#### Message #21: November, 1998

Since October 1, TechDirect gained 163 new subscribers for a total of 5079. Welcome to all the newcomers! We hope this service continues to be beneficial. Let us know your ideas for its improvement.

The Hazardous Waste Clean-Up Information (CLU-IN) homepage is switching to a new address at <a href="http://clu-in.org">http://clu-in.org</a>. The old address, <a href="http://clu-in.org">http://clu-in.org</a>, will continue to work for a few more months. Please update your bookmarks and links to the CLU-IN site to <a href="http://clu-in.org">http://clu-in.org</a>. Thank you.

# Guidance

#### Management of Remediation Waste Under RCRA (EPA

**530-F-98-026).** This guidance was issued jointly by the U.S. EPA Office of Solid Waste and Emergency Response and the Office of Enforcement and Compliance Assurance. The guidance provides information on the RCRA regulations and policies that most often affect remediation waste. The information in this memo, written to RCRA/CERCLA Senior Policy Managers and Regional Counsels, is divided into three categories: information on regulations and policies that apply to all remediation waste; information on regulations and policies that apply only to contaminated media; and, information on regulations and policies that apply ages]. View or download at

http://www.epa.gov/epaoswer/hazwaste/ca/index.htm. For hard copies, contact (800) 424-9346 or (703) 412-9810.

### Documents

**Remediation Case Studies.** On November 5, The Federal Remediation Technologies Roundtable will announce the availability of seven new volumes of remediation technology cost and performance case studies. These seven volumes contain 85 new cost and performance reports adding to the existing 54 reports in six previous volumes. Each case study will be made available electronically on November 5 in a searchable database at <a href="http://www.frt.gov">http://www.frt.gov</a>. The hard copies of the seven volumes will also be available in mid to late November at (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685. The seven new reports include: Volume 7: Ex Situ Soil Treatment (Bioremediation, Solvent Extraction, Thermal Desorption) (EPA 542-R-98-011) [September 1998, 272 pages]

Volume 8: Soil Vapor Extraction (EPA 542-R-98-012) [September 1998, 298 pages]

Volume 9: Groundwater Pump and Treat - Chlorinated Solvents (EPA 542-R-98-013) [September 1998, 251 pages]

Volume 10: Groundwater Pump and Treat - Nonchlorinated Contaminants (EPA 542-R-98-014) [September 1998, 256 pages] Volume 11: Innovative Groundwater Treatment Technologies (EPA 542-R-98-015) [September 1998, 281 pages].

Volume 12: On-Site Incineration (EPA 542-R-98-016) [September 1998, 272 pages]

Volume 13: Debris and Surface Cleaning Technologies, and other Miscellaneous Technologies (EPA 542-R-98-017) [September 1998, 196 pages]

**Monitored Natural Attenuation in Wisconsin and Illinois**. This report describes a natural attenuation field study conducted jointly by the U. S. Environmental Protection Agency (U. S. EPA) Region 5, Wisconsin Department of Natural Resources (WDNR), the Illinois Environmental Protection Agency (IEPA), and Amoco Corporation (Amoco) since October 1994. The purpose of the study was to determine the effectiveness of natural attenuation and to develop a cost effective way to evaluate it. Four tank sites in Wisconsin and three in Illinois were studied for two or more years [February 1998, 20 pages]. View or download from http://clu-in.org/techdrot/techpubs.htm

techpubs.htm. **To obtain the appendices to this report, please contact** <u>alvarez.gilberto@epa.gov</u>.

Ground Water Issue: Design Guidelines for Conventional Pump-and-Treat Systems (EPA 540-S-97-504). This paper was published by the U.S. EPA National Risk Management Research Laboratory for the EPA Groundwater Forum. As its title implies, this issue paper focuses on design considerations for conventional extraction and injection systems used in subsurface remediation [September 1997, 39 pages]. View or download from http://www.epa.gov/ada/issue.html. For hard copies, contact (580) 436-8651 or fax your request to (580) 436-8503.

# Site Characterization and Sampling

ETV Site Characterization and Monitoring Technology Pilot Technology Verification Statements and Reports: PCB Analysis Technologies. Since 1995, ETV's Site Characterization and Monitoring Technology Pilot has tested technologies and written verification statements and accompanying reports summarizing the performance of the technologies in the demonstrations. The Pilot recently published verification statements and reports for six PCB analysis technologies. View, download, or order from the Index of Verification Statements and Reports at

http://clu-in.org/CSCT/Verstate.htm. The six published reports include:

Dexsil Corporation L2000 PCB/Chloride Analyzer (EPA 600-R-98-109) [108 pages] Hach Company PCB Immunoassay Kit (EPA 600-R-98-110) [108 pages] Strategic Diagnostics, Inc. RaPID Assay System for PCB Analysis (EPA 600-R-98-111) [118 pages] Strategic Diagnostics Inc. D TECH PCB Test Kit (EPA 600-R-98-112) [107 pages] Strategic Diagnostics, Inc. EnviroGard PCB Test Kit (EPA 600-R-98-113) [107 pages] Electric Sensor Technology 4100 Vapor Detector (EPA 600-R-98-114) [111 pages]

**Tech Trends (EPA 542-N-98-009)**. This periodic newsletter profiles recent developments in treatment and site characterization technologies. This issue highlights recent demonstration results and new technical resources for several innovative technologies for site characterization and process monitoring [October 1998, 4 pages]. View or download at <a href="http://clu-in.org/techpubs.htm">http://clu-in.org/techpubs.htm</a>. For hard copies, contact (800) 490-9198 or (513) 489-8190 or fax your request to (513) 891-6685.

**Overview of On-Site Analytical Methods for Explosives in Soil** (Special Report 98-4). This report was published by the Cold Regions Research and Engineering Laboratory of the U.S. Army Corps of Engineers. On-site methods for explosives are reviewed. Discussions include considerations of specificity, detection limits, extraction cost and ease of use. The report also includes discussion of unique sampling design considerations [February 1998, 37 pages]. View or download at <a href="http://www.crrel.usace.army.mil/techpub/CRREL\_Reports/index.html">http://www.crrel.usace.army.mil/techpub/CRREL\_Reports/index.html</a> [CASE SENSITIVE]. DOD personnel and contractors may obtain hard copies at (800) 225-3842. All others may order report through the National Technical Information Service at (703) 487-4650.

Soil-Vapor Versus Discrete Soil Sample Measurements for VOCs in the Near-Surface Vadose Zone: Feasibility Study (Special Report 98-7). This report was published by the Cold Regions Research and Engineering Laboratory of the U.S. Army Corps of Engineers. This study analyzed a TCE soil-vapor collection, handling and analysis protocol against discrete soil matrix sample analysis [June 1998, 14 pages]. View or download at http://www.crrel.usace.army.mil/techpub/CRREL\_Reports/index.html [CASE SENSITIVE]. DOD personnel and contractors may obtain hard copies at (800) 225-3842. All others may order report through the National Technical Information Service at (703) 487-4650.

# **Conferences and Symposia**

Reminder!! Brownfields 98: The Basics and Beyond Showcasing Successful Partnerships, Los Angelos, November 16 - 18. Brownfields ?98 will provide unparalleled networking opportunities, bringing all major stakeholders in Brownfields cleanup and redevelopment together under one roof. Brownfields 98 is your chance to meet with experts in Brownfields business, development, finance, insurance, and law; representatives from grassroots community organizations and environmental groups; and top federal, state, and local government officials, to share ideas and experiences in this exciting and ever expanding field. For more information, visit

http://www.epa.gov/brownfields/bf98.htm.

Innovative Technologies for Site Assessment and Monitoring Workshop, Chicago, December 7. This workshop is intended to bring together for hands on training state regulators, engineering contractors, site owners and individuals involved in Brownfield's cleanups. Participants will receive valuable information on the operation, cost, logistics and data acceptance issues. 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.

Reminder!! Advances in Innovative Groundwater Remediation, Atlanta, GA, December 15. This free event, sponsored by the Ground Water Remediation Technologies Analysis Center (GWRTAC), will be held at the Downtown Atlanta Marriott Marquis Hotel. The one day seminar will include presentations from practitioners involved in phytoremediation, treatment walls, in situ flushing, thermal stripping, in situ chemical oxidation, remediation of metals, and bioremediation. For an agenda and Registration information, see http://www.gwrtac.org or contact Karen Devlin at Karen\_Devlin@philip-serv.com or (215) 643-5466.

**Reminder!! In Situ Thermal Processes Seminar, Atlanta, GA December 16.** This free event is sponsored by the U.S. EPA Technology Innovation Office and will be collocated at the Downtown Atlanta Marriott Marquis Hotel with the December 15 GWRTAC Groundwater seminar mentioned above. This one day seminar will focus on the fundamental principles, design considerations, limitations, and case studies for five in situ thermal processes. The technologies to be addressed include Dynamic Underground Stripping, Electrical Conductive Heating, Radio Frequency Heating, Six-Phase Electrical Heating, and In Situ Vitrification. Note...you may register for the December 15 and/or 16 event by contacting Karen Devlin at the address/phone number listed above.

# Other

**Subscription.** Remember it is free!! If your peers are interested in subscribing to TechDirect, they may do so on the Clean-Up Information (CLU-IN) home page at <a href="http://clu-in.org/">http://clu-in.org/</a>. 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 <a href="http://clu-in.org/techdrct.htm">http://clu-in.org/techdrct.htm</a> to catch up on documents previously highlighted. If you wish to get off the TechDirect subscription list, please let me know.

If you have any questions regarding TechDirect, contact me at (703) 603-7191 or heimerman.jeff@epa.gov

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