

**OFFICE OF RESEARCH AND DEVELOPMENT
HAZARDOUS SUBSTANCES TECHNICAL LIAISON
REGION 9 NEWSLETTER**

Spring 2006, Edition 35

Welcome to spring and another edition of the Region 9 HSTL Newsletter! This quarter I wanted to share with you a number of new environmental technologies, some of which have been developed as a result of recent homeland security concerns, such as water and chemical monitors. Also now available is information on controlling arsenic in water supplies. All this info is in the "National" section below.

A large number of documents and conferences are also noted, with one notable one on "The Future of Agriculture" being offered in Sacramento this August, which will combine agricultural cleanup and environmental concerns all in one conference. Check out this webpage for more info:

<http://www.dce.ksu.edu/dce/conf/ag&environment/> .

One sad note is that EPA's SITE Program, almost 20 years old and designed to test and evaluate vendors' new environmental cleanup technologies on real site conditions, is being discontinued due to the reality of today's bleak budget climate. The data from a number of useful past evaluations are still online, and some will soon be completed. But from then on, it's au revoir, SITE....<http://www.epa.gov/ORD/SITE/>

Remember, as EPA staff, I can assist you with Superfund / RCRA / Brownfields technical support through ORD. Please take advantage of that so that it doesn't disappear too! Don't hesitate to give me a call.

Mike Gill
EPA Region 9
ORD Hazardous Substances Technical Liaison
415-972-3054

Spring 2006 Edition of the Region 9 HSTL Newsletter:

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Serious Scientists Gather 'Round...

NATIONAL NEWS

New Tools and Technologies

Multi-Parameter Water Monitors For Distribution Systems Verified

The ETV Advanced Monitoring Systems Center, in cooperation with Battelle, has verified the performance of five multi-parameter water monitors for distribution systems with water security

applications. The monitors were verified for their performance in continuously measuring a combination of the following: free or total chlorine, total alkalinity, turbidity, temperature, conductivity, pH, total organic carbon, and oxidation-reduction potential in drinking water. The five monitors are:

TitraSip SA developed by Man-Tech Associates, Inc. ;
Model WQS developed by Rosemount Analytical;
Q45WQ Series developed by Analytical Technology, Inc. ;
Water Distribution Monitoring Panel and Event Monitor Trigger System developed by Hach Company; and
Sentinal 500 Series developed by Clarion Sensing Systems, Inc.

The performance of each monitor was assessed in terms of accuracy, response to injected contaminants, inter-unit reproducibility, ease of use, and data acquisition. The verification reports and statements will be available on the ETV Web Site at <http://www.epa.gov/etv/verifications/vcenter1-35.html> .

Reverse Osmosis Based Point-Of-Use Device For Chemical Agents Verified

The ETV Drinking Water Systems Center, in cooperation with NSF International, has verified the performance of a reverse osmosis based point-of-use device for removing chemical agents from drinking water point-of-use. The device, the Watts Premier WP-4V developed by Watts Premier, Inc., was verified for water security applications. The system was tested for removal of aldicarb, benzene, cadmium, carbofuran, cesium, chloroform, dichlorvos, dicrotophos, fenamiphos, mercury, mevinphos, oxamyl, strontium, and strychnine. The verification report and statement will be available on the ETV Web Site at: <http://www.epa.gov/etv/verifications/vcenter2-18.html>

Field-Based Perchlorate Measurement Instrument

(From Spring 06 Fed Corner of HydroVisions Newsletter - Jan 24, 06)

The National Defense Center for Environmental Excellence (NDCEE) has successfully completed a demonstration of a field-deployable prototype instrument that measures perchlorate concentrations in water. Demonstration results indicate that the instrument offers advantages over EPA Method 314. For example, it uses less expensive components, can be hand-portable for on-site testing, produces faster results, has a potentially lower detection limit, and is less prone to interference in high-salinity samples. For more information on the perchlorate monitor, please contact Hany Zaghoul at hany.h.zaghoul@erdc.usace.army.mil or Bill Tumblin at tumblinw@ctc.com.

Tools to Help Small Utilities Control Arsenic

(From Spring 06 Fed Corner of HydroVisions Newsletter - Jan 24, 06)

EPA has released a set of user-friendly multimedia products to help small drinking-water utilities meet new regulations to control arsenic. The tools will provide owners and operators with information to guide them in making treatment decisions. Kits including all of the new arsenic tools will be provided to EPA's state and technical assistance partners for distribution to public water systems affected by the arsenic regulation. The anchor product in this suite of tools is the "Arsenic Virtual Trade Show," a learning portal for arsenic-treatment technology. The website features a database of vendors, a treatment-decision tree, and tips for evaluating and selecting treatment providers. To launch the Arsenic Virtual Trade Show, go to:

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

New Arsenic Removal CD For Drinking Water Systems

(from the Feb 2006 NRMRL Monthly)

In 2005, EPA's Office of Research and Development and Office of Water presented 11 arsenic training workshops nationwide to provide in-depth treatment technology training to help drinking water systems become compliant with the new arsenic rule of 10 parts per billion (10 ppb). An interactive multimedia CD is now available summarizing workshop activities for all affected drinking water treatment facilities. The CD, "Interactive Workshop on Arsenic Removal from Drinking Water," presents a creative mix of digital video, audio, 3-D animation, engaging graphics and peer-reviewed content to give viewers a new way to interact with the workshop technical training sessions and other activities.

The CD is Windows OS-based and is available free of charge from EPA's National Service Center for Environmental Publications at 800-490-9198.

Reusable Environmental Cleanup Equipment

(Thanks to Ken Skahn, EPA HQ, Superfund Program and Lindsey Lien, US Army Corps of Engineers, Omaha)

There is a new web-based system developed to allow for the posting, transfer, and reuse of surplus remediation equipment. The equipment listed was purchased for a remedial action at a Superfund or other Federal agency site and is no longer needed at the site. The purpose, of course, is to reduce remedial action costs and make efficient use of equipment that would otherwise be left at the site or auctioned off at little return on the investment. Over the past 10 years there has been a number of Superfund sites on the East coast that have participated in equipment transfer mainly by word of mouth. This new system should make the practice more wide-spread and as painless as possible.

For more info, call Ken Skahn (703-603-8801) and see the following website:

<http://www.environmental.usace.army.mil/info/technical/process/prototypical/usedequip/usedequip.html>

SITE Program Scheduled for Closure in FY06

Here is a note from this winter's SITE Program quarterly report.....a sad note about the end of this program. (<http://www.epa.gov/ORD/SITE/quarterly/042005/highlights.htm>)

The Superfund Innovative Technology Evaluation (SITE) Program has successfully promoted the development, commercialization, and implementation of innovative hazardous waste treatment technologies for 20 years. Funding for SITE is scheduled to be discontinued at the end of FY '06. Since 1986, the SITE Program has completed over 150 evaluations of waste treatment technologies and 47 measurement, monitoring, and characterization technology demonstrations.

The cost savings realized from the use of innovative technologies such as those tested in the SITE Program has been estimated from analysis of Superfund RODs from 1993-2000 that selected innovative technologies for all or part of the remediation. The total cost savings is estimated at \$2.6 billion for various site cleanups. ([The Superfund Innovative Technology evaluation Program Annual Report to Congress FY 2002, EPA/540/R-04-505](#)).

During FY '06 the SITE Program will honor commitments for demonstration and evaluations of technologies currently in the Program. It is anticipated that all demonstration activities will be completed by the end of FY' 07. For additional information contact Randy Parker 513-569-7271.

LOCAL NEWS

HVOC Field Screening Technology

(From National Defense Center for Environmental Excellence (NDCEE) Newsletter - Winter 2006)

In 2005, the NDCEE performed two field evaluations of a halogenated volatile organic compound (HVOC) field screening technology. Evaluations were performed at North Island Naval Air Station and Edwards Air Force Base (AFB), California. Called the X-Wand™, the field-portable monitor can detect and quantify HVOC concentrations in soil and groundwater samples. It is expected to be an improvement over the common screening method using photoionization detectors, which can only detect, not measure, HVOCs. Both the Naval Facilities Engineering Command and the Air Force Center for Environmental Excellence are interested in using the emerging technology to assist with site remediation activities.

For the complete article, click on: <http://www.ndcee.ctc.com/> and then "Newsletters" (Winter 2006 Newsletter)

Compost-Free Bioreactors Remove Metals from Acid Rock Drainage

(From the March 2006 issue of Technology News and Trends)

The U.S. EPA's National Risk Management Research Laboratory (NRMRL) recently completed a two-year evaluation of a full-scale, compost-free bioreactor system operating at the Leviathan Mine Superfund site in northeastern California. The technology uses a liquid-carbon source in a rock matrix, rather than compost or wood chips, which is consumed by bacteria and collapses over time. Preliminary performance tests (reported in the May 2004 issue of *Technology News and Trends*) indicated 91-99% efficiency in removal of target metals from ARD. Performance results over the past two years confirmed that the system achieved a target-metal removal efficiency of 95%.

(For the complete article, please go to: <http://www.clu-in.org/products/newsltrs/tmandt/0306.cfm>)

Contributed by Edward Bates, NRMRL (bates.edward@epa.gov or 513-569-7774), Dr. Tim Tsukamoto, University of Nevada-Reno (timothyt@unr.edu), Glenn Miller, Ph.D., University of Nevada-Reno (gcmiller@unr.edu), and Matt Udell, Tetra Tech EM Inc. (matt.udell@ttemi.com or 916-853-4516)

DATEBOOK - UPCOMING EVENTS

This section of the newsletter is an attempt to present both EPA and non-EPA sponsored environmental technology related courses and conferences. But being a quarterly publication, it is impossible for this newsletter to always be up-to-date. For the most pertinent information on upcoming EPA courses, see <http://www.trainex.org>. These events are listed chronologically.

Many of the entries in these newsletters are from TIO's "TechDirect" emails (thank you Jeff Heimerman!). TechDirect prefers to concentrate mainly on new documents and the internet live events. However, they do support an area on the CLU-IN webpage where announcement of conferences and courses can be regularly posted. Sponsors can input information on their events at <http://clu-in.org/courses>. Likewise, the page has an area for upcoming events that might be of interest. It allows users to search events by location, topic, time period, etc.

Many of you know that www.clu-in.org routinely place seminars in the CLU-IN Studio archive after they have aired. This provides access to the slides and the audio file for each presentation. Some of you requested that we make these audio files more portable. Now they have done that. For more recent seminars, you now have the option to download them in MP3 format which will allow you to listen via portable music players. You may also subscribe to their podcast feed, which will alert you when new seminar archives are available. For more information, see <http://clu-in.org/live/archive.cfm> .

New CLU-IN Training Area. A new training section has been posted to CLU-IN. The new Training page offers visitors a quick glimpse of upcoming training opportunities in a monthly view as well as a running list of events. Links to upcoming Conference Webcasts, Trainex and Archived Internet Seminars and Podcasts are available on the new Training Page. See: <http://www.cluin.org/training> .

ITRC Internet Based Training

These are typically 1-2 hour online courses where the participant follows a webpage presentation, while listening on the phone. Check - <http://www.itrcweb.org> or <http://www.clu-in.org/studio/seminar.cfm> for times and registration.

NOTE: All dates/times are subject to change – check <http://www.itrcweb.org> for the most up-to-date information.

April 20th - *Remediation Process Optimization Advanced Training*
11:00 a.m. to 1:15 p.m. EASTERN Time

May 2nd - Introduction to Environmental Insurance and Other Risk Management Tools
2-3pm EASTERN TIME

May 11th – *What's New with In Situ Chemical Oxidation?*
11:00 a.m. to 1:15 p.m. EASTERN Time

May 13, 2006 - *Design, Installation and Monitoring of Alternative Final Landfill Covers*
http://www.clu-in.org/conf/itrc/alt_051304/

May 18th – *Site Investigation and Remediation for Munitions Response Projects*
11:00 a.m. to 1:15 p.m. EASTERN Time

2006 Ground Water Summit
April 23-26, 2006
San Antonio, TX

<http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=633&fecatuid=2009&datecatuid=1032>

National Association of Environmental Professionals' 31st Annual Conference
April 23-26, 2006
Albuquerque, NM
<http://www.naep.org/displayconvspecific.cfm?convnbr=2482>

WasteExpo 2006 and Medical Waste Conference
April 24-27, 2006
New Orleans, LA
<http://www.wasteexpo.com/>

Low Cost Remediation Strategies for Contaminated Soil and Ground Water
April 25-27, 2006
Chicago, IL
<http://www.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=655&feecatuid=2115&datecatuid=1056>

EnviroExpo & Conference 2006
May 2-3, 2006
Boston, MA
<http://www.enviroexpo.com/>

Restoring Greenspace: Ecological Reuse of Contaminated Properties in EPA Region 10
May 3-4, 2006
Seattle, WA
<http://www.wildlifehc.org/events/Index.cfm?Page=1&EventsID=3919>

Long-Term Monitoring Optimization (LTMO) Training
May 3-4, 2006
Trenton, NJ
<http://www.trainex.org>

Solid/Hazardous Waste Conference and Exhibition
May 3-5, 2006
Gatlinburg, TN
<http://www.state.tn.us/environment/swm/conference/>

Current and Future Challenges in Environmental Health, Toxicology and Food Safety in Central and Eastern Europe

May 3-5, 2006

L.I. Medved's Institute of Ecohygiene and Toxicology, Kiev, Ukraine

<http://www-apps.niehs.nih.gov/sbrp/3/kiev2006/>

ATSDR Course: Chemical Agents of Opportunity for Terrorism
The Medical and Psychological Consequences of TICs (Toxic Industrial Chemicals) and TIMs (Toxic Industrial Materials)

May 4th 2006

San Francisco

<http://www.trainex.org/offeringslist.cfm?courseid=275&all=yes>

Friday and Saturday, May 5-6th 2006

Monterey

<http://www.trainex.org/offeringslist.cfm?courseid=275&all=yes>

Collaborative Cleanups: Coordinating Cleanups to Revitalize America's Communities

May 4-5, 2006

Bretton Woods, NH

Contact: Ellen Manges (202) 566-0195

<http://www.epa.gov/landrevitalization>

2006 NSTI Nanotechnology Conference and Trade Show

May 7-11 2006

Boston, Massachusetts

<http://www.nsti.org/Nanotech2006/>

5th National Monitoring Conference "Monitoring Networks: Connecting for Clean Water"

May 7-11, 2006

San Jose, CA

http://water.usgs.gov/wicp/acwi/monitoring/conference/2006/calendar_annct_06.pdf

2006 IEEE International Symposium on Electronics and the Environment

May 8-11, 2006

San Francisco, CA

<http://www.regconnect.com/content/isee/>

National Sustainable Design Expo and Competition

Washington, DC

May 9-10

<http://www.epa.gov/P3>

VADOSE ZONE HYDROLOGY, CONTAMINATION & MODELING COURSE

May 10-12, 2006

Seaport Conference Center, Redwood City, CA

<http://www.grac.org/vadosereg.html>

2006 NATIONAL SBIR/STTR CONFERENCE

May 15-18, 2006

Louisville, KY

<http://www.sbirworld.com/ky/>

2006 NGWA Western Focus Ground Water Conference

May 16-17, 2006

San Francisco, CA

<http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=639&feecatuid=2080&datecatuid=1041>

The U.S. EPA Science Forum 2006, "Your Health, Your Environment, Your Future,"

May 16-18, 2006

Washington, DC

<http://www.epa.gov/ord/scienceforum/index.htm>

MODFLOW and More 2006: Managing Ground-Water Systems

May 22-24, 2006

Golden, CO

<http://www.mines.edu/igwmc/events/modflow2006/modflow2006.shtml>

Isotopic & Hydrogeological Characterization of Fractured Rock Settings: Current and Novel Approaches

May 22-23, 2006

Pittsburgh, PA

<http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=654&feecatuid=2108&datecatuid=1055>

Fifth International Battelle Conference on Remediation of Chlorinated and Recalcitrant Compounds

May 22-25, 2006

Monterey, CA

<http://www.battelle.org/environment/er/conferences/chlorcon/default.stm>

Multi-Agency Radiological Laboratory Analytical Protocols (MARLAP)
New Practical Training on MARLAP Part I

May 31– June 1, 2006

Sacramento, CA

To register, contact Richard Lessler at 415-947-4197 or <Lessler.Richard@epa.gov>

“Emerging Contaminants in Groundwater: A Continually Moving Target”

June 7 – 8, 2006

Concord, CA

<http://www.grac.org/contaminantsmain.html>

Contaminated and Hazardous Waste Site Management: Theory, Practice, and Outdoor Field Demonstrations

June 12-16, 2006

Toronto, Canada

<http://www.contaminatedsite.com/index.html>

Long-Term Monitoring Optimization (LTMO) Training

June 13-14, 2006

Kansas City, KS

<http://www.trainex.org>

EPA's NARPM 2006 Conference
June 19-24, 2006
New Orleans, LA
<http://www.epanarpm.org>

AWMA 99th Annual Conference and Exhibition - "Healthy Environments: Rebirth and
Renewal"
June 20-23, 2006
New Orleans, LA
<http://www.awma.org/ACE2006/>

Environmental Forensics
June 20-21, 2006
Columbus, OH
[http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=651&feecatuid=2099
&datecatuid=1052](http://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=651&feecatuid=2099&datecatuid=1052)

National Corrective Action Conference
June 20-21, 2006
Providence, RI
<http://www.epa.gov/region1/nationalcaconf/>

10th Annual Green Chemistry & Engineering Conference
June 26-30, 2006
Washington, DC
<http://www.sitestories.com/greenchem2006/index.html>

Combined Remedies Workshop
Date: June 27-28, 2006
Location: Tufts University; Medford, MA
<http://www-apps.niehs.nih.gov/sbrp/3/combinedremedies/>

2006 Community Involvement Conference and Training

June 27-30, 2006

Milwaukee, WI

<http://www.epa.gov/superfund/action/community/ciconference/2006/>

2006 NGWA Ground Water and Environmental Law Conference

07/06/2006 - 07/07/2006

Chicago, IL

<https://info.ngwa.org/servicecenter/Meetings/MeetingDetail.cfm?meetingid=638&feecatuid=2048&datecatuid=1040>

ASTSWMO State hazardous Waste Managers Conference

July 11-13, 2006

Albuquerque, NM

<http://astswmo.org> Contact: Allen Pearce (202) 308-8636

Pacific Southwest Organic Residuals Symposium

July 12-14, 2006

Sacramento CA

<http://www.wef.org/ConferencesTraining/Conferences/Co-sponsoredEvents/OrganicsResidualsSymposium.htm>

EPA STAR Progress Review Workshop for the Endocrine Disruptors Program

July 13-14, 2006

EPA, RTP, North Carolina

<http://es.epa.gov/ncer/events/index.html#jul1306>

Conference on Mercury as a Global Pollutant

Madison, Wisconsin

August 6-11, 2006

www.mercury2006.org

The Future of Agriculture: Science, Stewardship, and Sustainability

August 7-9, 2006

Sacramento, CA

<http://www.dce.ksu.edu/dce/conf/ag&environment/>

2006 Midwestern States Risk Assessment Symposium

August 21-24, 2006

Indianapolis, IN

<http://web.e-enterprise.purdue.edu/wps/portal/Environment/msras>

Multimodal Training Seminars

Department of Transportation's Pipeline and Hazardous Materials Safety Administration
(PHMSA)

August 22-23, 2006

Chicago, IL

<http://hazmat.dot.gov/training/training.htm#classes>

"Nanoparticle Dosimetry, Toxicology and Cellular Interactions" (during International Aerosol
Conference)

September 10-15, 2006

St. Paul, MN

<http://www.aaar.org/IAC2006/general.htm>

Second Biennial Central and Eastern European Environmental Health Conference (CEEHC)

September 17-20, 2006

Bratislava, Slovakia

<http://niles.niehs.nih.gov/sbrp2/events/index.cfm>

WASTECON 2006

September 19-21, 2006

Charlotte, NC

<http://www.swana.org>

First International Conference on DNAPL
CHARACTERIZATION AND REMEDIATION

September 25-28, 2006

Pittsburgh, PA

<http://www.redoxtech.com>

22nd Annual International Conference on Soils, Sediments and Water

University of Massachusetts Amherst

October 16-19, 2006

www.UMassSoils.com

NATIONAL SBIR FALL 2006 CONFERENCE

Nov. 6-9, 2006

Milwaukee, WI

<http://www.sbirworld.com/conferences/eventDetails.asp?mnuConf=1&confId=1648&fromPg=home>

Brownfields Conference

Nov 13-16, 2006

Boston, MA

<http://www.brownfields2006.org/en/index.aspx>

Hard Rock 2006 - Sustainable Modern Mining Applications

Nov 14-16, 2006

Tuscon, AZ

<http://www.epa.gov/hardrockmining/hardrock/hardrock2006.htm>

Partners in Environmental Technology Technical Symposium & Workshop

November 29-Dec 1, 2006

Washington, D.C.

<http://www.estcp.org/calendar/related-events.cfm#upcomingSymp>

WEB PAGES

Improved HSTL Website!

The HSTLs have been working to increase their visibility online with improved websites, both on the internet and the intranet. Most of the information is identical, but some, such as tech support, available only to EPA staff, is on the intranet. Here are the homepages:

Internet: <http://www.epa.gov/osp/hstl.htm>

Intranet (within EPA): <http://intranet.epa.gov/ospintra/scienceportal/htm/hstl.htm>

Stormwater Clearing House

The University of Massachusetts has developed a searchable database containing validated performance data and technical information on innovative stormwater treatment technologies. The database can be accessed at an interactive website:

<http://www.mastep.net>

Hurricane Efforts by the Superfund Basic Research Program (SBRP)

The SBRP has funded research/outreach activities at over 100 hazardous waste sites. It falls under the National Institute of Environmental Health Sciences (NIEHS) and is coordinated with EPA. This research is described in detail on their webpage (<http://www-apps.niehs.nih.gov/sbrp/>). They typically conduct classic research on Superfund related issues, but have recently branched out into new initiatives and posted new information on environmental health impacts in the Gulf Coast region following Hurricanes Katrina and Rita. As the website states:

This site is targeted to provide useful and readily accessible environmental health information to public health, environmental health, and public safety workers and volunteers deployed to impacted communities.

Please visit the website: <http://www-apps.niehs.nih.gov/katrina/>

New Phytotechnologies Profiles

EPA has developed this website to summarize timely information about full-, field- and large greenhouse-scale applications of phytotechnology. Projects for this website are collected using information from technical journals, conference proceedings as well as information obtained from technology vendors and site managers. The project profiles contain information about relevant site background, the types of contaminants treated, type of vegetation used, phytotechnology mechanisms, planting date, project size, location, cost, monitoring and performance results, as well as points of contact and references. This website can be used as a networking tool (each profile has a contact) to provide past solutions and lessons learned to new sites with similar contaminants and climate.

<http://www.cluin.org/products/phyto/>

EPA "TechMatch" Website

(Edited from 3/1/06 EPA NewsBriefs)

More than 130 EPA scientific patents of technologies that benefit the environment can now be viewed at the new EPA TechMatch web site. Under the Federal Technology Transfer Act (FTTA) of 1986, government agencies may patent and license inventions, which assist new ideas from government laboratories to enter the marketplace. Entrepreneurs can view and license EPA technologies to develop new products that offer both environmental protection and economic growth.

TechMatch includes third-party independent analyses of the commercial potential of the technologies, information on in-house research, and links to the full U.S. Patent and Trademark Office description of each patent. Technologies that have been assessed to have particularly high market potential are also featured.

TechMatch was developed by EPA in coordination with the West Virginia High Technology Consortium Foundation, and is available at: <http://www.epatechmatch.com/> .

New CLU-IN Contaminant Focus Area - POPs

A new Persistent Organic Pollutants section has been posted to our Contaminant Focus Area. The Contaminant Focus area bundles information associated with the cleanup of individual contaminants and contaminant groups. This contaminant focus area addresses persistent organic pollutants (POPs) information and is presented in categories such as Overview, Characteristics and Behavior of POPs, Health Effects of POPs, Treatment Technology Reports, and Additional Resources. Contaminant Focus not only draws upon existing resources from the CLU-IN site, but also links to sources of contaminant-specific information that were not previously cited or available on CLU-IN. This area will be updated continuously with information from federal cleanup programs, state sources, universities, nonprofit organizations, peer-reviewed publications, and public-private partnerships. See:

[http://clu.in.org/contaminantfocus/default.focus/sec/Persistent_Organic_Pollutants_\(POPs\)/cat/Overview/](http://clu.in.org/contaminantfocus/default.focus/sec/Persistent_Organic_Pollutants_(POPs)/cat/Overview/) .

Parameter Source Catalog for Radiation Modeling

The Parameter Source Catalog is a web-based, searchable and updatable catalog of existing sources of information on parameters and other data used in pathway modeling for environmental cleanup of sites contaminated with radioactive materials. It was produced under the direction of the Interagency Steering Committee on Radiation Standards (ISCORS). The member agencies are: Environmental Protection Agency, Nuclear Regulatory Commission, and the Departments of Energy, Defense, Human Health and Services, Labor, and Transportation. The Catalog is intended for use by professionals, managers, and others involved or interested in the use of transport/exposure pathway modeling to determine the doses and risks associated with contaminated sites. It provides subject and text search capabilities, and information on parameter definitions, on transport/exposure pathways, and on models and codes. It contains a tutorial for new users, and answers to frequently asked questions.

<http://web.ead.anl.gov/iscors/home.cfm>

New Research Brief on Transverse Dispersion Available

(January 2006 - News from the Western Region Hazardous Substance Research Center)

This short web article describes a novel approach for determining transverse dispersion, a process important for dilution and mixing of contaminants in groundwater. The brief describes research by Peter Kitanidis and his research team at Stanford University. Their experiments with helical and cochlear devices suggest that the rate of pore-scale transverse dispersivity may be greater than the values often assumed in aquifer modeling and cleanup simulations. Read more...

http://wrhsrc.oregonstate.edu/briefs/brief_9.htm

RECENT DOCUMENTS, DATABASES, ETC.

These entries are arranged alphabetically. Thanks to TechDirect, Tech Trends, NRMRL News, the ETV Program, DOE, DoD and others for posting their latest documents. And remember, many of these are available in paper format in the Region 9 library. Use your local library.....or it may disappear. It's happening at EPA.....

"Anaerobic Biodegradation of MTBE at a Gasoline Spill Site."
Wilson, John T., Cherri Adair, Philip M. Kaiser, and Ravi Kolhatkar. 2005. Ground Water Monitoring & Remediation, 25, 3:1003-115.

Characterization, Design, Construction, and Monitoring of Bioreactor Landfills
(ITRC document ALT-3)
(February 2006, 111 pages) (2MB)
<http://www.itrcweb.org/Documents/ALT-3.pdf>

"Commercial-Scale Aerobic-Anaerobic Bioreactor Landfill Operations."
Green, R., G. Hater, C. Goldsmith, F. Kremer, and T. Tolaymat. Proceedings of the 10th Sardinia International Solid Waste Symposium, Sardinia, Italy, September/October, 2005.

Contaminated Sediment Remediation Guidance for Hazardous Waste Sites
(EPA-540-R-05-012)
(December 2005, 236 pages)
<http://www.epa.gov/superfund/resources/sediment/guidance.htm>

Demonstration Applications of ARAMS for Aquatic and Terrestrial Ecological Risk Assessment
ERDC/EL TR-06-1 (U.S. Army Corps of Engineers)
(January 2006, 101 pages) (7MB)
<http://el.erd.usace.army.mil/elpubs/pdf/trel06-1.pdf>

Edible Oil Barriers for Treatment of Perchlorate Contaminated Groundwater
(DoD ESTCP Document ER-0221)
(November 2005, 155 pages) (5MB)
http://www.clu-in.org/download/contaminantfocus/perchlorate/estcp_perchlorate.pdf

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Serious Scientists Gather 'Round...

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JN: Journal of Environmental Engineering
PD: 2006
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PG: 120-128

PB: ASCE AMERICAN SOCIETY OF CIVIL ENGINEERS

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Mike Gill
ORD Hazardous Substances Technical Liaison
US EPA Region 9 / SFD-84
75 Hawthorne Street
San Francisco, CA 94105
415-972-3054
415-947-3520 (Fax)
Gill.Michael@epa.gov
