

Message #35: January 2000

Happy New Century. We wish you a prosperous New Year and success in your environmental cleanup operations. Since December 1, TechDirect gained 182 new subscribers for a total of 7804. Welcome to everyone just joining the TechDirect community. We try to keep these messages as brief as possible, but provide information relevant to your needs. We hope this service continues to be beneficial. Let us know your ideas for its improvement.

NOTE: Some organizations may take their web pages "OFFLINE" the last few days of this year and the first few days of 2000. If you encounter any problems with the document links during this time, that may be the reason. I suggest trying again a few days after the new year begins.

Mention of non-EPA documents 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.

New Documents

Directory of Technology Support Services to Brownfields Localities (EPA 542-B-99-005). This directory provides information about EPA offices, nongovernment organizations funded by EPA, and other federal agencies, that may be able to provide expertise to assist in the selection of technologies to characterize and clean up brownfields properties. The directory also includes: a table that summarizes key information about the services described in the directory; a list of documents that may be of interest to brownfields stakeholders; and a list of Web sites of other organizations that are involved in brownfields projects [November 1999, 28 pages]. View or download <http://clu-in.org/techpubs.htm> . For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 489-8695.

Phytoremediation Decision Tree. This document was produced by the Interstate Technology Regulatory Cooperation (ITRC) workgroup. The intent of this document is to provide a tool that can be used to determine if phytoremediation has the ability to be effective at a given site. It allows the user to take basic information from a specific site and, through a flow chart layout, decide if phytoremediation is feasible at that site. It contains separate decision trees for three types of contaminated media (i.e. soil, groundwater, and sediments). Along with each decision tree, additional information

is provided and is intended to support the decision tree [November 1999, 36 pages]. View or download at <http://clu-in.org/techpubs.htm> . No hard copies at this time.

Technology Status Review: In Situ Oxidation. This report was published by the DoD Environmental Security Technology Certification Program (ESTCP). It attempts to capture the current state of the art for this very promising technology, recognizing it is in a state of rapid development. The report also attempts to indicate the types of information that are needed to continue the evolution of in situ oxidation and to successfully implement the technology at specific sites. By reviewing past projects, we hope to provide site managers with a better understanding of the conditions under which ISO should be used, realistic goals for the technology, and limited guidance on the data needs and best practices for its use at specific sites [November 1999, 50 pages]. View or download at <http://www.estcp.org/documents/techdocs/index.cfm> .

ETV Verification Report: Environmental Decision Support Software, Environmental Software SitePro (TM) Version 3 (EPA 600-R-99-093). The Site Characterization and Monitoring Technologies Pilot issued a verification statement and report for the Environmental Software, Inc. SitePro Version 3.0 software. SitePro is a software application designed to help environmental professionals quickly and comprehensively characterize and manage information relevant to understanding environmental contamination problems. SitePro integrates a database, a geographic information system (GIS), computer-aided design (CAD), mapping, contouring, boring logs, cross-sections, graphing, imaging and reporting inside one application [October 1999, 58 pages]. View or download at <http://clu-in.org/techpubs.htm> OR <http://www.epa.gov/etv/verifprt.htm#02> .

ETV Verification Report: Environmental Decision Support Software, Environmental Systems Research Institute, Inc. ArcView GIS Version 3.1 using ArcView Spatial Analyst and ArcView 3D Analyst extensions (EPA 600-R-99-094). The Environmental Technologies Verification (ETV) Site Characterization and Monitoring Technologies Pilot issued a verification statement and report for the Environmental Systems Research Institute, Inc. ArcView GIS Version 3.1. The ArcView GIS integrates common database operations, such as query and statistical analysis, with the visualization and geographic analysis benefits offered by maps. The Spatial Analyst extension was developed to solve problems requiring that distance or other continuous surface modeling information be considered as part of the analysis. The 3D Analyst extension permits the creation of three-dimensional surface models and assists users with three primary tasks: surface model construction, analysis, and display [October 1999, 74 pages]. View or download at <http://clu-in.org/techpubs.htm> OR <http://www.epa.gov/etv/verifprt.htm#02> .

Site Assessment - Quick Reference Guidance Series. The U.S. EPA Office of Emergency and Remedial Response recently published three

guidance documents designed to improve site assessment processes. View or download these three documents at <http://www.epa.gov/superfund/programs/sitesmt/index.htm#site> .

****Improving Site Assessment: Abbreviated Preliminary Assessments (EPA-540-F-98-037).** This guidance document establishes the minimum requirements for conducting an Abbreviated Preliminary Assessment (APA) instead of a full Preliminary Assessment (PA) [October 1999, 9 pages].

****Improving Site Assessment: Combined PA/SI Assessments (EPA 540-F-98- 038).** This guidance document discusses elements and reporting requirements during each phase of the combined PA/SI assessment and supplements existing PA and SI guidance [October 1999, 7 pages].

****Improving Site Assessment: Pre-CERCLIS Screening Assessments (EPA 540-F-98-039).** This guidance document establishes minimum requirements for conducting pre-CERCLIS screening assessments and supplements existing pre-CERCLIS screening guidance [October 1999, 7 pages].

Understanding Variation in Partition Coefficient, K_d, Values (EPA 402-R-99-004A&B). This two-volume report published by the EPA Office of Air and Radiation describes the conceptualization, measurement, and use of the partition (or distribution) coefficient, K_d, parameter, and the geochemical aqueous solution and sorbent properties that are most important in controlling adsorption/retardation behavior of selected contaminants. The K_d concept and methods for measurement of K_d values are discussed in detail in Volume I. Volume II, "Review of Geochemistry and Available K_d Values for Cadmium, Cesium, Chromium, Lead, Plutonium, Radon, Strontium, Thorium, Tritium (3H), and Uranium," provides a "thumb-nail sketch" of the key geochemical processes affecting the sorption of selected inorganic contaminants, and a summary of K_d values given in the literature for these contaminants under oxidizing conditions. Important aqueous speciation, (co)precipitation/dissolution, and adsorption reactions are discussed for each contaminant. References to related key experimental and review articles for further reading are also listed [August 1999]. The documents are available by section or as complete documents at <http://www.epa.gov/radiation/technology/partition.htm> . For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 489-8695.

Endowment For the Business of Government. Academic and non-profit organizations interested in contributing to the dialogue about how regulatory agencies might support the incorporation of innovative environmental technologies into a more productive site characterization paradigm can seek funding from the PricewaterhouseCoopers Endowment for the Business of Government. The Endowment is offering three separate funding opportunities to support discussions and ideas about how new

approaches can be used to improve the effectiveness of government at the international, federal, state, and local levels. The monetary awards support either the development of research papers, the staging of "Thought Leadership Forums", or 2-4 month sabbaticals for government employees. The priority research areas include: leveraging technology, redefining public service for the 21st century, managing for results: the nuts and bolts of government, transforming public sector organizations, and leveraging the private sector. For more information, interested parties should visit:

<http://endowment.pwcglobal.com/about.asp>

Conferences and Symposia

National FIELDS Conference - 2000, Chicago, January 19-20. This conference is sponsored by the U.S. EPA Region V. The Fully Integrated Environmental Location Decision Support (FIELDS) system is a collection of automated tools and rigorous analytical methods to support, enhance, and communicate environmental remediation decisions. Presentations at the conference include an overview of the FIELDS system components, case studies from projects in which the FIELDS system was piloted, and analysis techniques for environmental data. Registration is free, but limited to 150 people.

EPA/ITRC/RTDF In Situ Permeable Reactive Barriers: Application and Deployment, Atlanta, GA, February 8-9. The training course is designed to assist professionals in the regulatory community in overseeing the design, implementation, and monitoring of groundwater remedies that involve the deployment of permeable reactive barriers. Industry professionals and consultants will benefit from the updated technical information presented as well as the interaction with regulators and other professional colleagues. For agenda and registration information see

<http://www.trainex.org/prb> .

On-Site InSights, the Innovative Technologies for Site Assessment and Monitoring Workshop, Reno, NV, February 16-17. This workshop is intended to bring state regulators, engineering contractors, site owners and also individuals involved in Brownfield's cleanups together for hands on training. Participants will receive valuable information on the operation, cost, logistics and data acceptance issues of "real world" innovative technologies that are usable today. Limited travel assistance available for state and city employees. Contact On-Site Insights, NHSRC/NJIT, 17 Glen Road, Wayland, MA 01778 or Dr. Andrea Kinney at (508) 358-3532, FAX (508) 358-5091 or email to andreakinney@worldnet.att.net.

Freshwater Spills Symposium, Albuquerque, NM, March 6-8. The U.S. EPA is sponsoring this conference as an opportunity for local, state, federal, and industry responders to exchange information on problems associated

with response to and remediation of freshwater oil spills. For agenda and registration information, see <http://www.epa.gov/oilspill/fss/register.htm> . Deadline for registration is January 31, 2000.

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/techdrct> at any time night or day.