

Message #103: September 2005

Welcome to TechDirect! Since the August 1 message, TechDirect gained 216 new subscribers for a total of 22,899. 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, sediments 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.

Special Announcements

Brownfields Job Training Grants-Request for Applications (RFA). EPA's Office of Brownfields Cleanup and Redevelopment is now requesting applications for brownfields job training grants. The goals of the Job Training Program are to prepare trainees for future employment in the environmental field and facilitate cleanup of brownfields sites contaminated with hazardous substances, pollutants, contaminants, and petroleum. Applications are due September 16, 2005. For more information, see

<http://www.epa.gov/swerosps/bf/announcg.htm> .

Webcast: 25 Years of Contaminated Land Management - Achievements and Work Still to Be Done. Live from ConSoil in Bordeaux, France, October 4, 2005. The webcast is sponsored by the European Soil and Groundwater Remediation Information System (EUGRIS), U.S. Environmental Protection Agency, the Network for Industrially Contaminated Land in Europe (NICOLE), and ConSoil 2005. This webcast includes two panels with four speakers each. Panel 1 is titled Shifts in Contaminated Site Management in the EU and US and offers insight to changes in the US and Europe to contaminated site management over the past 25 years, and insight into future directions. Panel 2 is titled, From Site Screening to Redevelopment, Progress in Every Step. Panelists

will discuss technical advances and policy shifts that allowed them in the field of contaminated site management go hand in hand and feed off each other. Presentations in this panel review major breakthroughs and their value going forward. Registration is required for each panel at <http://www.cluin.org/studio/consoil/>.

Internet Seminars

NIEHS DNAPLs - Above-Ground (Ex situ) Chemical/Physical Remediation Methods - September 7. This continues our series of web-based seminars focusing on issues for DNAPL-contaminated hazardous waste sites. This second event will feature Dr. Chang Yul Cha, Cha Corporation, and Eric Betterton, University of Arizona. Dr. Cha will discuss his recent NIEHS SBIR-supported development of Microwave Technology for Superfund Site Remediation. Dr. Eric Betterton, of the University of Arizona, will present his work investigating the difficulties associated with the destruction or final disposal of chlorinated solvents that are traditionally recovered from contaminated sites via pump and treat or soil vapor extraction methods. For more information and to register, see <http://clu-in.org/studio> .

EPA Jump-Starting Ecological Restoration - September 8. The goal of this seminar is to examine the relevance and importance of ecological restoration in the Superfund program and to discuss implementation strategies and specific techniques to speed the recovery of disturbed and contaminated land. Participants will learn why ecological restoration is important to the Superfund program; gain an understanding of the relationship between land disturbance, functioning ecological systems, and how restoration projects are managed; and learn various techniques. The seminar also will address in-situ remediation of metal contaminated soils. In short, participants can expect to learn how to jump-start restoration at a site. For more information and to register, see <http://clu-in.org/studio> .

ITRC What's New with In Situ Chemical Oxidation? - September 20.

This seminar presents updated guidance and technology advancement information for In Situ Chemical Oxidation. Topics include a regulatory discussion related to ISCO implementation; details on the chemistry behind ISCO technology; considerations for system design and application, including health and safety; and performance evaluation information. The course is based on the ITRC's In Situ Chemical Oxidation of Contaminated Soil and Groundwater, Second Edition (ISCO-2, 2005), with

sections on technology overview and applicability, remedial investigations, safety concerns, regulatory concerns, injection design, monitoring, stakeholder concerns, and case studies. For more information and to register, see <http://www.itrcweb.org> Or

<http://clu-in.org/studio> .

ITRC Characterization and Remediation of Soils at Closed Small Arms Firing Ranges - September 22. This seminar introduces the participants to the various physical (including hydraulic), chemical, and biochemical mechanisms available to treat or stabilize SAFRs after some unique characterization challenges are overcome. This training is based on the ITRC document entitled: Technical & Regulatory Guidance Document for Small Arms Firing Range Remediation Technologies. For more information and to register, see <http://www.itrcweb.org> Or

<http://clu-in.org/studio>.

ITRC Permeable Reactive Barriers: Lessons Learned and New Directions - October 6. This training presents updated information regarding new developments, innovative approaches, and lessons learned in the application of PRBs to treat a variety of groundwater contaminants. The information will be presented by reviewing the approaches and results at several sites where PRBs have been deployed. The training is based on the ITRC guidance document titled Permeable Reactive Barriers: Lessons Learned / New Directions (PRB-4, 2005). For more information and to register, see <http://www.itrcweb.org> Or <http://clu-in.org/studio>.

Documents and Web Resources

Abstracts of Remediation Case Studies, Volume 9 (EPA 542-R-05-021). This new report, published by the Federal Remediation Technologies Roundtable (FRTR), is a collection of recently published abstracts summarizing 13 cost and performance case studies on the use of remediation technologies at contaminated sites. The case studies include several different technologies for treating soil or groundwater contamination or both, with 7 reports addressing soil cleanup and 8 reports concerning groundwater (July 2005, 81 pages). View or download at <http://clu-in.org/techpubs.htm>. For hard copies, call (800) 490-9198 or fax to (513) 489-8695.

Comparison of Diffusion- and Pumped-Sampling Methods to Monitor Volatile Organic Compounds in Ground Water, Massachusetts Military Reservation, Cape Cod, Massachusetts, July 1999-December 2002 (SIR 2005-5010). This study was done cooperatively by the U.S. Geological Survey (USGS) and the

Air Force Center for Environmental Excellence (AFCEE). It evaluates the applicability of diffusion sampling for monitoring VOC concentrations in ground water collected from monitoring wells. The applicability of the diffusion-sampling method is measured by the utility of the method to detect concentrations of VOCs similar to those obtained by the pumped-sampling method. VOC concentrations in samples collected by the diffusion- and pumped-sampling methods are compared with each other; and in cases where the concentrations did not match, bias in the diffusion-sampling method is assessed. Comparisons are made between well, diffusion-sampler, aquifer, and geochemical characteristics, and the degree of agreement of the sampling methods. These comparisons add to the current understanding of diffusion samplers by examining how the samplers work in wells with short screens (2-5 ft long) (Spring 2005, 60 pages). View or download at <http://pubs.usgs.gov/sir/2005/5010/> .

The Inventory of Sources and Environmental Releases of Dioxin-Like Compounds in the United States: The Year 2000 Update (External Review Draft, EPA/600/p-03/002A). This report, published by the U.S. EPA, is to present the most current inventory of sources and environmental releases of dioxin-like compounds in the United States. This is a comprehensive overview of what is known about sources that release dioxin into the air, land and water of the United States. It is a listing of sources by category combined with estimates of releases of dioxin to the environment from these sources. Estimates of environmental releases are associated with three calendar years: 1987, 1995 and 2000. This provides a point of reference for observing any changes in the amount of dioxin that is released to the environment with the passage of time (March 2005). View or download in sections at <http://www.epa.gov/ncea/pdfs/dioxin/2k-update/> .

UST Systems: Inspecting and Maintaining Sumps and Spill Buckets (EPA 510-R-05-001). This report was published by the EPA Office of Underground Storage Tanks. It covers recommended inspection guidelines and best management practices for sumps associated with your UST system. This manual will help you identify and inspect the sumps associated with an UST system, including the equipment in sumps. It will explain some simple steps you can take to maintain sumps and the equipment in sumps, as well as identify potential problems. The report also provides tips for fixing common problems before they cause a release to the environment (May 2005, 20 pages). View or download at <http://www.epa.gov/swrust1/pubs/sumpman1.htm> .

Updated Contaminant Focus Area on CLU-IN. Comprehensive revisions to the arsenic, chromium VI, and perchlorate sections of Contaminant Focus have recently been posted. The Contaminant Focus area bundles information associated with the cleanup of individual contaminants and contaminant groups. This information is presented in categories such as Policy and Guidance, Chemistry and Behavior, Environmental Occurrence, Toxicology, Detection and Site Characterization, Treatment Technologies, and Conferences and Seminars. The TCE, PCBs, 1,4-Dioxane, and MTBE sections will be updated in the coming months. We welcome any suggestions you may have for new topics or additional resources.

Visit Contaminant Focus at <http://clu-in.org/contaminantfocus> .

Conferences and Symposia

Brownfields 2005: Reaching New Heights in Redevelopment, November 2-4, Denver. This event is sponsored by the U.S. EPA, the City of Denver and numerous cosponsors. This is the conference for everyone interested in brownfields [real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of contamination]. The program will include many different panel sessions, mobile workshops, Marketplace of Ideas roundtable discussions and individual poster presentations, the prestigious Phoenix Awards, and an extensive Exhibit Hall. A 1.5 day delivery of the Triad training course is scheduled immediately preceding the conference (October 31-Nov 1). For more information and to register, see <http://www.brownfields2005.org> .

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. Currently there are 103 conferences and courses featured. 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.