## U.S. ENVIRONMENTAL PROTECTION AGENCY



# TechDirect, January 1, 2011

Happy Holidays and may you have a prosperous new year! Welcome to TechDirect! Since the December 1 message, TechDirect gained 314 new subscribers for a total of 36,786. If you feel the service is valuable, please share TechDirect with your colleagues. Anyone interested in subscribing may do so on CLU-IN at <u>http://clu-in.org/techdirect</u>. 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.

TechDirect's purpose 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.

#### > Upcoming Live Internet Seminars

Your Role in Green Remediation Implementation and Case Studies in Green Remediation - This Year's Models and Tools (The 2010 NARPM Green Remediation Session Follow-on Webinars) - January 11 and February 10. In May 2010, EPA held its annual National Association of Remedial Project Managers (NARPM) meeting in Crystal City, VA, and for the third year in a row, one of our most attended sessions was on Green Remediation (GR). And like last year, we are offering those talks again to an online audience! EPA's definition of GR includes the practice of considering the environmental effects of a remediation strategy (i.e., the remedy selected and the implementation approach) early in the process, and incorporating options to maximize the net environmental benefit of the cleanup action. We've got more case studies and maturing policy and guidance that we'd like to share with an online audience. EPA's Technical Support Project, led by the Engineering Forum, has taken this full-day session and split it into three separate sessions that started in December. Each session is scheduled for two hours and will include policy and case studies, with time for Q&A along the way. For more information and to register for the two remaining sessions, see http://clu-in.org/live.

**ITRC Use and Measurement of Mass Flux and Mass Discharge - January 13, 2011, 11:00AM-1:15PM EST (16:00-18:15 GMT).** The ITRC technology overview, Use and Measurement of Mass Flux and Mass Discharge (MASSFLUX-1, 2010), and associated Internet-based training provide a description of the underlying concepts, potential applications, description of methods for measuring and calculating, and case studies of the uses of mass flux and mass discharge. This Technology Overview, and associated Internet-based training are intended to foster the appropriate understanding and application of mass flux and mass discharge estimates, and provide examples of use and analysis. The document and training assumes the participant has a general

understanding of hydrogeology, the movement of chemicals in porous media, remediation technologies, and the overall remedial process. For more information and to register, see <a href="http://www.itrcweb.org">http://www.itrcweb.org</a> Or <a href="http://www.itrcweb.org">http://cu-in.org/itre</a>.

Contaminated Sediments: New Tools and Approaches for in-situ Remediation -Session III - January 19, 2011, 2:00PM-4:00PM EST (19:00-21:00 GMT). This seminar will feature SRP grantees Dr. Richard G. Luthy and Dr. Charles A. Menzie. Dr. Luthy of the Woods Institute for the Environment at Stanford University will review recent experimental studies and modeling work that describe the up-take of hydrophobic organic contaminants by activated carbon amendment in sediment. The emphasis will be on practical aspects of testing and modeling to assess the suitability of sediment for in-place treatment of persistent organic contaminants by activated carbon sorbent. A comparison of different feeding traits of benthic organisms illustrates the degree of treatment needed to achieve a desired remedial success of sorbent amendment. Recent work with polysulfide rubber-modified activated carbon suggesting the potential to treat both mercury and hydrophobic organic compounds will also be presented. A follow-up by Dr. Charles Menzie of Exponent Inc. will discuss the efficacy of various methods of application of SediMite, a pelletized applomerate that consists of activated carbon, to contaminated sediments. He will focus on the effectiveness of delivery methods designed to minimally disturb sediment, yet deliver activated carbon amendment to the depth inhabited by biota. For more information and to register, see http://clu-in.org/live .

ITRC Use of Risk Assessment in Management of Contaminated Sites - January 25, 2011, 2:00PM-4:15PM EST (19:00-21:15 GMT). This training course identifies how various risk-based approaches and criteria are applied throughout the processes of screening, characterization, and management of contaminated sites. The training course and associated overview document, Use of Risk Assessment in Management of Contaminated Sites (RISK-2, 2008), are intended for risk assessors and project managers involved with the characterization, remediation, and/or re-use of sites. The training and overview document provide a valuable tool for federal and state regulatory agencies to demonstrate how site data collection, risk assessment, and risk management may be better integrated. For more information and to register, see <a href="http://www.itrcweb.org">http://www.itrcweb.org</a> Or <a href="http://www.itrcweb.org">http://

ITRC Phytotechnologies - January 27, 2011, 11:00AM-1:15PM EST (16:00-18:15 GMT). This training familiarizes participants with ITRC's Phytotechnology Technical and Regulatory Guidance and Decision Trees, Revised (Phyto-3, 2009). This document provides guidance for regulators who evaluate and make informed decisions on phytotechnology work plans and practitioners who have to evaluate any number of remedial alternatives at a given site. This document updates and replaces Phytoremediation Decision Tree (Phyto-1, 1999) and Phytotechnology Technical and Regulatory Guidance Document (Phyto-2, 2001). It has merged the concepts of both documents into a single document. This guidance includes new, and more importantly, practical information on the process and protocol for selecting and applying various phytotechnologies as remedial alternatives. For more information and to register, see <a href="http://www.itrcweb.org">http://www.itrcweb.org</a> OF <a href="http://www.it

#### > New Documents and Web Resources

Best Management Practices: Use of Systematic Project Planning Under a Triad Approach for Site Assessment and Cleanup (EPA 542-F-10-010). This technical publication is intended for environmental practitioners engaged in the investigation,

design, remediation, and closure or reuse of contaminated sites. Systematic Project Planning is a rigorous project planning process that lays a scientifically defensible foundation for proposed project activities. The bulletin discusses important considerations and contingencies that need to be addressed, and key activities to be performed during SPP at hazardous-waste sites. It guides the reader to think about SPP from early assessment, to evolving to a mature conceptual site model, to looking ahead at site re-use; and emphasizes up-front effort. Included are references where the reader can find tools and more detailed technical guidance (September 2010, 19 pages). View or download at <a href="http://clu-in.org/techpubs.htm">http://clu-in.org/techpubs.htm</a> .

**Technology News and Trends (EPA 542-N-10-006).** This issue highlights pilot-scale and demonstration projects to characterize and remediate sites with fractured bedrock contaminated by volatile organic compounds. Technologies applied in these projects involve subsurface injection of reactive amendments, in situ thermal conductive heating systems, and a range of geophysical tools to interpret a site's existing or emplaced network of hydraulic fractures (December 2010, 6 pages). View or download at <a href="http://clu-in.org/techpubs.htm">http://clu-in.org/techpubs.htm</a>.

**Dense Nonaqueous Phase Liquid Cleanup: Accomplishments at Twelve NPL Sites.** This document was prepared by Serena Ryan, a National Network for Environmental Management Studies (NNEMS) grantee under a fellowship from the U.S. EPA. The objective of this report is to provide an overview of remedial accomplishments at 12 current or former NPL sites affected by DNAPL and/or associated dissolved, vapor, or sorbed phase contamination. This report summarizes relevant information about these sites, including site sizes, contaminants, technologies, concentration level reductions, and current remedial status. A discussion of DNAPL characteristics, fate, and transport, as well as a summary of DNAPL remediation technologies, is also included. Case studies of individual sites are also provided (August 2010, 84 pages). View or download at <u>http://clu-in.org/techpubs.htm</u>.

**Draft Integrated Cleanup Initiative Implementation Plan.** The U.S. EPA is releasing for comment the draft Integrated Cleanup Initiative (ICI) Plan, a three-year strategy to focus on the agency's land cleanup programs. Sites covered under the cleanup programs include Superfund, federal facilities, brownfields, Resource Conservation and Recovery Act corrective action, and underground storage tank. The goal of the initiative is to accelerate cleanups of contaminated sites where possible, address a greater number of contaminated sites, and put the sites back into productive use while protecting human health and the environment. The initiative also seeks to provide communities with greater accountability and transparency on EPA's land cleanup programs. While many actions identified in the ICI are underway, EPA will use the comments received to further evaluate and refine the draft plan. EPA's draft plan will be available for public comment through January 10, 2011 (December 2010, 28 pages). View or download at http://www.epa.gov/oswer/integratedcleanup.htm .

Interim Final Guidance, Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites. This interim final guidance is intended to provide Superfund remedial, removal, brownfields, federal facilities, enforcement, underground storage tank (UST), and Resource Conservation and Recovery Act (RCRA) corrective action site managers and site attorneys an overview of EPA policies regarding roles and responsibilities of parties involved in various aspects of the Institutional Control (IC) life cycle. This guidance encourages stakeholder involvement early and often in all phases of ICs and includes stakeholder discussions on future land use and securing financial commitments to maintain and enforce ICs in the long term. EPA's Interim Final Guidance will be available for public comment through January 14, 2011 (November 2010, 36 pages). View or download at http://www.epa.gov/superfund/policy/ic/guide/. New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 13 resources, events, projects and news items were added to EUGRIS in December 1-24, 2010. These can be viewed at <a href="http://www.eugris.info/whatsnew.asp">http://www.eugris.info/whatsnew.asp</a>. Then select the appropriate month and year for the updates in which you are interested. The following resources were posted on EUGRIS:

NICOLE Sustainable Remediation Road Map (2010). NICOLE has recognised that a more comprehensive approach to remediation projects should incorporate sustainability (encompassing environmental, social and economic elements) alongside effective risk management. The Road Map sets out NICOLE's views on how to incorporate sustainability principles in remediation projects. View or download at http://www.nicole.org/documents/stream.aspx?o=2&fn=NICOLE\_Docs\_279.pdf .

Current State and Future Prospects of Remedial Soil Protection (2010). Overview about remedial soil protection in Germany. View or download at <a href="http://www.umweltdaten.de/publikationen/fpdf-l/4041.pdf">http://www.umweltdaten.de/publikationen/fpdf-l/4041.pdf</a> .

### > Conferences and Symposia

Call for Abstracts!! 2011 Environmental Monitoring and Data Quality Workshop, Arlington, VA, March 28-April 1, 2011. The 8th annual DoD Environmental Monitoring & Data Quality Workshop includes technical training sessions, technical presentations, a plenary session featuring distinguished speakers, a Q&A forum, component meetings, a poster session, an update on the DoD Environmental Laboratory Accreditation Program (ELAP), and networking opportunities with members of the environmental community. This workshop is open to all interested environmental professionals involved with DoD sites or projects including representatives from the DoD services, other federal agencies, state, local, and tribal governments, academia, and the private sector. All abstracts for technical presentations and posters must be submitted via email by January 14, 2011. For more information and to submit an abstract, see <a href="http://www.regonline.com/2011emdqworkshop">http://www.regonline.com/2011emdqworkshop</a>.

Vapor Intrusion Pathway: A Practical Guideline ITRC 2-day Classroom Training, San Antonio, TX, January 20-21, 2011. Led by internationally recognized experts, this 2-day ITRC classroom training will enable you to learn the latest strategies to conduct site screening and investigations; determine what tools are appropriate to collect quality data and evaluate the results; apply multiple lines of evidence to ensure quality decision-making; build solutions for VI issues through understanding of mitigation options; and network with environmental professionals dealing with this interdisciplinary and complex pathway. Interactive learning with hands-on exhibits, classroom exercises, and frequent Q&A sessions will reinforce these course objectives and contribute to a practical understanding of this difficult pathway. For more information and to register, see <a href="http://www.itrcweb.org/crt.asp">http://www.itrcweb.org/crt.asp</a>.

**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 28 conferences and courses featured. We invite sponsors to input information on their events at <a href="http://clu-in.org/courses">http://clu-in.org/courses</a> . 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)

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