



## TechDirect, April 1, 2014

Welcome to TechDirect! Since the March 1 message, TechDirect gained 165 new subscribers for a total of 36,939. 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.



TechDirect's purpose is to identify new technical, policy and guidance resources related to the assessment and remediation of contaminated soil, sediments and groundwater.



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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**CEC Hazard Ranking System (HRS) Webinar Series (Sessions 6-9) - April 1, 3, 8, 10.** The CERCLA Education Center (CEC) is offering another Hazard Ranking System Webinar Series in March and April 2014 and has expanded the course from six to nine modules. The HRS webinar series is an intermediate-level course designed for personnel who are required to compile, draft and review preliminary assessments (PA), site inspections (SI), and HRS documentation records/packages submitted for proposal to the National Priorities List (NPL). **The course is intended for EPA Regional, state, tribal and contractor personnel, who support EPA in the Superfund site assessment/NPL listing process.** This course assumes a basic understanding of the HRS and its context within the site assessment process. The training course is intended to enable staff to prepare HRS packages for the NPL and to plan PAs and SIs to address future HRS scoring issues. This training course provides details of the structure and application of the revised HRS and information related to the preparation of HRS packages, including HRS scoresheets, documentation records and site summaries. The course will incorporate an interactive case study for each of the four pathways to provide practical application of the HRS. The webinar series consists of nine two- to three-hour sessions during March and April 2014. In order to receive credit for taking the course, participants must participate in each session. If you are unable to make one of the sessions, archived versions will be made available at [www.clu-in.org](http://www.clu-in.org) that you can take to receive credit for the missed live session. In order to receive credit for a missed session, you must complete the missed session within 2 months of the originally scheduled date and submit an evaluation form from that archived module. For more information and to register, see <http://clu-in.org/live>.

**Sustainable Remediation - April 15, 2014, 10:00AM-11:00AM EDT (14:00-15:00 GMT).** A pre-conference workshop for the Sustainable Remediation Conference 2014. The webinar aims to stimulate international exchange by providing a venue for

professionals and interested parties from multiple backgrounds to share experiences and perspectives on how contaminated sites can be remediated with a lower environmental footprint, and how their reuse can contribute to a more sustainable land development. The event builds on the Green Remediation Conference (Copenhagen, November 2009), the 2nd International Conference on Sustainable Remediation (Vienna, November 2012) and discussions alongside at ConSoil 2010 & 2013 as well as through virtual events hosted by U.S. EPA. For more information and to register, see <http://clu-in.org/live> .

**ITRC Environmental Molecular Diagnostics: New Tools for Better Decisions - April 17, 2014, 11:00AM-1:15PM EDT (15:00-17:15 GMT).** Environmental molecular diagnostics (EMDs) are a group of advanced and emerging analytical techniques used to analyze biological and chemical characteristics of environmental samples. Although EMDs have been used over the past 25 years in various scientific fields, particularly medical research and diagnostic fields, their application to environmental remediation management is relatively new and rapidly developing. The ITRC Environmental Molecular Diagnostics Fact Sheets (EMD-1, 2011), ITRC Environmental Molecular Diagnostics Technical and Regulatory Guidance (EMD-2, 2013) and this companion Internet-based training will foster the appropriate uses of EMDs and help regulators, consultants, site owners, and other stakeholders to better understand a site and to make decisions based on the results of EMD analyses. At the conclusion of the training, learners will be able to determine when and how to use the ITRC Environmental Molecular Diagnostics Technical and Regulatory Guidance (EMD-2, 2013); define when EMDs can cost-effectively augment traditional remediation data sets; and describe the utility of various types of EMDs during remediation activities. For more information and to register, see <http://www.itrcweb.org> or <http://clu-in.org/live> .

**PCBs in Schools, Sessions I and II - April 21 and 28.** This webinar series focuses on polychlorinated biphenyls (PCBs) in schools and features Superfund Research Program (SRP) grantees, as well as EPA and international partners. During the first session, EPA Regional Risk Assessment Coordinator Mark Maddaloni will give a brief overview of PCBs and the issue of PCBs in the environment, particularly in schools. Following his introduction, Kent Thomas, an EPA Research Physical Scientist, will discuss the sources and levels of PCBs in indoor environments, and Peter Thorne, a professor and SRP researcher at the University of Iowa, will discuss human exposure to PCBs, routes of exposure, and reducing exposures. During the second session, Gabrielle Ludewig, a professor and SRP researcher at the University of Iowa, will give an overview of the mechanisms of toxicity; Geniece Lehmann, an EPA Toxicologist, will discuss evaluating the noncancer health risks from inhaled PCBs; and Niklas Johansson of the Swedish Environmental Protection Agency will give an international perspective on PCB inventory, remediation, and outcomes. For more information and to register, see <http://clu-in.org/live> .

**ITRC Groundwater Statistics for Environmental Project Managers - April 22, 2014, 2:00PM-4:15PM EDT (18:00-20:15 GMT).** Statistical techniques may be used throughout the process of cleaning up contaminated groundwater. It is challenging for practitioners, who are not experts in statistics, to interpret, and use statistical techniques. ITRC developed the Technical and Regulatory Web-based Guidance on Groundwater Statistics and Monitoring Compliance (GSMC-1, 2013) and this associated training specifically for environmental project managers who review or use statistical calculations for reports, who make recommendations or decisions based on statistics, or who need to demonstrate compliance for groundwater projects. The training class will encourage and support project managers and others who are not statisticians to: use the ITRC Technical and Regulatory Web-based Guidance on Groundwater Statistics and Monitoring Compliance (GSMC-1, 2013) to make better decisions for projects; apply key aspects of the statistical approach to groundwater data; and answer common questions on background, compliance, trend analysis, and

monitoring optimization. ITRC's Technical and Regulatory Web-based Guidance on Groundwater Statistics and Monitoring Compliance (GSMC-1, 2013) and this associated training bring clarity to the planning, implementation, and communication of groundwater statistical methods and should lead to greater confidence and transparency in the use of groundwater statistics for site management. For more information and to register, see <http://www.itrcweb.org> or <http://clu-in.org/live>.

**Military Munitions Support Services - Munitions Constituents - April 24, 2014, 1:00PM-4:45PM EDT (17:00-20:45 GMT).** This is one of the monthly webinar sessions for the Military Munitions Support Services (M2S2) community. During this session, speakers will make presentations on a variety of topics relative to the latest developments on munitions constituents sampling and analysis. For more information and to register, see <http://clu-in.org/live>.

**ASTM Greener Cleanup Standard Guide: An Introduction - April 25, 2014, 1:00PM-3:00PM EDT (17:00-19:00 GMT).** ASTM International, Inc. released its Greener Cleanup Standard Guide E2893-13, (the "Guide") in November 2013. The Guide offers remediation professionals a clear, step-wise approach to implementing green remediation projects, and is the most direct guidance of its kind. This webinar is provided through a collaboration of the Guide's Development Team and U.S. EPA. The Guide sets forth a 5-step decision-making process to reduce the environmental footprint of contaminated site assessment and cleanup projects. Through this webinar, participants will gain insight on the genesis of this ASTM effort, potential applications of the Guide, the mechanics of actually using it at a project, and how stakeholders are considering its use. This two-hour Webinar includes a 30-minute closing Q&A session and will be instructed by John Simon, lead of the Development Team, as well as Carlos Pachon and Deb Goldblum of U.S. EPA. For more information and to register, see <http://clu-in.org/live>.

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## > New Documents and Web Resources

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**Reference Guide to Treatment Technologies for Mining-Influenced Water (EPA 542-R-14-001).** This report highlights select mining-influenced water (MIW) treatment technologies used or piloted as part of remediation efforts at mine sites. It is intended to provide information on treatment technologies for MIW to federal, state and local regulators, site owners and operators, consultants, and other stakeholders. Included in the report are short descriptions of treatment technologies and information on the contaminants treated, pre-treatment requirements, long-term maintenance needs, performance, and costs. Sample sites illustrate considerations associated with selecting a technology. Website links and sources for more information on each topic are also included (March 2014, 94 pages). View or download at <http://clu-in.org/techpubs.htm>.

**United Kingdom's Sustainable Remediation Forum (SuRF-UK) Bulletin 4.** The UK Sustainable Remediation Forum has released three new products that include a Sustainable Management Practices (SMP) document and the assessor's aid to preparing for sustainability assessment and carrying out a qualitative Tier 1 sustainability assessment. The three documents listed below are summarized in SuRF-UK Bulletin 4. To download Bulletin 4 or any of the SuRF-UK Phase 3 deliverables, please visit <http://www.clare.co.uk/surfuk> where the roadmap has interactive hyperlinks to the relevant sections.

- Sustainable Management Practices (SMPs) - This report and supporting excel spreadsheet is aligned to the SuRF-UK sustainability indicator categories so that

the same sustainability principles can underpin all aspects of land contamination management.

- **Project Framing Guidance** - This aims to help project managers and sustainability assessors to frame their approach for a sustainability assessment. It includes two groups of activities: the preparation for a sustainability assessment followed by the definition of the sustainability assessment. The guidance is provided in a formatted PDF slide set and is supported by a log book which can be used to collect summary information for each step of the framing procedure;
- **Tier 1- Qualitative Assessment** - This is an "entry level" sustainability assessment based on simple tables using qualitative categories. It provides a slide deck procedure to follow with a series of checklists to help ensure that the framing is adequate for the sustainability assessment required. It is prepared as a formatted PDF slide set and is supported by a log book which can be used to collect summary information for each step.

**Technology Innovation News Survey Corner.** The Technology Innovation News Survey contains market/commercialization information; reports on demonstrations, feasibility studies and research; and other news relevant to the hazardous waste community interested in technology development. Recent issues, complete archives, and subscription information is available at <http://clu-in.org/products/tins/> . The following resources were included in recent issues:

- Biochemical Reactors for Mining-Influenced Water
- Groundwater Statistics and Monitoring Compliance: Statistical Tools for the Project Life Cycle
- In Situ Treatment at PCB Contaminated Sediment Sites
- Perchlorate Destruction and Potable Water Production Using Membrane Biofilm Reduction: Final Report Addendum
- Metric Identification and Protocol Development for Characterizing DNAPL Source Zone Architecture and Associated Plume Response
- Computational and Experimental Investigation of Contaminant Plume Response to DNAPL Source Zone Architecture and Depletion in Porous and Fractured Media
- Remediation of Perfluorooctane Sulfonate in Contaminated Soils by Modified Clay Adsorbent: A Risk-Based Approach
- SERDP and ESTCP Workshop on Vapor Intrusion into Indoor Air from Contaminated Groundwater
- Monitored Natural Recovery at Contaminated Sediment Sites

**EUGRIS Corner.** New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 9 resources, events, projects and news items were added to EUGRIS in March 2014. 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 resource was posted on EUGRIS:

**IHPA POPs Newsletter No 26.** This publication covers news on science and technology for disposal of obsolete stocks and remediation of POPs contamination, which might be of interest for commercial exploitation both in developed and developing countries. Special emphasis will be given to bioremediation, non-combustion related technologies, which will benefit developing countries. View or download at <http://www.eugris.info/newsdownloads/IHPA-POPs-Newsletter-No26.pdf>

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## > Conferences and Symposia

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**LNAPLs: Science, Management, and Technology - ITRC 2-day Classroom Training offered three times in 2014: Kansas City, MO (April 1-2); Lexington, KY (June 3-4); and Richmond, VA (October 29-30).** Led by internationally recognized experts, this 2-day ITRC classroom training will enable you to develop and apply an LNAPL Conceptual Site Model (LCSM), understand and assess LNAPL subsurface behavior, develop and justify LNAPL remedial objectives including maximum extent practicable considerations, select appropriate LNAPL remedial technologies and measure progress, and use ITRC's science-based LNAPL guidance to efficiently move sites to closure. Interactive learning with classroom exercises and Q&A sessions will reinforce these course learning objectives. For local, state, and federal government; students; community stakeholders; and tribal representatives, ITRC has a limited number of scholarships (waiver of registration fee only) available. For more information and to register, see <http://www.itrcweb.org/training>.

**Registration Now Open!! 2014 TRI National Training Conference, Arlington, VA, May 7-9, 2014.** Online registration is now open for the 2014 National Training Conference on the Toxics Release Inventory (TRI) and Environmental Conditions in Communities, which will be held May 7-9, 2014 at the Hilton Crystal City in Arlington, VA. The Dillard University Deep South Center for Environmental Justice and the U.S. EPA are co-sponsoring the conference, which aims to promote greater participation, collaboration, community awareness, and public involvement regarding data on toxic chemical releases and related environmental information. This year's conference agenda includes sessions on current and emerging right-to-know issues, pollution prevention, community engagement, tools and data, and environmental public health from a diverse group of presenters. Conference participants will experience dynamic discussions, great networking opportunities, and a conference full of valuable information. For more information and to register, see <http://www2.epa.gov/toxics-release-inventory-tri-program/2014-national-training-conference>.

**Call for Abstracts Deadline Extended!! National Conference on Mining-Influenced Waters: Approaches for Characterization, Source Control and Treatment, Albuquerque, NM, August 12-14, 2014.** Sponsored by the U.S. EPA, this free conference will provide a forum for the exchange of scientific information on current and emerging approaches to assessing characterization, monitoring, source control, treatment and/or remediation on mining-influenced waters. The deadline for one-page abstracts for oral and poster presentations has been extended to April 11, 2014. Visit the conference website at <http://www.epa.gov/nrmrl/events/event08142014.html> for details. To be added to the conference email distribution list, please contact Alina Martin, Leidos, at [martinali@leidos.com](mailto:martinali@leidos.com) or 571-244-1582.

**Call for Abstracts!! 3rd International Conference on Sustainable Remediation 2014, Ferrara, Italy, September 17-19, 2014.** This conference will focus on five topics concerning sustainable remediation: conceptual framing; tools, metrics and indicators; greening remediation, eco-efficient technologies and opportunities from synergy; case studies; and stakeholder involvement and participative approaches. Abstracts for presentations and posters may be submitted electronically at <http://www.sustrem2014.com/mail.php> through April 25, 2014. For more information, visit <http://www.sustrem2014.com/>.

**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. 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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