

Message #18: August, 1998

Since July 1, TechDirect gained 137 new subscribers for a total of 4735. Welcome to all the newcomers. If your peers are interested in subscribing to TechDirect, they may do so on the Clean-Up Information (CLU-IN) home page at <http://clu-in.org/membersh.htm>. If they do not have Internet access, your peers may subscribe to TechDirect by sending an E-mail message to lyris@lists.epa.gov. Leave the Subject line empty, and in the body of the message type: subscribe TechDirect [First name] [Last name]. Visit the TechDirect archive at <http://clu-in.org/techdrct.htm> to catch up on documents previously highlighted.

EPA FINAL RULE

Disposal of Polychlorinated Biphenyls (PCBs); Final Rule, June 29, 1998 (Volume 63, Number 124) [Page 35383-35474]. EPA is amending its rules under the Toxic Substances Control Act (TSCA) which address the manufacture, processing, distribution in commerce, use, cleanup, storage and disposal of polychlorinated biphenyls (PCBs). This rule provides flexibility in selecting disposal technologies for PCB wastes and expands the list of available decontamination procedures; provides less burdensome mechanisms for obtaining EPA approval for a variety of activities; clarifies and/or modifies certain provisions where implementation questions have arisen; modifies the requirements regarding the use and disposal of PCB equipment; and addresses outstanding issues associated with the notification and manifesting of PCB wastes and changes in the operation of commercial storage facilities. This rule also codifies policies that EPA has developed and implemented over the past 19 years. Some activities currently requiring PCB disposal approvals will no longer require those approvals. See

<http://www.epa.gov/fedrgstr/EPA-TOX/1998/June/Dav-29/t17048.htm>.

DOCUMENTS

NATO/CCMS Pilot Study on Evaluation of Demonstrated and Emerging Technologies for the Treatment of Contaminated Land and Groundwater. Download or view the following documents at <http://www.clu-in.org/partner1.cfm> or <http://nato.int/ccms>. Limited number of printed copies available from (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685.

(1) Phase II Final Report (EPA 542-R-98-001a). This volume describes the performance and results of 52 different

remediation projects/demonstrations from 14 countries during the five-year Phase II study. They are also summarized by technology limitations, environmental impact, health and safety concerns, and costs. Abstracts of CCMS Fellow Studies are provided as well [June 1998, 269+ pages].

(2) Phase II Overview Report (EPA 542-R-98-001b). This is an Executive Summary highlighting the most important conclusions and recommendations of the Phase II Pilot Study [June 1998, 12 pages].

(3) Phase II Appendix IV--Project Summaries (EPA 542-R-98-001c). This volume contains summaries of 52 remediation projects/demonstrations from 14 countries during the five-year Phase II study [June 1998, 158+ pages].

Innovative Site Remediation Technology: Phase II (Design and Application). This seven book series, produced by the WASTECH Consortium builds upon their earlier Phase I series and focuses on the design and application of specific remediation technologies. These consensus-based engineering manuals are written and reviewed by experts in the respective technology areas. The seven phase II books are available through the American Academy of Environmental Engineers (AAEE) at cost. Contact AAEE at (410) 266-3390, fax (410) 266-7653 or email aaee@ea.net.

Volume 1-Bioremediation

Volume 2-Chemical Treatment

Volume 3-Liquid Extraction Technologies

Volume 4-Stabilization/Solidification

Volume 5-Thermal Desorption

Volume 6-Thermal Destruction

Volume 7-Vapor Extraction and Air Sparging

Cost and Performance Report: Dual Auger Rotary Steam Stripping, Pinellas Northeast Site. This report was developed by the Department of Energy Innovative Treatment Remediation Demonstration (ITRD) program. It outlines the results of a demonstration of rotary steam stripping to remove VOCs. The report documents demonstration activities, summary data, and evaluation results on the cost and performance of the rotary steam stripping system [April 1998, 35 pages]. At this time only hard copies available, contact Mike Hightower at mmhight@sandia.gov.

Cost and Performance Report: *In Situ* Anaerobic Bioremediation, Pinellas Northeast Site. This report was developed by the Department of Energy Innovative Treatment Remediation Demonstration (ITRD) program. It outlines the results of a demonstration of an *in situ* anaerobic bioremediation to remove

chlorinated VOCs. The report documents demonstration activities, summary data, and evaluation results on the cost and performance of the *in situ* anaerobic bioremediation system [April 1998, 39 pages]. At this time only hard copies available, contact Mike Hightower at mmhight@sandia.gov.

Ground Water Currents (EPA 542-N-98-006). Ground Water Currents is a newsletter that provides descriptions and performance data for developments in innovative ground water treatment. This issue highlights remediation methods involving underground stripping in deep and shallow areas, *in situ* anaerobic bioremediation, and alternatives for DNAPL removal in fractured bedrock. [June 1998, 4 pages]. View or download from <http://clu-in.org/techpubs.htm>. For a hard copy, contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685.

Oil Spill Program Update. This quarterly is produced by the U.S. EPA Oil Program. This issue focuses on the Federal Oil Pollution Regulation as it pertains to vegetable oils and animal fats. The issues features discussions on the Spill Prevention Control and Countermeasures plan requirements and the Facility Response Plan requirements [July 1998, 16 pages]. Hard copies only at this time. Contact oliveira.beatriz@epamail.epa.gov.

CONFERENCES AND SYMPOSIA

Decision Support Software (DSS) Verification Visitor's Day. Albuquerque, September 16. As part of the Environmental Technology Verification (ETV) program, the U. S. Environmental Protection Agency, and the U. S. Department of Energy will be testing and verifying the performance of environmental decision support software (DSS) packages. Many agencies have expressed interest in the performance and potential applications of these packages when tested under real-world situations. Decision support software integrates environmental data and simulation models into a framework for making site characterization, monitoring, and cleanup decisions, (e.g., where to sample, cost/benefit analysis of additional or reduced sampling, and human risk analysis). An effective DSS package integrates, analyzes, and presents environmental information to assist a project manager in developing a cost-effective and defensible, cleanup/monitoring strategy. The verification testing will be conducted at the New Mexico Engineering Research Institute in Albuquerque, New Mexico. To showcase the efforts of this verification, including the technical aspects of the project, a Visitors Day will be held on Wednesday, September 16, 1998. During this day, those in attendance will hear formal presentations by the technology developers and be able to observe

application of the software to environmental problems. Advanced registration is required. Contacts: Amy Dindal, 423-574-4863, dindalab@ornl.gov (Visitor's Day) or Terry Sullivan, 516-344-2840, sulliva1@bnl.gov (Technical Information).

Monitored Natural Attenuation Seminars. The scientific understanding of natural attenuation processes continues to evolve, and interest in the use of monitored natural attenuation (MNA) at contaminated sites has increased significantly. The U.S. EPA and the U.S. Geological Survey will present seminars around the country on the technical issues associated with the various natural attenuation processes as they may occur in ground water. For more information on the seminar agenda and registration, contact <http://www.erg.com/erg/confer.htm>. Dates and locations for the seminars are:

September 2 & 3, Philadelphia
September 14 & 15, Denver
September 16 & 17, Chicago
October 14 & 15, Kansas City
November 2 & 3, Dallas
November 16 & 17, Atlanta
December 2 & 3, Seattle
December 8 & 9, Boston
December 14 & 15, San Francisco

The 1998 International Commercialization Conference, October 5-7, 1998, hosted by the Spokane Intercollegiate Research & Technology Institute (SIRTI). Entrepreneurs, policy makers, product development specialists, private investors, technology transfer managers, government agencies, universities, and innovators will share successful strategies, models and funding sources for bringing products from the bench to local and international markets. For more information, see <http://www.sirti.org>.

1998 Hazardous Waste Technology Exposition and Conference, San Diego, November 3-5. The Interstate Technology Regulatory Cooperation (ITRC) workgroup, a coalition of 26 states, is hosting a conference on state acceptance of innovative technologies. This conference will feature presentations and roundtable discussions regarding state information needs for technology consideration. The technology areas and topics that will be discussed include phytoremediation, *in situ* oxidation, *in situ* bioremediation, recirculating wells, UXO, DNAPLs, Radwaste, and pesticides. Companies that offer these technologies or deal with these contamination problems are invited to exhibit and participate in roundtable discussions with the state regulators. The deadline for registering for **exhibit space** is September 1. The conference

agenda will be available by October 1. For more information, contact Patricia Reyes [patricia_reyes@bah.com] or Courtney Zamora [courtney_zamora@bah.com]. Both may be reached at (703) 902-3373.

Are your waste management and remediation systems Y2K ready? Most people think of Y2K as a computer problem, but there are software programs and embedded chips, which may be vulnerable to the millennium bug, involved in all phases of site investigation and cleanup, waste management facilities, and underground tank operations.

As an example from the utilities industry, the Electric Power Research Institute reports that Y2K testing was conducted on a British power plant's generator temperature control system. The control system's clock was set to just before midnight Dec. 31, 1999. Twenty seconds past midnight, the generator unit tripped (turned off) due to high generator temperature. Turns out that an embedded chip in the control valve for generator cooling was integrated over time for smoothing and when the time moved from '99 to '00, the processor could not perform the algorithm and so the cooling valve went into fail-safe mode and closed, causing the unit to trip due to high temperature. If this type of thing occurred at many generators, there could be massive electrical outages.

Preparedness for Y2K is now receiving a lot of attention at highest levels of federal government. And a significant federal effort has been launched to deal with the Y2K problem, with two major facets: ensuring that critical federal information and security systems don't fail, and using federal government agencies as messengers about the importance of understanding and attending to the Y2K problem now. Will your pump and treat system operate? Will your monitoring systems function and produce reliable data? Will your waste management facility operate in a manner protective of the environment. Have you begun the process of examining potential Y2K related vulnerabilities associated with the environmental systems you manage?

As part of the Y2K awareness campaign, we are interested in identifying vulnerabilities that may exist in site assessment and remediation operations, hazardous waste landfills, incineration facilities, underground storage tank operations and oil delivery or storage systems. By identifying the possible Y2K problem scenarios, we may be able to help other waste management professionals that had not contemplated a relationship between potential Y2K problems and their environmental protection systems. I invite you to share waste system-related Y2K problem scenarios you foresee similar to the utilities example (scrubbed of any references to

specific locations or names). We will post the scenarios on CLU-IN as a service to others in the waste management community. Thank you.

If you have questions about TechDirect, contact Jeff Heimerman at (703) 603-7191 or heimerman.jeff@epamail.epa.gov.

<http://clu-in.org/techdrct/td0898.htm>
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