Welcome to TechDirect! Since the October 1 message, TechDirect gained 215 new subscribers for a total of 32,859. 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 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

Open Position with EPA's Environmental Response Team in Las Vegas, Nevada. The Environmental Response Team (ERT) specializes in field support and technical expertise for EPA responses to oil spills, hazardous emergencies, potentially hazardous scenarios, environmental disasters and long-term remedial activities as well as detection and analytical method development for biological and chemical agents. The ERT physical scientist/industrial hygienist will provide emergency response, site clean-up and health and safety support for environmental emergencies across the US in support of the EPA emergency response, removal, remedial and homeland security programs. This involves providing on-site advice and technical support to EPA On-Scene Coordinators and Remedial Project Manager for site investigations, assessments, sampling and modeling projects. In addition, this person will provide routine and emergency site advice and technical support on field analytical tools. Travel may be over 10 days per month throughout the US in support of site clean-up, national technical workgroups and hazardous material and homeland security exercises. EPA is accepting applications beginning October 25, 2012. Specific job information and application instructions for the position are posted on the USAJOBS Internet site. Vacancy Announcement Number: CI-OSWR-MP-2013-0002. Applicants must be United States citizens. The U.S. EPA is an Equal Opportunity Employer. For more information and application instructions, see http://www.epa.gov/usa jobs/.

FY2013 Proposal Guidelines for Brownfields Area-Wide Planning Grants. These grants may be used by communities to facilitate community involvement in developing an area-wide plan for brownfields assessment, cleanup and subsequent reuse on a catalyst site and other high-priority brownfield sites. Each grant is funded up to $200,000 for two years. The proposal submission deadline is November 30, 2012. Grant guidelines & frequently asked questions are available at: http://www.epa.gov/brownfields/awpg.htm.

FY 2014 SERDP Solicitations Released. The Department of Defense's Strategic Environmental Research and Development Program (SERDP) is seeking environmental research and development proposals for funding beginning in Fiscal Year (FY) 2014 in response to the Core and SERDP Exploratory Development (SEED) solicitations. Projects will be selected through a competitive process. All Core pre-proposals from the Federal and non-Federal sectors are due Tuesday, January 8, 2013. SEED proposals are due Tuesday, March 12, 2013. Details for both Federal and non-Federal submissions are available on the web site under Funding Opportunities at http://www.serdp-estcp.org/Funding-Opportunities/SERDP-Solicitations.

> Upcoming Live Internet Seminars

Pollution Prevention Success Story: Partnering with Promotoras - November 2, 1:00PM-2:00PM EDT (17:00-18:00 GMT). This seminar will feature Denise Moreno Ramirez, MS, from the University of Arizona Superfund Research Program and will focus on working with promotoras to implement a successful pollution prevention program targeting small businesses in Tucson. Pollution prevention (P2) is an environmental management strategy that focuses on reducing or eliminating waste at the source, thus limiting the amount of future pollution requiring clean-up. Denise Moreno Ramirez, MS, Community Engagement Coordinator, will discuss a successful P2 case study targeting predominately Hispanic small businesses located in low-income areas in Tucson, Arizona. She will detail how a community health advocate (promotora) strategy provided comprehensive education and outreach to local small business owners. The contributions of delivering tailored information, developing targeted trainings, and fostering community leadership to successful reductions in waste and energy consumption and reduced worker exposures will be described. Such P2 interventions demonstrate the importance of this type of approach as a foundation for environmental protection as well as public health. For more information and to register, see http://bit.ly/p2scenario.

Arsenic - Health and Remediation Applications, Session 2 - Emerging Issues in Arsenic Exposure and Disease - November 5, 2:00PM-4:00PM EDT (19:00-21:00 GMT). This seminar is the second in a three part series that coincides with the Superfund Research Program's 25th Anniversary and the 10th Anniversary of the Superfund Research Program (SRP) Risk e-Learning webinars. The SRP chose this opportunity to highlight the Program's accomplishments in the area of arsenic research. Since its inception, the SRP has funded work to understand the consequences of exposure to arsenic at the molecular and population levels. Equally important, these researchers have developed unique and effective methods to detect arsenic in the environment and to minimize human exposure to arsenic from drinking water and food sources. For more information and to register, see http://bit.ly/arsenic.

ITRC Soil Sampling and Decision Making Using Incremental Sampling Methodology Parts 1 and 2 - November 6 and 13, 2012. This 2-part training course along with ITRC's web-based Incremental Sampling Methodology Technical and Regulatory Guidance Document (ISM-1, 2012) is intended to assist regulators and practitioners with the understanding the fundamental
The concepts of soil/contaminant heterogeneity, representative sampling, sampling/laboratory error and how ISM addresses these concepts. Through this training course you should learn: basic principles to improve soil sampling results, systematic planning steps important to ISM, how to determine ISM Decision Units (DU), the answers to common questions about ISM sampling design and data analysis, methods to collect and analyze ISM soil samples, the impact of laboratory processing on soil samples, and how to evaluate ISM data and make decisions. In addition this ISM training and guidance provides insight on when and how to apply ISM at a contaminated site, and will aid in developing or reviewing project documents incorporating ISM (e.g., work plans, sampling plans, reports). For more information and to register, see http://clu-in.org/live or http://www.itrcweb.org.

ITRC Green & Sustainable Remediation - November 27, 2012, 2:00PM-4:15PM EST (19:00-21:15 GMT). Many state and federal agencies are just beginning to assess and apply green and sustainable remediation (GSR) into their regulatory programs. This training provides background on GSR concepts, a scalable and flexible framework and metrics, tools and resources to conduct GSR evaluations on remedial projects. The training is based on the ITRC’s Technical & Regulatory Guidance Document: Green and Sustainable Remediation: A Practical Framework (GSR-2, 2011) as well as ITRC's Overview Document, Green and Sustainable Remediation: State of the Science and Practice (GSR-1, 2011). Beyond basic GSR principles and definitions, participants will learn the potential benefits of incorporating GSR into their projects; when and how to incorporate GSR within a project's life cycle; and how to perform a GSR evaluation using appropriate tools. In addition, a variety of case studies will demonstrate the application of GSR and the results. The training course provides an important primer for both organizations initiating GSR programs as well as those organizations seeking to incorporate GSR considerations into existing regulatory guidance. For more information and to register, see http://www.itrcweb.org or http://www.eugris.info/whatsnew.asp.

New Documents and Web Resources

Green Remediation Best Management Practices: Mining Sites (EPA 542-F-12-028). This fact sheet describes best management practices (BMPs) that can be used to reduce the environmental footprint of cleanup activities associated with common project components, cleanup phases, and implementation of remediation technologies. The BMPs for mining sites focus on strategies to minimize the environmental footprint of characterizing mining influenced water, using passive treatment systems, and installing soil covers and on approaches for integrating onsite renewable energy, reclaiming residual and natural resources, and integrating cleanup with site restoration and reuse plans (September 2012, 6 pages). View or download at http://www.epa.gov/oerrpage/superfund/cleanup/postconstruction/092012strategy.pdf.

Comparison of No-Purge and Pumped Sampling Methods for Monitoring Concentrations of Ordnance-Related Compounds in Groundwater, Camp Edwards, Massachusetts Military Reservation, Cape Cod, Massachusetts, September 2012. Field tests were conducted near the Impact Area at Camp Edwards on the Massachusetts Military Reservation (MMR), Cape Cod, Massachusetts, to determine the utility of no-purge groundwater sampling for monitoring concentrations of ordnance-related explosive compounds and perchlorate in the sand and gravel aquifer. The no-purge methods included (1) a diffusion sampler constructed of rigid porous polyethylene, (2) a diffusion sampler constructed of regenerated-cellulose membrane, and (3) a tubular grab sampler (bailer) constructed of polyethylene film. The evidence from the field tests supports the conclusion that diffusion sampling with the rigid porous polyethylene and regenerated-cellulose membranes and grab sampling with the polyethylene-film samplers provide comparable data on the concentrations of ordnance-related compounds in groundwater at the MMR to that obtained by low-flow pumped sampling. These sampling methods are useful methods for monitoring these compounds at the MMR and in similar hydrogeologic environments. View or download at http://www.epa.gov/s SolidateWater/assessment/09092012ComparisonOfSamplingMethods.pdf.

National Strategy to Expand Superfund Optimization Practices from Site Assessment to Site Completion (OSWER 9200.3-75). The purpose of this National Strategy (Strategy) is to expand and formalize optimization practices from site assessment to site completion as an operating business model for the Superfund Remedial Program (Remedial Program). This Strategy fulfills Action 10 of the Office of Solid Waste and Emergency Response (OSWER) Integrated Cleanup Initiative (ICI): "Opportunities to Provide Greater Support in Optimizing Cleanup of Superfund Sites" (September 2012, 19 pages). View or download at http://www.epa.gov/solidwaste/superfund/optimization/09092012Strategy.pdf.

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://itrc.epa.gov/products/bbs/ . The following were included in recent issues:

- In Situ Bioremediation of Energetic Compounds in Groundwater: ESTCP Cost and Performance Report
- Activated Biochar with Iron for In Situ Sequestration of Organics, Metals, and Carbon
- TNT Biodegradation by Natural Microbial Assemblages at Estuarine Frontal Boundaries
- Protocol for Tier 2 Evaluation of Vapor Intrusion at Corrective Action Sites
- Total Chromium and Hexavalent Chromium Occurrence Analysis
- State of the Science of Hexavalent Chromium in Drinking Water
- Evaluation of Consideration and Incorporation of Green and Sustainable Remediation (GSR) Practices in Army Environmental Remediation
- Monitored Natural Attenuation Technical Guidance [NJ DEP]

EUGRIS Corner. New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 23 resources, events, projects and news items were added to EUGRIS in October. 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:

UK Department for Environment, Food & Rural Affairs (Defra) Normal Background Concentrations (NBCs) of Contaminants in English Soils. Defra has published a report and technical guidance sheets on normal background levels of contaminants in English soils. This work was undertaken by the British Geological Survey (BGS) on behalf of Defra and was
commissioned to support the revised Statutory Guidance, which underpins the contaminated land regime in England. A final report, guidance sheets and supplementary information have been produced for seven contaminants, which give a good representation of contaminants produced from a variety of sources in the surface environment. These seven contaminants are: arsenic (As), benzo(a)pyrene (BaP), cadmium (Cd), copper (Cu), mercury (Hg), nickel (Ni) and lead (Pb). Download the final project report, technical guidance sheets and supplementary information at:

> Conferences and Symposia

The Resource Conservation and Recovery Act (RCRA): Cradle to Grave, November 16, 2012. What does it really mean to manage waste from “cradle to grave”? Join Pete Raack to learn how this important, cross-cutting regulatory program manages the toxic refuse of a great consumer society. The target audience for this live webinar presentation is federal employees. For more information and to register, see http://www.clu-in.org/neti121116

Registration Now Open!! AquaConSoil 2013, Barcelona, Spain, April 16-19, 2013. Formerly known as ConSoil, the AquaConSoil conference is Europe’s largest conference on applied knowledge of the management of soil-water systems. AquaConSoil is expecting 1,000 delegates from research institutes and universities, governmental and consultant organizations and from industry. AquaConSoil 2013 provides great opportunities for scientists, companies and policy makers to learn of the latest developments in science, technology and management aspects of contaminated site assessment and cleanup. For more information and to register, see http://www.aquaconfod.org/aquaConsoil2013&rl1069

Registration Now Open!! Brownfields 2013, Atlanta, GA, May 15-17, 2013. The conference, cosponsored by U.S. EPA, is the largest and most comprehensive event in the nation that focuses on issues important to community revitalization and the assessment, cleanup and redevelopment of contaminated properties. For more information and to register, see http://www.brownfieldsconference.org

Call for Presenters!! Applications of Nanotechnology for Safe and Sustainable Environmental Remediations, Hammond, LA, June 5-7, 2013. This is the first national workshop that provides an opportunity for representatives from the environmental remediation community, industry, academia, and government to: share their perspectives, pose questions, and develop ideas for design of good guidelines, selection criteria, and work practices to support safe and sustainable nano-enabled environmental remediation; become acquainted with other U.S. nanotechnology stakeholders, including vendors, transporters, and contractors of the remediation sites and communities; and share case studies of nano-enhanced clean up technologies, including selection criteria for alternative remediation strategies and methods, job planning, job tasks, and nanomaterial handling practices. Presenters should submit titles and abstracts by December 14, 2012. For more information and the call for presenters, see http://selu.edu/nano-4-rem-anssers

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://www.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/techdirect at any time night or day.