

## Message #78: August 2003

Welcome to TechDirect. Since the July 1 message, TechDirect gained 240 new subscribers for a total of 17,111. If you feel the service is valuable, please share TechDirect with your colleagues. Anyone interested in subscribing to TechDirect 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.

**Announcement:** The U.S. EPA Technology Innovation Office merged into the larger Office of Superfund Remediation and Technology Innovation (ORSTI). We anticipate continuing to serve professionals across all cleanup programs by providing information on new technologies and strategies to improve site investigation and clean-up.

### ***Open Solicitation***

Department of Defense Broad Agency Announcement (BAA). The DoD Multidisciplinary University Research Initiative (MURI), one element of the University Research Initiative (URI), is sponsored by the following DoD research offices: the Office of Naval Research (ONR), the Army Research Office (ARO), and the Air Force Office of Scientific Research (AFOSR). The MURI program supports basic science and/or engineering research at institutions of higher education that is of critical importance to national defense. The program is focused on multidisciplinary research efforts that intersect more than one traditional science and engineering discipline. The FY04 MURI competition is specifically for 22 topics listed in the BAA. Two of the 22 topics are related to environmental clean-up. Detailed descriptions of all the topics can be found in the BAA. Innovative ideas addressing these research topics are highly encouraged. Deadline for submission of white papers is August 14, 2003. For full details, see <http://www.aro.army.mil/research/> .

### ***Internet Seminars***

**ITRC Systematic Approach to In Situ Bioremediation in Groundwater: Nitrates, Carbon Tetrachloride & Perchlorate - August 21**. This course presents a decision tree for reviewing, planning, evaluating, and approving in situ bioremediation (ISB) systems in the saturated subsurface. It defines site parameters and appropriate ranges of criteria necessary for characterization, testing, design and monitoring of ISB technologies. For more information and to register, see <http://www.itrcweb.org> or <http://clu-in.org/studio>.

## ***Documents and Websites***

**EPA's Land Revitalization Agenda.** In April 2003, the Environmental Protection Agency (EPA) announced its Land Revitalization Agenda (LRA). A very important element of the LRA is the development of partnerships to further land reuse in the cleanup of the nation's contaminated properties. As stated in the LRA, the EPA seeks to create broad-based public/private partnerships for reuse activities. The EPA is interested in establishing dialogues and creating non-financial cooperative arrangements with public and private organizations to explore ways of revitalizing contaminated properties. The LRA can be found in its full context at [www.epa.gov/swerrims/landrevitalization/agenda\\_full.htm](http://www.epa.gov/swerrims/landrevitalization/agenda_full.htm). To follow up on this invitation, please see the EPA contacts listed at <http://www.epa.gov/oswer/landrevitalization/news.htm#9> who can assist in screening and referring all requests for partnership, cooperation and/or dialogue.

**Engineering Manual: Conceptual Site Models for Ordnance and Explosives (OE) and Hazardous, Toxic, and Radioactive Waste (HTRW) Projects (EM 1110-1-1200).** This U.S. Army Corps of Engineers manual provides procedural guidance to develop Conceptual Site Models at sites potentially containing ordnance and explosives and/or other hazardous, toxic and radioactive waste environmental contamination. It describes sources and receptors and the interactions that link these (February 2003, 51 pages). View or download at <http://www.usace.army.mil/usace-docs/eng-manuals/em1110-1-1200/toc.htm>

**Engineering Manual: Safety and Health Aspects of Hazardous, Toxic, and Radioactive Waste Remediation Technologies.** This U.S. Army Corps of Engineers manual identifies and analyzes generic safety and health hazards for 25 remediation technologies used in clean-up operations (August 2003, 286 pages). View or download this document by section or in its entirety at <http://www.usace.army.mil/usace-docs/eng-manuals/em1110-1-4007/toc.htm>

**Ground Water Issue Paper: Movement and Longevity of Viruses**

**in the Subsurface (EPA 540-S-03-500).** This issue paper, published by the U.S. EPA National Risk Management Research Laboratory, discusses some of the conditions under which viral contaminants may survive and be transported in the subsurface, identifies sources as well as indicators of viral contamination, outlines the effects of hydrogeologic settings on viral movement, and introduces the reader to the current state of virus transport modeling along with an example of modeling applications (April 2003, 25 pages). View or download at <http://www.epa.gov/ada/download/issue/540S03500.pdf> . For hard copies, contact Kay Cooper at (580) 436-8651 or fax (580) 436-8503.

**Field Analytic Technologies Encyclopedia (FATE) Web Site.** The FATE web site has been updated with a new look and tools. The updates will help users better navigate to information about technologies that can be used in the field: to characterize contaminated media, monitor the progress of remedial efforts, and in some cases, to conduct confirmation sampling and analysis for site close out. Information has been added on systematic planning and the important role it plays when considering the use of field technologies. See the new Ask an Expert section, which allows users to submit questions about various technologies, even if they are not currently included in FATE. In the near future, site summary information and a problem solver will be added to further aid users in their search for technology information. See <http://fate.clu-in.org> .

**Technology News and Trends - July 2003 (EPA 542-N-03-004).** This newsletter is published periodically by the Office of Superfund Remediation and Technology Innovation (OSRTI). This issue highlights updates on technology applications reported in earlier issues of Ground Water Currents and Tech Trends newsletters. These updates are provided in an effort to keep readers informed about the long-term performance of innovative cleanup technologies. EPA's Technology Innovation Office invites contributors of other past articles to share recent project information and 'lessons learned,' including both project successes and set-backs (July 2003, 6 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.

**ITRC Quarterly Update - June 2003.** This update was issued by the Interstate Technology and Regulatory Council (ITRC). Read about ITRC's new formalized relationship with the Environmental Research Institute of the States, a change in program director, the spring membership meeting, and recent activities of the State Engagement Team and technical teams (June 2003, 8 pages). View or download at <http://www.itrcweb.org/ITRC0603Update.pdf> .

## **Models for Design of Free-Product Recovery Systems for**

**Petroleum Hydrocarbon Liquids. American Petroleum Institute Publication 4729** This document addresses the application of proven technologies for recovering free-product petroleum releases to groundwater. The manuscript documents new spreadsheet models for design and analysis of liquid free-product recovery systems using single and dual-pump wells, vacuum-enhanced wells, skimmer wells, and trenches. The principles that govern the distribution and movement of free-product petroleum hydrocarbons near the water table in an unconfined groundwater aquifer are reviewed. Models for predicting free-product recovery system performance are presented. Four spreadsheet models included with the document are described, and example applications are presented. (August 2003, 70 pages.) View or download at

<http://groundwater.api.org/lnapl> .

## ***Conferences and Symposia***

**Brownfields 2003: Growing a Greener America, October 27-29, Portland, OR.** This event is sponsored by the U.S. EPA, the City of Portland and many cosponsors. This is the conference for everyone interested in brownfields [real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of contamination]. The program will include many different panel sessions, mobile workshops, Marketplace of Ideas roundtable discussions and individual poster presentations, the prestigious Phoenix Awards, and an extensive Exhibit Hall. For more information and to register, see

<http://www.brownfields2003.org> .

**API Presents Two Free-Product Cleanup Workshops at 20th Annual API / NGWA Groundwater Conference.** The American Petroleum Institute will present two half-day free-product (AKA: "Light Non-Aqueous Phase Liquid" or "LNAPL") workshops at the National Ground Water Association - API "Petroleum Hydrocarbons and Organic Chemicals in Ground Water Conference and Exposition, August 19 in Costa Mesa CA. LNAPL Workshop 1: "Fundamentals of LNAPL Behavior and Project Endpoint Determination" will cover the things you need to know about LNAPL behavior after a release and which processes will affect a successful cleanup or site closure. LNAPL Workshop 2: "Pro Tools for Reaching LNAPL Endpoints" will provide more in-depth information for those need to collect and analyze data for LNAPL-specific assessments. The workshop will preview the latest software utilities developed by API Soil and Groundwater Technical Task Force for assessing the effectiveness of incremental LNAPL remediation and prediction of LNAPL recovery

over time for a variety of hydraulic recovery methods. Additional information is available via the "Conferences and Workshops" link at [www.api.org/groundwater](http://www.api.org/groundwater).

**Fall ITRC Classroom training Opportunities.** The Interstate Technology and Regulatory Council 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.