



TechDirect, April 1, 2011

Welcome to TechDirect! Since the March 1 message, TechDirect gained 412 new subscribers for a total of 37,757. If you feel the service is valuable, please share TechDirect with your colleagues. Anyone interested in subscribing may do so on CLU-IN at <http://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 ground water.

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

ITRC Project Risk Management for Site Remediation, April 12, 2011, 2:00PM-4:15PM EDT (18:00-20:15 GMT). Remediation Risk Management (RRM) is a course of action through which all risks related to the remediation processes (site investigations, remedy selection, execution, and completion) are holistically addressed in order to maximize the certainty in the cleanup process to protect human health and the environment. Remediation decisions to achieve such a goal should be made based on threshold criteria on human health and ecological risks, while considering all the other potential project risks. Through this training course and associated ITRC Technical and Regulatory Guidance Document: Project Risk Management for Site Remediation (RRM-1, 2011), the ITRC RRM team presents tools and processes that can help the site remediation practitioner anticipate, plan for, and mitigate many of the most common obstacles to a successful site remediation project. Examples of project risks include remediation technology feasibility risks; remedy selection risks; remedy construction, operation and monitoring risks; remedy performance and operations risks; environmental impacts of systems during their operation; worker safety risk, human health and ecological impacts due to remedy operation; as well as costs and schedules risks including funding and contracting issues. For more information and to register, see <http://www.itrcweb.org> or <http://clu-in.org/live>.

Community Engagement Activities for Safe Drinking Water, April 14, 2011, 1:00PM-3:00PM EDT (17:00-19:00 GMT). In this seminar sponsored by the Superfund Research Program (SRP), Dr. Laurie Reynolds Rardin, SRP funded researcher from Dartmouth College will present "Face-To-Face Communication Empowers Communities to Spread the Word." This presentation will focus on the Dartmouth Toxic Metals Superfund Research Program Research Translation Core's recently produced "In Small Doses: Arsenic," a 10-minute movie (www.insmalldoses.org) which explains how and why owners of private wells in northern New England should check the levels of arsenic

in their drinking water. By providing this information in a visually engaging format, the goal was to persuade private well owners to test their wells and put in an arsenic remediation system if warranted. Face-to-face communication and access to copies of the video proved to be one of the best methods of distribution by expanding the delivery network and allowing the movie to be shown by local town government and public health officials, residents, and on local cable channels. Following her presentation, SRP funded researcher from UC-Davis Radomir Schmidt will discuss a MTBE bioremediation project in Glennville, CA. The project was designed to test existing bioreactor technology for potential drinking water production. The UC-Davis researchers tested for a panel of potential waterborne pathogens. They sought to promote a sense of project ownership in local residents through information exchange meetings, demonstrations of the bioremediation process, and by recruiting locals to help monitor the day-to-day running of the bioreactor. For more information and to register, see <http://clu-in.org/live> .

ITRC Incorporating Bioavailability Considerations into the Evaluation of Contaminated Sediment Sites, April 26, 2011, 2:00PM-4:15PM EDT (18:00-20:15 GMT). ITRC's web-based Technical and Regulatory Guidance, Incorporating Bioavailability Considerations into the Evaluation of Contaminated Sediment Sites (Sed-1, 2011) and associated Internet-based training are intended to assist state regulators and practitioners with understanding and incorporating fundamental concepts of bioavailability in contaminated sediment management practices. This guidance and training describe how bioavailability considerations can be used to evaluate exposure at contaminated sediment sites, the mechanisms affecting contaminant bioavailability, available tools used to assess bioavailability, the proper application of those tools, and how bioavailability information can be incorporated into risk-management decisions. This guidance and training also contain summaries of case studies where bioavailability has been assessed and considered in the contaminated sediment remedial decision making process. This guidance and training provide insight on how bioavailability assessments can be used to understand, mitigate, and manage risk at a contaminated sediment site, often at a reduced overall project cost. For more information and to register, see <http://www.itrcweb.org> or <http://clu-in.org/live> .

ITRC Enhanced Attenuation of Chlorinated Organics: A Site Management Tool, April 28, 2011, 11:00AM-1:00PM EDT (15:00-17:00 GMT). This training on the ITRC Technical and Regulatory Guidance for Enhanced Attenuation: Chlorinated Organics (EACO-1, 2008) describes the transition (the bridge) between aggressive remedial actions and MNA and vice versa. Enhanced attenuation (EA) is the application of technologies that minimize energy input and are sustainable in order to reduce contaminant loading and/or increase the attenuation capacity of a contaminated plume to progress sites towards established remedial objectives. Contaminant loading and attenuation capacity are fundamental to sound decisions for remediation of groundwater contamination. This training explains how a decision framework which, when followed, allows for a smooth transition between more aggressive remedial technologies to sustainable remedial alternatives and eventually to Monitored Natural Attenuation. This training will demonstrate how this decision framework allows regulators and practitioners to integrate Enhanced Attenuation into the remedial decision process. For more information and to register, see <http://www.itrcweb.org> or <http://clu-in.org/live> .

> New Documents and Web Resources

Fact Sheet on Evapotranspiration Cover Systems for Waste Containment (EPA

542-F-11-001). EPA's Office of Superfund Remediation and Technology Innovation (OSRTI) has prepared a 28-page fact sheet updating the 2003 fact sheet on evapotranspiration (ET) landfill cover systems. The document provides information on the regulatory setting for ET covers; general considerations in their design, performance, and monitoring; and developmental and implementation status as of early 2011. Examples of installed ET cover systems are provided with supporting performance data, as well as a list of 222 sites that have proposed, approved, and installed ET covers (February 2011, 28 pages). View or download at <http://clu-in.org/techpubs.htm> .

Alternative Landfill Cover Project Profiles Database. EPA's Office of Superfund Remediation and Technology Innovation (OSRTI) has updated the project profiles to reflect recent developments in the field of alternative landfill covers. The website contains information on proposed, tested, or installed alternative covers—primarily evapotranspiration (ET) covers—at waste disposal sites, including municipal solid waste and hazardous waste landfills and radioactive waste sites. The database has grown from 92 to 222 landfill sites with the addition of 130 new sites that use ET covers. Contact information is provided, and issued or proposed permits where available. These sites are found primarily in the arid and semi-arid regions of California, Arizona, New Mexico, Texas, and the Great Plains states. View and use at <http://www.clu-in.org/products/altcovers/> .

Final Report: Technical Assistance for the Kearsarge Metallurgical Corporation Superfund Site, Conway, New Hampshire, EPA Region 1 (EPA 542-R-09-014). This report reviews and provides recommendations for a long-term groundwater monitoring network for the Kearsarge Metallurgical Corporation Superfund site (KMC site). The KMC site is a former foundry and metal fabrication facility in Conway, New Hampshire, listed on the National Priorities List (NPL) in 1984. The site is currently in a long-term operation and maintenance (O&M) phase. The primary goal of developing an optimized groundwater monitoring strategy at the KMC site is to create a dataset that fully supports site management decisions relating to the long-term remedial strategy and reuse options for the property. In this report, the current KMC site groundwater monitoring network has been evaluated using a formal qualitative approach as well as statistical tools found in the Monitoring and Remediation Optimization System (MAROS) software. The evaluation of the monitoring system included data collected both prior to and during active groundwater extraction (1983 - 2005) and after cessation of the extraction remedy (2006 - 2009). Network recommendations are made for groundwater sampling frequency and location based on lines of evidence developed from qualitative factors as well as statistical results (December 2009, 120 pages). View or download at <http://clu-in.org/techpubs.htm> .

Groundwater Monitoring Network Optimization, Delatte Metals Superfund Site, Ponchatoula, Louisiana, Region 6 (EPA 542-R-09-013). This report reviews and provides recommendations for improving a groundwater monitoring network for the Delatte Metals Superfund site. The Delatte Metals site consists of former battery recycling facilities located just outside of Ponchatoula, Louisiana. The primary goal of optimizing the groundwater monitoring strategy at the Delatte Metals site is to create a dataset that fully supports site management decisions while minimizing the time and expense associated with collecting and interpreting data. The recommendations contained in this report are intended to further develop understanding of the site conceptual model and management objectives and to support the development of a comprehensive management strategy for the future, within the context of CERCLA and the NCP. This report outlines recommendations based on a formal evaluation, but final determination of any sampling locations and frequencies are to be decided by the overseeing regulatory agencies (September 2009, 165 pages). View or download at <http://clu-in.org/techpubs.htm> .

Final Report: Technical Assistance for the Gilson Road Superfund Site, Nashua, New Hampshire, EPA Region 1 (EPA 542-R-09-012). This report reviews and provides recommendations for a long-term groundwater monitoring network for the Gilson Road (Sylvester) Superfund Site (Gilson Road). Extensive remedial actions have been successfully implemented at the site over the past 30 years, and the site is currently in a long-term operation and maintenance phase (O&M). The primary goal of developing an optimized groundwater monitoring strategy at the Gilson Road site is to create a dataset that fully supports site management decisions while minimizing expense and effort associated with long-term O&M. (September 2009, 125 pages). View or download at <http://clu-in.org/techpubs.htm> .

Technology News and Trends (EPA 542-N-11-001). This issue highlights techniques to enhance site investigations through advanced data integration and high resolution technology such as membrane interface probes, electrical resistivity imagery, and compound specific isotope analysis. In addition to improving the conceptual site model, use of these field and laboratory tools can aid in the selection of innovative design, construction, and monitoring approaches facilitating increased use of in situ cleanup remedies (March 2011, 6 pages). View or download at <http://clu-in.org/techpubs.htm> .

EUGRIS Corner. New Documents on EUGRIS, the platform for European contaminated soil and water information. More than 24 resources, events, projects and news items were added to EUGRIS in March 1-24, 2011. 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:

Good Practice Guide for Landscaping (2011). The UK's WRAP Waste Resources Action Programme produced this guidance document which aims to provide good practice advice on the use of compost in landscaping and regeneration and in particular for the following sectors: Brownfield restoration and habitat establishment, Highways and waterways, Sustainable Urban Drainage Systems (SUDS) and green roofs, Sports turf, and General landscaping. It includes discussions and case studies on bioremediation. View or download at http://www.wrap.org.uk/farming_growing_and_landscaping/landscape_and_design/good_practice_guide/ .

> Conferences and Symposia

Brownfields 2011 Conference, Philadelphia, PA, April 3-5, 2011. The EPA Brownfields Program is co-sponsoring the 14th National Brownfields Conference. The conference will provide a forum for training, research and technical assistance to communities to facilitate the inventory of brownfield sites, assessment and remediation of brownfields sites, community involvement, and the green and sustainable revitalization of brownfields and contaminated sites. For more information, including how to register onsite, see <http://www.brownfields2011.org/en/home> .

Training for Small Businesses at 2011 Brownfields Conference, Philadelphia, PA, April 4-5, 2011. EPA's Office of Solid Waste and Emergency Response (OSWER) will be offering two days of training sessions (April 4-5) for Small and Disadvantaged Business owners and other interested parties in conjunction with the Brownfields 2011 Conference in Philadelphia. All sessions will be held at the Philadelphia Marriott Downtown (1201 Market Street, Philadelphia, PA 19107) in the Franklin 3 meeting room on the Fourth floor. Training Sessions will address Best Management Practices (BMPs) for Targeted Brownfields Assessments, BMPs for Brownfields Remediation, and BMPs for Green Remediation. These 1.5- to 3-hour sessions will be offered on Monday and

Tuesday, April 4th and 5th. For more information and to register see the News section on the front page of <http://www.trainex.org> .

Small and Disadvantaged Business Listening Session at 2011 Brownfields Conference, Philadelphia, PA, April 6, 2011. OSWER also will be holding a one-day Listening Session on April 6. The Listening Session is part of an initiative to build the technical capacity of small and disadvantaged businesses (SDBs) as they compete for environmental cleanup business. The purpose of this event is for EPA to hear from SDBs about challenges, barriers, and issues of concern that would assist it in providing more meaningful and relevant training and technical support. In addition to the listening session, the event includes an afternoon "matchmaking" session where SDBs have an opportunity to speak one-on-one with the EPA staff organizing the listening session, as well to network with major Superfund Contractors invited to the meeting. The session will be held at the Philadelphia Marriott Downtown (1201 Market Street, Philadelphia, PA 19107) in the Franklin 3 meeting room on the Fourth floor. For more information and to register, see <http://www.trainex.org/listen> .

Vapor Intrusion Pathway: A Practical Guideline ITRC 2-day Classroom Training, Princeton, NJ, April 18-19, 2011. Led by internationally recognized experts, this 2-day ITRC classroom training will enable you to learn the latest strategies to conduct site screening and investigations; determine what tools are appropriate to collect quality data and evaluate the results; apply multiple lines of evidence to ensure quality decision-making; build solutions for VI issues through understanding of mitigation options; and network with environmental professionals dealing with this interdisciplinary and complex pathway. Interactive learning with hands-on exhibits, classroom exercises, and frequent Q&A sessions will reinforce these course objectives and contribute to a practical understanding of this difficult pathway. For more information and to register, see <http://www.itrcweb.org/crt.asp> .

Advanced Triad Training for Practitioners, New Orleans, LA, April 26-28, 2011. This 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 the Triad Approach can be used to streamline projects in a legal, technically sound, and cost-effective manner. For more information and to register, see <http://trainex.org/offeringslist.cfm?courseid=796&all=yes> .

Water Balance Covers for Landfills & Mine Sites: Achieving Engineering and Regulatory Acceptance in the West, Denver, CO, May 17-19, 2011. This 2 1/2 day workshop is intended to teach owners and operators, consultants, and engineers how to design and submit quality proposals for water balance covers, and to teach regulators how to evaluate those proposals. Participants will learn the hydraulic properties of these covers, how to optimize designs with models, and how to ensure that the final product is environmentally protective. Topics will include alternative cover design, soil selection, construction, monitoring, including discussions of regulatory issues, soil physics, plant-soil-water relations, hydraulic balance, saturated/unsaturated water movement, and computer modeling. Regional case studies will be emphasized. For more information and to register, see www.phytosociety.org . For questions, to submit poster abstracts, or for mail-in registrations contact Steve Rock 513-569-7149, rock.steven@epa.gov.

Registration Now Open!! International Conference on Sustainable Remediation 2011: State of the Practice, Amherst, MA, June 1-3, 2011. Sponsored by the Environmental Institute at the University of Massachusetts Amherst and the U.S. EPA Office of Superfund Remediation and Technology Innovation, the conference will address the interrelated themes of green chemistry, human health, and environmental response. Session presentations by scientists, practitioners, and regulators will feature new research, field applications, and lessons learned. Leading researchers and regulatory experts will provide an overview of the sustainable remediation landscape

and address research needs, policy and regulatory challenges moving forward. The conference will feature 2 keynote presentations, 24 technical sessions, poster presentations and a student poster competition, exhibits, and ample opportunities for networking. The 2010 Green Remediation Conference attracted hundreds of attendees (academia, government, non-profit, and private sector) from 16 countries and 31 States. For more information and to register, see <http://www.umass.edu/tei/conferences/SustainableRemediation/> .

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. Currently there are 38 conferences and courses featured. We invite sponsors to input information on their events at <http://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 Jeff Heimerman at (703) 603-7191 or heimerman.jeff@epa.gov. Remember, you may subscribe, unsubscribe or change your subscription address at <http://clu-in.org/techdirect> at any time night or day.

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