



## TechDirect, November 1, 2009

Welcome to TechDirect! Since the October 1 message, TechDirect gained 260 new subscribers for a total of 34,358. 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.

### TIP's News Corner:

- [Courses & Conferences](#)
- [All Recent Additions](#)
- [All New Publications](#)

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.

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### > Upcoming Live Internet Seminars

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**Vapor Intrusion Site Issues - November 2, 2009 1:00PM-3:00PM EST (18:00-20:00 GMT).** This two-hour course based on an 8 hour class delivered at the OSC Readiness conference, teaches techniques for addressing sites that have vapor intrusion issues originating from contaminated ground water or soils. The migration and accumulation of chemical vapors in an indoor environment may pose a significant risk to human health. The course will include the following topics: Vapor intrusion overview including current guidance from EPA, Interstate Technology Regulatory Council (ITRC), states, and API;; Sampling procedures: Subslab, soil gas, indoor air, outdoor air; Ground water issues: Permanent wells, temporary wells, nested wells, and sampling; Chlorinated site: Behr Site Case Study; Petroleum site: Hartford Site Case Study; Health issues and screening levels. The course includes lectures, case studies, and question and answer sessions. For more information and to register, see <http://clu-in.org/live>.

**ITRC Quality Considerations for Munitions Response Projects - 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/live> .

**Elemental Mercury Basics and Response - November 4, 2009 1:00PM-3:00PM EST (18:00-20:00 GMT).** This course provides information on the misunderstood properties of mercury and insight into addressing issues related to sites contaminated with mercury: regulations, response, monitoring, health concerns, toxicology, and cleanup. The seminar focuses primarily on complex residential contamination sites. Participants will be able to download a detailed guidebook and checklist that will assist them through all phases of a cleanup at a residential site contaminated with mercury, from initial notification through final restoration. The seminar will discuss the complexities of issues associated with mercury cleanups, and the difficulties responders have encountered and successes they have achieved. Participants will also be able to download guidance and examples of mercury outreach and education materials that have been prepared over the years to better educate responders, health professionals, and the public. For more information and to register, see <http://www.itrcweb.org> or <http://clu-in.org/live> .

**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 vice 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 <http://www.itrcweb.org> or <http://clu-in.org/live> .

**ITRC Phytotechnologies - November 10, 2009, 2:00PM-4:15PM EST (19:00-21:15 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 <http://www.itrcweb.org> or <http://clu-in.org/live> .

**Green Remediation: Applying Strategies in the Field - 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 has held one session on

October 8th. The other two sessions will follow on November 12th and December 15th. For more information and to register, see <http://clu-in.org/live> .

**SERDP Funding Opportunities - November 13, 2009, 1:00PM-2:30PM EST (18:00-19:30 GMT).** This seminar will provide a summary of the Strategic Environmental Research and Development Program (SERDP) development and opportunities for interested researchers to conduct research and development. This "how to play" briefing will offer essential information for those who wish to understand new funding opportunities within SERDP. The FY11 SERDP solicitation will be released in late October 2009 and attendees may use this time to ask general questions about the solicitation. For more information and to register, see <http://clu-in.org/live> .

**Introduction to CERCLA 103, EPCRA, and CAA 112(r) - November 16, 2009 1:00PM-3:00PM EST (18:00-20:00 GMT).** This class will focus on regulatory and legislative requirements related to emergency notification for hazardous chemical releases, community emergency planning, and chemical accident prevention. The course provides an overview in the requirements of section 103 of the Comprehensive Environmental Response, Compensation, and Liabilities Act (CERCLA), the Emergency Planning and Community Right-to-Know Act (EPCRA), and section 112(r) (the EPA Risk Management Program and Clean Air Act General Duty Clause) of the Clean Air Act (CAA). For more information and to register, see <http://clu-in.org/live> .

**ITRC Survey of Munitions Response Technologies - November 19, 2009, 11:00AM-1:00PM EST (16:00-18:00 GMT).** This training introduces Survey of Munitions Response Technologies (UXO-4, 2006), created by the ITRC's Unexploded Ordinance Team in partnership with the Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program (ESTCP). The document provides an overview of the current status of commercially-available technologies in common usage for munitions response actions, and, where possible, assess and quantify their performance capabilities. This training course is intended for an intermediate to advanced audience and assumes an understanding of technologies and phases of munitions response. This training course focuses on the major take-home conclusions of the Survey of Munitions Response Technologies (UXO-4, 2006) and provides an understanding of the performance capabilities of available technologies under real-world site conditions. For more information and to register, see <http://www.itrcweb.org> or <http://clu-in.org/live> .

**Alternative Countermeasures for Oil Spills; a Primer on NCP Product Schedule - November 23, 2009 1:00PM-3:00PM EST (18:00-20:00 GMT).** this webinar will be a condensed version of the ACM class scheduled to be presented as an 8-hour workshop at the 2010 OSC Readiness Training Program. This webinar will stress the basics of how OSCs can use the NCP Subpart J Product Schedule in their daily spill planning and response work with emphasis on how to deal with product vendors before and during a spill response. Some discussion of the new U.S. Coast Guard dispersant capabilities rule will be included. For more information and to register, see <http://www.itrcweb.org> or <http://clu-in.org/live> .

**ITRC LNAPL Training Parts 1 and 2 - December 3 and 10, 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 <http://www.itrcweb.org> or <http://clu-in.org/live>.

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## > New Documents and Web Resources

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**New Cost and Performance Information on Cleanup Technologies.** The Federal Remediation Technologies Roundtable (FRTR) recently announced the release of 23 new case study and technology assessment reports. These reports document the cost, performance, and lessons learned in implementing a wide range of hazardous waste site cleanup technologies in the field, ranging from large-scale demonstrations to full-scale applications. The remediation case studies and general technology assessment reports and other related FRTR information are available at <http://www.frtr.gov>. Visitors to the Web site can search these reports by remedial technology, optimization method, and other criteria. With these new additions, close to 800 reports are now available in four areas - over 400 cost and performance case study reports describing the use of remediation technologies; over 185 reports describing the use of site characterization and monitoring technologies; more than 125 case studies describing long-term monitoring/optimization of remediation technologies; and more than 85 reports describing the assessments of remediation technologies at hazardous waste sites. View case study and technology assessment reports at <http://www.frtr.gov/costperf.htm>.

**Federal Remediation Technologies Roundtable Annual Summary of Activities: September 2009 (EPA-542-F-09-001).** This fact sheet, produced by the FRTR, summarizes activities of member agencies' remediation programs and describes recently published cost and performance case studies and reports. The 2009 fact sheet also highlights FRTR member agencies' Green Remediation activities, which was the focus of the December 2008 FRTR meeting. A summary of that meeting and the presentations on Green Remediation are posted on the FRTR Web site. Recently, EPA's contaminated site cleanup programs have released the Principles for Greener Cleanups (Principles) to improve the decision-making process for cleanup activities in a way that ensures protection of human health and the environment and reduces adverse environmental impacts on communities (<http://www.epa.gov/oswer/greencleanups>). In consideration of these Principles, EPA's Superfund Program, one of five major EPA cleanup programs, has released a Green Remediation strategy outlining major activities to reduce the environmental footprint of its cleanups (<http://www.epa.gov/superfund/greenremediation>). View or download the FRTR fact sheet at <http://www.frtr.gov/publib.htm>. For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

**EPA Plans to Develop Interim Preliminary Remediation Goals for Dioxin in Soil.**

The U.S. Environmental Protection Agency is seeking public comment on a plan to develop interim preliminary remediation goals (PRGs) for dioxin in soil at Superfund sites. The plan includes a review of current dioxin cleanup guidance that has been established by the EPA, states and other countries, including the latest fully peer-reviewed dioxin toxicity assessments. EPA will release the draft interim PRGs for public comment in December 2009, and anticipates issuing the final interim PRGs in June 2010. EPA is currently undertaking a reassessment of dioxin, the results of which are expected to be released by the end of 2010. View plan and provide comments at <http://www.epa.gov/superfund/policy/remedy/sfremedy/remedies/dioxininterimplan.html>.

**Ground Water Issue: Assessment and Delineation of DNAPL Source Zones at**

**Hazardous Waste Sites (EPA 600-R-09-119).** This document provides a framework for assessing the presence of dense non-aqueous phase liquid (DNAPL) and delineating the spatial extent of the DNAPL source zone, a priority at many sites due to the increasing use of in situ remediation technologies. The described strategy expands the applicability of the document to include both unconsolidated deposits and fractured bedrock, and encourage an iterative, flexible site investigation approach (September 2009, 20 pages). View or download at <http://www.epa.gov/ada/download/issue/600r09119.pdf> .

**Voluntary Guidelines for Methamphetamine Laboratory Cleanup**

**(EPA-530-R-08-008).** EPA has issued a document providing state and local governments technical guidance for methamphetamine lab cleanups. The document is based on an extensive review of the best available science and practices for cleanup. Other issues included are best practices for specific items or materials, sampling procedures, and technical resources. The Methamphetamine Remediation Research Act of 2007 required EPA to develop these guidelines, based on the best currently available knowledge in the field of meth lab remediation. EPA reviewed state guidance and regulations to develop these voluntary guidelines. In addition, this document has received extensive review and refinement from a broad array of stakeholders as well as feedback from nationally recognized experts in meth lab remediation (August 2009, 48 pages). View or download at [http://www.epa.gov/oem/meth\\_lab\\_guidelines.pdf](http://www.epa.gov/oem/meth_lab_guidelines.pdf) .

**Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities - Unified Guidance (EPA 530-R-09-007).**

The Unified Guidance provides a suggested framework and recommendations for the statistical analysis of groundwater monitoring data at Resource Conservation and Recovery Act (RCRA) facility units subject to 40 CFR Parts 264 and 265 and 40 CFR Part 258, to determine whether groundwater has been impacted by a hazardous constituent release. Specific statistical methods are identified in the RCRA regulations, but their application is not described in any detail. The Unified Guidance provides examples and background information that will aid in successfully conducting the required statistical analyses. The Unified Guidance draws upon the experience gained in the last decade in implementing the RCRA Subtitle C and D groundwater monitoring programs and new research that has emerged since earlier Agency guidance. It updates and replaces the earlier 1989 Interim Final Guidance and the July 1992 Addendum (March 2009, 884 pages). View or download at <http://www.epa.gov/osw/hazard/correctiveaction/resources/guidance/sitechar/gwstats/unified-guid.pdf> .

**EUGRIS Corner.** New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 12 resources, events projects and news items were added to EUGRIS 1 - 24 October, 2009. These can be viewed at <http://www.eugris.info/whatsnew.asp> . Then select the appropriate month and year for the updates in which you are interested. The following reports were featured on EUGRIS:

**Uncontaminated Topsoil A Technical Report on the Use of Both Naturally Occurring and Manufactured Uncontaminated Topsoil (2009).**

The Environment Agency currently considers that all uncontaminated topsoil, other than topsoil used where it was produced without needing further treatment, remains waste until the point at which it is fully recovered and is suitable for an agreed use without posing a risk to the environment. The project board asked a Technical Advisory Group (TAG) to consider the feasibility of producing a Quality Protocol that would enable the point of recovery of topsoil to be moved closer to the point of its production. This would mean a site-specific assessment would not be needed to demonstrate that the topsoil could be used on any site. This report is an output of the discussions held by the TAG between July 2007 and February 2008. View or download from [http://www.environment-agency.gov.uk/static/documents/Business/091014\\_Topsoil\\_TR\\_to\\_publish.pdf](http://www.environment-agency.gov.uk/static/documents/Business/091014_Topsoil_TR_to_publish.pdf) .

**The Nano4water Cluster Website (2009).** This is a coalition of research projects, funded by the European Commission following a Joint Call on nanotechnologies for

water treatment (FP7-ENV-NMP-2008-2). The aim of this action is to support research and technological development in the field of water treatment by applying developed or adapted nano-engineered materials to promising separation, purification and detoxification technologies. For more information, visit <http://nano4water.eu/index.php?id=34> .

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## > Conferences and Symposia

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**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 <http://www.polytec.dk/GreenRemediation/> .

**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> .

**Partners in Environmental Technology Technical Symposium & Workshop, Washington, DC, December 1-3, 2009.** Sponsored by the Strategic Environmental Research and Development Program (SERDP), DoD's environmental science and technology program, and the Environmental Security Technology Certification Program (ESTCP), this event will provide attendees: (1) plenary session speakers offering key insights into environmental issues; (2) concurrent technical sessions and short courses covering the latest in environmental research results and technical innovations as well as unique training opportunities; (3) poster sessions featuring more than 400 technical posters; (4) exhibit booths offering information about funding opportunities in related research programs; (5) networking opportunities with more than 1,000 environmental professionals from the government, academic, and private sectors; and (6) a session providing a summary of SERDP and ESTCP funding opportunities to conduct research and demonstrations. For more information and to register, see

<http://www.serdp-estcp.org/symposium2009/> .

**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 <https://superfund.usace.army.mil/2010DCHWS> .

**Call for Abstracts!! ConSoil 2010 - Management of Soil, Groundwater, and Sediment Salzburg, Austria, September 22-24, 2010.** The 11th edition will continue the successful programme of the ConSoil conferences. The themes of ConSoil 2010 reflect the latest topics in the management of soil, groundwater and sediment. ConSoil is the leading platform to exchange news and knowledge between:scientists, policy makers, consultants / service providers, administrators, site owners / river basin , managers, remediation companies / contractors, banking and insurance companies. The conference language will be English. Abstracts are due by December 21, 2009. For more information and to submit an abstract, see <http://www.consoil.de> .

**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 95 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](mailto:heimerman.jeff@epa.gov). Remember, you may subscribe, unsubscribe or change your subscription address at <http://clu-in.org/techdirect> at any time night or day.

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