

## Message #40: June 2000

Since May 1, TechDirect gained 275 new subscribers for a total of 8570. 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 Announcement***

**In Situ Thermal Technologies Netcast.** On June 7, the U.S. EPA Technology Innovation Office will sponsor a LIVE netcast of the In Situ Thermal Seminar being held in Boston. This conference features eight presentations focused on different methods of introducing heat to the subsurface for vadose and groundwater source zone remediation. We have posted the presentations on CLU-IN and will have a live audio feed from the conference in Boston. The conference begins at 8:30 am Eastern Daylight Time (12:30 GMT) and continues until 4:30 pm EDT (20:30 GMT). If you are able to play Real Audio broadcasts, you will be able to participate FROM ANYWHERE AROUND THE WORLD. You will be able to listen to the presentations while viewing the presenters' slides on the web. No registration required to participate in the netcast. For more information and the agenda, see <http://clu-in.org/thermal> .

### ***Documents***

**Applicability of RCRA 3020(b) to In-Situ Bioremediation Technologies.** This letter was issued by the U.S. EPA Office of Solid Waste. It addresses the condition in section 3020(b)(2) that the contaminated ground water be treated to substantially reduce hazardous constituents prior to such injection. The substantial reduction of hazardous constituents required by 3020(b) may occur after reinjection. View or download at [View or download at http://clu-in.org/techpubs.htm](http://clu-in.org/techpubs.htm) .

**Application of Field-Based Characterization Tools in the Waterfront Voluntary Setting .** This report was developed by Brian Pietruszewski, a National Network for Environmental Management Studies Fellow under grant to EPA. Voluntary action to redevelop

potentially contaminated property operates under vastly different market constraints than mandated corrective action programs. Pressures exist that impact the time scale, cost/benefit ratio, priorities, and resources that allow the action to transpire. Non-market pressures, usually in the form of regulation, also affect decisions over the course of redevelopment. Together, these forces also determine the technologies and methods used to characterize the property, as well as the media sampled. This report will investigate the reasons behind that and detail the current level of field-based characterization tool application at 115 waterfront brownfield and Voluntary Cleanup Program (VCP) sites [December 1999, 67 pages]. View or download at <http://clu-in.org/techpubs.htm> . For hard copy, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

**Remedial Systems Optimization.** The Federal Remediation Technologies Roundtable (FRTR) homepage has assembled a number of remediation system optimization information resources. The page includes a summary of last summer's conference, several guidance documents, ongoing research and optimization tools and models. It is a rich resource for those interested in optimizing the performance of remedial systems. For more information, see <http://www.frtr.gov/optimization/index.html> .

**Ground Water Currents (EPA 542-N-00-002).** This quarterly update provides descriptions and performance data for developments in innovative ground water treatment. This issue highlights multi-agency efforts to accelerate the development and implementation of innovative DNAPL remediation technologies, research into increasing the effectiveness of permeable reactive barriers, and development and implementation of innovative site characterization and remediation technologies [April 2000, 4 pages]. View or download at <http://clu-in.org/techpubs.htm> . For hard copy, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

**Natural Attenuation of Explosives in Groundwater.** This cost and performance report was published by the Department of Defense Environmental Security Technology Certification Program (ESTCP). It summarizes a demonstration designed to define and optimize the data collection and processing procedures for evaluation, selection, and implementation of MNA for explosives. The demonstration was conducted at a former waste disposal lagoon site at the Louisiana Army Ammunition Plant, Minden, LA. Thirty wells were monitored quarterly over a two-year period. A cone penetrometry sampling event was also conducted to refine the conceptualization of the site hydrogeology and to collect aquifer material for development of

microbial biomarker techniques for tracking attenuation processes. A conceptual model of the contaminant plume was developed and a numerical model was used to predict future plume migration and mass [June 1999, 37 pages]. View or download at

<http://www.estcp.org/documents/techdocs/index.cfm> . A limited number of hard copies of ESTCP Cost and Performance Reports are available from (703) 736-4549

**High Resolution Seismic Reflection to Characterize and Plan Remediation at Hazardous Waste Sites.** This cost and performance report was published by the Department of Defense Environmental Security Technology Certification Program (ESTCP). This report presents cost and performance data for the three-dimensional (3-D) seismic reflection survey technique used to generate a high-resolution, 3-D imaging of subsurface geologic, subsurface hydro-geologic, and subsurface dense non-aqueous phase liquid (DNAPL) contaminant source areas at four selected Department of Defense (DoD) sites. The objective of the project was to verify that the 3-D seismic reflection survey is a viable technique for rapidly and effectively performing DNAPL source delineation and high-resolution site characterization [October 1999, 40 pages]. View or download at <http://www.estcp.org/documents/techdocs/index.cfm> . A limited number of hard copies of ESTCP Cost and Performance Reports are available from (703) 736-4549.

**Treatment Technology Developers Note!** The Bay Area Defense Conversion Action Team's Environmental Technology Partnership (BADCAT ETP) invites technology providers to demonstrate innovative and emerging technologies offering improved performance, reduced risk and increased cost effectiveness. BADCAT ETP has identified the following regional priority needs and seeks firms offering advancements in: 1. The Treatment of DNAPLs, 2. Enhanced Bioremediation of Groundwater Beneath Landfills, and 3. In-situ Treatment of PCBs and Pesticides within Wetland Areas. For further information, Pre-proposal guidelines and other specific program benefits, visit <http://www.barta.org/connections/associations.html>; e-mail [rtruit@aol.com](mailto:rtruit@aol.com) or call Robin Truitt, the BADCAT ETP Coordinator at (510) 986-0303. The tentative deadline for proposal submission JUNE 15TH, 2000.

## ***Symposia and Conferences***

**Reminder!! MNA Internet Seminar.** TIO is facilitating an Internet seminar entitled, 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 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.

**EPA/ITRC/RTDF In Situ Permeable Reactive Barriers: Application and Deployment, July 25-26, Chicago.** 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.

**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.