

Message #63: May 2002

Welcome to TechDirect. Since the April 1 message, TechDirect gained 300 new subscribers for a total of 13,681. 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.

New Video

Introduction to Environmental Geophysics. This video, produced by the U.S. EPA Environmental Response Team, is designed for individuals who have the responsibility for overseeing or planning the collection of site data or waste characteristics. It stresses practical information required to design or supervise geophysical surveys at hazardous waste sites. Run time 9 minutes. See the video section <http://clu-in.org/studio>

Documents and Websites

Risk Assessment Guidance for Superfund Volume III Part A: Process for Conducting Probabilistic Risk Assessment (RAGS 3a)(OSWER 9285.7-45). This guidance document was issue by the U.S. EPA Office of Emergency and Remedial Response. It was created to establish national criteria to conduct, and review Superfund probabilistic risk assessments in response to the October 1995 Superfund Reform #6A. RAGS 3A was designed to address both human health and ecological probabilistic risk assessments (PRA). It provides flexibility and maintains national consistency in selecting the preliminary remediation goal, based on a recommended high-end range of risk values. It advocates using a tiered approach, from the traditional point estimates for screening purposes, to using PRA to assess more complex sites (April 2002, xx pages). View or download at <http://www.epa.gov/superfund/RAGS3A/index.htm> or <http://clu-in.org/techpubs.htm> .

MTBE Treatment Profiles Website. This website contains information about completed and ongoing applications of treatment

for methyl tert-butyl ether (MTBE) in drinking water and media at contaminated sites. The information is provided in almost 250 MTBE treatment profiles that describe sites using in situ and ex situ technologies to treat MTBE in drinking water, groundwater, and soil. The profiles provide a summary of relevant site information, contaminants and media treated, technology design and operation, and cost and performance results, points of contact, and references. The profiles currently link to 18 more detailed case studies. The website also allows users to update current profiles and add new applications. EPA plans to continually add additional profiles to the system. For more information, see <http://clu-in.org/products/mtbe> .

Technology Evaluation Report: Phytoremediation of Soil and Groundwater (TE-02-01). This report was authored by Dr. Jerald Schnoor, University of Iowa for the Ground Water Remediation Technologies Analysis Center (GWRTAC). The report complements the original GWRTAC E-Series Phytoremediation report by Dr. Schnoor and reviews progress made over the last several years. Several phytotechnologies are covered, and the document includes a timely section on transgenic (genetically engineered) plants (March 2002, 52 pages). View or download at http://www.gwrtac.org/pdf/phyto_e_2002.pdf .

Technology Evaluation Report: Permeable Reactive Barriers: A Case Study Review (TE-01-01). This report was authored by Dr. Radisav Vidic, University of Pittsburgh, for the Ground Water Remediation Technologies Analysis Center (GWRTAC). It contains summary information on several PRB installations, and takes a broad look at the PRB technology, summarizing lessons learned from their design and operation (October 2001, 52 pages). View or download at http://www.gwrtac.org/pdf/prb_e.pdf .

Technology Status Report: A Catalogue of the Horizontal Environmental Wells in the United States (TS-02-01). This report was authored by Dr. Dawn Kaback, Concurrent Technologies Corporation for the Ground Water Remediation Technologies Analysis Center (GWRTAC). This catalogue provides a record of how the industry has evolved since the late 1980s. Included in this document are: a history of horizontal environmental well technology; explanation of environmental applications for horizontal wells; discussion of well design and drilling techniques, including well materials and drilling fluids used, and well development techniques. Trends associated with the installed 1,142 horizontal environmental wells included in the catalogue are also presented, including the date of installation, location, well purpose, depth, construction method and materials (January 2002, 69 pages). View or download

at <http://www.gwrtac.org/pdf/hor-wells.pdf> .

Performance Comparison: Direct-push Wells Versus Drilled Wells (TR-2120-ENV). This report was published by the Naval Facilities Engineering Command (NFESC). A comparison between ground water monitoring alternatives (direct-push installed monitoring wells and hollow stem auger drilled monitoring wells) was conducted on the leading edge of a methyl-tertiary butyl ether (MTBE) plume located at Naval Base Ventura County (NBVC) Port Hueneme, California. The purpose of this effort was to determine whether representative chemical and water table data could be generated using properly designed direct-push monitoring wells. No significant performance differences were observed between the direct-push wells and drilled wells (January 2001, 182 pages). View or download at <http://clu-in.org/techpubs.htm> .

Pay For Performance Toolbox. The Toolbox was developed by the U.S. EPA Office of Underground Storage Tanks. Pay For Performance (PFP) is a type of performance-based contracting that states and owners/operators can use to contract for LUST cleanups. The PFP Toolbox is designed to assist state regulators in developing a PFP program and provides information on how to use PFP contracting, develop a PFP contract, implement a PFP program, and expand an existing PFP program. In addition, the Toolbox provides examples of actual PFP contracts used in existing state LUST PFP programs, PFP presentations prepared by state staff, and articles written by state staff about PFP performance from LUSTLine. The PFP Toolbox can be seen at www.epa.gov/oust/pfp/toolbox.htm .

Ground Water Currents - current issue (EPA 542-N-02-002). GWC is published by the EPA Technology Innovation Office. This will be the last issue before Ground Water Currents and Tech Trends are combined into one periodic publication. This issue features articles on permanganate chemical oxidation in fractured bedrock, performance of dual reactive walls at Watervliet Arsenal, and a phytoremediation field demonstration at a Naval Air Station (April 2002, 4 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.

NATO/CCMS Pilot Study Evaluation of Demonstrated and Emerging Technologies for the Treatment of Contaminated Land and Groundwater (Phase III) 2001 Annual Report (EPA 542-R-02-001). The Council of the North Atlantic Treaty Organization (NATO) established the Committee on the Challenges of Modern Society (CCMS) in 1969. CCMS was charged with developing meaningful programs to share information among countries on

environmental and societal issues that complement other international endeavors and to provide leadership in solving specific problems of the human environment. This report lists progress on ongoing projects and a country Tour de Table of current work (January 2002, 285 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.

NATO/CCMS Pilot Study for the Evaluation of Demonstrated and Emerging Technologies for the Treatment and Clean Up of Contaminated Land and Groundwater (Phase III) 2001 Special Session: Performance Verification of In Situ Remediation Technologies (EPA 542-R-02-002). This report includes the visuals used during the presentations made at the NATO/CCMS meeting in Liège, Belgium on September 10-11, 2001. In most cases, these presentation materials have been supplemented with an extended abstract or paper. Individuals who are interested in learning more on the subject of an individual presentation or on the Special Session should feel free to contact the participants at the address listed in the back of this report (January 2002, 142 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.

Upcoming Internet Seminars

ITRC Phytotechnologies - May 2. Space still available!! This ITRC seminar focuses on the 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. For more information and to register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

ITRC In Situ Chemical Oxidation - May 14. The purpose of this training is to familiarize participants with the recently released ITRC In Situ Chemical Oxidation Technical and Regulatory Guidance document. It provides technical and regulatory information to help you understand, evaluate and make informed decisions on ISCO proposals. Included is a description of the various chemical oxidants, regulatory considerations, stakeholder concerns, case studies, and technical references. For more information and to register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

ITRC Passive Diffusion Samplers - May 16. This seminar will present the technical and regulatory considerations associated with deployment of diffusion samplers, and summarize major points of the

recently issued USGS document, Users Guide For Polyethylene-Based Passive Diffusion Bag Samplers To Obtain Volatile Organic Compound Concentrations In Wells. For more information and to register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

Perchlorate Update - June 4. This live webcast, sponsored by the U.S. EPA's Technical Support Project (TSP), is designed to disseminate current perchlorate information to remediation professionals and community stakeholders. The TSP Federal Facility Forum is hosting this live broadcast from their semi-annual meeting in Denver. The three-hour session will cover the nature of perchlorate (general background information), the national occurrence of perchlorate, perchlorate toxicity assessment (human health), perchlorate in the environment, ecological considerations, perchlorate treatment technologies, perchlorate analytical detection methods, and the current regulatory aspects of perchlorate. For more information and to register for this live webcast, see <http://clu-in.org/studio> .

Conferences and Symposia

Call for Abstracts - Not too late!! The 18th Annual Waste Testing & Quality Assurance Symposium will be held in August in Crystal City, VA. Abstracts are due May 1, 2002; however, if you are interested in presenting a paper please contact Dr. Larry Keith at larrykeith@earthlink.net to obtain a few days extra. For more information on the conference, see <http://wtqa.org> .

Improving the Quality of Site Characterization Conference, June 4, Manchester, NH and June 6, Hartford, CT. The New England Waste Management Officials Association is sponsoring two one-day conferences in June. The objective of the events are to raise awareness of state and EPA concerns about traditional approaches to site characterization and to present strategy and technology options that can help improve the information obtained during site characterizations and the subsequent remediation decisions. Agenda and logistics information is available at

<http://www.newmoa.org/Newmoa/htdocs/cleanup/improvingquality.cfm> .

2002 National Site Assessment Conference, May 13-17, Austin, TX. Since its inception in 1989, the National Site Assessment Conference (NSAC) has been an annual forum for EPA, (including removal and remediation program staff) States, Tribes, and other Federal agencies to review accomplishments, revisit goals, and discuss recent and pending changes in legislation, funding, policies, and guidance. Speakers representing a broad site assessment spectrum share ideas and expertise on how to address evolving site

assessment needs. For more information, see

http://www.epa.gov/superfund/programs/siteasmt/sa_conf/ .

If you have any questions regarding TechDirect, contact Jeff Heimerman at (703) 603-7191 or 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.