TechDirect
January 1, 2026

Happy Holidays and may you have a prosperous new year!
Welcome to TechDirect! Since the December 1 message, TechDirect gained 18 new subscribers for a total of 36,946. 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.

Please feel free to reply to this email or share your comments online with feedback on your utilization of the TechDirect service or recommendations for future editions.

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

From Cells to Solutions: Emerging Tools for Studying Health and Disease (Three Part Series) — Session I - Friday, January 9, 2026, 1:00PM-3:00PM EST (18:00-20:00 GMT), Session II - Friday, January 16, 2026, 12:00PM-2:00PM EST (17:00-19:00 GMT), and Session III - Wednesday, January 21, 2026, 1:00PM-3:00PM EST (18:00-20:00 GMT). The National Institute of Environmental Health Sciences (NIEHS) Superfund Research Program (SRP) is hosting a Risk e-Learning webinar series focused on the use of innovative, human-relevant technologies to better characterize the biological

effects of chemicals. New technologies, including advanced cell-based assays, organoids, and computational modeling approaches, are expanding the toolbox researchers use to answer previously difficult or unanswerable questions. Presenters will discuss how these emerging methodologies are being applied to uncover mechanistic insights, improve predictive accuracy for human health outcomes, and refine risk assessment frameworks. For more information and to register, see https://www.clu-in.org/live.

ITRC: Introduction to Hydrocarbons Training - Tuesday, January 13, 2026, 1:00PM-3:00PM EST (18:00-20:00 GMT). Petroleum is a complex mixture of many compounds. Regulatory and technical guidance documents commonly focus on the hydrocarbon components of that mixture, or perceived risks that they present. However, focusing on a specific area of concern often causes practitioners to overlook other aspects of a release. For example, concerns related to exposure to total petroleum hydrocarbons (TPH) risks may be overlooked while pursuing concerns related to light non-aqueous phase liquid (LNAPL) recovery or petroleum vapor intrusion (PVI). This class is designed to provide a basic overview of hydrocarbon behavior in the subsurface and how to scientifically assess concerns arising from the release of petroleum products into the environment. It will highlight key issues that help identify and manage TPH, LNAPL, and PVI risks together. For more information and to register, see https://www.itrcweb.org or https://www.clu-in.org/live.

ITRC: Managed Aquifer Recharge (MAR) Training - Thursday, January 15, 2026, 1:00PM-3:00PM EST (18:00-20:00 GMT). This training is intended for state regulators and stakeholders who may not be familiar with the opportunities and challenges associated with MAR. It provides a basic understanding of MAR concepts, along with case studies, that showcase examples of successful MAR applications. For those who are familiar with MAR, the training gives an overview of the components of the MAR process along with the important considerations associated with each component necessary for the design and implementation of a MAR project. For more information and to register, see https://www.itrcweb.org or https://www.clu-in.org/live.

ITRC: Contaminants of Emerging Concern (CEC) Identification Framework Training - Thursday, January 22, 2026, 1:00PM-3:00PM EDT (18:00-20:00 GMT). In 2023, the ITRC Contaminants of Emerging Concern (CEC) Framework was published to help environmental regulatory agencies and other stakeholders identify, evaluate, and manage CEC's while acknowledging uncertainties in their environmental fate and transport, receptor exposure, and/or toxicity. The framework is meant to help environmental regulatory agencies and other stakeholders by providing examples of CEC monitoring programs and guiding the user through the process of identifying CEC key characteristics, how to communicate real and perceived risk from CEC to the public, and how laboratory analytical methods can be used in the identification process. This ITRC CEC training presents this entirely new framework for identification, prioritization, and communication of CEC. For more information and to register, see https://www.itrcweb.org or https://www.clu-in.org/live

ITRC: PFAS Chemistry Training - Tuesday, January 27, 2026, 1:00PM-3:00PM EST (18:00-20:00 GMT). The Interstate Technology & Regulatory Council (ITRC) is presenting an introductory training on the basics of per- and polyfluoroalkyl substances (PFAS) chemistry. This training supplements the ITRC PFAS Introductory training and ITRC Beyond the Basics Training sessions. For more information and to register, see https://www.clu-in.org/live.

Federal Facilities Online Academy: Military Munitions Policy Overview - Tuesday, February 25, 2026, 1:00PM-3:00PM EST (18:00-20:00 GMT). This two-hour webinar provides an overview of the Department of Defense (DoD) Military Munitions Response Program (MMRP), munitions policies, and how the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is applied to munitions sites. By taking this course, participants will achieve the following objectives: Learn about DoD MMRP; Understand the CERCLA process as applied to a munitions site; Understand munitions policies; and, Explore EPA Munitions Frequently Asked Questions (FAQs). The instructional methodology for this course includes lecture, case studies, and quizzes. The target audience for this course are federal, state, and tribal representatives who work on Federal Facility cleanups. Ideally, students should have a basic understanding of munitions and the CERCLA process. For more information and to register, see https://www.clu-in.org/conf/tio/FFAcademy3/ or https://www.clu-in.org/live.

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:

- Recommended Approach for Estimating PCE/TCE Abiotic First-Order Reductive Dechlorination Rate Constants in Clayey Soils Under Anoxic Conditions
- ALTEMIS: Next-Generation In Situ Real-Time Groundwater Monitoring Strategies
- An Injectable Permeable Reactive Barrier for 90Sr Groundwater Remediation at Chalk River Laboratories

NAVFAC Fact Sheet on Fiber-Optic Distributed Temperature Sensing (FO-DTS) Technology for Groundwater-to-Surface Water Interface Investigations (September 2025). Groundwater plumes discharging as "seeps" into streams, wetlands, or coastal waters can transport pollutants; however, these discharge points are often preferentially distributed and can be overlooked by traditional site investigation methods. Recent research has focused on the development of improved tools to locate and delineate groundwater seeps. This fact sheet discusses one advanced tool, FO-DTS, which is a direct-contact technology that shows promise in improving site investigations. FO-DTS uses a fiber-optic cable as a continuous thermal sensor to pinpoint active discharge zones along the cable by detecting subtle temperature differences between groundwater and surface water. This fact sheet highlights the capabilities of the FO-DTS technology and monitoring results from two Navy case study sites. View the Fact Sheet at the link below: To view or download, please visit: https://www.clu-in.org/NAVFAC-FOTDS.

US EPA Counts per Minute (CPM) for Superfund Electronic Calculator. The CPM calculator converts cleanup goals expressed in picocuries per mass, area from risk assessments, dose calculations, or Applicable or Relevant and Appropriate Requirements (ARARs), into equivalent counts per minute for real-time field surveys. The Counts Per Minute calculator may also assist in the standardization of correlating lab data and real time site-specific measurements while reducing the amount of lab sampling needed for site characterization and confirmation studies. Note this tool will not replace the need for sampling. Learn more and access the calculator at https://epa-cpm.ornl.gov/index.html .

Conferences and Symposia

Design and Construction Issues at Hazardous Waste Sites (DCHWS West), January 26-28, 2026, Denver, CO. The DCHWS West, co-sponsored by the US EPA and Society of American Military Engineers (SAME) and originally scheduled for November 3-5, 2025, has been postponed to January 26-28, 2026. The applications of engineering and science associated with cleaning up hazardous waste sites continue to evolve rapidly. The event's primary goal is to facilitate an interactive engagement between professionals from government and the private sector related to relevant and topical issues. For more information, please visit https://sites.google.com/samephiladelphiapost.org/dchws/west-symposium/fall-2025-dchws.

Design and Construction Issues at Hazardous Waste Sites (DCHWS East), March 4-6, 2026, Philadelphia, PA. The US EPA and Society of American Military Engineers (SAME) co-sponsor the DCHWS East each Spring. The

applications of engineering and science associated with cleaning up hazardous waste sites continue to evolve rapidly. The event's primary goal is to facilitate an interactive engagement between professionals from government and the private sector related to relevant and topical issues. For more information and to register, please visit https://sites.google.com/samephiladelphiapost.org/dchws/east-symposium/spring-2026-dchws?authuser=0 .

Superfund Radiation Dose Assessment Training, March 8, 2026, Phoenix, AZ. As part of the Waste Management Symposium, the US EPA will hold a Superfund Radiation Dose Assessment class Sunday March 8, 2026, in Phoenix, Arizona. The course is an interactive, full-day advanced program that addresses specific technical and regulatory challenges faced by site managers (e.g., Regional Project Managers, On-scene Coordinators) and technical staff (e.g., risk assessors, health physicists) involved in managing sites within the US Environmental Protection Agency's Superfund remedial program. While the focus of Superfund assessments is usually risk, this special edition of this course will focus on the dose assessment calculators which are used by EPA for determining compliance with dose based Applicable or Relevant and Appropriate Requirements (ARARs). The instructors are Stuart Walker of US EPA, and Fred Dolislager of US DOE's Oak Ridge National Laboratory. For more information and to register, please visit https://www.wmsym.org/conference-information/wm2026-conference/.

U.S EPA and RAIS Screening Level Calculator Training for Chemical and Radionuclide Risk Analysis, March 23-26, 2026, Oak Ridge, TN. This training will primarily provide the participant with operational knowledge of key EPA and RAIS calculators. Additionally, the training and exercises will delve into the ability of the calculators to address site-specific exposures, unique toxicity assessments, and complex risk characterizations. Comprehensive instruction on the use of the websites will provide the knowledge to create all the tables necessary for exposure, toxicity, characterization, and uncertainty assessment sections of a risk assessment. In addition to classroom activities, tours are given of the Spallation Neutron Source facility, the High Flux Isotope Reactor, Frontier (ORNL's exascale supercomputer), and the Historic Graphite Reactor from the Manhattan Project. For more information and to register, please visit https://rais.ornl.gov/spring2026.html

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 (202) 566-0832 or balent.jean@epa.gov.

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