

Message #44: October 2000

Since September 1, TechDirect gained 247 new subscribers for a total of 9,154. Welcome to everyone just joining TechDirect. After more than three years, we have passed the 9000 subscriber mark. I continue to be surprised how many people across the world are interested in information about site remediation and characterization technologies. I hope these e-mails continue to keep you abreast of new information in technology development and deployment.

We know that TechDirect generates document downloads and it is a very effective system for pointing people to information resources. However, we have very little understanding of how these documents and resources aid in the conduct of your work. If there have been resources in past issues of TechDirect that have been particularly useful, feel free to let us know.

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.

Documents

A Guide to Developing and Documenting Cost Estimates During the Feasibility Study (EPA-540-R-00-002). This report was prepared by the U.S. EPA Office of Emergency and Remedial Response and the U.S. Army Corps of Engineers' Hazardous, Toxic, and Radioactive Waste Center of Expertise. It provides protocols for developing cost estimates of remedial alternatives during the remedial investigation/feasibility study process to improve the consistency, completeness, and accuracy of cost estimates. The document presents clear procedures and expectations, a checklist of cost elements, and example formats. It also identifies resources for estimating costs during the feasibility study (July 2000, 76 pages) plus several appendices. View or download at

<http://www.epa.gov/superfund/resources/remedy/costest.htm> .

Solidification/Stabilization Use at Superfund Sites (EPA 542-R-00-010). This report was published by the U.S. EPA Technology Innovation Office. It provides the most recent information about solidification/stabilization applications at Superfund sites, as well as information about trends in use, specific types of applications, and cost (September 2000, 28 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.

Potential Applicability of Assembled Chemical Weapons Assessment Technologies to RCRA Waste Streams and Contaminated Media (EPA 542-R-00-004). This report was published by the U.S. EPA Technology Innovation Office. It provides an evaluation of the potential applicability of Assembled Chemical Weapons Assessment (ACWA) technologies to RCRA waste streams and contaminated media found at RCRA and Superfund sites. The information in this report is intended to provide site managers information on the potential uses of ACWA technologies and to help technology providers better understand the potential market for those and similar technologies (August 2000, 88 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.

Innovations in Site Characterization Case Study: Site Cleanup of the Wenatchee Tree Fruit Test Plot Site Using a Dynamic Work Plan (EPA 542-R-00-009). The Wenatchee Tree Fruit Research and Extension Center site contained soils contaminated with organochlorine pesticides, organophosphorus pesticides, and other pesticides due to agriculture-related research activities conducted from 1966 until the mid-1980s. The U. S. Army Corps of Engineers used a dynamic work plan guided by field analyses to seamlessly integrate the site characterization and cleanup portions of the project. Characterization, excavation, and segregation of contaminated soil was based on the results of immunoassay (IA) test kits for DDT and cyclodiene pesticides. An initial pilot test and then continuing evaluation of data comparability between the IA methods and fixed laboratory pesticide results allowed the USACE team to develop site-specific IA kit action levels that guided on-site decision-making. Characterization, cleanup, and closure was accomplished within a single 4-month field mobilization, and the entire project cost (\$589K) was about half the cost (\$1.2 million) estimated according to a more traditional site characterization and remediation scenario relying on multiple rounds of field mobilization, sampling, sample shipment, laboratory analysis, and data assessment (August 2000, 46 pages). View or download at <http://clu-in.org/techpubs.htm> . Hard copies will be available in 2-3 weeks, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

UXO Detection at Jefferson Proving Ground Using Ground-Penetrating Radar (ERDC/CRREL TR-00-005). This document was published by the US Army Corps of Engineers Cold Regions Research Laboratory. Ground-penetrating radar (GPR) was used to detect UXO and nonordnance on the 40-acre site at Jefferson Proving Ground, Indiana. The report discusses the results

of that effort. It concluded that GPR is effective for finding targets in this type of soil to no more than 2-m depth (April 2000, 38 pages). View or download at http://www.crrel.usace.army.mil/techpub/CRREL_Reports/reports/TR00-5.pdf .

Evaluating the Hanby Test Kits for Screening Soil and Groundwater for Total Petroleum Hydrocarbons: Field Demonstration (ERDC/CRREL TR-00-007). This document was published by the US Army Corps of Engineers Cold Regions Research Laboratory. This report evaluates the methods of analysis that can be used with the Hanby Test Kits for assessing the total petroleum hydrocarbon (TPH) contamination in environmental matrices (June 2000, 28 pages). View or download at http://www.crrel.usace.army.mil/techpub/CRREL_Reports/reports/TR00-7.pdf .

Innovative Technology Summary Report: Electrical Resistance Tomography for Subsurface Imaging (DOE/EM-0538). This report was produced by the U.S. Department of Energy. Electrical Resistance Tomography allows site investigators to view two- or three-dimensional electrical resistivity images of the subsurface on an on-site computer terminal within minutes of data acquisition. ERT For Subsurface Imaging technology has been successfully demonstrated for monitoring remediation processes, detecting potential leaks under high-level waste tanks, measuring moisture movement in fractured rock, and for verifying the effectiveness of subsurface barriers (June 2000, 34 pages). View or download at <http://apps.em.doe.gov/ost/> .

Tech Trends (EPA 542-N-00-005). Tech Trends is a quarterly newsletter that provides descriptions and performance data for innovative source control technologies that have been applied in the field. This issue highlights innovative bioremediation technologies used to treat contaminated soils (August 2000, 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.

Ground Water Currents (EPA 542-N-00-006). This issue highlights the use of peroxide, ozone, and permanganate in remediating ground water through chemical oxidation/reduction. In addition, it includes a description of results obtained in field uses of phytoremediation and biologically enhanced reductive dechlorination (September 2000, 4 pages). View or download at <http://clu-in.org/techpubs.htm> . Hard copies will be available in 2-3 weeks, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

Site Remediation Technology InfoBase: A Guide to Federal Programs, Information Resources, and Publications on Contaminated Site Cleanup Technologies (EPA 542-B-00-005).

This report was developed by the member agencies of the Federal Remediation Technologies Roundtable (FRTR). It is a directory of Federal programs responsible for cleaning up contaminated sites AND technology development assistance programs [June 2000, 80 pages]. View or download at <http://www.frtr.gov> .

Conferences and Symposia

Call for Papers! Field Screening Europe 2001. This conference is sponsored by several institutions and the Environmental Research Center of the University of Karlsruhe. The objective of this event is to continue discussions about on-site analysis together with methods, techniques and technologies for site assessment. The deadline for submission of extended abstracts is October 15. The conference flier may be viewed at <http://www.uni-karlsruhe.de/~fzu/Calendar/Conference/FSE2001/> .

U.S.-European Partnering Event for Environmental Technologies, Amsterdam, November 29-December 1. This event is sponsored by the International Environmental Technology Office of the White House. Environmental Technology companies and organizations interested extending their international networks are invited to participate in this event. The purpose of the conference is to provide opportunities to identify and develop cooperative environmental technology projects and facilitate international partnerships. For complete event information, see <http://www.et3m.net/> .

Upcoming Courses and Conferences. A popular feature of the CLU-IN front page is the listing of upcoming courses and conferences. It regularly contains information on 150 or more events sponsored by both public and private sector entities. It is searchable by date, topic, title, etc. We have added a new feature that displays only new entries since your last visit. We encourage you to consult this directory on a regular basis to identify courses or conferences germane to your interests. As an event sponsor, you may submit information about your event any time night or day at <http://clu-in.org/courses> . All entries are reviewed before being posted on the public area of CLU-IN so expect a delay of 1-2 weeks between submitting and display.

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.