

## Message #39: May 2000

Since April 1, TechDirect gained 183 new subscribers for a total of 8405. Welcome to everyone just joining the TechDirect community. As always, I welcome any feedback you have on this service. Here are the documents we found for you this month.

Mention of non-EPA documents 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***

**MTBE Treatment Demonstration - Request for Applications.** The U.S. EPA is announcing a Request for Applications (RFA) to demonstrate technologies to treat MTBE. The RFA is open and proposals are due by May 30, 2000. EPA has selected the Naval Construction Battalion Center at Port Hueneme, California to host demonstrations of both drinking water and aquifer treatment technologies. For more information and a copy of the solicitation, see

<http://www.epa.gov/swrust1/mtbe/mtbedemo.htm> .

**TIO Internet Seminars.** For over a year the Technology Innovation Office has been working in cooperation with other public organizations to host live technical seminars over the Internet. In the past, participation was by invitation only. We wish to offer the seminars on a more frequent basis to a wider audience. The first seminar being offered is titled, Natural Attenuation of Chlorinated Solvents: Principles and Practices. This seminar is sponsored by the Interstate Technology Regulatory Cooperation workgroup (ITRC). This two-hour seminar will be offered May 15, June 1, and July 26. Additional offering may be scheduled if interest is high. For more information and to register, see <http://clu-in.org/conf/itrc> . We will announce future seminars on this and other topics through TechDirect, the CLU-IN web site and other outlets.

### ***Documents***

**Innovative Treatment Technology Developer's Guide to Support Services (Fourth Edition) (EPA 540-B-99-008).** The guide was published by the U.S. EPA Technology Innovation Office. It lists more than 100 private organizations, government programs, on-line databases, and other resources that can provide business support to

developers. Resources are presented in four main categories: financial and market research assistance; technology testing, demonstration, evaluation and transfer assistance, business development assistance; and, administrative and financial assistance. 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.

**Profiles of Innovative Technology Providers (EPA 542-R-99-012).** This report was published by the U.S. EPA Technology Innovation Office. It provides a technical, financial, and stock analysis of six years of data from EPA's former Vendor Information System for Innovative Treatment Technologies (now part of EPAREACHIT). The report analyzes the growth in the number and types of technologies available in the marketplace, the category and scale of the development of ITTs and their patent status. 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.

**Assessing Contractors Capabilities for Streamlined Site Investigations (EPA 542-R-00-001).** This report was published by the U.S. EPA Technology Innovation Office. The purpose of this document is to familiarize and encourage brownfields decision makers to investigate and employ innovative methods for characterizing their sites, to assist brownfields decision makers in assessing contractors' capabilities and familiarity with these methods, and to suggest additional items for contractors to consider in conducting their activities [January 2000, 15 pages]. For this and other Brownfields technical documents, see <http://www.brownfieldstsc.org> Or <http://clu-in.org/techpubs.htm> . For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

**Introduction to Phytoremediation (EPA 600-R-99-107).** This report was produced by the U.S. EPA Office of Research and Development. It is a tool for site regulators, owners, neighbors, and managers to evaluate the applicability of phytoremediation to a site. This document defines terms and provides a framework to understand phytoremediation applications. It is a compilation of research and remediation work that has been done to date. It is not a design manual, and is not intended to provide enough information to choose, engineer, and install a phytoremediation application [February 2000, 104 pages]. View or download at <http://clu-in.org/techpubs.htm> .

**An In Situ Permeable Reactive Barrier for the Treatment of Hexavalent Chromium and Trichloroethylene in Ground Water.** The U.S. EPA National Risk Management Research Laboratory produced this three-volume set of publications on Permeable Reactive Barrier Walls. The purpose of this document is to provide

detailed design, installation and performance monitoring data on a full-scale PRB application which successfully remediated a mixed waste (chromate and chlorinated organic compounds) ground-water plume. All three volumes below are available at

<http://www.epa.gov/ada/pubs/reports.html> . For hard copies, contact Kay Cooper at [cooper.kay@epa.gov](mailto:cooper.kay@epa.gov) or (580) 436-8651.

Volume 1 Design and Installation (EPA 600-R-99-095a) [September 1999, 122 pages].

Volume 2 Performance Monitoring (EPA 600-R-99-095b) [September 1999, 220 pages].

Volume 3 Multicomponent Reactive Transport Modeling (EPA 600-R-99-095c) [September 1999, 50 pages].

**Using Stable Isotopes of Carbon and Nitrogen as In-Situ Tracers for Monitoring the Natural Attenuation of Explosives (Special Report 99-19).** This report was produced by the Army Corps of Engineers Cold Regions research Laboratory. It examines the use of carbon and nitrogen stable isotope measurements from TNT as a possible tool for monitoring the natural attenuation of TNT. Incubation studies of spiked soil samples were conducted. Field studies using both soil and groundwater samples support the laboratory finding that changes in the <sup>15</sup>N for TNT extracted from groundwater could be detected in samples collected at different points along transects at the Louisiana Army Ammunition Plant and that no measurable change in the <sup>13</sup>C values for soil or TNT could be seen [December 1999, 26 pages]. View or download at

[http://www.crrel.usace.army.mil/techpub/CRREL\\_Reports/reports/SR99\\_18.pdf](http://www.crrel.usace.army.mil/techpub/CRREL_Reports/reports/SR99_18.pdf) .

**Hard copies still available.** We still have a large supply of hard copies available for two documents. We plan to recycle the inventory in the near future. If you are interested in obtaining a hard copy of Analysis of Selected Enhancements for Soil Vapor Extraction (EPA 542-R-97-007) or Field Analytical and Site Characterization Technologies: Summary of Applications (EPA 542-R-97-011) contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

**Reminder!! Phase I Open Solicitation - EPA Small Business Innovation Research Program.** The EPA Office of Research and Development opened a Phase I solicitation on March 30, 2000 that will close on May 25, 2000. Two of the research proposal categories being sought are: Section D: Waste Management and Site Remediation; and Section E: Monitoring and Measurement Technologies. For more information, see <http://es.epa.gov/ncercqa/sbir/2001sbir.html> .

## ***Symposia and Conferences***

**Fourth Advances in Innovative Groundwater Remediation, June 6, Boston, MA.** This free event, sponsored by the Ground Water Remediation Technologies Analysis Center (GWRTAC), will be held at the Radisson Boston Hotel. The one day seminar will include presentations from practitioners involved in phytoremediation, treatment walls, in situ flushing, thermal stripping, in situ chemical oxidation, remediation of metals, and bioremediation. See agenda and registration information at <http://www.gwrtac.org> or <http://clu-in.org/thermal> or contact Karen Devlin at [kdevlin@philipinc.com](mailto:kdevlin@philipinc.com) or (215) 643-5466.

**In Situ Thermal Processes Seminar, June 7, Boston, MA.** This free event is sponsored by the U.S. EPA Technology Innovation Office and will be collocated at the Hotel with the June 6 GWRTAC Groundwater seminar mentioned above. This one day seminar will focus on the fundamental principles, design considerations, limitations, and case studies for five in situ thermal processes. The technologies to be addressed include Dynamic Underground Stripping, Electrical Conductive Heating, Radio Frequency Heating, Six-Phase Electrical Heating, and In Situ Vitrification. Note, you may register for the June 6 and/or 7 event at <http://clu-in.org/thermal> or by contacting Karen Devlin at the address listed above.

**Environmental Restoration End User Conference 2000, Augusta, GA, June 6-8.** This conference is sponsored by DOE, DOD, and EPA. The purpose of the conference is to share DOE/DOD/EPA cleanup successes and technical innovations, promote deployment of innovative technologies, and facilitate integration and teamwork between DOE, DOD, EPA, and State Regulatory Agencies.

**Accelerated Bioremediation of Chlorinated Solvents, Atlantic City, NJ, June 6-7.** This training course is being offered by the Interstate Technology Regulatory Cooperation (ITRC) Workgroup and the Remediation Technologies Development Forum (RTDF). The course will examine the roles of site characterization, modeling, design, monitoring and regulatory interaction in applying in-situ engineered bioremediation. Lecture, case studies, hands-on exercises and structured discussion sessions will be used to give students knowledge and information that can be put to use immediately. For agenda and registration information, see <http://clu-in.org/techpubs.htm>.

**EPA/ITRC/RTDF In Situ Permeable Reactive Barriers: Application and Deployment, Denver, CO, June 13-14.** The training course is designed to assist professionals in the regulatory community in overseeing the design, implementation, and monitoring of groundwater remedies that involve the deployment of permeable reactive barriers. Industry professionals and consultants will benefit from the updated technical information presented as well as the interaction with regulators and other professional colleagues. For more information, please visit <http://www.trainex.org/prb>.

**Upcoming Courses and Conferences.** A popular feature of the CLU-IN front page is the listing of upcoming courses and conferences. It regularly contains information on 200 or more events sponsored by both public and private sector entities. It is searchable by date, topic, title, etc. We encourage you to consult this directory on a regular basis. If you are interested in having your event posted, you may submit information at <http://clu-in.org> .

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.