

## Message #59: January 2002

Welcome to TechDirect. Happy Holidays! The EPA Technology Innovation Office hopes everyone has a safe and prosperous 2002. Since the December 1 message, TechDirect gained 260 new subscribers for a total of 12,342. If you feel the service is valuable, please share TechDirect with your colleagues. Anyone interested in subscribing to TechDirect may do so on CLU-IN at <http://clu-in.org/techdirect> . All previous TechDirect messages are archived there.

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 Announcement***

The NOAA/UNH Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET), located at the University of New Hampshire, in cooperation with NOAA's Office of Response and Restoration (OR&R) is inviting preliminary proposals for project funding consideration. This request for preliminary proposals solicits projects that support the mission, goals and objectives of CICEET and OR&R in developing and applying innovative environmental technologies that address short-term and long-term oil behavior processes, better understand the effectiveness and effects of response countermeasures, understand more about when responses can be terminated and develop new technologies to make the observations needed to support these decisions. The deadline for receipt of preliminary proposal submissions is 4 PM Friday, January 18, 2002. For more information, see <http://ciceet.unh.edu> , then select Funding Opportunities and select the link for FY 2002 Request for Proposals for Oil Spill Response Research and Development.

### ***Live Internet Seminars***

**Acceso a Información Sobre Tecnologías de Tratamiento de Suelos y Aguas Subterráneas Contaminados - 15 de enero.** La EPA presenta un seminario en Español por Internet para profesionales en el tratamiento de suelos y aguas subterráneas contaminados. Este seminario de dos horas ha sido diseñado con la meta de simplificar el camino a la información que uno necesita para elegir entre soluciones tecnológicas que ofrece el mercado a los

problemas de contaminación. El seminario es gratuito y será presentado en vivo desde Washington, DC. Para recibir información adicional visit <http://clu-in.org/conf/tio/register/>.

**Modernizing Site Cleanup: Managing Decision Uncertainties Using the Triad Approach - January 23.** This seminar, sponsored by the U.S. Army Corps of Engineers and U.S. EPA, Technology Innovation Office. It is designed to introduce state and federal project managers and technical staff, environmental consultants, site owners, and community stakeholders to the importance of using systematic planning to implement dynamic data collection strategies using innovative field measurement technologies. For more information and to register, see or <http://clu-in.org/studio> .

**Handbook of Groundwater Protection and Cleanup Policies for RCRA Corrective Action, January 29.** This seminar will provide an overview of the recently finalized Handbook that contains EPA's latest interpretations of policies on topics such as, cleanup goals, groundwater use, point of compliance, source control, and completing groundwater remedies. The Handbook ties 15 different topics together with an overall Groundwater Protection and Cleanup Strategy that emphasizes a phased, results-based approach to cleaning up contaminated groundwater. Although the Handbook focuses on RCRA Corrective Action, EPA believes the plain language of the policy descriptions, and the Internet links to over 50 more detailed resources will be helpful to anyone involved with groundwater protection and cleanup. For more information and to register, see or <http://clu-in.org/studio> .

**Remediation System Evaluation and Optimization of Pump and Treat Projects - February 5.** The objective of this presentation is to enhance current understanding of the Remediation System Evaluation (RSE) process and optimization tools available to site managers of pump and treat systems. RSEs aim to improve the efficiency of operation and maximize the remedy's effectiveness by identifying ways to reduce O&M costs, shorten closure time, verify clear goals and exit strategy, and assure equipment is adequately maintained. Pump and treat systems have been operating for two decades and this experience has led to large gains in knowledge and understanding. For more information and to register, see or <http://clu-in.org/studio> .

**EPA Small Business Innovation Research Overview and Proposal Writing - February 13.** This seminar will describe the EPA Small Business Innovation Research (SBIR) program which provides financial support to help small technology based firms develop new environmental technologies and ready them for commercialization. The presentation will cover the basics of the SBIR program, upcoming 2002 solicitations and schedules, and helpful information on writing a competitive proposal and winning an SBIR award. For more information and to register, see or <http://clu-in.org/studio> .

## ***New Documents***

**Groundwater Pump and Treat Systems: Summary of Selected Cost and Performance Information at Superfund-financed Sites (EPA 542-R-01-021a)**

This report summarizes Phase 1 (the data collection phase) of the Nationwide Fund-lead Pump and Treat Optimization Project. Each EPA Region was contacted to identify their Fund-lead pump-and-treat (P&T) systems. Twenty Fund-lead systems were selected to undergo Remedial System Evaluations (RSEs). This report identifies the 88 Fund-lead P&T systems, summarizes the information submitted by the EPA Regions, and presents the screening and selection of those systems to receive RSEs (December 2001, 76 pages). View or download at

<http://clu-in.org/techpubs.htm> .

**Improving Sampling, Analysis, and Data Management for Site Investigation and Cleanup (EPA 540-F-01-030a)**

The United States Environmental Protection Agency (EPA) supports the adoption of streamlined approaches to sampling, analysis, and data management activities conducted during site assessment, characterization, and cleanup. This position reflects the growing trend towards using smarter, faster, and better technologies and work strategies. EPA is coordinating with other Federal and State agencies to educate regulators, practitioners, site owners, and others involved in site cleanup decisions about the benefits of a streamlined approach. Ultimately, EPA expects to institutionalize these newer approaches and anticipates that the principles will guide the way data are collected and analyzed for future site cleanup decisions (April 2001, 4 pages). View or download at <http://clu-in.org/techpubs.htm> . For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

**Resources for Strategic Site Investigation and Monitoring (EPA 542-F-01-030b)**

EPA, in concert with other federal agencies and state organizations, is accelerating the development of policies and information to support Strategic Investigation and Monitoring activities at hazardous waste sites. These efforts are meant to assist site decision makers as they transition to newer, streamlined approaches. A fuller description of the emphasis on these approaches is described in a fact sheet entitled "Improving Sampling, Analysis, and Data Management for Site Investigation and Cleanup" (EPA 542-F-01-030a). The educational, training, and guidance resources described below either already exist or are under development to support project managers seeking to apply these approaches (September 2001, 4 pages). View or download at <http://clu-in.org/techpubs.htm> . For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

**Photocatalytic Treatment of Air Emissions Resulting from**

**Ground-Water Treatment.** A new system for treating off-gas from ground water remediation systems containing chlorinated organic compounds has

been demonstrated under the U.S. EPA's Superfund Innovative Technology Evaluation (SITE) Program. Results indicate that this technology, known as the adsorption-integrated-reaction (AIR2000) process, effectively removed trichloroethylene (TCE) and trace levels of other targeted compounds by more than 98.5 percent. In addition, the process successfully met state standards for volatile organic compound (VOC) emissions. View or download at <http://clu-in.org/techpubs.htm> .

**TechTrends - current issue (EPA 542-N-01-004).** This quarterly newsletter is published by the U.S. EPA Technology Innovation office. This issue highlights innovative technologies, including remote sensing and advanced analytical techniques, for site characterization involving contaminated soil, sediments, and ground water (November 2001, 4 pages). View or download at <http://clu-in.org/techpubs.htm> . For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

**Groundwater Currents - current issue (EPA 542-N-01-007).** This quarterly newsletter is published by the U.S. EPA Technology Innovation office. This issue highlights technologies for remediating ground water at military sites contaminated with ordnance, MTBE, and chlorinated solvents. Currently, more than 21,000 potentially contaminated sites exist on defense-related facilities across the country. These facilities offer unique opportunities for collaborative efforts on technology innovation involving the U.S. EPA, other Federal departments and agencies, and the private sector. It is estimated that cleanup of these sites will cost about \$30 billion (October 2001, 4 pages). View or download at <http://clu-in.org/techpubs.htm> . For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax to (513) 489-8695.

**Perspectives on Innovative Characterization and Remediation Technologies for Contaminated Sites.** This paper is the basis for an Internet seminar presented by Dr. Walter Kovalick, U.S. EPA Technology Innovation Office at ENRY2000, Belgrade, Yugoslavia, September, 2001. It describes some of the data on the kinds of contamination, media, and technologies deployed to deal with problems at these sites. In addition, it highlights technology partnerships that have evolved to demonstrate and verify site measurement and clean-up technologies and to assure a more robust set of clean-up options. Finally, the advent of the Internet has increased access to a considerable body of publicly available information on the cost and performance of these technologies that might be of interest (September 2001, 7 pages). View or download at <http://clu-in.org/techpubs.htm> .

**Conference Proceedings for CLARINET: Sustainable Management of Contaminated Land.** This report summarizes the CLARINET conference held June 21-22, 2001, in Vienna, Austria. The issue of locally contaminated soils and groundwater is often considered a national problem. However, the scientific principles for tackling contaminated site problems are not confined to national boundaries. Therefore international co-operation and

networking are called for. The Conference aimed at encouraging international co-operation in the field of contaminated land management and contributed to a better understanding of the different interests of various stakeholder-groups (Fall 2001, 127 pages). View or download at

[http://www.clarinet.at/library/proceedings\\_finalconf.pdf](http://www.clarinet.at/library/proceedings_finalconf.pdf) .

## ***Conferences and Symposia***

**Reminder!! 2002 Resource Conservation and Recovery Act (RCRA) National Meeting, January 15 - 18, Washington, DC.** The meeting is open to the public. The theme of this year's meeting is "Partnerships for Cleaner Communities." Topics will include Corrective Action, Brownfields, Permitting, Municipal Solid Waste, Non-hazardous Industrial and Special Waste, Waste Minimization, and Federal, State and Tribal Programs. In addition, exhibits of various environmental program initiatives will be on-site. There is no fee, however pre-registration is required for meeting attendance. Space is limited and registrations will be confirmed in the order in which they are received. You can pre-register for the meeting and arrange for overnight accommodations at <http://www.epa.gov/osw/meeting> . If electronic pre-registration is not possible, please contact Anita Cummings (703-308-8303, <cummings.anita@epa.gov>), Gina Bowler (703-308-7279, <bowler.gina@epa.gov>), or Alan Strasser (301-577-9339, <astrasser@hazmed.com>). All meeting attendees will be required to present photo identification on-site and to wear badges issued by EPA for admittance to meeting sessions.

**Sediment Stability Workshop, New Orleans, January 22-24.** This conference is sponsored by the USEPA, US Army Corps of Engineers, U.S. Navy and several other organizations. Understanding the processes that control sediment stability is critical to conducting a credible alternatives analysis for sediment remediation. The objective of this workshop is to inform industry, regulators, consultants and academia who are concerned about physical sediment stability issues on the following: (1) factors controlling sediment stability; (2) state-of-the-science regarding sediment stability, i.e., what is known about sediment stability?; (3) how sediment stability problems can be analyzed using scientific techniques, i.e., demonstrate what has been done at various sites; and (4) application of the scientific method to sediment stability problems, including data analysis, modeling, and uncertainty analysis. For additional information including registration, see

<http://www.smwg.org/> .

**SBIR Program Workshop, Philadelphia, February 19.** This free one-day workshop will help small businesses learn about the Small Business Innovation Research program. The EPA grant solicitation

for Mobile Sources and Stormwater opens on January 21. The general EPA topics solicitation opens March 28. The workshop emphasizes practical information on critical elements of the program, including writing winning proposals, commercialization and sources of assistance. You may register by calling the EPA Region III Business Assistance Center at (800) 228-8711 or online at <http://www.epa.gov/region3/sbac/contact.htm>

If you have any questions regarding TechDirect, contact Jeff Heimerman at (703) 603-7191 or [heimerman.jeff@epa.gov](mailto:heimerman.jeff@epa.gov). Remember, you may subscribe, unsubscribe or change your subscription address at <http://clu-in.org/techdrct> at any time night or day.