdf> .

## ***Conferences and Symposia***

**ITRC MTBE & TBA:** - Comprehensive Site Assessment and Successful Groundwater Remediation, Denver, December 16-17. This comprehensive two-day course introduces students to a variety of MTBE and TBA contaminated groundwater topics including:

chemical, physical and biological characteristics; characterization; site assessment; remediation technologies; and case studies. The MTBE team has assembled a top-notch group of instructors offering both theoretical and practical information about MTBE and TBA in groundwater. Students can expect to increase their understanding of groundwater related site characterization and remediation issues, especially as it relates to regulator acceptance and successful application of innovative technology. To register, see

<https://weborcl8.wpi.biz/itrc/mtbe200412/regform.htm> .

**Call for Papers! 2005 NGWA Conference on MtBE and Perchlorate: Assessment, Remediation, and Public Policy, San Francisco, May 26-27.** Abstracts are being considered for the following topics: Remediation Technology Costs, Public Policy and Legal Issues; Risk Assessments, Current Remediation Technologies, Drinking Water Treatment Technologies, Fate and Transport, Enhancing Natural Attenuation Processes, Current Litigation, Toxicology and Health Risks, and Energy Policy Implications. Abstract Submission Deadline is December 15. For more information see, <http://www.ngwa.org/pdf/e/conf/0505265015cfp2.pdf> .

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 159 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](mailto: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.