

## Message #28: June, 1999

Since May 1, TechDirect gained 237 new subscribers for a total of 6515. Welcome to all the new subscribers! We hope this service continues to meet your needs. If any of the resources previously featured have been particularly useful in your work, please take a moment to let us know.

**Reminder!** If you experience problems with a URLs that do not work, please try the URL again making sure to eliminate the period that may be present at the end.

### ***New Remediation Documents***

**Treatment Technologies for Site Cleanup: Annual Status Report, Ninth Edition (EPA 542- R-99-001).** This new report documents, as of the summer of 1998, the status of treatment technology applications at more than 900 soil and groundwater cleanup projects in the Superfund program, selected RCRA corrective action sites, US DOE, and US DoD sites. The report updates the projects included in the ASR 8th Edition, and information on projects derived from 79 Records of Decision signed in 1996 and 1997. It also now includes information on 217 incineration and solidification/stabilization projects not previously covered. For the most frequently selected technologies, the report analyzes selection trends over time, contaminant groups addressed, quantities of soil treated, and project implementation status. Specific site information for each technology application has been incorporated into the [EPAREACHIT](#) on-line database cited in last month's TechDirect. View or download from <http://clu-in.org/techpubs.htm>. Hard copies will be available by June 15, contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685.

**Phytoremediation Resource Guide (EPA 542-B-99-003).** This Guide provides abstracts of more than 100 phytoremediation overviews, field studies and demonstrations, research articles, and Internet resources. It also provides a brief summary of phytoremediation. Finally, a matrix is provided to allow easy screening of the abstracted references [May 1999, 56 pages]. View or download from <http://clu-in.org/techpubs.htm>. Hard copies will be available by June 15, contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685.

### **Field Applications of In Situ Remediation Technologies:**

**Permeable Reactive Barriers (EPA-542-R-99-002).** This document is a status report on the use of permeable reactive barriers (PRBs) for ground-water remediation in the United States, Canada, and selected locations abroad. Included in this report are profiles of ongoing and completed pilot- and full-scale PRB demonstrations as well as full-scale installations. The profiles are organized by the type of contaminant treated. At some sites, PRBs are being used to address more than one type of contaminant. Profiles for these site are included in all applicable sections of this document [June 1999, 137 pages]. Hard copies will be available by June 15, contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685.

**Tech Trends (542-N-99-003).** TechTrends is published quarterly by the U.S. EPA and provides descriptions and performance data for innovative source control technologies that have been applied in the field. This issue highlights innovative techniques for containment and treatment of soil, sediment, and ground water contaminants under challenging site conditions [May 1999, 4 pages]. View or download from <http://clu-in.org/techpubs.htm>. For hard copies contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685.

## ***Site Characterization Documents***

**Innovations in Site Characterization: Interim Guide to Preparing Case Studies (EPA 542-B-98-009).** This guide is intended to assist in the preparation of Site Characterization Case Study Reports. It provides guidelines that facilitate collecting and documenting the cost and performance information and presents a standard presentation format [October 1998, 23 pages]. View or download from <http://clu-in.org/techpubs.htm>. For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685.

**Dexsil L2000 PCB/Chloride Analyzer for Drum Surfaces (EPA 542-R-99-003).** This case study is one of a series designed to provide cost and performance information for innovative tools that support less costly and more representative site characterization. These case studies will include reports on new technologies as well as novel applications of familiar tools or processes. This case study describes how a field analytical method was used to measure PCB Surficial contamination in empty drums that were cleaned by a new process [May 1999, 48 pages]. View or download from <http://clu-in.org/techpubs.htm>. Hard copies will be available by June 15, contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685.

## **Geophysical Techniques to Locate DNAPLs: Profiles of**

**Federally Funded Projects (542-R-98-020).** This report was published by the Federal Remediation Technologies Roundtable. It is intended to provide a status report for researchers and practitioners on federal projects that are using noninvasive geophysical techniques to locate DNAPLs in the subsurface [December 1998, 31 pages]. View or download at <http://clu-in.org/techpubs.htm>. Hard copies will be available by June 15, contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685.

**Using Field Methods — Experiences and Lessons: Defensibility of Field Data.** So...you want to use field analytical methods to generate data for your hazardous waste site, but you are not sure whether such data 'will stand up if we have to go to court'? This article, written by Bart Simmons of Cal/EPA, discusses several Federal and California court rulings that have demonstrated that if data sets are scientifically defensible, they are legally defensible: "The rules for the defensibility of field methods are no different than those for fixed laboratory methods." [May 1999, 4 pages]. View or download from <http://clu-in.org/techpubs.htm>.

**Ground Water Issue Paper: Fundamentals of Soil Science as Applicable to Management of Hazardous Wastes (540-S-98-500).** This Issue Paper was published by the EPA National Risk Management Research Laboratory for the Ground Water Forum. It summarizes the basic concepts of soil science as related to the management of hazardous waste and serves as a foundation from which to build a thorough understanding of soil processes [April 1999, 24 pages]. View or download from <ftp://ftp.epa.gov/pub/ada/issue/soilfund.pdf> OR <http://clu-in.org/techpubs.htm>. For hard copies contact (580) 436-8651 or fax your request to (580) 436-8503.

## ***Conferences and Symposia***

**In Situ Permeable Reactive Barriers: Application and Deployment, June 22-23, Boston, MA.** EPA's National Risk Management Research Laboratory and the Technology Innovation Office, in cooperation with the Remediation Technologies Development Forum and the Interstate Technology Regulatory Cooperation Work Group, are offering a 1.5-day training course on the use of permeable reactive barriers for remediating and managing contaminated groundwater. Training sessions will be held in the ten EPA regional cities throughout the country between June 1999 and September 2000. The first course offering will be held in Boston, MA, June 22-23. For course agenda and registration information, see <http://www.trainex.org/prb>.

**WTQA'99, Arlington, Virginia, July 18 - 22.** The 15th Annual Waste Testing and Quality Assurance Symposium will be held at the Crystal Gateway Marriott Hotel in Arlington, VA with the theme being, Preparing for Change Under PBMS. The conference will be preceded and followed by short courses. Hosted by the Waste Policy Institute and US EPA, the three day conference will begin with a plenary session on July 19th followed by concurrent technical sessions on July 20 - 21, 1999. In addition to regular technical sessions on quality assurance, organic and inorganic chemical analysis, six special PBMS Issue Sessions focus on PBMS Status, Contracting, Laboratory Management, Scientific and Legal Defensibility, Field and Laboratory Implementation, and Laboratory Auditing and Accreditation. The deadline for advanced registration has been extended to June 15, 1999. Complete program information and on-line registration form is available on the Internet at <http://www.wpi.org/wtqa> and any questions may be asked by sending a fax to 540-557-6043, attention Dr. Larry Keith.

**Perchlorate in the Environment: Toxicological, Ecological, Analytical, Water Treatment, and Site Remediation Developments in Pure and Applied Science New Orleans, LA August 22-26.** Because of its unique physical and chemical properties, perchlorate poses a number of challenges in terms of quantitative analysis, remediation, and water treatment. Additionally there are toxicological and ecological implications. In light of these challenges the U.S. EPA Office of Research and Development and the American Chemical Society Division of Environmental Chemistry are co-organizing a symposium on perchlorate in the environment. For conference and registration information, see <http://www.acs.org/meetings/neworleans/welcome.htm>.

**MARK YOUR CALENDARS!! Innovative Clean-Up Approaches: Investments in Technology Development, Results & Outlook for the Future, Chicago area, November 2-4.** The conference is being sponsored by the US EPA Office of Research and Development (ORD) and the Technology Innovation Office (TIO). The conference will provide an opportunity for stakeholders and partners to share the most recent information about the status of these efforts, evaluate success of past efforts, and discuss future research and information needs. Stakeholders will also learn of opportunities to participate in EPA-sponsored programs, such as the SITE and Brownfields Programs. Additional information on the conference will be posted at <http://www.epa.gov/ttbnrml> in July.

**Remediation of Subsurface Contaminants: The Meaning and Measures of Success, November 12-15, Amelia Island, Florida.**

This conference is sponsored by the National Ground Water Association. The purpose of the 1999 Theis conference is to provide focussed discussion on issues of defining and attaining "success" in subsurface remediation. The huge expenditures invested in these efforts and the competing interests and the limited cleanup funds make this debate an important one. Ground water scientists and practitioners play a crucial role in providing credible information to advance this debate and the conference will focus on discussion and exploration of those issues where the science can play a useful role. Application deadline was July 1, 1999. .

## ***Editorial Note***

**Looking for Additional Leads!** The Technology Innovation Office is undertaking a project to assemble information on efforts to identify and remediate contaminated ground water in fractured rock. We have already gathered information on some sites and are looking to identify additional sites where characterization and remediation activities are planned or ongoing. The types of information we are collecting include site location, contaminants of concern, information on assessment and remediation efforts, and contact information. If you have any leads to help us identify additional sites, please contact Rich Steimle at [steimle.richard@epa.gov](mailto:steimle.richard@epa.gov) or Eric Jacobs at [jacobs.eric@epa.gov](mailto:jacobs.eric@epa.gov).

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If you have any questions or comments about TechDirect, please contact Jeff Heimerman at (703) 603-7191 or [heimerman.jeff@epa.gov](mailto:heimerman.jeff@epa.gov).