U.S. ENVIRONMENTAL PROTECTION AGENCY

TechDirect, June 1, 2019

Welcome to TechDirect! Since the May 1 message, TechDirect gained 57 new subscribers for a total of 39,040. If you feel the service is valuable, please share TechDirect with your colleagues. Anyone interested in subscribing may do so on CLU-IN at https://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.

> Upcoming Live Internet Seminars

Combined Analytical Services Contract (CASC) Pre-Solicitation Webinar - June 4, 2019, 1:00PM-2:30PM EDT (17:00-18:30 GMT). The US EPA Analytical Services Branch (ASB) and Office of Acquisition Solutions (OAS) will present their upcoming Combined Analytical Services Contract (CASC) procurement to industry. The session will be 90 minutes including a 60 minute presentation and 30 minutes for questions and answers. ASB and OAS presenters will highlight important information to review and consider prior to the release of the Request for Proposal (RFP). The RFP will include both Inorganic and Organic Methods (SuperFund Analytical Methods or SFAM) and High Resolution Superfund Methods (HRSM) Statements of Work (SOWs). A written Q&A will be available following the event. All interested laboratories are strongly encouraged to participate. Please note: this will be the only webinar prior to the release of the RFP. The upcoming analytical services Statements of Work (SOWs) are available at: https://www.epa.gov/clp/upcoming-analytical-services. This event has a target audience of environmental testing laboratories registered under NAICS code 541380-Testing laboratories. For more information and to register, see https://clu-in.org/live.

2019-2020 Small Business Innovation Research (SBIR) Phase I Solicitation Informational Webinar - June 6, 2019, 1:00PM-2:00PM EDT (17:00-18:00 GMT). Learn about EPA's SBIR program, this year's solicitation topics, and how to apply for an SBIR contract. EPA SBIR program experts will be available to answer questions during a question & answer (Q&A) session following the presentation. EPA's 2019-2020 SBIR Phase I solicitation is anticipated to open June 13, 2019. For more information and to register, see https://2019_sbir_solicitation_webinar.eventbrite.com.

NARPM Presents…Stand and Deliver Effective Presentations - June 11 and July 10, 2019, 1:00PM-3:00PM EDT (17:00-19:00 GMT). This webinar will provide participants with guidelines on how to make better presentations to the public, their peers, or management. The webinar will help to improve your presentation skills and provide you with tools and techniques to be an interesting and effective presenter. The webinar is intended to help participants increase their comfort in public speaking, control and connect with their audience, handle audience participation,

and ultimately deliver the message and take-away points of training courses they are planning to instruct. The webinar will teach participants how to manage nerves, voice, gestures, transitions, visual aids, and content. The webinar also addresses how to manage the audience to include difficult participants, the solicitation of questions, and the response to questions and will include techniques for adapting to diverse audiences. For more information and to register, see https://clu-in.org/live.

Using Comprehensive Area-Wide Planning Approaches to Promote Equitable Development - June 18, 2019, 1:00PM-2:30PM EDT (17:00-18:30 GMT). Several decades of practice in environmental justice and community revitalization has resulted in comprehensive area-wide planning approaches. Presenters will share lessons for achieving community involvement, revitalization and resilience from area-wide planning approaches used to address brownfields or other community challenges and discuss how states can support such comprehensive collaborative approaches. They will apply these lessons to addressing significant current challenges, such as displacement and gentrification. For more information and to register, see https://www.eventbrite.com/e/using-comprehensive-area-wide-planning-approaches-to-promote-equitable-development-tickets-61577252219.

ITRC TPH Risk Evaluation at Petroleum-Contaminated Sites – June 19, 2019, 1:00PM-3:15PM EST (17:00-19:15 GMT). The basis for this training course is the ITRC guidance: TPH Risk Evaluation at Petroleum-Contaminated Sites (TPHRisk-1, 2018). The guidance builds on long-standing and current research and experience, and presents the current science for evaluating TPH risk at petroleum-contaminated sites. As a participant in this training you should learn to: recognize the ITRC document as a go-to resource for evaluating TPH risk at petroleum-contaminated sites, recognize how TPH -impacted media interacts with the environment and changes over time, select appropriate analytic method(s) to match site objectives, and apply the decision framework to determine when a site-specific target level may be more appropriate than a generic screening level for TPH. For more information and to register, see https://www.itrcweb.org or https://clu-in.org/live.

FRTR Presents…Per- and Polyfluoroalkyl Substances (PFAS) Emerging Characterization and Remedial Technologies, Session 1 - June 20, 2019, 1:00PM-2:30PM EDT (17:00-18:30 GMT). This is part of a webinar series featuring presentations delivered at the Fall 2018 FRTR Meeting and related material. The meeting's objective was to identify and discuss the emerging science behind PFAS characterization and remedial technologies. This session will include the following topics: What are PFAS, and What are the Issues with Them?; Treatment Technologies for PFAS Site Management. For more information and to register, see https://clu-in.org/live.

Superfund Redevelopment Initiative Series: Bona Fide Prospective Purchasers: Liability Protection and Redevelopment - June 28, 2019, 2:00PM-3:30PM EDT (18:00-19:30 GMT). Location, location, location…and liability protection! EPA works with bona fide prospective purchasers to help them understand liability protections and any site use restrictions in order to safely redevelop Superfund sites during and after cleanup. This webinar will provide an overview of liability protections, best practices and specific examples of bona fide prospective purchasers working with EPA to successfully redevelop Superfund sites. For more information and to register, see https://clu-in.org/live.

Highlight from the CLU-IN Seminar Archives. Each edition of TechDirect highlights a previously recorded internet seminar from our archives that may be of interest to our readers. We welcome your feedback on this addition to Techdirect.

Sustained In Situ Detoxification of Priority Chloroorganic Pollutants, Sponsored by US EPA, Office of Superfund Remediation and Technology Innovation (OSRTI) Archive of Mar 13, 2017 Seminar (1 Hours). Contaminated site cleanup and environmental stewardship are costly tasks and continued research and innovation can lower the financial burden to site owners and to the taxpayer. A variety of technologies addressing groundwater contamination emerged and have been implemented. Bioremediation takes advantage of naturally occurring microorganisms that detoxify contaminants and in situ implementation of this approach promises to

meet cleanup goals at reasonable costs. While biostimulation and bioaugmentation have been successfully applied at numerous sites, the current approaches should be considered brute-force, and more refined treatment (i.e., precision bioremediation) will result in a similar reduction of contaminant concentrations at substantially lower capital investment and lesser environmental impacts. Progress in understanding of the microbiology contributing to chlorinated solvent detoxification under anoxic conditions serves as an example how investments in fundamental research and translational efforts can advance bioremediation from an empirical practice to an approach with predictable outcomes. To replay the archived webinar, visit https://clu-in.org/conf/tio/ISB_031317/.

Treatment Options for the Emerging Contaminants 1,2,3-Trichloropropane and 1,2-Dibromoethane, Sponsored by SERDP and ESTCP , Archived on May 23, 2019. To replay the archived webinar, visit https://www.serdp-estcp.org/Tools-and-Training/Webinar-Series/05-23-2019.

> New Documents and Web Resources

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 https://clu-in.org/products/tins/. The following resources were included in recent issues:

- Full-Scale Fixed-Bed Biological Perchlorate Destruction Demonstration: Construction of a Fixed-Bed Bioreactor Wellhead Treatment System
- Deep Vadose Zone Treatability Test of Uranium Reactive Gas Sequestration for the Hanford Central Plateau
- Independent Assessment of Science and Technology for the Department of Energy's Defense Environmental Cleanup Program
- Update for Chapter 3 of the Exposure Factors Handbook: Ingestion of Water and Other Select Liquids
- Analysis of Long-Term Performance of Zero-Valent Iron Applications
- Demonstration of Smoldering Combustion Treatment of PFAS-Impacted Investigation-Derived Waste
- Lessons Learned: Natural and Enhanced Attenuation of Explosives on an Active Grenade Range
- Facilitated Transport Enabled In Situ Chemical Oxidation of 1,4-Dioxane-Contaminated Groundwater
- Development of Field Methodology to Rapidly Detect *Dehalococcoides* and *Dehalobacter* Spp. Genes On-Site
- Guidance for Management of Superfund Remedies in Post Construction

EUGRIS Corner. New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 16 resources, events, projects and news items were added to EUGRIS in May 2019. 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:

Short Animation on Sustainable Remediation (2019). Produced for SuRF-UK, the United Kingdom's Sustainable Remediation Forum, this short movie explains key concepts of sustainable remediation. To view, see https://www.claire.co.uk/projects-and-initiatives/surf-uk

> Conferences and Symposia

Incremental Sampling, San Francisco, CA, August 1, 2019. This training course focuses on the theory and application of ITRC's Incremental Sampling Methodology (ISM), composite sampling designs, and hybrids of the two. Incremental Sampling (IS) hybrid designs are useful to address multiple project goals simultaneously. Since "representativeness" is a key aspect of data quality and ISM/IS data are demonstrably more representative than most discrete data, it will be argued that IS data are indeed "better" than non-IS data. The course will answer questions such as: what is the difference between ITRC's ISM and EPA's IS strategies? Is there written EPA guidance? What features should an ISM or IS design have? Can IS give project risk assessors the data they want, while simultaneously meeting the RPM's own data needs for characterization or remedial design? How are background concentrations determined and comparisons to background handled using IS? Do we know whether IS "worked" for the project? For more information and to register, see https://www.trainex.org/classdetails.cfm?courseid=1621&classid=7925.

Call for Ideas Deadline Extended! 2019 National Brownfields Training Conference, Los Angeles, CA, December 11-13, 2019. Submit your ideas for dynamic educational sessions that encourage conversation and participation from your fellow attendees. The Brownfields 2019 educational program will motivate brownfields stakeholders to engage, learn, and share their experiences and knowledge of community revitalization challenges and solutions. The conference planning committee is looking for session ideas in six topic areas. Submissions are due by June 6, 2019. For more information and to submit an idea, see https://brownfields2019.org/education/callforideas/.

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 https://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 Jean Balent at (703) 603-9924 or balent.jean@epa.gov. Remember, you may subscribe, unsubscribe or change your subscription address at https://clu-in.org/techdirect at any time night or day.