

## Message #79: September 2003

Welcome to TechDirect. We hope everyone had a enjoyable summer. Since the August 1 message, TechDirect gained 157 new subscribers for a total of 17,246. 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 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.

### ***Documents and Websites***

**REACHIT - New and Improved.** The U.S. EPA's Remediation and Characterization Innovative Technologies (REACHIT) database has undergone several enhancements to provide more current and accessible information on cleanup and characterization technologies. EPA REACHIT provides data on technology applications which can be searched, downloaded, and printed, and is free to both technology providers and users. REACHIT was updated with more than 100 new technologies added, most of which address difficult remediation problems, including chlorinated solvents, NAPL, fractured rock, and low-permeability clays. The new vendors offer technologies including: in situ chemical oxidation, in situ thermal treatment, in situ flushing, phytoremediation, and characterization and sampling technologies for NAPL. New data on the use of treatment technologies at Superfund sites is current as of March 2003 and for the first time includes data on over 700 pump-and-treat projects. System improvements also include a revised Vendor Information Form (VIF), including a new 1-page short form; faster, more reliable servers; and, improved spreadsheet reportst. To access REACHIT, see <http://www.epareachit.org>

**Compendium of Federal Facilities Cleanup Management Information (EPA-505-B-03-002).** This compendium, produced by the U.S. EPA Federal Facilities Restoration and Reuse Office, assembles all the major policy and guidance documents produced by EPA, DOD and DOE related to restoration of federal facilities. It

contains three volumes: Volume 1: Federal Facility Cleanup Response; Volume II: Base Realignment and Closure; and Volume III: Enforcement. The document is viewable online and it contains links to several downloadable PDF documents (May 2003). See

<http://epa.gov/swerffrr/documents/ffcc.htm> .

**Environmental Cleanup at Navy Facilities: Adaptive Site Management.** This report, produced by the National Research Council, suggests how to make forward progress at sites where cleanup has stalled before reaching cleanup goals. The recommendations are mainly applicable to high-risk, high-cost sites with recalcitrant contamination like DNAPLs (July 2003, 376 pages). Available for download at cost from <http://www.nap.edu/catalog/10599.html> .

**Surfactant-Enhanced Aquifer Remediation (SEAR) Implementation Manual (TR-2219-ENV).** This report was produced by the Naval Facilities Engineering Command. The objective of this implementation manual is to familiarize remedial project managers, engineers and scientists affiliated with environmental remediation projects on the major tasks and planning parameters involved with implementing an in-situ surfactant flood or surfactant-enhanced aquifer remediation (SEAR) project to remove dense non-aqueous phase liquids (DNAPLs) (April 2003, 54 pages). View or download at <http://clu-in.org/techpubs.htm> .

Oil Spill Program Update. This quarterly update is produced by the U.S. EPA Oil Program Center. It contains information on oil spill-related conferences and information on recent response actions (July 2003, 7 pages). View or download at <http://www.epa.gov/oilspill/pdfs/0703update.pdf> .

**Automated Groundwater Flow System for Contaminant Fate and Transport Analyses.** Because many sites are remote and lack power, a device that permits unattended operation is essential. US Army Corps of Engineers, Engineer Research and Development Center- Cold Regions Research and Engineering Laboratory engineers and scientists developed an automated system to measure repetitively on a daily basis the in-situ, site-specific seepage direction and velocity together with water levels in monitoring wells with a sensor to accurately measure and record in-situ seepage direction and velocity at remote sites. The sensor utilizes the thermal "tag-and-trace" technique to measure flows at velocities ranging from 0.5 to 10 ft/day. Each system consists of a flow sensor, data logger, data storage module, 12-volt battery, and solar panel. More information is available at:

[http://www.crel.usace.army.mil/erd/ground\\_water.html](http://www.crel.usace.army.mil/erd/ground_water.html) .

## ***September Internet Seminars***

September is a busy month for live web seminars on CLU-IN. For full descriptions of the following Internet seminars and to register for the live event(s), see <http://clu-in.org/studio> .

September 09 - ITRC Surfactant/Cosolvent Flushing of DNAPL Source Zones

September 11 - ITRC Characterization and Remediation of Soils at Small Arms Firing Ranges

September 16 - ITRC In Situ Chemical Oxidation

September 23 - ITRC Natural Attenuation of Chlorinated Solvents in Groundwater: Principles and Practices

September 24 - EPA Application of Transport Optimization Codes to Groundwater Pump and Treat Systems

September 25 - ITRC Passive Diffusion Bag Samplers for Volatile Organic Compounds in Ground Water.

## ***Conferences and Symposia***

**Subsurface Vapor Intrusion to Indoor Air Symposium - San Jose, September 30 and Long Beach, October 1.** These one-day symposia are sponsored by the Ground Water Resources Association, California Department of Toxic Substances Control, the San Francisco Bay Water Quality Control Board and U.S. EPA Region IX. The potential for human exposures resulting from subsurface vapor intrusion to indoor air is a topic of significant concern and debate. These one-day symposia will provide attendees with an overview of the issues, along with a summary of the state of the science and practice in California. The workshop will also familiarize attendees with recent and emerging regulatory guidance, along with various tools and strategies that can be employed to evaluate site-specific exposures, where site-specific evaluations are warranted. For more information and to register, see <http://www.grac.org/ia.html> .

**Call for Papers! Freshwater Spills Symposium, New Orleans, April 6-8.** The U.S. EPA Oil Program Center and the FSS Design Team invite you to submit a paper and/or presentation to be considered for presentation at the 2004 FSS. The FSS Design Team recommends that you choose a topic for your paper or presentation from the list of Suggested Presentation Topics, as the sessions and tracks will be organized based on these subjects. The deadline for the call for abstracts is September 5, 2003. For more information, see <http://www.freshwaterspills.net/fss2004/> .

**Emerging Scientific Issues for Superfund, Berkeley, October**

**8-10.** This conference is sponsored by the U.S. EPA, NIEHS, UC Davis, and the University of Arizona. It will focus on emerging problems and issues in three distinct areas: (1) new contaminants and new threats, (2) transport and detection, and (3) remediation and treatment. There will be a half-day workshop addressing the transition of emerging technologies from the laboratory to the field. For more information and to register, see <http://www-sf.ucdavis.edu/conferences/> .

**Fall ITRC Classroom Training Opportunities.** The Interstate Technology and Regulatory Council (ITRC) is offering four classroom training deliveries on three topics in October 2003. For more information on each course and to register, see <http://www.itrcweb.org> and click on Classroom Training. Each course is two days in duration. The ITRC has scheduled deliveries for the following topics.

Unexploded Ordnance (UXO) Basic Training Course, Austin, October 28-29.

Accelerated In Situ Bioremediation of Chlorinated Solvents Course, Chicago, October 28-29.

Phytotechnologies - Mechanisms and Applications Course, San Francisco, October 23-24.

Phytotechnologies - Mechanisms and Applications Course, Seattle, October 27-28.

NOTE: 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. 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.