Welcome to TechDirect! Since the May 1 message, TechDirect gained 258 new subscribers for a total of 39,104. 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 Announces Superfund Task Force.** As part of his continued effort to prioritize Superfund cleanups, Administrator Scott Pruitt announced on May 22 the creation of a Superfund task force to provide recommendations within 30 days on how the EPA can streamline and improve the Superfund program, including:

- expediting the cleanup process;
- reducing the burden on cooperating parties; incentivizing parties to remediate sites;
- encouraging private investment in cleanups and sites; promoting the revitalization of properties across the country; and
- establishing and strengthening partnerships.

This action follows Administrator Pruitt's recent directive that authority to select remedies estimated to cost $50 million or more be retained by the Administrator to help revitalize contaminated sites faster. Read the full press release for more information about the Superfund Task Force at https://go.usa.gov/xNXYR.

**Board of Scientific Counselors Nominations Now Open.** The U.S. EPA is seeking nominations for technical experts to serve on its Board of Scientific Counselors (BOSC), a federal advisory committee to the Office of Research and Development (ORD). The BOSC provides independent scientific and technical peer review, consultation, advice, and recommendations for each of its research programs. Information on the BOSC can be found at https://www.epa.gov/bosc. Individuals and organizations can nominate themselves or others by using the nomination form on the BOSC website at https://www.epa.gov/bosc/invitation-nominations-bosc-executive-committee-and-subcommittees. The nomination period is open until June 30, 2017. Details regarding areas of expertise sought, process for submitting nominations, and selection criteria can also be found in
Upcoming Live Internet Seminars

SERDP & ESTCP Webinar on Classification of Military Munitions using Electromagnetic Induction Data - June 1, 2017, 12:00PM-1:30PM EDT (16:00-17:30 GMT). Join SERDP and ESTCP on Thursday, June 1 for a webinar detailing results from Department of Defense funded research to improve the classification of buried metal as unexploded ordnance (UXO) or non-UXO, based on the analysis of multi-coil electromagnetic induction (EMI) data. Dr. Dean Keiswetter, a chief scientist and program director at Acorn Science and Innovation, will present the technical approach and results of a research project to improve the existing data analysis and software toolset for UXO classification. For more information and to register, see https://www.serdp-estcp.org/Tools-and-Training/Webinar-Series.

Filing EPA Information in AES Targeted at Current Exporters Only - June 5, 2017, 1:30PM-2:00PM EDT (17:30-18:00 GMT). Exporters of manifested hazardous wastes, spent/used lead-acid batteries, universal wastes and cathode ray tubes for recycling should now be transitioning to an electronic border process using the Automated Export System (AES) or AESDirect. This 30-minute webinar will provide detailed filing instructions for exporters and their authorized filing agents (e.g., customs brokers) on how to file the RCRA information about their shipments in AES and AESDirect. For more information and to register, see https://clu-in.org/live.

Requirements That Apply to Import and Export Shipments That Go to Both an Interim and Final Destination Facility - June 5, 2017, 3:00PM-4:00PM EDT (19:00-20:00 GMT). Exports and imports of hazardous wastes, including those managed as universal waste and spent lead-acid batteries, are required to follow import and export procedures under 40 CFR Part 262 Subpart H. But shipments going first to an interim facility for temporary holding or consolidation prior to being shipped to a final disposal or recycling facility have special procedures to follow. This 1-hr webinar will walk through the additional information to provide in your notices and the shipment-specific tracking procedures you must follow to comply with 40 CFR Part 262 Subpart H. For more information and to register, see https://clu-in.org/live.

ITRC Issues and Options in Human Health Risk Assessment - A Resource When Alternatives to Default Parameters and Scenarios are Proposed - June 6, 2017, 1:00PM-3:15PM EDT (17:00-19:15 GMT). After participating in this ITRC training course, the learner will be able to apply ITRC’s Decision Making at Contaminated Sites: Issues and Options in Human Health Risk (RISK-3, 2015) document when developing or reviewing site-specific risk assessments by: identifying common issues encountered when alternatives to default parameters and scenarios are proposed during the planning, data evaluation, toxicity, exposure assessment, and risk characterization and providing possible options for addressing these issues; recognizing the value of proper planning and the role of stakeholders in the development and review of risk assessments; and providing information (that includes links to additional resources and tools) to support decision making when alternatives to default approaches, scenarios and parameters are proposed. For more information and to register, see http://www.itrcweb.org or http://clu-in.org/live.

ITRC Integrated DNAPL Site Characterization - June 8, 2017, 1:00PM-3:15PM EDT (17:00-19:15 GMT). The Integrated DNAPL Site Characterization Team has
synthesized the knowledge about dense nonaqueous phase liquid (DNAPL) site characterization and remediation acquired over the past several decades, and has integrated that information into a new document, Integrated DNAPL Site Characterization and Tools Selection (ISC-1, 2015). This guidance is a resource to inform regulators, responsible parties, other problem holders, consultants, community stakeholders, and other interested parties of the critical concepts related to characterization approaches and tools for collecting subsurface data at DNAPL sites. After this associated training, participants will be able to use the guidance to develop and support an integrated approach to DNAPL site characterization, including: identify what site conditions must be considered when developing an informative DNAPL conceptual site model (CSM); define an objectives-based DNAPL characterization strategy; understand what tools and resources are available to improve the identification, collection, and evaluation of appropriate site characterization data; and navigate the DNAPL characterization tools table and select appropriate technologies to fill site-specific data gaps. For more information and to register, see http://www.itrcweb.org or http://clu-in.org/live.

Analytical Tools and Methods: Session III - Fate and Transport of Contaminants - June 12, 2017, 1:00PM-3:00PM EDT (17:00-19:00 GMT). This webinar series highlights innovative analytical tools and methods developed and used by Superfund Research Program (SRP) grantees. During the third session of the series, speakers will highlight tools and methods to detect contaminants and measure their fate and transport in the environment. The speakers will highlight work related to polychlorinated biphenyls (PCBs), per- and polyfluoroalkyl substances (PFASs), chlorinated solvents, and other chemicals in the environment. Presenters include: Keri Hornbuckle, Ph.D., University of Iowa SRP Center; Jennifer Guelfo, Ph.D., Brown University SRP Center; and Mark Brusseau, Ph.D., University of Arizona SRP Center. For more information and to register, see http://clu-in.org/live.

Superfund Redevelopment Initiative Series: Opportunities for Reuse at Capped Sites - June 14, 2017, 2:00PM-3:30PM EDT (18:00-19:30 GMT). Former landfills, abandoned dumps, and other contaminated sites throughout the United States, once thought to be of limited value, are being transformed into viable commercial and industrial developments, parks and other recreational areas, and wildlife areas. With forethought and effective planning, communities and site stakeholders can return sites to productive use without jeopardizing the effectiveness of a remedial cap. This webinar will share lessons learned from the successful reuse and assessment of capped sites. For more information and to register, see http://clu-in.org/live.

Military Munitions Support Services - Stakeholder Collaboration on MMRP Projects - June 15, 2017, 1:00PM-3:45PM EDT (17:00-19:45 GMT). This session will discuss challenges and successes of interagency collaborative efforts on munitions response projects. For more information and to register, see http://clu-in.org/live.

New Documents and Web Resources

Federal Remediation Technologies Roundtable (FRTR) Spring Meeting Summary. The May 2017 FRTR Meeting focused on the characterization and treatment of heavy metals at mining sites. A webinar series will be hosted this summer based on some of the topics covered at this meeting including risk assessment, biochemical and biogeochemical remediation treatments, modelling techniques, and the use of unmanned aircraft systems for biological surveying. Meeting materials and additional information can be found at https://frtr.gov/meetings.htm.
Superfund Research Program (SRP) Research Briefs. To get monthly updates on research advances from the SRP you can subscribe to their Research Brief mailing list at https://list.nih.gov/cgi-bin/wa.exe?SUBED1=SRP-BRIEF&A=1.

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:

- Technical Memorandum: ISB Phase I and ISCO Phase II Results and Downgradient Area Pilot Study Work Plan
- Screening of PFASs in Groundwater and Surface Water
- Glowing Crystals Can Detect, Cleanse Contaminated Drinking Water
- Aquatic Contaminant and Mercury Simulation Modules Developed for Hydrologic and Hydraulic Models
- Best Practices for Environmental Site Management: Recommended Contents of a Groundwater Monitoring Report
- Definition and Procedure for the Determination of the Method Detection Limit, Revision 2
- Coal Plant Decommissioning: Plant Decommissioning, Remediation and Redevelopment
- In-Situ Capping of Contaminated Sediments
- Long-Term Contaminant Management Using Institutional Controls

EUGRIS Corner. New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 6 resources, events, projects and news items were added to EUGRIS in May 2017. 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.

> Conferences and Symposia

Remediation Innovative Technology Seminar (RITS), Honolulu, HI, July 11-12, 2017. The RITS is the Department of the Navy (DON) showcase for the latest Environmental Restoration (ER) technologies, methodologies, and guidance. The seminar is geared toward Remedial Project Managers (RPMs), but other Department of Defense (DoD) personnel, federal/state/local regulators, and contractors with an active DON ER contract are welcome to attend. The RITS will be conducted at several locations through July 12, 2017. The 2017 RITS topics include: Risk Communication for Per- and Polyfluoroalkyl Substances (PFAS) Sites; Innovations in In Situ Sediment Remediation; Light Nonaqueous Phase Liquid (LNAPL) Site Management - How to Use Tools to Support Monitored Natural Attenuation and Risk-Based Closure; Natural Attenuation Processes at the Groundwater-Surface Water Interface; Demonstrating a Geophysics Strategy for Minimally Invasive Remediation Performance Assessment; and Enhanced In Situ Bioremediation - State-of-the-Practice. For more information and to register, see https://clu-in.org/RITS.

Groundwater High-Resolution Site Characterization (HRSC), San Francisco, CA, June 13-14 & Dallas, TX, November 15-16, 2017. This training course focuses on
groundwater characterization and discusses (1) the impacts of subsurface heterogeneity on the investigation and cleanup of groundwater and related media, (2) the need for scale-appropriate measurements and adequate data density, and (3) the tools and strategies that are available to overcome the impacts of subsurface heterogeneity. After taking this course, participants will be armed with information that will allow them to improve their subsurface investigation approaches and develop more realistic and comprehensive conceptual site models (CSM). CSMs developed based on HRSC strategies and tools will decrease site uncertainty, improve the remedy selection process for groundwater remedies, and better enable the evaluation, design, and implementation of targeted in situ and ex situ groundwater remedies. The Groundwater HRSC course is an advanced 2-day course. The recommended audience includes EPA, federal, state, tribal and private industry technical project managers, practitioners and other stakeholders involved in groundwater investigation and remediation. For more information and to register, see https://trainex.org/hrsc.

Best Practices for Site Characterization Throughout the Remediation Process, Dallas, TX, August 1-3 & New York, NY, September 12-14, 2017. This training course is based on best management practices (BMP) implemented by the U.S. EPA, partnership organizations, federal and state partners, and consultants. Participants will learn how to streamline projects in a legal, technically sound, and cost-effective manner. By taking the course, participants achieve the following objectives: integrate best practices into traditional project activities; effectively collect and communicate critical project information; design dynamic work strategies; recognize and overcome the challenges presented while implementing a dynamic work strategy; and use BMPs to support all phases of the environmental cleanup life cycle. For more information and to register, see https://trainex.org/offeringslist.cfm?courseid=1515.

National Environmental Monitoring Conference (NEMC), Washington, DC, August 7-11 2017. The theme of the 2017 conference is “Effectively Communicating Scientific Information.” NEMC is held annually as a part of the Environmental Measurement Symposium - a combined meeting of the NEMC and The NELAC Institute (TNI)'s Forum on Environmental Accreditation. The Symposium is co-sponsored by TNI under a cooperative agreement with the U.S. EPA. Some of the highlights for the week include: a special half-day general session focused on the conference theme; over 160 oral and poster presentations on a variety of cutting-edge environmental monitoring issues; meetings of TNI Committees to further TNI efforts on environmental laboratory accreditation, proficiency testing, and accreditation of field sampling and measurement organizations; an exhibit program showcasing the latest innovations in environmental monitoring; special keynote presentations on topics of general interest; and an open meeting of EPA’s Environmental Laboratory Advisory Board. For more information and to register, see http://www.nemc.us.

Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation, and Management - ITRC 2-day Classroom Training, Ann Arbor, MI, October 10-11, 2017, includes optional bonus day on October 12 with a Vapor intrusion update from the Michigan Department of Environmental Quality. 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 - 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.

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.