Message #54: August 2001

Welcome to TechDirect. Since the July 1 message, TechDirect has 329 new subscribers for a total of 11,409. 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 TechDirect messages are archived there.

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

Phytotechnologies - August 7 and 9. This ITRC seminar focuses on the recently released ITRC Phytotechnologies Technical and Regulatory Guidance and Phytoremediation Decision Tree. It provides technical and regulatory information to help you understand, evaluate and make informed decisions on phytotechnology proposals. To register, see http://clu-in.org/studio or http://www.itrcweb.org .

Enhanced In Situ Bioremediation - August 21 and 23. This ITRC seminar is based on the ITRC document titled, Technical & Regulatory Guidance for Enhanced In Situ Bioremediation of Chlorinated Solvents in Ground Water. The training focuses on a variety of amendments, which may be added to in situ bioremediation systems, the mechanism of delivery and regulatory issues associated with approving or permitting EISB systems. It will also cover common problems encountered during operation of a system. To register, see http://clu-in.org/studio or http://www.itrcweb.org .

Field Analytical Methods for Detecting Explosives Compounds - August 26-28. The presentation discusses the physical and chemical properties of secondary explosives that make analytical determination of these compounds challenging. It reviews fixed-laboratory-based methods for this suite of compounds, and the quantitative requirements for various compounds within this group. Sampling considerations are discussed, with particular emphasis on the problem of obtaining representative soil samples in areas of extreme spatial heterogeneity in analyte distribution. Finally there will be a discussion of the advantages and disadvantages of the most commonly employed on-site methods for these compounds. To register - see http://clu-in.org/studio .

CLU-IN Studio Update

New videos on the CLU-IN Studio. Several new videos were mounted on the CLU-IN Studio in July. These videos were produced by the U.S. EPA Environmental Response Team and deal with selected environmental remediation topics. The new videos, located at http://clu-in.org/studio , include:
1. Clandestine Drug Labs (25 min)
2. Alabama Oil Burn (7 min)
3. Navajo Vats (10 min)
4. Superfund Seniors (12 min)

New Documents

The State-of-the-Practice of Characterization and Remediation of Contaminated Ground Water at Fractured Rock Sites (EPA 542-R-01-010). This report was published by the U.S. EPA Technology Innovation Office in cooperation with the Ontario Ministry of the Environment and the U.S. Department of Energy. This report summarizes two conferences held in 2000 on Fractured Rock Sites. The report suggests high priority characterization and remediation needs to research and development laboratories. It also documents the current state of the practice and to enable the measurement of trends and directions (July 2001, 16 pages). View or download at http://clu-in.org/techpubs.htm .

Innovations in Site Characterization - Technology Evaluation: Real-Time VOC Analysis using a Field Portable GC/MS (EPA 542-R-01-011). This report, published by the EPA Technology Innovation Office, describes a the use of a field GC/MS to measure trichloroethylene on a real-time basis. The results were effective3 for making real time decisions that guided characterization of the plume and optimal placement of the monitoring wells (July 2001, 32 pages). View or download at http://clu-in.org/techpubs.htm . Hard copies will be avaialbe in 3-4 weeks at contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

Characterization of Explosives Contamination at Military Firing Ranges (ERDC/CRREL TR-01-5). This report was published by the U.S. Army Corps of Engineers Cold Regions Research Laboratory. The report discusses the results of an effort to determine the magnitude and variability of explosives residues in surface soils resulting from training activities at several types of training ranges at major U.S.Army training facilities. It is hoped that this type of information will help assess the potential for contamination of groundwater with explosives-related contaminants (July 2001, 36

pages). View or download at http://www.crrel.usace.army.mil/techpub/CRREL_Reports/index.html

Field Gas Chromatography/Thermionic Detector System for On-Site Determination of Explosives in Soils (ERDC/CRREL TR-01-9). This report was published by the U.S. Army Corps of Engineers Cold Regions Research Laboratory. On-site determination of nitroaromatic, nitramine, and nitrate ester explosives compounds in soils was performed using a field-portable gas chromatograph (GC) equipped with a thermionic ionization detector (TID) selective for compounds with nitrofunctional groups. Good agreement was established for the concentrations of several explosives analytes when this method of analysis was compared to either high-performance liquid chromatography (Method 8330)or GC electron capture (Method 8095)analysis (May 2001, 29 pages). View or download at http://www.crrel.usace.army.mil/techpub/CRREL_Reports/index.html .

Brownfields in Illinois Municipalities. This report was published the Illinois Institute for Rural Affairs in collaboration with the Illinois EPA and the Illinois Municipal League. This survey of local officials in Illinois municipalities analyzes the responses to questions ranging from types of vacant and abandoned properties in the community to the priorities for selecting specific properties for redevelopment (June 2001, 112 pages). View or download at http://www.iira.org/pubsnew/publications/IIRA_Reports_175.pdf .

Superfund Post Construction Completion: An Overview (EPA 540-F-01-009). This fact sheet was produced by the U.S. EPA Office of Emergency and Remedial Response. The fact outlines the goals and objectives for Superfund Post Construction Complete (PCC) work, identifies the activities included under the banner of PCC, and describes the roles and responsibilities of involved parties. Key references and a bibliography are provided for more detailed information. It addresses response actions completed under the Superfund program, including response actions completed by Federal facilities under CERCLA, the Comprehensive Environmental Response, Compensation, and Liability Act (June 2001, 15 pages). View or download at http://www.epa.gov/superfund/action/postconstruction/pcc_overview.pdf .

Superfund's Future: What will it cost? This report, commissioned by the U.S. Congress, was published by Resources for the Future (RFF). RFF was asked to look at the status of the Superfund and estimate the future cost of the program. They were asked to estimate costs associated with: cleaning up existing sites on the NPL, sites that will be added before 2010, emergency response and removal actions, five year reviews, long term response actions, and the cost of administering the program (July 2001, 324 pages). The twelve-page executive summary of the report is available online at

http://www.rff.org/books/chapterpdfs/Executive_summary.pdf . Hard copies are available at cost from http://www.rff.org/books/descriptions/superfunds_future.htm .

Centerpoint (Vol. 6, No.1). This periodic newsletter is published by the U.S. EPA Hazardous Substance Research Centers. This issue reports the results of a conference held in the summer 2000 to examine the lessons learned in the first twelve years of HSRC operation. Discussions at the conference focused on three areas: a review of the state of science for the primary focus areas of the five centers; advances in each research area over the past 12 years; and important problems that remain (July 2001, 24 pages). View or download at http://www.hsrc.org/hsrc/pdf/CP11.pdf .

Tech Trends (EPA 542-N-01-002). This quarterly newsletter is published by the EPA Technology Innovation Office. This issue focuses on technologies for enhancing biodegradation of soil contaminants commonly associated with industry (June 2001, 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 2001. The Interstate Technology Regulatory Cooperation (ITRC) workgroup publishes the Quarterly Update to keep its state participants and other interested members of the environmental community informed on what the organization is doing to accomplish its mission. This issue highlights ITRC work with the Air Force Base Conversion Agency and Kelly AFB. It also provides updates on all the ITRC work teams and upcoming conferences and training classes. To see the Quarterly Update, visit http://www.itrcweb.org .

Conferences and Symposia

ITRC - Phytotechnologies, September 12-13, Austin, TX and October 24-25, Anherst, MA. This two-day course discusses the latest applications of phytotechnologies in remediation and waste management. The curriculum focuses systems design using hands-on team problem solving and evening homework. Case studies are incorporated into each major subject area. For more information, see http://www.itrcweb.org

ITRC - Accelerated Bioremediation of Chlorinated Solvents, October 23-24, Pasadena, CA and December 4-5 New Orleans, LA. This two-day course examines the roles of site characterization, modeling, design, monitoring, and regulatory interaction in applying in-situ engineered bioremediation. Lectures, case studies, hands on exercises and discussion sessions are used to give participants knowledge and information that can be put together immediately. For

more information, see http://www.itrcweb.org

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