

## Message #117: November 2006

Welcome to TechDirect! Since the October 1 message, TechDirect gained 434 new subscribers for a total of 26,349. 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> . All previous issues of TechDirect are archived there. The TechDirect messages of the past can be searched by keyword or can be viewed as individual issues.

TechDirect's purpose is to identify new technical, policy and guidance resources related to the assessment and remediation of contaminated soil, sediments 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.

### ***Upcoming Live Internet Seminars***

**ITRC Radiation Site Cleanup: CERCLA Requirements and Guidance - November 7.** The focus of this ITRC training is EPA's guidance for remediating radioactively contaminated sites, which can facilitate cleanups that are consistent with how chemical contaminants are addressed, except where technical differences posed by radiation are addressed. This course also discusses long term stewardship (LTS) challenges related to the large radioactively contaminated sites. This understanding of LTS issues is integral to the cleanup process and decisions made at the radiation sites. For more information and to register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

**Pharmaceuticals and Personal Care Products in the Environment - November 8.** Many public and private groups throughout the country are developing actions that can be taken right now to reduce the amount of pharmaceutical and personal care products entering the environment. Chen Wen of the Office of Prevention, Pesticides and Toxics will discuss EPA's stewardship program that helps hospitals reduce pharmaceutical waste. Karin North of the City of Palo Alto (California) will provide highlights and lessons learned from the May 2006 San Francisco Bay Region pharmaceutical take-back event for residential pharmaceutical waste. For more information and to register, see <http://clu-in.org/studio> .

**ITRC Characterization, Design, Construction and Monitoring of**

**Bioreactor Landfills - November 9.** Bioreactors are landfills where controlled addition of non-hazardous liquid wastes, sludges, or water accelerates the decomposition of waste and landfill gas generation. This training, based on the ITRC's Characterization, Design, Construction, and Monitoring of Bioreactor Landfills (ALT-3, 2006), teaches the principles used to make critical decisions during permitting, operating, and monitoring a bioreactor landfill. This training also provides a general understanding of the biological degradation of solid wastes under aerobic and anaerobic waste conditions and the degradation products associated with each process. For more information and to register, see <http://www.itrcweb.org> or <http://clu-in.org/studio> .

**ITRC Real-Time Measurement of Radionuclides in Soil - November 14.** This training introduces state regulators, environmental consultants, site owners, and community stakeholders to ITRC's Technology Overview document: Real- Time Measurement of Radionuclides in Soil: Technology and Case Studies (RAD-4, 2006), created by ITRC's Radionuclides Team. This training provides information on the basics of real-time measurement systems, how the technologies and data are used, acceptance issues, and case studies. For more information and to register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

**ITRC Evaluating, Optimizing, or Ending Post-Closure Care at Municipal Solid Waste Landfills Based on Site-Specific Data Evaluations - November 16.** This training, based on ITRC's Technical and Regulatory Guidance: Evaluating, Optimizing, or Ending Post-Closure Care at Municipal Solid Waste Landfills Based on Site-Specific Data Evaluations (ALT-4, 2006), describes a method to evaluate the performance of Post Closure Care at a landfill and determine when leachate recovery, landfill gas management, groundwater monitoring, and cap maintenance can be reduced or even ended based on threats (to human health and the environment) posed by the closed landfill. The training and document describe "custodial care" as those requirements the property owner must follow after post closure care has been ended. For more information and to register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

**ITRC Planning and Promoting of Ecological Reuse of Remediated Sites - December 5** This training is based on the ITRC Technical and Regulatory Guideline: Planning and Promoting Ecological Land Reuse of Remediated Sites (ECO-2, 2006). The document presents a process to promote ecological land reuse activities considering natural or green technologies instead of more traditional remedies. The guidance demonstrates that natural or

ecological end-uses are valuable alternatives to conventional property development or redevelopment. Ecological benefits and a process for calculating their value are included in the guidance and reviewed in this training. For more information and to register, see

<http://www.itrcweb.org> OR <http://clu-in.org/studio> .

**ITRC Overview of Direct-push Well Technology for Long-term Groundwater Monitoring - December 7.** Direct-push wells have been used for temporary groundwater monitoring purposes for many years but are generally prohibited for use as long-term groundwater monitoring wells. Recent research indicates that direct-push wells are as well suited for long-term environmental groundwater monitoring purposes as conventionally constructed wells. This training introduces ITRC's *The Use of Direct-push Well Technology for Long-term Environmental Monitoring in Groundwater Investigations* (SCM-2, 2006), provides a background in the principles of direct-push wells, and presents the state of the art regarding recent research. For more information and to register, see

<http://www.itrcweb.org> OR <http://clu-in.org/studio> .

## ***Solicitations***

**Brownfields Assessment, Revolving Loan Fund, and Cleanup Grants - Request For Proposals/Availability of Funds.** The U.S. EPA Office of Solid Waste and Emergency Response announces the availability of funds and solicits proposals from eligible entities to help states and communities around the country clean up and revitalize brownfield sites (RFP# EPA-OSWER- OBCR-07-01). Proposals may be sent through the U.S. Postal Service, commercial delivery service, or electronically through <http://www.grants.gov> - only one method should be used. Proposals sent through the U.S. Postal Service or sent via a commercial delivery service must be postmarked by 12/8/06; Proposals submitted through <http://www.grants.gov> must be received by 12/8/06. The total estimated funding expected to be available under this competitive opportunity is approximately \$72 million. EPA anticipates awarding approximately 200 cooperative agreements. See <http://www.epa.gov/oswer/grants-funding.htm#epa-oswer-obcr-07-01> .

**OSWER Innovation Pilots - RFA NO: EPA-OSWER-IO-06-08 - Closing Date: November 20, 2006.** This U.S. EPA notice announces the availability of funds and solicits creative proposals testing innovative and collaborative approaches to: restore contaminated properties to environmental and economic vitality; increase America's homeland security; promote stewardship and resource conservation consistent with the Agency's Resource Conservation Challenge, and; encourage voluntary efforts to clean

up sites. The total estimated funding available under this competitive opportunity is \$500,000. EPA anticipates award of 5- 10 assistance agreements resulting from this competitive opportunity. The assistance agreements awarded shall range in value to a maximum of \$100,000. For more information, see <http://www.epa.gov/oswer/docs/grants/06-08.pdf> .

## ***New Documents and Web Resources***

**Proposal Guidelines for Brownfields Assessment, Revolving Loan Fund, and Cleanup Grants.** This document was published by the EPA Office of Solid Waste and Emergency Response (OSWER). It provides guidance on proposal content and format to potential grant applicants responding to the Request for Proposals - RFP# EPA-OSWER-OBCR-07-01 identified above (October 2006, 92 pages). View or download at <http://www.epa.gov/oswer/docs/grants/epa-oswer-obcr-07-01.pdf> .

**Engineering Issue Paper: In Situ Chemical Oxidation (EPA 600-R-06-072).** This issue paper was produced by the EPA Risk Management Research Laboratory and the Engineering Forum. It provides an up-to-date overview of ISCO remediation technology and fundamentals, and is developed based on peer-reviewed literature, EPA reports, web sources, current research, conference proceedings, and other pertinent information (August 2006, 60 pages). View or download at <http://www.epa.gov/ada/download/issue/600R06072.pdf> .

**Protocol for Enhanced In Situ Bioremediation Using Emulsified Edible Oil (ER-0221).** This report was published by the DoD Environmental Security Technology Certification Program (ESTCP). Emulsified edible oils have been used to stimulate in situ anaerobic biodegradation of groundwater contaminants at commercial, industrial and military sites throughout the US. The procedures and applications of emulsified oils for the anaerobic bioremediation of chlorinated solvents are applicable to numerous other anaerobically biodegradable contaminants like nitrates, perchlorates, and energetics (e.g., RDX, TNT). The protocol presented in this document is intended to assist base managers and project engineers in: (1) determining if the emulsified oil process is appropriate for their site; and (2) designing and implementing this technology. This protocol also provides background information on the development and scientific basis of this technology (June 2006, 100 pages). View or download at <http://handle.dtic.mil/100.2/ADA451205> .

**Systematic Planning: A Case Study for Hazardous Waste Site Investigations (EPA 240-B-06-004).** This document describes the Data Quality Objectives (DQO) process in a decision-making situation. The case study shows how application of the DQO process

leads to sound data collection techniques, sampling methods, and analysis of the results for decision-making. Elementary Data Quality Assessment is used to draw conclusions from the results. The case study is presented in two parts--a Preliminary Investigation followed by a Remedial Investigation-- that correspond to the general stages of data collection and analysis in an environmental investigation. With each investigation, information is presented according to the three stages of EPA's Quality System: planning, implementation, and assessment. The case study demonstrates how the study team succeeded in establishing the nature and extent of site contamination and contaminants of potential concern during the Preliminary Investigation, which provided the data necessary to support a well- focused, statistically based sampling campaign to complete the subsequent Remedial Investigation (February 2006, 67 pages). <http://www.epa.gov/quality/gq-docs/casestudy-final.pdf> .

### **Measurement and Monitoring: 21st Quarterly Literature Search.**

This service is provided by the U.S. EPA Office of Superfund Remediation and Technology Innovation as a part of its Measurement and Monitoring for the 21st Century Initiative. EPA has identified 16 areas related to waste site cleanup where significant technology needs exist and, thus, require research and or technology demonstration to help advance new tools to address these needs. The 21st quarterly update of literature contains new citations related to the needs areas (October 2006, 135 pages), and is added to our searchable abstract database. View or download at

<http://clu-in.org/programs/21m2/> .

**Pharmwaste Listserv.** This listserve is sponsored by the Florida Department of Environmental Protection. Proper disposal of pharmaceutical waste is an emerging issue nationally as low-levels of various pharmaceutical compounds are found in waterways across the country. This listserve will help create a national dialogue to organize, discuss and track ideas, projects, grants, and other issues. Participants are primarily from various government agencies, but others are welcome to join. See <http://lists.dep.state.fl.us/cgi-bin/mailman/listinfo/pharmwaste>

**EUGRIS Corner.** EUGRIS is the platform for European contaminated soil and water information. See the following link to access the following documents and resources: <http://www.eugris.info/Whatsnew.asp>.

- Risk Based Management of Contamination and Protection of the Soil System in Urban Environments (2005). This report by the Joint Technical Approach for Soil and Groundwater Quality Management (JOINT) Project Consortium gives specific recommendations for risk based management of

contaminations in the soil system, aimed at integrating the management of the soil and groundwater resources.

- **GeoPASS: Use the Optimal Geophysical Technique for Your Subsurface Investigations.** GeoPASS has been designed to assure the right geophysical technique is used for a specific job. GeoPASS will assist you in selecting the optimum geophysical technique or it may even advise you not to use geophysics for your project.
- **NICOLE News: October 2006.** The Network for Industrially Contaminated Land in Europe (NICOLE) has just published its annual newsletter for 2006, containing a review of its activities over the past 10 years and an outline of its new working groups on ecological risk assessment, waste, soil, groundwater and MNA.
- **Rapid Sample Preparation and Bioanalytical Techniques for Efficient Screening of Organic Pollutants in the Environment (2006).** This thesis assesses the potential utility of more convenient sample preparation and bioanalytical techniques for rapidly screening various environmental matrices that could be useful complements to higher resolution methods.
- **Characterization of PAH-Contaminated Soils Focusing on Availability, Chemical Composition and Biological Effects (2006).** This thesis examines the availability, chemical composition and biological effects of PAHs in samples of soils from PAH-contaminated environments.
- **PROMOTE: Efficiency Control and Performance Verification of Improved Approaches for Soil-Groundwater Protection and Rehabilitation.** PROMOTE will acquire the potential to act as one of the initiators for a European Environmental Technology Verification System, overcoming implementation barriers and bridging the gap between innovative and accepted technique.
- **TESTNET: Towards European Sectorial Testing Networks for Environmental Technologies.** TESTNET aims to enhance the application of environmentally sound technologies (EsTs) through the development of a European structure for the production of reliable and independent performance data for EsTs.
- **RISKBASE: Risk-Based Management of the Water-Sediment-Soil System at the River Basin Scale.** In RISKBASE, leading European scientists and representatives of major European stakeholder groups will review and synthesise the outcome of European Community Research, Technological Development and Demonstration Framework Program projects and other major initiatives related to integrated risk assessment-based management of the water/sediment/soil

system at the river- basin scale.

## ***Conferences and Symposia***

### **Reminder! Partners in Environmental Technology Technical Symposium & Workshop, Washington, DC, November 28-30.**

This event is sponsored by the DoD Strategic Environmental Research Development Program (SERDP) and the DoD Environmental Security Technology Certification Program (ESTCP). It will provide attendees: (1) concurrent technical sessions covering the latest in environmental research results and technical innovations; (2) poster sessions featuring more than 300 technical posters; (3) exhibit booths offering information about funding opportunities in related research programs; (4) two sessions providing a summary of SERDP and ESTCP program development and opportunities to conduct research and demonstrations; and (5) networking opportunities with more than 800 environmental professionals. For agenda and registration information, see

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

### **Call for Presenters! U.S. EPA Community Involvement Conference and Training, June 19-22, Jacksonville, FL .**

EPA is seeking proposals for engaging, interactive presentations that provide helpful information and tools that practitioners can use to enhance community involvement, share successful approaches and lessons learned, and bring together people with diverse perspectives to discuss key issues and opportunities. You may propose one of the following types of presentations: A presentation for a concurrent session that involves a case study, panel discussion, training, or interactive exercises; a four-hour or eight-hour training workshop to teach a novice, intermediate, or advanced skill; or a field trip to see first-hand how involving the community advances the protection of the environment. Proposal applications are due December 15, 2006. For more information, see

<http://www.epa.gov/superfund/action/community/ciconference/> .

### **Call for Abstracts for the 2007 Conference on Design and Construction Issues at Hazardous Waste Sites, April 4 - 5, Philadelphia .**

This conference is hosted by the US EPA and the US Army Corps of Engineers. The conference will provide a forum for discussion between the private sector and the federal, state, local, and tribal governments regarding design and construction issues at hazardous waste sites, including effective methods, lessons learned, application of technologies, and field approaches. Abstracts are due by December 15, 2006. For abstract guidelines or to register please

see the conference website at <http://hq.environmental.usace.army.mil/rdra-07> .

**NOTE:** For TechDirect, 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. Currently there are 101 conferences and courses featured. 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.