Welcome to TechDirect! Since the June 1 message, TechDirect gained 75 new subscribers for a total of 39,156. 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.

> Special Announcements

EPA's 2018-2019 Small Business Innovation Research (SBIR) Phase I Solicitation. EPA is calling for small businesses to apply for Phase I awards up to $100,000 to demonstrate proof of concept in the following topic areas: clean and safe water, air quality, land revitalization, homeland security, manufacturing, sustainable materials management and safer chemicals. Successful Phase I companies are eligible to apply for Phase II funding, which awards up to $300,000 for two years with a commercialization option of up to $100,000, to further develop and commercialize their technologies. For more information and application instructions, see https://www.epa.gov/sbir/sbir-funding-opportunities.

2018 Brownfields Utilization, Investment and Local Development (BUILD) Act Comment Solicitation. The BUILD Act was enacted on March 23, 2018 as part of the Consolidated Appropriations Act, 2018. The BUILD Act reauthorized EPA's Brownfields Program, and made amendments to the 2002 Small Business Liability Relief and Brownfields Revitalization Act. Authorized changes affect brownfields grants, ownership and liability provisions, and state and tribal response programs. EPA is developing policy guidance to implement the BUILD Act. As part of this process, the EPA is soliciting comment on three provisions in the BUILD Act: the authority to increase the per-site cleanup grant amounts to $500,000; the new multi-purpose grant authority; and the new small community assistance grant authority. To help frame comments, EPA published questions related to these provisions in the Federal Register. Comments will be accepted through July 10, 2018 at BUILDAct@epa.gov. For more information about these provisions and how to submit comments to EPA, see https://www.epa.gov/brownfields/brownfields-broadcast.

ITRC Seeks 2019 Team Projects. The Interstate Technology & Regulatory Council (ITRC) requests proposals for 2019 ITRC remediation and non-remediation projects.
All applicable topics will be considered, but scoring evaluation criteria will give greater weight to proposals that address the needs identified in the recent State survey fact sheet, or proposals which update ITRC documents that are outdated. Proposals are due by July 13, 2018. For more information, including identified needs, and application instructions, see https://www.itrcweb.org/About/ITRC-Seeks-2019-Team-Projects.

> Upcoming Live Internet Seminars

ITRC Remediation Management of Complex Sites - July 19, 2018, 1:00PM-3:15PM EDT (17:00-19:15 GMT). This training course and associated ITRC guidance: Remediation Management of Complex Sites (RMCS-1, 2017), provide a recommended holistic process for management of challenging sites, termed "adaptive site management." By participating in this training course we expect you will learn to apply the ITRC guidance document to: identify and integrate technical and nontechnical challenges into a holistic approach to remediation; use the Remediation Potential Assessment to identify whether adaptive site management is warranted due to site complexity; understand and apply adaptive site management principles; develop a long-term performance-based action plan; apply well-demonstrated techniques for effective stakeholder engagement; access additional resources, tools, and case studies most relevant for complex sites; and communicate the value of the guidance to regulators, practitioners, community members, and others. For more information and to register, see https://www.itrcweb.org or https://clu-in.org/live.

Superfund Redevelopment Initiative Series: Superfund and Cultural Competence - Building a Foundation for Effective Community Engagement - August 2, 2018, 2:00PM-3:30PM EDT (18:00-19:30 GMT). EPA staff interact with impacted communities across the country. These communities may represent a broad range of cultures, including cultures based in race/ethnicity, class, place and other forms of identity. Each EPA site team may also represent a diverse range of cultural perspectives, skill sets and differing professional cultures. This webinar will show how understanding cultural competence skills and tools can help people connect across difference or perceived difference and work together more effectively. This webinar will deepen participants' understanding of what culture is and how it impacts Superfund work, and demonstrate through a series of case studies how becoming culturally competent can improve remedial outcomes, prepare job trainees for successfully entering the workforce, and improve dynamics of remedial teams whose members have different areas of expertise. The Superfund Redevelopment Initiative is hosting this webinar and is happy to answer any follow up questions about the webinar from the press or other interested parties. 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.

Groundwater Statistics for Environmental Project Managers, Sponsored by: Interstate Technology and Regulatory Council, Archive of Mar 27, 2018 Seminar (2 Hours, 15 Minutes). 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, http://www.itrcweb.org/gsmc-1/) 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. For more information or to replay, visit [https://clu-in.org/conf/itrc/GSMC_032718/](https://clu-in.org/conf/itrc/GSMC_032718/).

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

- Construction Completion Report, Seabord Chemical Corporation and Riverdale Drive Landfill Site
- Screening-Level Feasibility Assessment and Design Tool in Support of 1,4-Dioxane Remediation by Extreme Soil Vapor Extraction (XSVE)
- Demonstration and Validation of Enhanced Monitored Natural Recovery at DoD Sites: ESTCP Cost and Performance Report
- In Situ Metals Immobilization: Pilot Testing Work Plan, West of 4th Site, Site Unit 1
- Secondary Impacts of In Situ Remediation on Groundwater Quality and Post-Treatment Management Strategies
- Weathered Petroleum Hydrocarbons (Silica Gel Clean-Up)
- ChemMaps
- Montana Pole and Treating Plant: More Consideration and Evaluation of Alternatives
- Sediment Electrokineitic Remediation Technology for Heavy Metal Pollution Removal
- Illustrated Guide for the Disposal of Chemicals Used in the Illicit Manufacture of Drugs
- Environmental Restoration Wiki for Enhanced Transfer of SERDP and ESTCP Research to Users
- Test No. 318: Dispersion Stability of Nanomaterials in Simulated Environmental Media

**EUGRIS Corner.** New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 31 resources, events, projects and news items were added to EUGRIS in June 2018. These can be viewed at [http://www.eugris.info/whatsnew.asp](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:

**SEKRET Sediment ElectroKinetic REmediation Technology for Heavy Metal Pollution Removal.** The SEKRET project will consist of different actions aimed at demonstrating that the innovative Electro- Kinetic Remediation (EKR) technology can effectively remove heavy metals from contaminated harbour dredged sediments from European ports. The project will be realized at a pilot scale in a real port environment; it will demonstrate that dredged sediment with heavy metal and hydrocarbon concentrations over the agreed standards can be treated via EKR in order to reach full compliance. The main action will be the demonstration of the EKR technology by way of a demonstrative plant to be built in a dedicated area (500 m2 and already located in agreement with Livorno Port Authority) within the Port. More information at [http://lifesekret.com/](http://lifesekret.com/).
Basic Environmental Geophysics (BEG), Lenexa, KS, July 11-12, 2018 and Edison, NJ, July 18-19, 2018. This 2-day course provides individuals who have little or no geophysical exploration experience with practical information on the strengths and limitations of the most used geophysical techniques on hazardous waste sites. It is intended to enable students to select the appropriate methods and to effectively supervise geophysical surveys during hazardous waste site investigations. The course emphasizes three geophysical methods -- magnetics, electromagnetics, and ground-penetrating radar -- most commonly employed for site characterization and waste location throughout the U.S. The course also introduces other methods -- seismic refraction, gravity, resistivity, and borehole geophysics -- that may be effective depending on regional or site-specific conditions, and for all methods provides examples of situations where they may be applicable. It is intended for personnel responsible for inspections, site characterization, site investigations, and removal and remedial actions at Superfund sites. For more information and to register, see https://trainex.org/offeringlist.cfm?courseid=1760.

Registration Now Open! 2018 Environmental Measurement Symposium, New Orleans, LA, August 6-10, 2018. The Environmental Measurement Symposium is the combined meeting of the Forum on Laboratory Accreditation and the National Environmental Monitoring Conference (NEMC) and is the largest conference focused on environmental measurements in North America. The NELAC Institute (TNI) and the U.S. EPA are co-sponsors. The theme of this year's symposium is "The Future Landscape of Science." The deadline for early registration is Monday, July 16. For more information and to register, see https://iattend.net/EventHome?id=ems18.

Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation, and Management, Seattle (area), WA, October 10-11, 2018. This 2-day ITRC classroom training is based on the ITRC Technical and Regulatory Guidance Web-Based Document, Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation, and Management (PVI-1, 2014) and led by internationally recognized experts. Within the training class, participants will hear about EPA's Technical Guide for Addressing Petroleum Vapor Intrusion at Leaking Underground Storage Tank Sites (June 2015). The ITRC guidance document and EPA guide are complementary documents with the ITRC training course providing the "how-to" knowledge and skills for screening, investigating, and managing the petroleum vapor intrusion pathway. The class will enable you to develop the skills to screen-out petroleum sites based on the scientifically-supported ITRC strategy and checklist; focus the limited resources investigating those PVI sites that truly represent an unacceptable risk; and communicate ITRC PVI strategy and justify science-based decisions to management, clients, and the public. 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 fee waivers available. The ITRC 2-day class is preapproved for continuing education for CT LEPs, MA LSPs, and SC PGs and approval has been requested for DE PGs, NE Water Well Standards, and NJ LSRPs. For more information and to register, see http://www.itrcweb.org/training.

Registration Now Open! 3rd Western Symposium Design and Construction Issues at Hazardous Waste Sites, Denver, CO, November 5-7, 2018. This event is designed to encourage dialogue and information sharing on design and construction
issues relevant to hazardous waste sites in the western United States. The applications of engineering and science associated with cleaning up hazardous waste sites continue to evolve rapidly. The goal of this symposium is to facilitate an interactive engagement between professionals from government and the private sector related to relevant and topical issues affecting our field. For more information and to register, see https://www.samedmnp.org/dchws-west.

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.