

Message #83: January 2004

Welcome to TechDirect. Since the December 1 message, TechDirect gained 193 new subscribers for a total of 17,857. 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 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.

Solicitation.

EPA's Office of Solid Waste and Emergency Response (OSWER) is now soliciting cooperative agreement proposals from educational institutions and non-profit organizations. The cooperative agreements would be for EPA financial assistance to provide educational and training opportunities, in the form of internships, for students in the hazardous waste management field. These cooperative agreements will be awarded under Section 311(b)3 and (9) of the Comprehensive Environmental Response, Compensation and Liability Act and Section 8001 of the Solid Waste Disposal Act, and would enable students to: gain knowledge of alternative or innovative treatment technologies and real work experience in the hazardous waste management field; and also to earn academic credit. Deadline to submit proposals is February 4, 2004. For more information, see <http://www.epa.gov/oswer/education-grants.htm> .

Internet Seminars

No live events planned for January. We now have forty seminars archived in the CLU-IN Studio at <http://clu-in.org/studio>. This area allows individuals to see and hear seminar topics as they were delivered on a previous date. The audio portion can be heard using Real Player or Windows Media Player.

Documents

EPA REACHIT Database Updated. The U.S. EPA added 130 new commercial treatment and characterization technologies, including: in situ chemical treatment, permeable reactive barrier, in situ thermal treatment, in situ flushing, phytoremediation, pump and treat for perchlorate, in situ chemical immobilization, and characterization and sampling technologies for NAPLs. For the first time, the system documents 743 pump and treat systems at Superfund sites, as well as over 50 vertical engineered barrier (VEB) projects, and more detailed information on other technologies. To access REACHIT, see <http://www.epareachit.org> .

Human Health Toxicity Values in Superfund Risk Assessments (OSWER Directive 9285.7-53). This directive was issued on December 5, 2003 by the Office of Superfund Remediation and Technology Innovation (OSRTI). It presents current Office of Solid Waste and Emergency Response (OSWER) technical and policy recommendations regarding human health toxicity values in risk assessments. The guidance revises the hierarchy of human health toxicity values recommended for use in risk assessments that were originally presented in Risk Assessment Guidance for Superfund, Volume I, Part A, "Human Health Evaluation Manual" (RAGS) (OSWER 9285.7-02B, EPA/540/1-89/009, December 1989). The memo provides guidance for the sources of toxicity information that should generally be used in performing human health risk assessments at Superfund sites. It does not address the situation where new toxicity information is brought to the attention of USEPA. It also does not provide guidance or address toxicity or reference values for ecological risk. Public comments on this memorandum are welcomed at any time December 2003, 4 pages). View or download the memorandum at <http://www.epa.gov/oerrpage/superfund/programs/risk/hhmemo.pdf> .

Guidance on the Resolution of the Post-ROD Dispute (memorandum and attachments). EPA recently issued guidance to confirm the resolution of the post-Record of Decision (ROD) dispute between EPA and the Department of Defense and to provide guidelines to the implementation of the resolution. For more information, see http://www.epa.gov/swerrfr/documents/post_rod_112503.htm .

Technology News and Trends - Issue 9 (EPA 542-N-03-006). This quarterly update is produced by the EPA Office of Superfund Remediation and Technology Innovation. This issue features articles on Innovative Methods Used to Integrate Soil and Ground-Water Remediation and a summary of SVE and ISCO Used After Pump

and Treat for Multimedia Removal of VOCs (December 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.

Technical and Regulatory Guidance for Design, Installation, and Monitoring of Alternative Final Landfill Covers (ALT-2). This document was prepared by The Interstate Technology & Regulatory Council Alternative Landfill Technologies Team. It is primarily written for decision makers associated with the plan development, review, and implementation of alternative final covers (AFCs). The document focuses on the decisions and facilitating the decision processes related to design, evaluation, construction, and post-closure care associated with AFCs. To facilitate the use of this document and understanding of the decision process, an electronically interactive decision tree is provided. The document provides input related to key decision steps in the permitting, design, construction, and maintenance of AFCs (December 2003, 211 pages). View or download at <http://www.itrcweb.org/ALT-2.pdf> .

Alternative Landfill Cover Profiles On-line. Prepared by U.S. EPA's Technology Innovation Office, this database contains information about proposed, tested, or installed alternative design covers at waste disposal sites, including municipal solid waste and hazardous waste landfills and radioactive waste sites. The majority of alternative design covers featured are evapotranspiration (ET) covers including monolithic and capillary barrier designs. As of November 2003, the database included 64 landfills/waste sites with 77 cover projects (some sites have more than 1 cover project). Most of the cover projects are demonstrations. Several are full-scale applications. To access the profiles, visit <http://clu-in.org/products/altcovers> .

Vapor Intrusion Issues at Brownfield Sites (BRNFLD-1). This document was prepared by The Interstate Technology & Regulatory Council Brownfields Team. It provides an overview of vapor intrusion, the type of contaminants that may have vapor intrusion potential, the potential of brownfield sites to have indoor air exposure from vapor intrusion, and the steps that can be taken to limit exposures. It includes discussion of state and federal approaches for determining whether vapor intrusion may pose risks and case studies to illustrate site conditions that are typical when vapor intrusion impacts indoor air quality (December 2003, 77 pages). View or download at <http://www.itrcweb.org/BRNFLD-1.pdf> . (See also the Vapor Intrusion Workshop under Conferences and Symposia).

Technical and Regulatory Guidelines Document for Constructed Treatment Wetlands (WTLND-1). This document was prepared by The Interstate Technology & Regulatory Council

Wetlands Team. It describes the fundamental mechanisms of wetland contaminant removal and overall wetland functions and provides detailed descriptions of the various contaminant treatment objectives, treatment efficiencies, and goals of different constructed wetland applications. Detailed, site-specific predesign criteria and conceptual designs are outlined, followed by final design, postconstruction activities, operation and maintenance, monitoring, and implementation costs. The document provides decision trees for each of the major constructed treatment wetland applications, designed to enable users to take basic information from a specific site and, through a flow chart, decide whether a particular wetland system is appropriate for the site (November 2003, 212 pages). View or download at <http://www.itrcweb.org/WTLND-1.pdf> .

Munitions Response Historical Records Review (UXO-2). This document was prepared by The Interstate Technology & Regulatory Council UXO Team. It is intended to serve as a guide for regulators, stakeholders, and others involved in oversight or review of munitions response historical records review (MR HRR) projects on munitions response sites. The goals of this document are to educate state regulators and other stakeholders on the purpose, content, and terminology of MR HRRs; provide a uniform technical approach and useful tools that are compatible with any regulatory framework or authority for reviewing MR HRRs; and communicate state regulator expectations to those planning, initiating, and executing MR HRRs (November 2003, 70 pages). View or download at

<http://www.itrcweb.org/user/UXO-2.pdf> .

National Emission Standards for Hazardous Air Pollutants (NESHAP) From Site Remediations were promulgated in the Federal Register on October 8, 2003 (vol. 68, No. 195, pp 58171 ff.). The final rule implements the Clean Air Act (CAA) section 112(d) to control emissions of hazardous air pollutants (HAP) at major sources where remediation technologies and practices are used at the site to clean up contaminated environmental media (e.g., soils, groundwaters, or surface waters) or certain stored or disposed materials that pose a reasonable potential threat to contaminate environmental media. Site remediations subject to the final rule are required to control emissions of organic HAP by meeting emissions limitations and work practice standards reflecting the application of maximum achievable control technology (MACT). To determine whether a facility is subject to the final rule, one needs to carefully examine the applicability criteria. The final rule amends 40 CFR part 63 by adding subpart GGGGG--National Emission Standards for Hazardous Air Pollutants for Site Remediation (October 2003, 54 pages). View or download at <http://clu-in.org/techpubs.htm> .

Conferences and Symposia

Designing, Building, & Regulating Evapotranspiration (ET) Landfill Covers, March 9-10, Denver. This meeting is sponsored by the Phytoremediation Action Team of the Remediation Technologies Development Forum. At this meeting, presenters will share information on federal and state-initiated programs demonstrating and assessing the performance of ET covers, such as the U.S. Environmental Protection Agency's Alternative Cover Assessment Program (ACAP), and present information on ET cover design, construction, monitoring, and regulation for remediation and final closure at sites. For more information and to register, see

<http://www.rtdf.org/public/phyto/minutes/default.htm> .

Groundwater Flow and Transport Modeling Optimization Workshop

at the International Ground Water Monitoring Center (IGWMC) March 17-19, Golden, CO. This course, sponsored by DoD and EPA, is intended to increase awareness of environmental project managers and the groundwater modeling community regarding the use of modeling optimization to optimize pumping strategies for real-world plume remediation problems. It will provide fundamental concepts to all attendees (managers and modelers) during the first day and then provide more detailed instruction on the use of two codes: Simulation/Optimization Modeling System (SOMOS) and Modular Groundwater Optimizer (MGO). Contact Sophia Seo at IGWMC (hseo@Mines.EDU) or Yan Zhang at GeoTrans, Inc. (yzhang@geotransinc.com) for course details.

Call for papers!! Vapor Intrusion Attenuation Workshop: A Study of Observed Vapor Intrusion Attenuation, March 15-18, San Diego . The U.S. EPA's Office of Solid Waste and Emergency Response (OSWER) is requesting abstracts for a workshop on subsurface vapor-to-indoor-air attenuation factors. This one and one-half day workshop focuses specifically on what is known from measurements about the attenuation factor and vapor attenuation processes in the subsurface. This call for papers is for presentations describing (1) preexisting and newly gathered attenuation-related data sets, (2) methods for correctly and effectively sampling and analyzing soil gas and indoor air data in the context of a vapor intrusion investigation, and (3) approaches for correctly interpreting VI attenuation data in the light of background concentrations from other vapor sources and site conditions that can impact results. Interested parties should submit an abstract by January 15, 2004. For more information on the workshop and abstract submission

guidelines, see <http://clu-in.org/techpubs.htm> .

Reminder CALL FOR ABSTRACTS!! Accelerating Site Closeout, Improving Performance, and Reducing Costs Through Optimization, Dallas, June 15-17, 2004. This conference, sponsored by member agencies of the Federal Remediation Technologies Roundtable, will outline long-term remediation liabilities and optimization needs and opportunities; disseminate existing and emerging optimization strategies, technologies, tools and science; communicate lessons learned; and present remedial optimization within the context of site wide and multi-site management programs. Abstracts for oral presentations must be submitted by February 6, 2004. For information on how to submit an abstract, a list of abstract topics, and how to register for the conference, please visit <http://clu-in.org/siteopt> .

Call for Papers!! US EPA/ NGWA Fractured Rock Conference: State of the Science and Measuring Success in Remediation, September 2004. The conference is an international consortium of engineers, scientists, regulators, responsible parties, researchers and students gathering to understand the science of classical and innovative remediation technologies. Case studies will focus on federal, state and industrial sites contaminated by DNAPLs, other organics, metals and radionuclides. The conference committee is accepting abstracts for consideration on selected topics. The deadline for abstract submission is February 14, 2004. For more information on the abstract submission and the conference, see <http://www.ngwa.org/pdf/e/conf/0409135017cfp.pdf> .

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. Remember, you may subscribe, unsubscribe or change your subscription address at <http://clu-in.org/techdrct> at any time night or day.