

Message #93: November 2004

Welcome to TechDirect. Since the October 1 message, TechDirect gained 272 new subscribers for a total of 20,457. 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 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.

Solicitations

EPA SITE Program. The EPA Superfund Innovate Technology Evaluation (SITE) Program seeks cooperative projects with hazardous waste sites that are in need of full-scale demonstrations of innovative treatment technologies. SITE offers a mechanism for independent third party evaluation of innovative technology performance and cost. The site program is financially responsible for preliminary treatability studies, test plan preparation, sampling, sample and data analysis and report writing of the demonstration results. This solicitation is directed toward owners/managers of private sites or state and federal government agencies that have the financial or regulatory responsibility for on site hazardous waste remediation. Copies of the solicitation and application may be downloaded at <http://www.epa.gov/ORD/SITE> . For more information contact Randy A. Parker parker.randy@epa.gov (513) 569-7271.

DoD ESTCP. The Department of Defense, through the Environmental Security Technology Certification Program (ESTCP), will be funding demonstration projects for treatment of perchlorate in drinking water. The objective of this effort is to evaluate alternative technologies that can significantly reduce the costs of removing perchlorate for large-scale drinking water treatment. ESTCP intends to fund multiple demonstration projects through this competitive selection process. The demonstrations will be conducted at a number of selected public water supply utilities in southern California

that have been impacted by perchlorate. The due date for these pre-proposals is November 18, 2004.

Upcoming Internet Seminars

ITRC Constructed Treatment Wetlands - November 4. This course, developed by the Interstate Technology and Regulatory Council (ITRC), is based on Technical and Regulatory Guidance for Treating Storm Water and Wastewater Using Constructed Treatment Wetlands (WTLND-1). It describes the physical, chemical, and biological mechanisms operating in wetlands treatment systems, the contaminants to which they apply, the characteristics of sites suitable to treatment in this fashion, and relevant regulatory issues. To register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

ITRC Design, Installation and Monitoring of Alternative Final Landfill Covers - November 9. This training focuses on evapotranspiration (ET) covers and the decisions associated with their successful design, construction, and long-term care. For more information and to register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

ITRC Radiation Risk Assessment: Updates and Tools - November 16. This ITRC training clarifies the variations between the dose approach used at some sites and EPA's risk-based approach. It also elaborates on the methodology used to develop risk-based remediation goals. For more information and to register, see or <http://clu-in.org/studio> Or <http://www.itrcweb.org> .

ITRC What is Remediation Process Optimization And How Can It Help Me Identify Opportunities for Enhanced and More Efficient Site Remediation? - November 18. Through this training, the ITRC RPO team intends to inform interested and affected parties about the value of optimization in efficiently and objectively setting and attaining remediation goals. Key elements of RPO that will be discussed in the training include: Appropriate use of up-to-date conceptual site models (CSM), Flexible Remedial Actions (RAs) operations considering technology limitations and risk assessments; use of treatment trains for each target zone, and developing performance objectives for each element; development of an exit strategy for each remedy component considering life-cycle factors; and life-cycle cost analysis as a decision-making tool with the requirement that protectiveness must be maintained or improved. For more information and to register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio> .

New Documents and Websites

Strategy to Ensure Institutional Control Implementation at Superfund Sites (OSWER Dir. 9355.0-106). This document sets forth EPA's strategy (Strategy) for ensuring that institutional controls (ICs) are successfully implemented at Superfund sites, with an emphasis on evaluating ICs at sites where all construction of all remedies is complete (construction complete sites).¹ This Strategy will serve as a roadmap for EPA regional and headquarters personnel in preparing Region specific action plans and conducting the work necessary to ensure the proper implementation of ICs at Superfund sites. This work includes gathering and entering information in the Institutional Controls Tracking System (ICTS), evaluating the data generated through ICTS, prioritizing and conducting site-specific followup activities, building the capacity to better manage and review IC information, and coordinating with other interested parties (September 2004, 17 pages). View or download at <http://www.epa.gov/superfund/action/ic/icstrategy.pdf> .

Technology News and Trends, September issue (EPA 542-N-04-005). This periodic newsletter is produced by the EPA Office of Superfund Remediation and Technology Innovation (OSRTI). This issue features articles on the use of wind turbines to power ground water circulation wells; in situ treatment of an acidic mine pit lake; defining a NAPL source zone using field data; and, the use of the Superfund Document Management System (SDMS) in the Columbia Shuttle Recovery effort. View or download at <http://clu-in.org/download/newsletters/tandt0904.pdf> . For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

ESTCP Cost and Performance Report: Man Portable for the Multi-Sensor Towed Array Detection System (UX 9811). This evaluation report was produced by the DOD Environmental Security Technology Certification Program (ESTCP). The MTADS addresses all aspects of the Tri-Service Requirements for land-based buried UXO. It is capable of detecting all classes of buried UXO at their maximum likely penetration depths. The system correctly locates buried targets, determines their burial depths, classifies the likely ordnance size, and provides for future target way pointing, as well as creating geographical information system (GIS)-compatible target output maps and sorted target tables. The man portable adjuncts extend this capability into areas of rugged terrain and areas with poor sky visibility (June 2004, 85 pages). View or download at <http://www.estcp.org/documents/techdocs/UX-9811.pdf> .

Remediation Process Optimization: Identifying Opportunities for Enhanced and More Efficient Site Remediation (RPO-1). This

document was produced by the Interstate technology and regulatory Council (ITRC). It provides practical information and guidance on how to systematically evaluate and manage uncertainty associated with the remediation process by using RPO as a tool. Its primary goal is to provide information and tools to help ensure that the remediation process is progressing toward site cleanup objectives that are both acceptable and feasible and that selected remediation approaches attain those objectives and remain protective of human health and the environment. This document provides guidance on what could and should be included in an effective RPO proposal or program, including what RPO is, the regulatory framework that RPO must operate within, and references that provide examples of successful RPOs and resources for further examination of RPO. (September 2004, 156 pages). View or download at

<http://www.itrcweb.org/RPO-1.pdf> .

Hazardous Substance Research Center Briefs on Anaerobic Reductive Dechlorination Available . These short web articles were produced by the Western Region Hazardous Substance Research Center, one of five university-based hazardous substance research centers funded by the USEPA Office of Research and Development. They describe research on anaerobic reductive dechlorination of TCE and PCE. The process shows potential for in situ treatment of contaminant source zones. Research Brief #4 (http://www.wrsrc.orst.edu/briefs/brief_4.htm) describes studies to define the kinetics and inhibition of the dechlorination reactions and Research Brief #5 (http://www.wrsrc.orst.edu/briefs/brief_5.htm) describes efforts to develop "push-pull" tests to monitor bioaugmentation with reductive dechlorinating cultures.

State Approaches for Drycleaner Remediation Programs. This paper, developed by the State Coalition for Remediation of Drycleaners' (SCRD) Program Development/Administration Subgroup, identifies and discusses five primary components of state drycleaner cleanup programs. These components include: Funding Mechanisms, Eligibility, Prioritization, Implementation, and Benefits. For each of the components discussed in the paper, there is a section on considerations, which offers more insights into these various approaches. This document can be used as a resource for states in the development stage or for states that are considering restructuring their programs (October 2004). View or print at

<http://www.drycleancoalition.org/news.cfm> .

Conferences and Symposia

Pit Lakes 2004, Reno, November 16-18. This conference is

sponsored by the U.S. EPA Office of Research and Development. Its purpose is to provide a forum for the exchange of scientific information on current domestic and international pit lake approaches, including pit lakes from arid and wet regions throughout the world. These approaches include characterization, modeling/monitoring, and treatment and remediation. The advancement of these approaches will lay a stronger foundation for environmental decision-making by improving the means of identifying and prioritizing mining pit lake impacts and alternatives for their restoration. For agenda and registration information, see

<http://www.epa.gov/tbnrml/pitlakes.htm#regis> .

Alternative Covers for Landfills, Waste Repositories, and Mine Wastes in the Northwest: Design, Modeling, Construction, and Monitoring, Boise, ID December 7-9. This training course is sponsored by the Interstate Technology and Regulatory Council (ITRC). It covers alternative cover design, construction, operation, and monitoring, including discussions of plant-soil-water relations, hydraulic balance, contaminant fate and transport, and saturated/unsaturated water movement. Case studies pertaining to Northwest mine tailing wastes will be emphasized. Study results and lessons learned from the Alternative Covers Assessment Program will be discussed, as well as modeling of alternative covers. For more information or to register, see <https://weborcl8.wpi.biz/itrc/alt200412/regform.htm> .

Partners in Environmental Technology Technical Symposium & Workshop, Washington, D.C., November 30-December 2. This annual technical Symposium & Workshop, sponsored by the Strategic Environmental Research & Development Program (SERDP) and the Environmental Security Technology Certification Program (ESTCP), will feature comprehensive sessions that illustrate how SERDP research and development and ESTCP demonstration and validation efforts are assisting the Department of Defense to address increasingly complex environmental challenges. Other highlights of the event include: 1) poster sessions that feature approximately 250 posters facilitating technology transfer, 2) exhibit booths offering information about funding opportunities, 3) a concluding session about SERDP and ESTCP research and demonstration opportunities, and 4) networking with more than 800 environmental professionals. For additional information or to register, visit <http://www.serdp.org/symposiums/symposiums.html> or call (703) 736-4548.

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. 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.