NEWS

June 2008

State and National Updates

Alabama

- As of April 2, 2008 the Alabama Drycleaning Environmental Response Trust Fund has $2,951,475.89.

- Currently, ADEM is considering approval for bioremediation through Enhanced Reductive Dechlorination (ERD) for a site in Mobile.

  - Wells will be installed in the source area to inject ethyl lactate and emulsified oil substrates to promote ERD.
  - The substrates are used by microorganisms in an anaerobic environment to biodegrade chlorinated ethenes.
  - Analytical results from samples collected indicate the presence of the bacteria *Dehalococcoides*; the only know strain of bacteria that can completely dechlorinate PCE and DCE to ethane.
  - Bioaugmentation may be recommended if ERD progress is less than expected.
  - Bioremediation by ERD has a successful proven track record when implemented appropriately and site conditions do not prohibit distribution of the substrate within the source area.

Kansas

- Spic-N-Span Vapor Mitigation Systems, Emporia, KS: Vapor mitigation systems were installed in buildings occupied by a former Spic-N-Span Cleaners in Emporia, Kansas. Soil vapor and indoor air testing for VOCs identified the need to install three systems to protect the occupants from potentially harmful vapors.

  The system utilizes a sub-slab depressurization system with three separate blowers and depressurization points to prevent migration of VOCs through the concrete floor. The systems are protecting two commercial businesses and two residential apartments on the second floor.

Missouri

- As of April 30, 2008, the Drycleaning Environmental Response Trust Fund has a balance of $2,699,034.

- A Certification of Completion letter was recently issued to the Frontenac Cleaners-West End site in St. Louis. The site was evaluated in accordance with the Departmental Missouri Risk-Based Corrective Action (MRBCA) Technical Guidance. Based on reviews of the reports and comparison with current state standards, the levels of chlorinated solvent contamination do not exceed the MRBCA residential-use risk based target levels for chlorinated dry cleaning chemicals.

Texas

- New dry cleaner legislation passed by the 80th Texas Legislature in the summer of 2007 amended the Texas Health and Safety Code Chapter 374. New rules drafted to implement these changes to the law are up for final adoption in June 2008. The law and rules created important changes to the Texas Dry Cleaner Program, including:

  - Property owner and previous property owners wishing to benefit from the fund are now required to register and pay annual fees.
  - The law prohibits the use of PCE at sites once the program has completed corrective action. The rules, if adopted, would prohibit PCE use at sites once the program has initiated corrective action and a notice would be filed in the real property records of the county or counties in which the site was located, notifying future property owners that PCE may not be used at that site.
  - Allows use of liens against the property for past due registration fees/clean up costs – as remedy for non payment of registration fees by property owners/previous property owners.

Wisconsin

- The Wisconsin Dry Cleaner Environmental Response Program (DERP) closes to new applicants on August 30, 2008. Former and current dry cleaner owner/operators must notify the WI Department of Natural Resources of contamination on their property and apply to DERP by August 30 in order to qualify for reimbursement of their cleanup costs. Information about applying to DERP can be found at: http://dnr.wi.gov/org/aw/rr/financial/dryclean.html.

  The Wisconsin state budget was signed in October 2007 and authorized an increase in the dry cleaner license fee of 1%. The fee increased in January 2008 from 1.8% to 2.8% of dry cleaning revenues. The license fees, along with solvent fees, fund the Dry Cleaner Environmental Response Fund (DERF). Licensed dry cleaners must be current with their fee payments in order to qualify for reimbursement of cleanup expenses from DERF.

Presentations by SCRD Members at National Conferences

- On May 22, Bill Linn (FL) gave a platform presentation titled "Drycleaning Solvent Contamination in Florida, an Update" at Battelle's Sixth International Conference on Remediation of Chlorinated and Recalcitrant Compounds in Monterey, California (www.battelle.org/chlorcon).

The following papers and posters on other Florida Drycleaning Solvent Cleanup Program sites were also presented at the Battelle conference:

- Combined Remedial Technologies to Facilitate Site Cleanup – Guy Frearson, Metcalf & Eddy, Inc.
- Application of Modified Fenton's Reagent for the Treatment of Chlorinated Organics – Maura Saks, Tetra Tech EC, Inc.
- Passive Flux Meter Monitoring of Hydraulic Containment and Contaminant Flux during NZVI Treatment of cVOCs – Kelly Baltz, Golder & Associates, Inc.
- Vadose Zone Source Remediation and Resulting Effects on Groundwater at Drycleaning Sites – Mike Lodato, Geosyntec Consultants, Inc.
- Biological Degradation Enhanced with Groundwater Pump and Treat – Joseph Applegate, LFR, Inc.

State Progress on Remediation of Dry Cleaning Sites

Remediation is currently being conducted at drycleaning sites in all of the member states. As of May 2008, cumulative statistics for the State Coalition for Remediation of Drycleaners member states are as follows:

3,663 Sites in drycleaning programs
1,958 Sites where contamination assessment work has been initiated
881 Sites where contamination assessment work has been completed
436 Sites where remediation has been initiated
169 Sites where remediation has been completed
429 Sites closed

Remedial Technologies Employed at SCRD Drycleaning Sites

Soil/Sediment/Sludge Remediation:

- Excavation/Removal, including conventional excavations, trench box excavations, large diameter auger, vacuum trucks, septic tank/lift station cleanouts
- Soil Vapor Extraction (in-situ and ex-situ)
- Heated Soil Vapor Extraction
- Passive Venting
- Mobile Injection Treatment Unit
- Sub-slab Depressurization System

Groundwater Remediation:

- Pump & Treat
- Multi-phase Extraction
- Air Sparging
- Recirculating Wells
- Chemical Oxidation using: Fenton's Reagent, potassium permanganate, sodium permanganate, hydrogen peroxide, ozone, Cool-Ox™, persulfate

- Bioremediation using: HRC®, HRC-X™, Cl-Out, ethyl lactate, sodium lactate, potassium lactate, molasses, emulsified oil substrate, ORC®, ABC®, ERC, Phoster's Process™, Vitamin B_{12} / B_1, chitin, corn syrup, vegetable oil, and Bio Rem H-10™
- Bioaugmentation using: KB-1™, Bio-Dechlor INOCULUM™, Pseudomonas, Co-solvent flushing
- Surfactant/Co-solvent flushing
- Co-oxidation
- Nano-scale zero-valent iron
- Diffusive Emitter
- Permeable Reactive Barrier (iron filings)
- Zero-Valent Iron Soil Mixing
- Zero valent iron
- Electrical Resistance
- Monitored Natural Attenuation (MNA)

Upcoming Events

- October 20-23, 2008, University of Massachusetts at Amherst – 24th Annual International Conference on Soils, Sediments & Water (www.umasssoils.com).

- December 2-5, 2008, Las Vegas, Nevada – National Ground Water Association's (www.ngwa.org) 2008 Ground Water Expo and Annual Meeting.

- January 28-30, 2009, San Diego, California – Air & Waste Management Association's Vapor Intrusion Conference (www.awma.org/events/view_event.html?typeid=1&id=98).

- April 19-23, 2009, Tucson, Arizona – National Ground Water Association's (www.ngwa.org) 2009 Ground Water Summit.

- May 5-9, 2009, Baltimore, Maryland – Tenth International In Situ and On-site Bioremediation Symposium (www.battelle.org/conferences/bioremediation).

SCRD Facts

- The SCRD website received an estimated 11,271 visits during April 2008.
- As of May 2008, there are 584 subscribers to the SCRD newsletter.

Newsletter Subscription

If you would like to be placed on the subscription list for the SCRD newsletter please go to the following address http://www.drycleancoalition.org/newsletter.cfm. Copies of previous newsletters can be viewed at http://www.drycleancoalition.org/pubs.cfm on the SCRD website.

SCRD members are state governments that have established programs to fund remediation of drycleaner sites. Current member states include Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin. California, Maryland, New Jersey, New York, and Virginia, which do not have formal programs but are active in drycleaner remediation under other authorities, also participate in Coalition activities. SCRD provides a forum for states to share programmatic, technical, and environmental information to improve the remediation of drycleaner sites. SCRD was established in 1998 and receives technical, management, and training support from the U.S. EPA Office Superfund Remediation and Technology Innovation (OSRTI) and the National Ground Water Association (NGWA).