

## Message #108: February 2006

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Welcome to TechDirect! Since the January 1 message, TechDirect gained 255 new subscribers for a total of 24,154. 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 TechDirect messages of the past can be searched by keyword or can be viewed as individual issues.

The purpose of TechDirect 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.

### ***Open Solicitation***

The Department of Defense (DoD) through the Environmental Security Technology Certification Program (ESTCP), supports the demonstration and validation of environmental technologies that address priority DoD environmental requirements. The goal of ESTCP is to transition mature environmental Science and Technology projects through the demonstration/validation phase, thereby enabling promising technologies to receive regulatory and DoD end user acceptance and to be fielded and commercialized more rapidly. ESTCP is seeking pre-proposals from DoD organizations as well as non-DoD Federal organizations and the private sector. PRE-PROPOSALS ARE DUE BY THURSDAY, MARCH 09, 2006. Detailed instructions for DoD, Non-DoD federal, and BAA proposers (i.e., details regarding the program's objectives, proposal submission requirements, the evaluation of proposals, and the individual topic areas) are available on the ESTCP website at <http://www.estcp.org/opportunities> .

### ***Internet Seminars***

#### **ITRC Strategies for Monitoring the Performance of DNAPL**

**Source Zone Remedies - February 7.** This training discusses issues surrounding the assessment of remediation performance at DNAPL sites where the source zone is being targeted for treatment. It is based on the ITRC document titled, Strategies for Monitoring the Performance of DNAPL Source Zone Remedies. Specific issues dealing with monitoring the performance of various DNAPL source zone remediation technologies are discussed. Elements of a robust performance monitoring program are described including the need to establish appropriate performance goals and metrics well in advance. To register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

**ITRC Guidance for Characterization, Design Construction and Monitoring of Mitigation Wetlands - February 9.** This seminar is the second in a series of wetland trainings beginning with the ITRC Technical and Regulatory Guidance Document for Constructed Treatment Wetlands (WTLND-1). To improve the success of wetland mitigation projects, this training presents comprehensive guidance for regulators, environmental professionals, or owners to use to understand, characterize, design, construct, and monitor mitigation wetlands. To register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

**ITRC Radiation Site Cleanup: CERCLA Requirements and Guidance - February 23.** 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. To register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

**ITRC Triad Approach: A New Paradigm for Environmental Project Management - February 28.** This seminar discusses the relationship of the Triad to previous regulatory guidance, and offers a discussion of issues that may affect stakeholders. The ITRC guidance document, Technical and Regulatory Guidance for the Triad Approach: A New Paradigm for Environmental Project Management (SCM-1), serves as the basis for this training course. To register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

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

**Contaminated Sediment Remediation Guidance for Hazardous Waste Sites (EPA-540-R-05-012).** This guidance was issued by the EPA Office of Solid waste and Emergency Response. It provides

technical and policy guidance for project managers and management teams making remedy decisions for contaminated sediment sites. The guidance is primarily intended for federal and state project managers considering actions under CERCLA, although technical aspects of the guidance are also intended to assist project managers addressing sediment contamination under RCRA. Many aspects of this guidance also will be useful to other governmental organizations and potentially responsible parties (PRPs) that may be conducting a sediment cleanup. Although aspects related to site characterization and risk assessment are addressed, the guidance focuses on considerations regarding feasibility studies and remedy selection for contaminated sediment (December 2005, 236 pages). View or download the complete document or sections at

<http://www.epa.gov/superfund/resources/sediment/guidance.htm> .

**EPA Assessment Guidance for Perchlorate.** The EPA Office of Solid Waste and Emergency Response issued new guidance for cleaning up perchlorate contamination recommending a preliminary clean-up goal for perchlorate of 24.5 parts per billion in water. EPA's guidance is derived from the agency's reference dose for perchlorate which is based on the 2005 recommendations and conclusions of the nation's foremost science advisory committee (National Academy of Sciences). This preliminary goal is a starting point for an evaluation of site-specific conditions. Consistent with current practice, final clean-up determinations should take site-specific information into consideration. This action offers clear guidance to site managers to help ensure national consistency in evaluating perchlorate in light of widely varying state guidance. This decision was based on the best available science and will be updated as new information becomes available (January 2006, 3 pages). View or download at <http://epa.gov/newsroom/perchlorate.pdf> .

**Edible Oil Barriers for Treatment of Perchlorate Contaminated Groundwater (ER-0221).** This report was published by the DoD Environmental Security Technology Certification Program (ESTCP). This final technical report documents the demonstration of emulsified edible oil barriers for groundwater remediation at a confidential perchlorate site in Maryland. The general purpose of the demonstration was to evaluate the efficacy of emulsified oils for treating perchlorate contaminated groundwater. A second demonstration was performed as part of this project to evaluate the use of emulsified oils for remediation of chlorinated solvent impacted groundwater at the Charleston Naval Weapons Station (NWS) in South Carolina. The work at the Charleston NWS is still ongoing and will be reported separately. In addition, a technical protocol document is being written under this demonstration project which

describes in detail the use of emulsified oils for enhanced anaerobic bioremediation of perchlorate and chlorinated solvents (November 2005, 155 pages). View or download at <http://clu-in.org/techpubs.htm> .

**Institutional Controls Bibliography: Institutional Control, Remedy Selection, and Post-Construction Completion Guidance and Policy (OSWER 9355.0110)** . This bibliography was published by the EPA Office of Solid Waste and Emergency Response. It covers 40 guidance and policy documents and provides citations and brief synopses of the IC use and policy information contained in each. It is anticipated that this document will prove useful to the Superfund program as it identifies, selects, plans, and implements ICs at sites nationwide (December 2005, 9 pages). View or download at <http://www.epa.gov/superfund/action/ic/guide/index.htm> .

**Fractured Rock: State of the Science and Measuring Success in Remediation**. This document was prepared by the National Ground Water Association. It summarizes the 2004 Fractured Bedrock Conference, held in Portland, ME. The report details progress made in the remediation of contaminated ground water in fractured bedrock since 2001 and what the future holds. Specifically, the paper discusses the adequacy of characterization methods, the use of remediation technologies, the understanding of hydraulic processes in fractured rock and research needs (September 2005, 22 pages). View or download at <http://clu-in.org/fracrock> .

**Reference Guide to Non-Combustion Technologies for Remediation of Persistent Organic Pollutants in Stockpile and Soil (EPA-542-R-05-006)** . This EPA report is intended to provide a high level summary of information on the applicability of existing and emerging non- combustion technologies for the remediation of POPs in stockpiles and soil. It provides short descriptions of these technologies and evaluates them based on the POPs treated, media treated, pretreatment requirements, performance and cost. Case studies provided show the various considerations associated with selecting a non-combustion technology. This report is intended to update and summarize technology information in older reports in a relevant concise reader's guide with links to sources of further information. In addition, this report provides information on several new technologies (December 2005, 70 pages). View or download at <http://clu-in.org/techpubs.htm> .

**New CLU-IN Contaminant Focus Area**. A new Persistent Organic Pollutants section has been posted to our Contaminant Focus Area. The Contaminant Focus area bundles information associated with the cleanup of individual contaminants and contaminant groups. This

contaminant focus area addresses persistent organic pollutants (POPs) information and is presented in categories such as Overview, Characteristics and Behavior of POPs, Health Effects of POPs, Treatment Technology Reports, and Additional Resources. Contaminant Focus not only draws upon existing resources from the CLU-IN site, but also links to sources of contaminant-specific information that were not previously cited or available on CLU-IN. This area will be updated continuously with information from federal cleanup programs, state sources, universities, nonprofit organizations, peer-reviewed publications, and public-private partnerships. See <http://clu.in.org/contaminantfocus> .

**Examination of Risk-Based Screening Values and Approaches of Selected States (RISK-1, December 2005).** This document was produced by the Interstate Technology and Regulatory Council (ITRC) to provide information on the different methods used by regulatory agencies to develop and apply screening values for evaluating contaminated media. The main objective of the ITRC Risk Team study was to document and analyze the differences among selected states for the screening values used to evaluate contaminants in groundwater, surface water, and soil in residential and industrial land use scenarios. This effort was undertaken to understand the basis for the development of the various criteria and to assess how these criteria are utilized. The Risk Team focused on examining and documenting the various screening values for five specific contaminants that are often identified as drivers for management actions at contaminated sites (December 2005, 115 pages). View or download at <http://www.itrcweb.org/Documents/RISK-1.pdf> .

**New CLU-IN Training Area.** A new training section has been posted to CLU-IN. The new Training page offers visitors a quick glimpse of upcoming training opportunities in a monthly view as well as a running list of events. Links to upcoming Conference Webcasts, Trainex and Archived Internet Seminars and Podcasts are available on the new Training Page. See <http://www.clu.in.org/training> .

**EUGRIS** is a major European platform for soil and water information with a content including over 80 general technical and six country specific zones, as well as 2353 resources (such as document and web links), 42 funding program links, 166 projects links 202 organization summaries and links and a glossary of 458 terms. EUGRIS has an open news system and calendar of conferences and training courses. It has over 1,200 registered users from all over the world. See [www.eugris.info](http://www.eugris.info) .

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 178 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.