## TechDirect, October 1, 2009

Welcome to TechDirect! Since the September 1 message, TechDirect gained 332 new subscribers for a total of 34,327. 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

ITRC Use of Risk Assessment in Management of Contaminated Sites - October 6, 2009, 2:00PM-4:15PM EDT (18:00-20:15 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> Of <a href="http://www.itrcweb.org">http://w

Green Remediation: Applying Strategies in the Field - October 8, November 12, and December 15. In June 2009, EPA held its annual National Association of Remedial Project Managers meeting in Atlanta, GA, and for the second 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. Since last year, experience has increased and policies are more developed, and this is a chance to share that with an online audience. EPA's Technical Support Project, led by the Engineering Forum, has taken this full-day session and will hold one session per month for 3 months starting in October. Each session will last no longer than 2 hours. For more information and to register, see <a href="http://du-in.org/live">http://du-in.org/live</a>.

**ITRC Performance-based Environmental Management - October 15, 2009, 11:00AM-1:15PM EDT (15:00-17:15 GMT).** Performance-based environmental management (PBEM) is a strategic, goal-oriented methodology that is implemented through effective planning and decision logic to reach a desired end state of site cleanup. The goal of PBEM is to be protective of human health and the environment while efficiently implementing appropriate streamlined cleanup processes. This ITRC training presents an overview of what PBEM is, explains how and when to implement it, and describes the issues that regulators are concerned about throughout PBEM's implementation. Case studies will be presented to illustrate successful PBEM projects. The course is valuable not only because PBEM is being proposed and implemented at many federal and private sites throughout the country, but also because PBEM provides an opportunity to enhance all site remediation. For more information and to register, see <a href="http://www.itrcweb.org">http://www.itrcweb.org</a> Or <a href="http://www.itrc

**ITRC LNAPL Training Parts 1 and 2 - October 20 and 22, 2009.** Light non-aqueous phase liquids (LNAPLs) are organic liquids such as gasoline, diesel, and other petroleum hydrocarbon products that are immiscible with water and less dense than water. LNAPLs are important because they are present in the subsurface at thousands of remediation sites across the country, and are frequently the focus of assessment and remediation efforts. Part 1 of this training course explains how LNAPLs behave in the subsurface and examines what controls their behavior. Part 1 also explains what LNAPL data can tell you about the LNAPL and site conditions. Relevant and practical examples are used to illustrate key concepts. Part 2 addresses LNAPL characterization and site conceptual model development as well as LNAPL recovery evaluation and remedial considerations. Specifically, Part 2 discusses key LNAPL and site data, when and why those data may be important, and how to get those data. Part 2 also discusses how to evaluate LNAPL recoverability. 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://www.itrcweb.org</a> Or <a href="http://www.itrcweb.org">http://www.itrcweb.org</a> Or <a href="http://www.itrcweb.org">http://www.itrcweb.org</a> Or <a href="http://www.itrcweb.org">http://www.itrcweb.org</a> OF <a href="http://www.itrcweb.org">http://wwww.itrcweb.org</a> OF <a href="http://ww

Superfund Redevelopment Initiative (SRI) 10th Anniversary: Celebrating Success - October 22, 2009, 2:00PM-4:00PM EDT (18:00-20:00 GMT). EPA's Superfund Redevelopment Initiative (SRI) celebrates its 10-year Anniversary in 2009! To mark this event, EPA is hosting a diverse series of seminars featuring Superfund site reuse success stories. This and successive webinars will present reuse case studies on multi-use, renewable energy, ecological reuse, and commercial reuse. For more information and to register, see <a href="http://clu-in.org/sri">http://clu-in.org/sri</a>.

ITRC Quality Consideration for Munitions Response - November 3, 2009, 2:00PM-4:15PM EST (19:00-21:15 GMT). This training introduces state regulators, environmental consultants, site owners, and community stakeholders to Quality Considerations for Munitions Response Projects (UXO-5, 2008), created by the ITRC's Unexploded Ordnance (UXO) Team. In this document, quality is defined as "conformance to requirements." To manage quality, the quality requirements of the project must first be understood. Requirements must be precisely stated and clearly understood by everyone involved. A plan is then put in place to meet those requirements. The UXO Team emphasizes taking a whole-system approach to designing, planning and managing a munitions response (MR) project to optimize quality. This training course is intended for an intermediate audience and assumes a basic understanding of specialized processes associated with MR projects. For more information and to register, see http://www.itrcweb.org or http://clu-in.org/studio.

**ITRC Enhanced Attenuation of Chlorinated Organics: A Site Management Tool -November 5, 2009, 11:00AM-1:15PM EST (16:00-18:15 GMT).** This training on the ITRC Technical and Regulatory Guidance for Enhanced Attenuation: Chlorinated Organics (EACO-1, 2008) describes the transition (the bridge) between aggressive remedial actions and MNA and vise versa. Enhanced attenuation (EA) is the application of technologies that minimize energy input and are sustainable in order to reduce contaminant loading and/or increase the attenuation capacity of a contaminated plume to progress sites towards established remedial objectives. Contaminant loading and attenuation capacity are fundamental to sound decisions for remediation of groundwater contamination. This training explains how a decision framework which, when followed, allows for a smooth transition between more aggressive remedial technologies to sustainable remedial alternatives and eventually to Monitored Natural Attenuation. This training will demonstrate how this decision framework allows regulators and practitioners to integrate Enhanced Attenuation into the remedial decision process. For more information and to register, see <a href="http://www.itrcweb.org">http://www.itrcweb.org</a> Or <a href="http://w

## > New Documents and Web Resources

Principles for Greener Cleanups and Superfund Green Remediation Strategy. The U.S. EPA has developed Principles for Greener Cleanups with the goal of reducing the demands placed on the environment during cleanup of contaminated land, while continuing to protect human health and the environment. Among other things, the Principles call for EPA's cleanup programs to utilize greener approaches during any phase of site work, and establish the goal of evaluating cleanup actions more holistically to ensure protection of human health and the environment while reducing the environmental footprint of cleanup activities, when feasible. Cleanups that do not satisfy threshold requirements for protectiveness, or do not meet site specific cleanup objectives, do not qualify as a greener cleanup. The U.S. EPA Superfund Program is seeking public comment on an initial draft Superfund Green Remediation Strategy, which sets out its current plans to reduce energy use and enhance the environmental performance of remedial and non-time critical removal actions undertaken to address hazardous waste sites. In consideration of the Principles for Greener Cleanups, the Superfund Green Remediation Strategy is an initial effort to outline key actions and related activities that can be undertaken to promote green remediation. These action items fall into three major categories: policy and guidance development, resource development and program implementation, and program evaluation. The strategy also contains several recommendations including a call for EPA to implement a series of near-term program initiatives and to establish a baseline of Superfund energy usage. The public comment period is open through November 10, 2009. View the principles and strategy and provide comments at http://www.epa.gov/oswer/greencleanups .

**Updated Emerging Contaminants Fact Sheets.** The U.S. EPA Federal Facilities Restoration and Reuse Office (FFRRO) has developed fact sheets that address emerging contaminants of particular concern to the federal facility community. While these contaminants present a number of issues to the government, the private sector, and other organizations, these fact sheets are designed to provide basic information targeted to federal facility Remedial Project Managers and other federal facility site managers or field personnel. These fact sheets include current information on physical and chemical properties; environmental and health impacts; existing regulatory standards and cleanup levels; detection and treatment methods; and additional sources of information. View or download at <a href="http://clu-in.org/emergingcontaminants/">http://clu-in.org/emergingcontaminants/</a>.

**Technology News and Trends (EPA 542-N-09-005).** This issue highlights approaches to assessing, mitigating, and monitoring vapor intrusion (VI). Varied action levels for VI represent varying site-specific factors included in development of the action level (September 2009, 6 pages). View or download at <a href="http://clu-in.org/techpubs.htm">http://clu-in.org/techpubs.htm</a>.

The Use of Portable X-Ray Fluorescence (pXRF) in Screening High Risk

(allotment) Sites. In this CL:AIRE Feature Article, a European City Council shares their experience of screening the city's allotments for metal contamination using a hand-held pXRF (portable X-Ray Fluorescence) device. The article explains the procedures and thought processes the council underwent last year in conducting this investigation over a total of 535 allotments as part of regulatory obligations under Part IIa of the Environmental Protection Act. View or download at

http://www.claire.co.uk/index.php?option=com\_content&task=view&id=295&Itemid=28\_.

**EUGRIS Corner.** New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 43 resources, events projects and news items were added to EUGRIS 1 - 24 September, 2008. 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 reports were featured on EUGRIS:

Health Risk Perception and Environmental Problems: Findings from Ten Case Studies in the North West of England (2009). Today, organisations acknowledge the fundamental contribution that perception and communication have to risk management, and Public health practitioners are expected to take a holistic approach; and to understand the needs of the community; communicate with individuals and groups properly; and successfully involve the public in any relevant risk assessment. This work aims to provide public health specialists and practitioners with a simple tool to assist in the management of public concerns that arise in relation to potential environmental hazards. View or download at <a href="http://www.cph.org.uk/showPublication.aspr?publie=538">http://www.cph.org.uk/showPublication.aspr?publie=538</a>.

Contaminated Land Exposure Assessment (CLEA) Software and Dioxins

**Workbook (2009).** This software, CLEA software version 1.05, is a computer version of the CLEA model. It replaces CLEA software version 1.04 (which in turn replaced CLEA software version 1.03 beta, the evaluation version of this software). It also contains additional approaches, which may be useful for site-specific risk assessment that are not described within the CLEA report but are covered in some detail within the handbook. The handbook also provides a detailed user guide explaining how to operate all of the functions of the software. View or download from http://www.environment-agency.gov.uk/research/planning/33732.aspx .

## > Conferences and Symposia

Interstate Technology and Regulatory Council (ITRC) 2009 Fall Meeting Leading Environmental Change, Louisville, Kentucky, October 26-30, 2009. This meeting offers the opportunity for environmental professionals from across the country to network and collaborate on innovative approaches to solving environmental challenges. This week-long, conference-style meeting features plenary and breakout sessions, as well as ITRC Team meetings. Highlights include the connection between ITRC and emerging environmental issues and topics ITRC will address in 2010. Registration for this meeting is open to the over 500 current ITRC members in addition to outside parties who wish to engage with ITRC (registration fee applies). For more information and to register, see http://www.itrcweb.org/2009FallMeeting.asp.

Nanotechnology for Environmental Cleanup and Pollution Control, Burlingame, CA, November 3, 2009. The Symposium is a forum for leading nanotechnology researchers, practitioners, and policy and regulatory experts to share and express the latest research findings, case studies, and regulatory issues of nanotechnology. The focus of the Symposium will be on the application of nanotechnology for groundwater remediation, surface water treatment, and pollution control. For more information and to register, see <a href="http://www.grac.org/nanotech.asp">http://www.grac.org/nanotech.asp</a>.

**GreenRemediation, Copenhagen, Denmark, November 9-10, 2009.** Sustainable approaches for decision-making and soil remediation are more relevant than ever. The objective of the GreenRemediation Conference is to improve the awareness of green remediation solutions among environmentalists and decision makers. Main topics are Policy Drivers, Decision Support Tools and Sustainable Remediation Technologies. The program includes presentations from speakers from 9 countries around the world including organisations like NICOLE, SuRF UK, EU Common Forum on Contaminated

Land and the U.S. EPA. The conference is organized by the Danish EPA, Information Centre on Contaminated Sites - DANISH REGIONS, The Capital Region of Denmark and a number of private organisations. For more information and to register, see <a href="http://www.polytec.dk/GreenRemediation/">http://www.polytec.dk/GreenRemediation/</a>.

**Brownfields 2009 Conference, New Orleans, LA, November 16-18, 2009.** The Brownfields 2009 Conference will see stakeholders from community, planning, real estate, finance, and policy interests from across the nation converge to focus on brownfields cleanup, redevelopment, and a broad range of land revitalization solutions. Take advantage of learning and networking opportunities including first-rate educational sessions, valuable mobile workshops, dynamic plenary speakers, excellent organizational meetings, and more. For more information and to register, see http://www.brownfieldsconference.org .

Call for Abstracts!! 2010 Conference on Design and Construction Issues at Hazardous Waste Sites, Philadelphia, PA, April 21-23, 2010. This conference, to be hosted by the U.S. EPA and the U.S. Army Corps of Engineers, will facilitate information exchange among professionals from the private and public sectors regarding design and construction issues at hazardous waste sites including effective methods, remediation strategies, lessons learned, and application of technologies. Abstracts are due by November 13, 2009. For more information and to submit an abstract, see <a href="https://superfund.usace.army.mil/2010DCHWS">https://superfund.usace.army.mil/2010DCHWS</a> .

**Call for Abstracts!! Green Remediation: Environment - Energy - Economics, Amherst, MA, June 15-17, 2010.** The conference will address the full range of environmental, energy and economic aspects of green and sustainable remediation, taking into account the energy requirements of treatment systems, air emissions, water use requirements and impacts on water resources, land and ecosystem use and impacts, energy use and renewables, material consumption, reuse, and waste generation. The conference will provide a forum for scientists, regulators, managers, and other stakeholders from around the globe to interact and share new knowledge in both basic and applied research in green and sustainable remediation. Abstracts are encouraged in all areas of green and sustainable remediation, from basic to applied research, from case studies to demonstration projects. Abstracts for platform presentations are due by November 1, 2009. For more information and to submit an abstract, see <a href="http://www.umass.edu/tei/conferences/GreenRemediation/GreenCallForAbstracts.html">http://www.umass.edu/tei/conferences/GreenRemediation/GreenCallForAbstracts.html</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 73 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) 603-7191 or <u>heimerman.jeff@epa.gov</u>. Remember, you may subscribe, unsubscribe or change your subscription address at <u>http://clu-in.org/techdirect</u> at any time night or day.

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