Welcome to TechDirect! Since the June 1 message, TechDirect gained 500 new subscribers for a total of 22,443. 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.

**Special Announcements**

**Cooperative Agreement Opportunity.** EPA's Office of Superfund Remediation and Technology Innovation announces a funding opportunity for a non-profit or for-profit organization to enter into a cooperative agreement concerning the use of innovative technologies to remediate ground water and soils that have been contaminated by hazardous waste. There are three parts to this award: 1) Provide support to the meetings of the State Coalition for the Remediation of Drycleaners, 2) Plan and manage a national conference on the assessment and remediation of abandoned mine lands, and 3) Plan and manage either a national conference on the assessment and remediation of contaminated ground water in fractured bedrock from hazardous waste sites or a conference on the assessment and remediation of sites which are contaminated by Dense Non-aqueous Phase Liquids (DNAPLS). This is a three year award in which EPA will fund for $180,000. For more information, see http://clu-in.org/fracrock/2005proposal/.  

**Superfund Photo History Project.** The deadline for photograph submission is extended to July 15. As part of its commemoration of its 25th Anniversary, the Superfund program is conducting a photo history and we need your submissions. We are looking for photos that capture the people and places of Superfund (all aspects of it), the human and environmental impacts of Superfund sites, and the
changes in communities resulting from site cleanups. EPA will use selected photos to enhance its 25th Anniversary Oral History Project and to create an archive of Superfund images. In addition, EPA will select two photos representing each of its ten regions for later display across the country. Guidelines for submitting photos are available at [http://www.epa.gov/superfund/action/process/photo/index.htm](http://www.epa.gov/superfund/action/process/photo/index.htm).

**Upcoming Internet Seminars**

**ITRC What’s New with In Situ Chemical Oxidation? - July 12.** This training presents updated guidance and technology advancement information for In Situ Chemical Oxidation. Topics include a regulatory discussion related to ISCO implementation; details on the chemistry behind ISCO technology; considerations for system design and application, including health and safety; and performance evaluation information. The course is based on the ITRC’s In Situ Chemical Oxidation of Contaminated Soil and Groundwater, Second Edition (ISCO-2, 2005), with sections on technology overview and applicability, remedial investigations, safety concerns, regulatory concerns, injection design, monitoring, stakeholder concerns, and case studies. For more information and to register, see [http://www.itrcweb.org](http://www.itrcweb.org) or [http://clu-in.org/studio](http://clu-in.org/studio).

**Performance Testing of Field Portable Monitoring and Measurement Technologies for Dioxin and Dioxin-like Compounds in Soil and Sediment - July 19.** This seminar is sponsored by the EPA Superfund Innovative Technology Evaluation (SITE) program. It will cover the demonstration design and evaluation of five field portable analytic technologies for dioxin and dioxin-like compounds in soil and sediment matrices. For more information and to register, see [http://clu-in.org/studio](http://clu-in.org/studio).

**New Documents and Online Resources**

**SW-846 is Now Guidance!** The U.S. EPA published the Methods Innovation Rule (MIR) in the Federal Register as a Final Rule on Tuesday, June 14, 2005. Promulgation of the MIR removes the unnecessary requirements in the RCRA regulations to use only SW-846 methods. With the exception of about 25 method-defined parameters, which are still incorporated by reference in the RCRA regulations at 40 CFR 260.11, SW-846 methods are now guidance. View or download at [http://clu-in.org/techpubs.htm](http://clu-in.org/techpubs.htm).

**Use of Field-Scale Phytotechnology for Chlorinated Solvents, Metals, Explosives and Propellants, and Pesticides (EPA 542-R-05-002).** This document was published by the EPA Office of
Superfund Remediation and Technology Innovation. For this document, the US EPA collected information about 79 field-scale phytotechnology projects conducted throughout the US and Canada that involved treatment of soil and groundwater contaminated with chlorinated solvents, metals, explosives and pesticides. The purpose of this report is to inform readers of the status of these projects. This document can be used as a networking tool for federal, state and industrial employees to share lessons learned from and practical experiences with field-scale applications of phytotechnology (April 2005, 27 pages). View or download at [http://clu-in.org/techpubs.htm](http://clu-in.org/techpubs.htm).

USGS Patents the Multifunction Bedrock-Aquifer Transportable Testing Tool. The U.S. Geological Survey designed, constructed, and patented a Multifunction Bedrock-Aquifer Transportable Testing Tool (BAT3). BAT3 is designed to conduct tests that measure the permeability of fractures, and collect water samples for geochemical analyses from short intervals of boreholes in fractured-rock aquifers. The BAT3 is unique when compared to conventional packer systems: it has the ability to conduct multiple types of hydraulic tests, geochemical sampling, and tracer tests; to monitor the operational integrity of tests; and to conduct real-time data analysis and visualization. USGS scientists and their partners have used the BAT3 at several sites throughout the eastern United States, including sites with contaminated ground water, in order to characterize fractured rock aquifers. View information at [http://toxics.usgs.gov/highlights/bat3/](http://toxics.usgs.gov/highlights/bat3/).

Perchlorate Treatment Technology Update (EPA 542-R-05-015). This issue paper was produced by U.S. EPA's Federal Facilities Forum to provide information about technologies available for treatment of perchlorate contamination in environmental media, including technologies that have been used to date and others that show potential for treating such contamination. It provides site-specific information on 51 projects where treatment technologies have been or are being applied for full-scale treatment or field demonstrations. A brief overview of key perchlorate issues, including health effects and risks, regulatory standards and cleanup levels, degradation processes, and treatment technologies, is provided (May 2005, 80 pages). Please keep in mind that this document captures only a few of the technical/regulatory issues related to perchlorate that will continue to evolve over the next several months. View or download at [http://clu-in.org/techpubs.htm](http://clu-in.org/techpubs.htm).

Roadmap to Long-Term Monitoring Optimization (EPA 542-R-05-003). This document, produced by EPA and the U.S. Army Corps of Engineers, focuses on optimization of established long-term
monitoring programs for groundwater. It discusses tools and techniques that concentrate on methods for optimizing the monitoring frequency and spatial distribution of wells. The primary goals of this Roadmap are to assist site managers in: understanding the steps involved in conducting a Long Term Monitoring Optimization (LTMO); determining if their monitoring program could benefit from a LTMO assessment; identifying potential strategies for applying optimization techniques and evaluating which are appropriate for their program; and providing more information and resources about LTMO tools, methods, and approaches (May 2005, 48 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.

Compilation of Available Data on Building Decontamination Alternatives (EPA 600-R-05-036). This report was produced by the EPA National Homeland Security Research Center. As an initial step in this Safe Buildings decontamination program, NHSRC commissioned this report, to provide background information regarding potential building decontamination technologies. This state-of-the-art review of decontamination technologies is intended to: assist NHSRC in prioritizing the technologies to be evaluated under its decontamination program; and serve as an educational tool for the various NHSRC clients interested in building decontamination (March 2005, 196 pages). View or download at http://www.epa.gov/ordnhsrc/pubs/reportBuildDecon052705.pdf.

**Conferences and Symposia**

**Call for Poster Abstracts!** Partners in Environmental Technology Technical Symposium and Workshop, Washington DC, November 29-December 1. Sponsored by SERDP and ESTCP, this conference will provide attendees: (1) concurrent technical sessions covering the latest in environmental research results and technical innovations; (2) poster sessions featuring more than 200 technical posters; (3) exhibit booths offering information about funding opportunities in related research programs; (4) a concluding session providing a summary of SERDP and ESTCP program development and opportunities to conduct research and demonstrations; and (5) networking opportunities with more than 800 environmental professionals. Deadline for Poster Abstract submission is August 1. For more information, see http://www.serdp.org/news/news.html.

**MTBE & TBA** - Comprehensive Site Assessment and Successful Groundwater Remediation, San Francisco, August 10-12. This comprehensive two-day ITRC 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/mtbe200508/regform.htm.

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 147 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.