



OFFICE OF RESEARCH AND DEVELOPMENT SUPERFUND AND TECHNOLOGY LIAISON (STL) REGION 9 NEWSLETTER

Spring 2008, Edition 43

Even in the coldest parts of the country, spring has arrived, the ground has once again thawed, and outside construction work at cleanup sites is starting up. San Francisco is never that cold and the Giants haven't thawed out yet from the winter break....but that's another story - time to get back to work! This is the another installment of the STL Region 9 Newsletter, hopefully offering you some valuable information from the world of hazardous waste cleanups. Check it out for stories on [successful technology applications](#) (bioremediation and ISCO) with a local slant, as well as an integrated technology approach used at the Pemaco site in Maywood, CA. Also, read about the new [Regional Environmental Technology Advocates Network](#) and find the latest on conference dates and helpful new documents. (There is also a bit of commentary on the state of EPA science at the end that may be of interest. Hmmm.....)

Although somewhat in a state of flux, ORD's Tech Support Centers continue to work very hard to give you tech support to supplement your regional tech support or contractual expertise. Please continue to consider them for your technical needs - I'm available to help you make that connection. And finally, congratulations to both my newly retired colleague in Region 7, Bob Mournighan, and newly hired colleague in Region 8, Kathleen Graham. Goodbye to Bob and hello to Kathleen!

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EPA Region 9
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Serious Scientists Gather 'Round...

NATIONAL NEWS

[2008 EPA Science Forum: Innovative Technologies and Economic Progress](#)
(From NRMRL News, March 2008)

I don't usually promote individual conferences in this section, but here's an important one to consider.....



The eighth annual EPA Science Forum will be held in Washington, DC on May 20-22. This year, the forum will highlight the role of innovative technologies in an expanding and sustainable economy. In addition to scientific sessions and poster presentations,

presenters are planning a display of the models, equipment, and technological solutions designed to help maintain a safe and prosperous environment, at home and around the world.

This year's Science Forum will emphasize three major themes:

- Technology Advances and Future Directions
- Energy, Climate, and the Environment
- Water Systems Infrastructure and Security

For information, see: <http://www.epa.gov/scienceforum> .

First Meeting Of The EPA "Regional Environmental Technology Advocates Network"

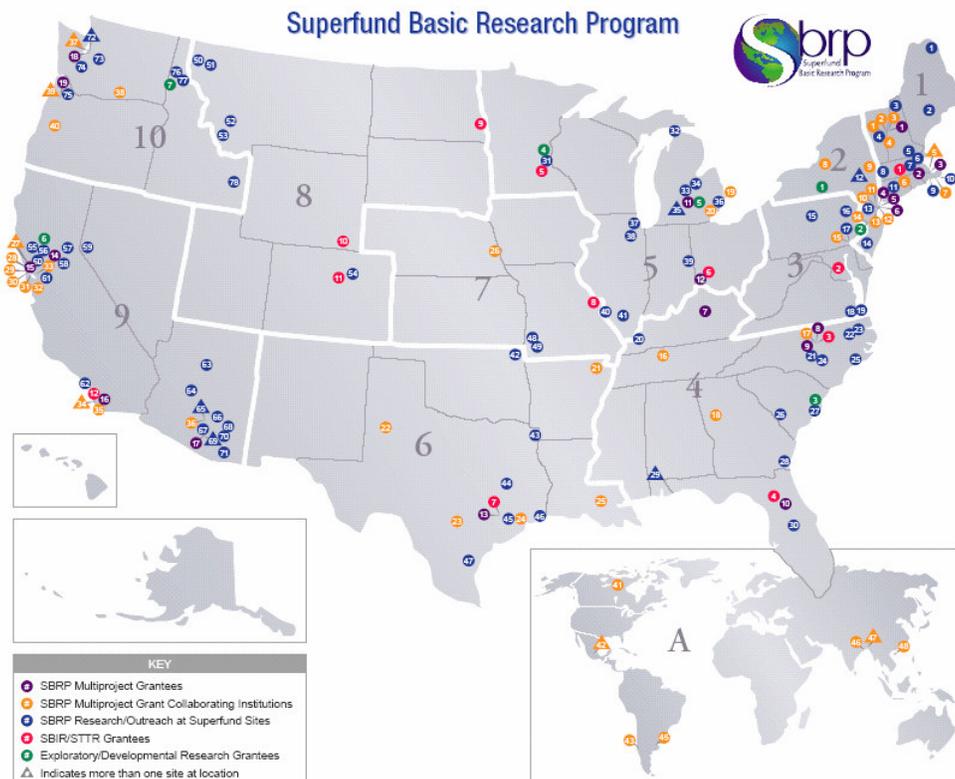
(Edited from the ETV report of March, 2008)

In 2007, EPA established a Regional Environmental Technology Advocates Network (RETAN). The RETAN is comprised of technology advocates from each of the ten EPA regions and is charged with identifying opportunities to use technology to achieve better results, sharing information within the Agency and among its stakeholders, and serving as liaisons with technology programs across the Agency and members of the EPA Environmental Technology Council. The newly-formed RETAN met for the first time on April 1-3 in Chicago, IL. Two main objectives of the meeting, led by EPA's interim Senior Environmental Technology Officer, Jeff Heimerman, were to identify priority environmental problems with technology needs for each region, and to discuss existing and potential tools, technology programs, and partnerships that could aid the RETAN in fulfilling its mission. Some examples of regional environmental problems identified at the meeting included: stormwater and non-point source nutrient loading; indoor air concerns (e.g., radon, vapor intrusion); mercury emissions monitoring from coal-fired power plants; biofuels impacts, production, and distribution; mining related issues (e.g., acid mine drainage); and others.

Region 9 Lab Director Brenda Bettencourt and ORD STL Mike Gill represented Region 9 and participated in the RETAN meeting. For more information, please contact Mike Gill at <gill.michael@epa.gov>.

Superfund Basic Research Program (SBRP) Research Articles

You've heard this before - the Superfund Basic Research Program (SBRP) has funded research/outreach activities at over 100 hazardous waste sites. It falls under the National Institute of Environmental Health Sciences (NIEHS). This research is described in detail on their webpage (<http://www.niehs.nih.gov/sbrp/>) and the locations are shown on the map below.



Here are the titles of the recent papers released by the SBRP over the past year (since early 2007). For more details on these or past research briefs by year, go to: <http://tools.niehs.nih.gov/sbrp/researchbriefs/> .

1. Microwave Technology for Granular Activated Carbon Regeneration
2. A New USEPA SW-846 Method 4435 for HAH Analysis
3. The Dartmouth Community Outreach Core Facilitates Change in New Hampshire Lead Laws
4. Folic Acid Supplementation Lowers Blood Arsenic by Increasing Arsenic Methylation
5. Novel High-Strength Iron Cement Sequesters Pollutants
6. Understanding the Underlying Mechanism of Asbestos Carcinogenesis
7. Assessing Bioremediation of Chloroethenes through Stable Carbon Isotope Fractionation
8. Enhanced Phytoremediation of Volatile Environmental Pollutants
9. SBRP Investigators Find Evidence Suggesting a New Type of Endocrine Disruptor
10. A Screening Tool to Identify Developmental Neurotoxicants
11. *In utero* and Early Postnatal Exposure to Arsenic May Alter Pulmonary Function
12. High-Performance Carbon-Based Mercury Sorbents

LOCAL NEWS

[University of Arizona SBRP - Research Translation Example at Region 9 Superfund Site](#) (Edited from UA SBRP Webpage)

The goal of the SBRP program and its research listed above is to one day be applied in cleanup decisions at Superfund sites. The University of Arizona's SBRP is doing just that for a nearby community - putting research into action. One of Region 9's Superfund sites, the Motorola 52nd Street site in Phoenix, AZ, has issues that UA is presently studying. On March 6, 2008, UA SBRP investigators Eduardo Sáez and Mark Brusseau, and Coordinators Denise Moreno Ramirez and Monica Ramirez presented an educational overview to the Lindon Park Neighborhood Association regarding the nature of volatile organic compounds and clean up strategies currently being used at the Motorola 52nd Street site. This organization is also a recent EPA grant recipient, and will use the funds to interpret and help the community understand technical information regarding the Motorola 52nd Street site decisions.

The UA SBRP was delighted to be a resource to this actively engaged community and looks forward to working with them again in the future.

For complete article, go to:

http://www.superfund.pharmacy.arizona.edu/news/Motorola_52nd_community.php

[Bioremediation Evaluated for Long-Term Immobilization of Uranium](#)

(From January, 2008 Technology News and Trends)

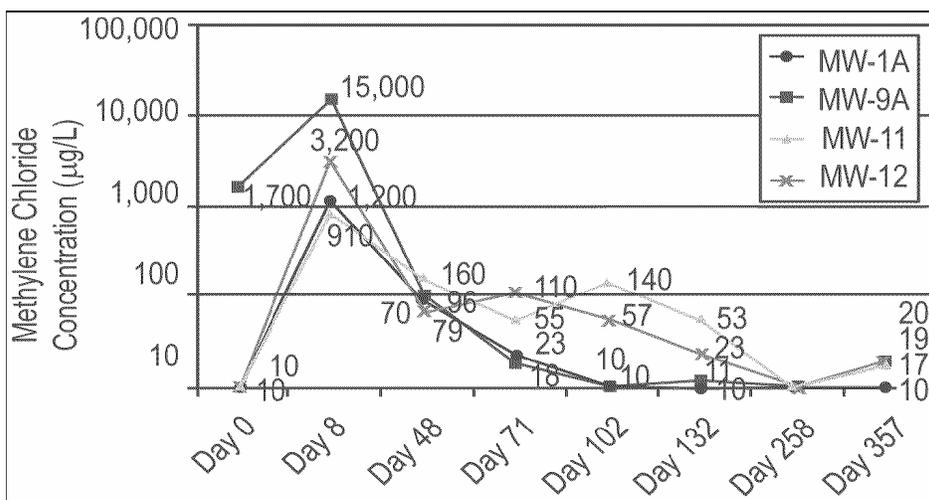
Oak Ridge National Laboratory (ORNL) and Stanford University researchers are developing a strategy for bioimmobilizing uranium in the highly contaminated subsurface of the former “S3 Ponds” site at DOE’s Oak Ridge Field Research Center in Oak Ridge, TN. The approach employs a treatment train involving flow-field hydraulic control, subsurface preconditioning, and delivery of ethanol as an electron donor for insitu U(VI) reduction/immobilization. Results of pilot-scale field tests will be integrated into DOE decision-making in 2015 regarding the S3 Ponds cleanup. Additional environmental management assistance in evaluating site-specific environmental engineering, hydrogeology, microbiology, geo-chemistry, and physics is provided by the University of Oklahoma, Argonne National Laboratory, Michigan State University, Montana State University, and Georgia Institute of Technology.

(For complete article, see <http://clu-in.org/download/newsletters/tnandt0108.pdf>)

Sodium Persulfate and Hydrogen Peroxide Injections Achieve Ground Water Cleanup

(From April, 2008 Technology News and Trends)

The California Regional Water Quality Control Board (RWQCB), Los Angeles Region, oversees remediation of a 2.8-acre area known as the “Former Sta-Lube” site in Rancho Dominguez, CA. Cleanup technologies employed at this site since 1997 include SVE, P&T, and soil excavation with offsite disposal. In 2005, another excavation and addition of in-situ chemical oxidation (ISCO) quickly addressed a previously unknown DNAPL zone serving as a continued source of dissolved contamination.

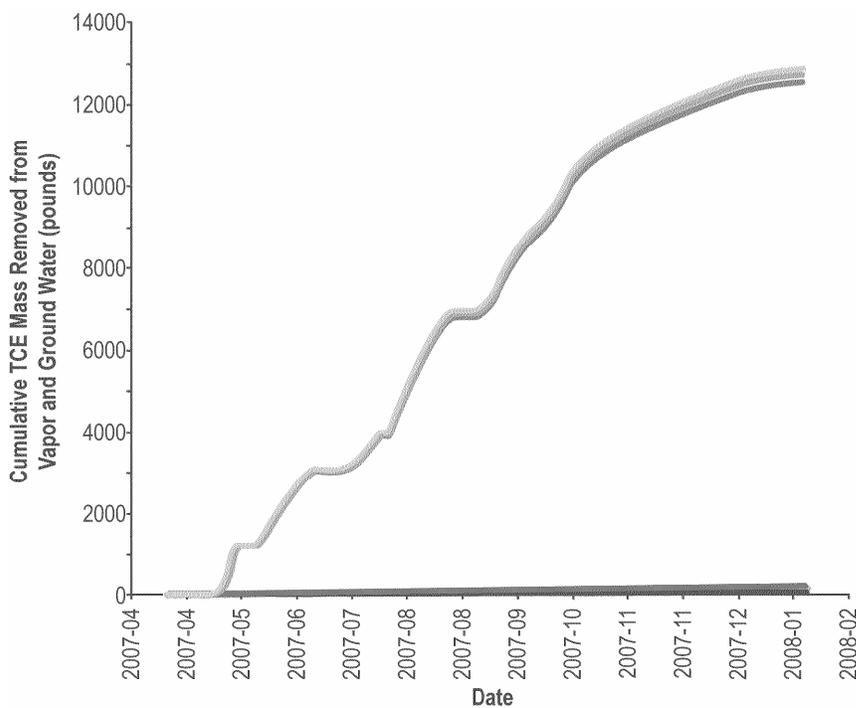


(For complete article, see <http://clu-in.org/download/newsletters/tandt0408.pdf>)

Integrated Technology Approach Used to Remediate Site Contaminated by 56 Chemicals

(Edited from April, 2008 Technology News and Trends)

EPA Region 9 is using several technologies to treat soil and ground water at the Pemaco Superfund site in Maywood, CA. Cleanup began in 2005 with placement of a conventional soil cover over the entire 1.14-acre site to establish plant growth and stabilize soil. Full-scale treatment began last summer through use of a P&T system containing granular activated carbon (GAC), and startup of an electrical resistance heating (ERH) system shortly thereafter to vaporize VOC hotspots. A portion of the integrated system’s high electricity demand is met through solar energy. Intermediate results as the remedy progresses indicate that ground-water concentrations have been reduced significantly and are on a downward trend. Air emissions have met standards throughout remedy implementation.



(For complete article, see <http://clu-in.org/download/newsltrs/tnandt0408.pdf>)

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. For more recent seminars, you can also 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> .

CLU-IN Training Area. A training section has been posted to CLU-IN. The 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 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> to verify times and registration.

April 24 - Protocol for Use of Five Passive Samplers

April 29 - Vapor Intrusion Pathway: A Practical Guideline

May 15 - Planning and Promoting Ecological Land Reuse of Remediated Sites

June 5 - Performance-Based Environmental Management

June 12 - Perchlorate Remediation Technologies

June 24 - An Overview of Direct-Push Well Technology for Long-Term Groundwater Monitoring

June 26 - Enhanced Attenuation: Chlorinated Solvents

2008 Conference on Design and Construction Issues at Hazardous Waste Sites

April 24-25, 2008

Philadelphia, PA

<https://superfund.usace.army.mil/2008DCHWS>

International Oil Spill Conference

May 4-9, 2008

Savannah, GA

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

Brownfields 2008

May 5-7, 2008

Detroit, MI

<http://www.brownfields2008.org>

The Joint Services Environmental Management Conference and Exposition (JSEM 2008)

May 5-8, 2008

Denver, CO

<http://www.jsemconference.com/2008/>

Hazardous Materials Incident Response Operations

May 5-9, 2008

Richmond, CA

<http://www.trainex.org/offeringslist.cfm?courseid=23&all=yes>

Superfund Academy 101

May 5-9, 2008

Seattle, WA

<http://www.trainex.org/offeringslist.cfm?courseid=254&all=yes>

2008 NorCal SETAC Annual Meeting

"Environmental Stewardship in the Context of Climate Change: Physical, Chemical, Biological, and Social Forces".

May 7-8, 2008

Oakland, CA

http://www.norcalsetac.org/pages/2008_Annual_Meeting_84932

The World Environmental and Water Resources Congress 2008

May 12-16, 2008

Honolulu, HI

<http://content.asce.org/conferences/ewri2008/>

Introduction to Environmental Geophysics

May 13, 2008

Oakland, CA

<http://www.trainex.org/offeringlist.cfm?courseid=28&all=yes>

Restoring Greenspace: Ecological Reuse of Contaminated Properties in EPA Reg 9

May 14-15, 2008

Concord, California 94520

http://www.wildlifehc.org/events/restoringgreenspace_registration.cfm

Remediation Technology Symposium (DTSC / USEPA)

May 14-16, 2008

Sacramento, CA

<http://www.dtsc.ca.gov/HazardousWaste/Remediation.cfm>

(For those who cannot attend, DTSC will Web-cast the proceedings. Or contact DTSC by e-mail at RemSymp@dtsc.ca.gov.)

Fifth PCB Workshop: New Knowledge Gained from Old Pollutants

May 18-22, 2008

Iowa, City, Iowa

<http://tools.niehs.nih.gov/sbrp/events/index.cfm?id=303>

MODFLOW and More: Groundwater and Public Policy

May 19-21, 2008

Colorado School of Mines, Golden, Colorado

<http://www.mines.edu/igwmc/events/modflow2008/modflow2008.shtml>

2008 National Environmental Partnership Summit

May 19-21, 2008

Baltimore, MD

<http://www.environmentalsummit.org/register.cfm>

Third Annual National Environmental Studies and Sciences Summit

May 22-24, 2008

Jonesboro, Arkansas

<http://evs.astate.edu/summit2008.htm>

Cal EPA OEHHA Distinguished Lecture Series: Advances in Toxicology and Risk Assessment

All the lectures will be held in Sacramento and simultaneously webcast on the website of California Environmental Protection Agency (<http://www.calepa.ca.gov/Broadcast>). The lectures will begin at 10 am and are open to the public at no cost. No registration is required. This inaugural series has been focusing on Epigenetics and Environmental Diseases. The remaining three lectures in the series are listed below. For questions, please contact Dr. Ling-Hong Li (OEHHA Sacramento: lli@oehha.ca.gov) or Dr. David Morry (OEHHA Oakland: dmorry@oehha.ca.gov).

Epigenetic Mechanisms in Autism Spectrum Disorders

Thursday, May 22, 2008, 10 AM

Sierra Hearing Room, California EPA, 1001 I Street, Sacramento, CA

Dr. Janine M. LaSalle, Professor

Department of Medical Microbiology & Immunology, University of California, Davis

Gene Pathways Targeted during Phthalate-induced Testicular Dysgenesis

Tuesday, June 24, 2008, 10 AM

Sierra Hearing Room, California EPA, 1001 I Street, Sacramento, CA

Dr. Kevin W. Gaido, Senior Investigator and Director

Center for Integrated Genomics, The Hamner Institutes for Health Sciences

Early Life Estrogen Exposures Alter the Prostate Epigenome and Increase Cancer Risk

Wednesday, July 23, 2008, 10 AM

Sierra Hearing Room, California EPA, 1001 I Street, Sacramento, CA

Dr. Gail S. Prins, Professor

Department of Urology, University of Illinois at Chicago

Sixth International Conference on Remediation of Chlorinated and Recalcitrant Compounds

May 19-22, 2008

Monterey, CA

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

Annual ETV Team Meeting

May 19-20, 2008

Washington, DC

<http://www.epa.gov/etv/events.html#051908>

U.S. EPA Science Forum 2008

"Innovative Technology: Key to Environmental and Economic Progress"

May 20-22, 2008

Washington, DC

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

2008 Life Science Venture Forum

May 30, 2008

Santa Clara, CA

<http://www.theventureforum.com/index.asp>

National Corrective Action Conference

June 2-4, 2008

New Orleans, LA

<http://www.epacaconf.com/>

Environmental Site Restoration/Mitigation

June 3-5, 2008

Oxnard, CA

http://www.nwetc.org/bio-402_06-08_oxnard.htm

**Mine Tailings Stabilization in Arid and Semi-Arid Environments:
Assessment, Problems, and Solutions (Expert Panel Workshop)**

June 5-6, 2008

The University of Arizona campus, Tucson, AZ

<http://www.niehs.nih.gov/research/supported/sbrp/events/index.cfm>

AWWA Annual Conference and Exposition (ACE 2008)

June 8-12, 2008

Atlanta, GA

<http://www.awwa.org/ace08/>

Triad Investigations: New Approaches and Innovative Strategies

June 10-13, 2008

Amherst, MA

<http://www.umass.edu/tei/conferences/triad.html>

Vadose Zone Hydrology, Contamination & Modeling Course

June 9-11, 2008

Los Angeles, CA (UCLA)

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

2008 Annual Meeting of American Society of Surface Mining & Reclamation

June 14-19, 2008

Richmond, VA

http://www.cses.vt.edu/vegetation/ASMR_2008.html

Environmental Remediation Technologies

June 24-26, 2008

Indianapolis, IN

<http://www.trainex.org/offeringlist.cfm?courseid=2&all=yes>

Air and Waste Management Association 2008 Annual Conference and Exhibition

June 24-27, 2008

Portland, OR

<http://www.awma.org/ACE2008/>

**Contaminant Forensics of Petroleum, Chlorinated
Hydrocarbons, and Metals**

June 26-27, 2008

San Francisco, CA

http://www.nwetc.org/chem-405_06-08_san_francisco.htm

**XVII International Conference of Computational Methods in Water Resources
(CMWR)**

July 6 - 10, 2008

San Francisco, CA

<http://www-esd.lbl.gov/CMWR08/>

EPA NARPM Conference

July 7-11, 2008

Portland, OR

<http://www.epanarpm.org/2008/home.htm>

Green Technology Entrepreneurship Academy

Date: July 7-11, 2008

Location: Lake Tahoe, Nevada

<http://entrepreneurship.ucdavis.edu/green/>

Climate Change: Implications for California Groundwater Management

August 12-13, 2008

Sacramento, CA

<http://www.grac.org/climatereg.htm>

**28th International Symposium on Halogenated Persistent Organic Pollutants
(Dioxin 2008)**

August 17-22, 2008

Birmingham, UK

<http://www.dioxin2008.org/>

Fundamental Contaminant Chemistry

August 25, 2008

Oakland, CA

http://www.nwetc.org/chem-403a_08-08_oakland.htm

**Applied Contaminant Chemistry and Transport in Soil and
Groundwater**

August 26-27, 2008

Oakland, CA

http://www.nwetc.org/chem-403b_08-08_oakland.htm

**Monitored Natural Attenuation of Petroleum and Chlorinated
Hydrocarbons in Soil and Groundwater**

August 28-29, 2008

Oakland, CA

http://www.nwetc.org/ghyd-410_08-08_oakland.htm

Principles of Scientific Sampling for Environmental Professionals

September 16-18, 2008

Sacramento, CA

http://www.nwetc.org/stat-403_09-08_sacramento.htm

GRA Principles of Groundwater Flow & Transport Modeling Course

September 22-24, 2008

Redwood City, CA

<http://www.grac.org/modeling.asp>

GRA Introduction to Practical Statistics Workshop

September 24, 2008

Costa Mesa, CA

<http://www.grac.org/stats.asp>

GROUNDWATER RESOURCES ASSOCIATION of California

17th Annual Conference & Meeting - GROUNDWATER: Challenges to Meeting Our Future Needs

September 24-26, 2008

Costa Mesa, CA

<http://www.grac.org/am08.asp>

International Environmental Nanotechnology Conference: Applications and Implications

October 7-9, 2008

Chicago, IL

<http://emsus.com/nanotechconf/index.htm>

GRA Applications of Optimization Techniques to Groundwater Projects Symposium

October 15 & 16, 2008

Sacramento, CA

<http://www.grac.org/optimization.asp>

OSC 201

October 20-22, 2008

Chicago, IL

<http://www.trainex.org/offeringlist.cfm?courseid=285&all=yes>

24th Annual International Conference on Soils, Sediments and Water Analysis, Site Assessment, Fate, Environmental and Human Risk Assessment, Remediation and Regulation

October 20-23, 2008

Amherst, MA

<http://www.UMassSoils.com/>

11th Annual Florida Brownfields Conference

October 26-29, 2008

St. Pete Beach, FL

<http://www.floridabrownfields.org>

National Forum on Vapor Intrusion: Science, Technology and Policy

Tentative Location: Philadelphia, PA

Tentative Dates: November 17-18, 2008

For more info, contact Mike Gill (gill.michael@epa.gov) or Bill Hagel (hagel.bill@epa.gov)

GROUNDWATER RESOURCES ASSOCIATION of California - Emerging Contaminants 2008

November 19-20, 2008

San Jose, California

<http://www.grac.org/contaminants.asp>

SBRP Annual Meeting

December 7-9, 2008

Asilomar Conference Grounds in Pacific Grove, CA

<http://www.niehs.nih.gov/research/supported/sbrp/events/index.cfm>

US EPA Tech Support Project Meeting

Late January, 2009

Location TBD

For more info, contact Linda Fiedler at [<fiedler.linda@epa.gov>](mailto:fiedler.linda@epa.gov)

<http://www.epa.gov/tio/tsp/meetings.htm>

19th Annual AEHS Meeting & West Coast Conference on Soils, Sediments, and Water

March 9-12, 2009

San Diego, California

<http://www.aehs.com/conferences/westcoast/>

In Situ and On-Site Bioremediation - The 10th International Symposium

May 5-9, 2009

Baltimore, MD

<http://www.battelle.org/conferences/bioremediation/>

WEB PAGES

ORD's Land Research Program



The website for the Land Research Program in EPA's Office of Research and Development (ORD) is now available. This site provides information on the innovative science solutions being developed by the program to preserve the nation's land, restore contaminated properties, and protect public health from exposure to environmental contaminants. The site includes a description of the program, fact sheets, science topic experts, links to ORD technical support centers, research publications, research accomplishments, and links to tools, models, and information.

<http://www.epa.gov/ord/lrp>

Release of GSFLOW: A New Model for Simulation of Ground-Water and Surface-Water Interaction

The Offices of Ground Water and Surface Water and the National Research Program are pleased to announce the release of the new GSFLOW ground water and surface water FLOW model. The model is based on the USGS Precipitation-Runoff Modeling System (PRMS) and Modular Ground-Water Flow Model (MODFLOW-2005). GSFLOW was

developed to simulate ground water / surface water interactions in one or more watersheds by simultaneously simulating flow across the land surface, within saturated and unsaturated subsurface materials, and between terrestrial and surface water domains (streams and lakes). GSFLOW can be used to evaluate the effects of such factors as land use change, climate variability, and ground water withdrawals on surface and subsurface flow. The model is applicable to watersheds that range from a few square kilometers to several thousand square kilometers, and for time periods that range from months to several decades.

GSFLOW is documented in USGS Techniques and Methods 6-D1, "GSFLOW--Coupled ground-water and surface-water flow model based on the integration of the Precipitation-Runoff Modeling System (PRMS) and the Modular Ground-Water Flow Model (MODFLOW-2005)," by Steven Markstrom, Richard Niswonger, Steven Regan, David Prudic, and Paul Barlow. The report is available online from Internet address: <http://pubs.usgs.gov/tm/tm6d1/pdf/tm6d1.pdf>. A limited number of bound copies of the report are available by contacting Steven Markstrom (markstro@usgs.gov). The code can be accessed from the USGS Water Resources Applications Software webpages: <http://water.usgs.gov/nrp/gwsoftware/gsfLOW/gsfLOW.html>.

Green Remediation Website



EPA's Office of Superfund Remediation and Technology Innovation has released a Green Remediation web site. The site explains the basic principles and objectives of green remediation, and outlines best practices for reducing the environmental footprint of contaminated site cleanup projects. Over coming months, the site will expand to describe more details on green remediation best practices, and serve as a clearinghouse for technical materials, decision-making tools, site-specific case studies illustrating green remediation implementation efforts, and information on green remediation related events and new information products. View and use at <http://clu-in.org/greenremediation/> .

CLU-IN Site Tour

CLU-IN houses the latest detailed information on innovative site characterization, monitoring, and remediation approaches. In fact, CLU-IN has so many resources and services available that it can be hard for new visitors to quickly see all that it has to offer. The CLU-IN Site Tour briefly describes some of the CLU-IN resources that can make your job easier. Take the tour at <http://clu-in.org/tour/> .

DNAPL Website

EPA's Office of Superfund Remediation and Technology Innovation has released a website that compiles available information related to the cleanup of dense nonaqueous-phase liquids (DNAPLs) at hazardous waste sites. This initial phase addresses the most common DNAPL contaminants: chlorinated ethenes (e.g., tetrachloroethene and trichloroethene) and multi-component wastes (creosotes, coal tars, and heavy oils). Future expansion may include ethers, halogenated alkanes, polychlorinated biphenyls, and other chemicals that form DNAPLs. With the primary focus on source zone cleanup, information is provided for available remediation technologies, such as bioremediation, in situ flushing and oxidation, and thermal processes. EPA will maintain the website by adding new resources as they become available. The website was developed in response to a recommendation of the EPA Ground Water Task Force (www.gwtf.clu-in.org), which identified a need for the creation of a comprehensive compilation of DNAPL resources. View and use at <http://www.cluin.org/DNAPL> .

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.....

Biosolids Recycling: Restore, Reclaim, Remediate

(Video)

<http://www.clu-in.org/studio/biosolids.cfm>

Brownfields Technology Primer: Vapor Intrusion Considerations for Redevelopment

(EPA 542-R-08-001)

(March 2008, 48 pages)

<http://brownfieldstsc.org/vaporintrusion>

BTSC Vapor Intrusion Considerations for Redevelopment

(EPA 542-R-08-001)

<http://www.brownfieldstsc.org/pdfs/BTSC%20Vapor%20Intrusion%20Considerations%20for%20Redevelopment%20EPA%20542-R-08-001.pdf>

"Decontamination and Decommissioning of Radiologically Contaminated Facilities" (RAD-5)

(January 2008, 207 pages)

<http://www.itrcweb.org/Documents/RAD5.pdf>

Demonstration of Biodegradation of DNAPL Through Biostimulation and Bioaugmentation at Launch Complex 34 in Cape Canaveral Air Force Station, Florida

(103 pp, 6.08 MB)

(EPA/540/R-07/007)

September 2004

<http://www.epa.gov/nrmrl/pubs/540r07007/540r07007.pdf>

Demonstration of In Situ Dehalogenation of DNAPL Through Injection of Emulsified Zero-Valent Iron at Launch Complex 34 in Cape Canaveral Air Force Station, Florida

(223 pp, 13.2 MB)

(EPA/540/R-07/006)

September 2007

<http://www.epa.gov/nrmrl/pubs/540r07006/540r07006.pdf>

Effects of Sewage Sludge Applications to Agricultural Soils on Soil Microbial Activity and the Implications for Agricultural Productivity and Long-Term Soil Fertility - Phase III

(October 2007, 148 pages)

http://randd.defra.gov.uk/Document.aspx?Document=SP0130_6505_FRP.pdf

Enhanced Attenuation: Chlorinated Organics

(EACO-1)

(April 2008, 109 pages)

<http://www.itrcweb.org/Documents/EACO-1.pdf>

EUGRIS Corner

(New Documents on EUGRIS, the platform for European contaminated soil and water information)

<http://www.eugris.info/whatsnew.asp>

For example:

EU Shared Environmental Information System (SEIS)

<http://ec.europa.eu/environment/seis/index.htm>

European Commission - DG Joint Research Centre Institute for Environment and Sustainability, 2008: Google Earth Files for the European Soil Database

<http://eusoils.jrc.ec.europa.eu/>

The Four Rs of Environmental Dredging: Resuspension, Release, Residual, and Risk

Todd S. Bridges, Stephen Ells, Donald Hayes, David Mount, Steven C. Nadeau, Michael R. Palermo, Clay Patmont, and Paul Schroeder

January 2008

<http://www.smwg.org/1910.PDF>

Grand Plaza Site Investigation Using the Triad Approach and Evaluation of Vapor Intrusion

(86 pp, 3.2 MB)

(EPA/540/R-07/002)

September 2006

<http://www.epa.gov/nrmrl/pubs/540r07002/540r07002.pdf>

Ground Water Issue Paper: Metal Attenuation Processes at Mining Sites

(EPA 600-R-07-092)

October 2007, 13 pages)

<http://www.epa.gov/ada/download/issue/600R07092.pdf>

Groundwater Monitoring Network Optimization, Frontier Hard Chrome Superfund Site, Vancouver, Washington

(EPA 542-R-07-021)

(December 2007, 101 pages)

http://clu-in.org/download/remed/hyopt/application/fhc_final_report1-2-08a.pdf

An Introductory Guide to Valuing Ecosystem Services

(PB12852)

(December 2007, 68 pages)

http://www.defra.gov.uk/wildlife-countryside/natres/pdf/eco_valuing.pdf

Measurement & Monitoring: 26th Quarterly Literature Update

(March 2008, 101 pages)

<http://clu-in.org/programs/21m2/spotlight/26thLitUpdate.pdf>

Measurement of Total Site Mercury Emissions From a Chlor-Alkali Plant Using Open-Path UV-DOAS

(146 pp, 2.94 MB)

(EPA/600/R-07/077)

July 2007

<http://www.epa.gov/nrmrl/pubs/600r07077/600r07077.pdf>

Mine Waste Technology Program: A Success Story (CD)

(EPA/625/C-07/001)

2007

Abstract - <http://www.epa.gov/nrmrl/pubs/625c07001/625c07001.htm>

Monitored Natural Attenuation of Inorganic Contaminants in Ground Water, Volumes 1 & 2

Volume 1 (EPA 600-R-07-139, October 2007, 94 pages) at

<http://www.epa.gov/ada/download/reports/600R07139/600R07139.pdf>

Volume 2 (EPA 600-R-07-140, October 2007, 124 pages) at

<http://www.epa.gov/ada/download/reports/600R07140/600R07140.pdf>

Online Hazardous Waste Cleanup Technical Resources

EPA 542-F-08-003

April 2008

(12pp, 564KB)

<http://www.epa.gov/tio/tsp/download/epa542f08003.pdf>

Our Land, Our Legacy: The Resource Conservation and Recovery Act

(Video)

http://www.clu-in.org/studio/rcra_dvd.cfm

Phase 3 Conference of the U.S.-Germany Bilateral Working Group, Brownfield Revitalization (CD)

(EPA/625/C-07/002)

2007

<http://www.epa.gov/nrmrl/pubs/625c07002/625c07002.htm>

Procedures for the Derivation of Equilibrium Partitioning Sediment Benchmarks (ESBs) for the Protection of Benthic Organisms: Compendium of Tier 2 Values for Nonionic Organics

(EPA 600-R-02-016)

(March 2008, 75 pages)

http://www.epa.gov/nheerl/publications/files/ESB_Compndium_v14_final.pdf

Proceedings of the Desert Remedial Action Technologies (D-RAT) Workshop, Phoenix, October 2007

(December 2007, 27 pages)

[http://www.epa.gov/OSP/presentations/drat/D-RAT_Workshop_Proceedings_\(Oct_2-4,_07\).pdf](http://www.epa.gov/OSP/presentations/drat/D-RAT_Workshop_Proceedings_(Oct_2-4,_07).pdf)

Proceedings of the Nanotechnology for Site Remediation Workshop, Chicago, September 6-7, 2006

(EPA 905-K-07-001)

(December 2007, 51 pages)

<http://www.epa.gov/osp/hstl/Nanotech%20Proceedings.pdf>

Recommendations from the EPA Ground Water Task Force

(EPA 500-R-07-001)

(December 2007, 82 pages)

http://gwtf.clu-in.org/docs/report/gwtf_report_coverletter.pdf

"Removal of Added Nitrate in the Single, Binary, and Ternary Systems of Cotton Burr Compost, Zerovalent Iron and Sediment: Implications for Groundwater Nitrate Remediation Using Permeable Reactive Barriers."

Su, C. and R. W. Puls. (2007)

Chemosphere, 67, 8: 1653-1662.

http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V74-4MWXT50-3&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=22fc0a4ea5ab1492c670a12229cc16d1

Report of the NICOLE Workshop: Using Baselines in Liability Management - What Do Upcoming Directives Require of Us? Brussels, November 2007

(January 2008, 42 pages)

<http://www.nicole.org/news/downloads/NICOLE%20Brussels%20WORKSHOP2.pdf>

SERDP and ESTCP Expert Panel Workshop on Reducing the Uncertainty of DNAPL Source Zone Remediation

(September 2006, 198 pages)

<http://www.estcp.org/viewfile.cfm?Doc=DNAPLWorkshopReport%2Epdf>

A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems

(EPA 600-R-08-003)

(January 2008, 166 pages)

<http://www.epa.gov/ada/download/reports/600R08003/600R08003.pdf>

Technology News and Trends

(EPA 542-N-08-001)

(January 2008, 6 pages)

<http://www.clu-in.org/download/newsletters/tnandt0108.pdf>

Technology News and Trends

(EPA 542-N-08-002)

(April 2008, 6 pages)

<http://www.clu-in.org/download/newsletters/tnandt0408.pdf>

Xpert Design and Diagnostics' (XDD) In Situ Chemical Oxidation Process Using Potassium Permanganate (KMnO₄)

(EPA/540/R-07/005)

(May 2007, 96 pages)

<http://www.epa.gov/nrmrl/pubs/540r07005/540r07005.pdf>

Serious Scientists Gather 'Round. . .

Here is the commentary mentioned in the opener:

Does science still make a difference at EPA?????

EPA chief blasted for blocking pollution plan

Wednesday, Feb 27, 2008

<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/02/28/MNJ1V9LR9.DTL&hw=epa&sn=006&sc=214>

Yes, to some, it does still make a difference!!!!

Monday, March 3, 2008 - EPA employee unions representing more than 10,000 EPA employees charge that under Administrator Johnson, Principles of Scientific Integrity have been ignored when making decisions, including the CA air waiver decision

http://www.peer.org/docs/epa/08_3_3_union_letter_on_johnson.pdf

Interesting Result:

TI: *Ecological knowledge shrinks as economies grow*

AU:

JN: Environmental Science and Technology

PD: 2008

VO: 42

NO: 4

PG: 978

PB: ACS AMERICAN CHEMICAL SOCIETY

IS: 0013-936X

PE: FEB 15

URL: <http://pubs.acs.org/subscribe/journals/esthag/42/i04/html/021508news.html>



Disclaimer

This quarterly newsletter publication is meant to be used for information only. It does not represent the opinion of the management of the regional or national offices of EPA, only that of the author. The accuracy of the information contained herein is not guaranteed, only desired. If corrections are necessary, please contact the author. Thanks again to all of my information resources, which include EPA's OSRTI (formerly TIO), ORD (including ETV and NRMRL News) and Region 1's CEIT.

Thanks for reading it! Comments and suggestions are appreciated. If you wish to be added to or deleted from this list, please send me an email. (gill.michael@epa.gov)

Newsletter archives can be found on the EPA intranet site.....<http://www.epa.gov/osp/hstl/hstlnewsletter.htm>

A number of environmental technology web resources can be found here.....<http://www.epa.gov/region09/waste/techlinks/>

And don't forget the "STL" website.....<http://www.epa.gov/osp/hstl.htm>

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