NEWS

December 2009

SCRD Holds 2009 Meeting

The State Coalition for Remediation of Drycleaners (SCRD) and the U.S. EPA's Technical Support Project (TSP) held a joint meeting from November 17-19 in San Antonio, Texas. The meeting offered joint training sessions on environmental forensics, green remediation, and containment technologies, as well as individual TSP and SCRD business and technical sessions.

State representatives from member states Alabama, Connecticut, Florida, Illinois, Kansas, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin attended the meeting. Representatives from Alaska, California, New Hampshire, New Jersey, New York, and Oklahoma also participated in the meeting.

This year's meeting consisted of state program updates, panel discussions on vapor intrusion and mass reduction vs. long term remediation, and case studies/presentations on a variety of subjects. The presentations given were:

- State Coalition for Remediation of Drycleaners Overview
- Large Scale Bio-remediation Using Multiple Electron Donors (OR)
- Surfactant Enhanced Insitu Chemical Oxidation – New York State's Experience (NY)
- Overview of Biological Remediation Case Studies (FL)
- Ethyl Lactate Injection (AL)
- Chemical Oxidation (Preliminary Results from Recent Pilot Studies) (IL)
- Tennessee Drycleaner Program Funding Task Force (TN)
- Expanded Initial Assessments – 2009 Update, "236 Sites Later" (SC)
- VI issues at WI Dry Cleaner Sites (WI)
- Draft Vapor Intrusion Guidance – DEQ Guidance for Assessing and Remediating Vapor Intrusion in Building (OR)
- Vapor Intrusion at a Kansas City, Missouri Site (MO)
- NC DSCA Policy to Assess Indoor Air (NC)
- What Goes Down, Comes Back Up, PCE in Downtown Fairbanks (AK)
- Remedy Standard Selection and Presumptive Remedy Screening (TX)

The 2009 meeting agenda, state updates and case study presentations will be available for viewing on the SCRD website. Summaries of past meetings and conference calls can be found on the website at http://www.drycleancoalition.org/members.cfm.

State and National Updates

Alabama

- The Alabama Drycleaning Environmental Response Trust Fund (DERTF) has recently installed four new Board members and a new Environmental Engineer which should enhance operations within the DERTF.

Florida

- Remediation has been implemented at 188 drycleaning sites. The approach to remediation in the unsaturated zone has been predominantly soil vapor extraction (145 sites) and excavation (72 sites) with chemical oxidation utilized at one site. At some sites, a combination of soil vapor extraction and excavation has been utilized. Bioremediation has been the most widely used technology in groundwater remediation (52 sites), followed by chemical oxidation (16 sites), pump & treat (15 sites), multi-phase extraction (14 sites), air sparging (13 sites), nanno-scale zero valent iron (4 sites), diffusive oxygen emitter (2 sites), co-solvent flushing (1 site), and co-oxidation (1 site).

Illinois

- New legislation takes effect on January 1, 2010 regarding civil penalties for solvent distributors who sell solvent to unlicensed drycleaners. First time penalty is $500, second and subsequent penalties are $5,000 per violation.

Kansas

- **Remediation System Design Wins Award:**
  The Kansas Department of Health and Environment (KDHE) Drycleaning Program and Burns & McDonnell Engineering (design engineer) were notified in December 2009 that the Ineeda Cleaners Granular Activated Carbon (GAC) Remediation System won an American Council of Engineering Companies (ACEC) of Kansas, Engineering Excellence Award. ACEC of Kansas President, Troy Eisenbraun will present the award to a representative of Burns & McDonnell for the outstanding engineering excellence of this project. The ceremony will take place at the ACEC of Kansas Annual Membership Meeting held during the Kansas Society of Professional Engineers' Annual Conference, June 16-18, 2010 at the Capitol Plaza Hotel in Topeka, Kansas.

  The system is located downgradient of the source area at the Hutchinson, Kansas Correctional Facility (HCF) property and utilizes a 16-inch diameter recovery well to pump 550 gpm of groundwater to help contain the leading edge of the three mile-long plume. Water is pumped through two, 10,000 lb. granular activated carbon vessels for treatment of PCE-contaminated groundwater. The system's innovative design reinjects the treated water into the aquifer due to the difficulties in securing water

rights in this over-appropriated area. Because the groundwater is treated to drinking water quality standards, the system also provides an option to divert the water for use in vegetable gardens operated by the HCF, using their existing water rights for that purpose. This project will be entered into the ACEC national Engineering Excellence Awards competition.

Missouri

- Since the last newsletter, the Drycleaning Environmental Response Trust (DERT) Fund has issued certification of completion letters to three sites: American Cleaners-Dorsett Road, Maryland Heights (5/21/09), American Cleaners-Southroads Shopping Center, St. Louis (6/9/09), and Foster's Cleaners, Blue Springs (6/18/09).

  In November, the DERT fund surpassed the $1 million dollar mark in reimbursements of eligible costs to its participants. Since its inception on May 30, 2006, the DERT Fund has reimbursed $1,031,548.

New Jersey

- New Jersey does not have a state funded drycleaner remediation program but there have been recent inquiries by industry representatives expressing interest in such a program. The state is currently undergoing a change in administration and the implementation of a state funded program will be evaluated by management once the transition of the administration has been completed.

  New Jersey has approximately 1500 drycleaners currently operating in the state and a significant number of former drycleaners. The state has approximately 400 drycleaners in the Site Remediation Program but many are in the program due to heating oil tank issues.

  The New Jersey Site Remediation Reform Act (SRRA), signed into law on May 7, 2009, has significantly modified New Jersey's Site Remediation Program. The statute is designed to streamline the remediation of contaminated sites in New Jersey and was initiated due to 18,000 backlogged cases in the Site Remediation Program. The statute created a Licensed Site Remediation Professional (LSRP) Program modeled after the LSP program currently in place in Massachusetts. The NJ program places the authority and responsibility of all aspects of the remediation of a contaminated site on the LSRP, who has the authority to perform all investigations and remediation without pre-approval from the Department. A code of conduct is contained in the Act, and non-compliance with applicable laws and regulation carries the threat of civil and criminal sanctions. NJDEP will review a percentage of the submissions by LSRPs; however, regulatory enforcement actions will be between NJDEP and the remediating parties. Penalties to the LSRP, such as loss of license, are handled by the LSRP licensing board which was created as part of this statute. Further information regarding this program can be found at http://www.state.nj.us/dep/srp/srra.

Oregon

- **Insurance recovery** - $25,000 contract with Restorical Research to conduct insurance archeology. Currently conducting investigations at four sites. Recovered valid policies and pursuing claims that could total several million dollars. Have already recovered more than cost of contract and expect to recover one million dollars already spent by the program.

  NESHAP Rulemaking – Air Quality Division is adopting the 2006 NESAHP drycleaner requirements. Intent is to use fees generated by new permit and registration fees to fund additional inspections and improve compliance.

  Compliance Inspections – Twenty-five random compliance inspections were conducted as support for NESHAP rulemaking. The findings were mixed. On one hand, most drycleaners were out of compliance. Common compliance issues were:

    - Weekly leak inspections
    - PERC purchase logs
    - Hazardous waste storage
    - Secondary containment under waste water treatment units and hazardous waste containers
    - Posting emergency contact information

  On the other hand, the inspections and enforcements had a dramatic effect on compliance. All violations observed during the inspections have been corrected.

  Expedited Enforcement – Allows inspectors to issue field citations during an inspection such as those previously implemented in Oregon by the Underground Storage Tanks and On-Site programs. This is currently in the developmental stage in the Dry Cleaner Program.

  The purpose of the field citation is to make enforcement more efficient for both the agency and drycleaners. The field citation, which is similar to a traffic ticket, is issued by the inspector at the conclusion of the inspection. With the citation, the drycleaner is notified of the violations, corrective actions that need to be taken, the timeline for the corrective action, and applicable penalties for the violations. The drycleaner then certifies that the necessary corrective actions have been completed and pays the penalty at a discount.

South Carolina

- **South Carolina Drycleaning Law Changed** - In May 2009, the South Carolina General Assembly made changes to the South Carolina Drycleaning Restoration Trust Fund Law. The Law was changed to make clear who should pay and the amount paid.

Drycleaning Facility Exemption Certificates (DFEC) will be re-issued – Drycleaning facilities that have an "opted out" certificate to the Fund are required to ask for a DFEC by **December 31, 2009**. On January 1, 2010, anyone not having a DFEC issued after July 1, 2009, cannot purchase solvent without paying the solvent surcharge.

Dry drop-off facilities are not eligible to receive a DFEC, only wet-sites. This means that a dry drop-off facility must pay the 1% sales tax unless the owner's plant has a DFEC.

Annual Certificate of Registration (ACOR) Required – The Department of revenue (DOR) will issue an ACOR annually to drycleaners that are current with all fees and taxes required by the Fund. Drycleaners who do not have a DFEC must have an ACOR in order to purchase solvent after October 1, 2009 and must provide the ACOR or DFEC to the supplier of his solvent prior to purchase. This certificate must be conspicuously displayed in the drycleaning facility.

Civil penalties up to $10,000 have been established for: Solvent transferred from one facility to another without a DFEC or an ACOR; solvent sold without a DFEC or an ACOR; solvent purchased without a DFEC or an ACOR.

Wholesale drycleaning facilities are required to participate in the fund – Wholesale drycleaning facilities that conduct drycleaning for other businesses are required to register with DOR and pay the annual registration fee. They will pay the solvent surcharge. The 1% tax will be collected by the drycleaners (operating the dry drop-off facility) from the customer.

Closed-loop delivery system required effective January 1, 2010 – All halogenated solvents must be delivered by a closed-loop system to the drycleaning machine. Therefore, no halogenated solvents are allowed to be stored on site after January 1, 2010.

The Department of Health and Environmental Control (DHEC) to help dry cleaners that can't afford secondary assessment – If contamination was not found during the initial soil sampling, a secondary assessment will be required. Dry cleaners will need to procure an estimate for the secondary assessment, and let DHEC know, in writing, if they will proceed with the secondary assessment. If after receiving an estimate the dry cleaner feels that they can't afford the secondary assessment, they need to contact DHEC and establish financial hardship. If DHEC determines that a hardship exists, the dry cleaner will submit $1,000 to DHEC and DHEC will conduct the secondary assessment. If contamination is found, DHEC will refund any money in excess of the facility's deductible. If evidence of contamination is not found, the facility can still become eligible if contamination is found and DHEC is notified within 6 months of discovery of the evidence.

If within thirty days the $1,000 is not paid or the dry cleaner does not agree to conduct the secondary assessment, the facility becomes ineligible to receive fund money and will be subject to any applicable environmental laws.

Application of surcharge and fee changes; take effect March 1, 2010 – The surcharges and fees themselves have not changed but to whom they apply has. Retail drycleaning facilities and dry drop-off facilities must pay the 1%. Drycleaners must have a DFEC issued after July 1, 2009 to be exempt from the 1% surcharge. Property owners can pay the registration fee. On January 1, 2010, exempted facilities must have a DFEC issued after July 1, 2009.

Any site that applies for eligibility to the Fund after November 24, 2006, will have a deductible of $25,000.

Wisconsin

- Governor Doyle signed Wisconsin's biennium budget into law in June 2009. The budget provides for a transfer of up to $6.2 million from the Environmental Improvement Fund (EIF) to the Dry Cleaner Environmental Response Fund (DERF). The EIF provides loan money to municipalities for environmental improvements, including groundwater cleanup. The transfer, which must be paid back with interest over 20 years, has allowed payment of backlogged reimbursements to dry cleaners. Without the transfer, dry cleaners were facing reimbursement delays of 2+ years which would have significantly delayed response actions.

State Progress on Remediation of Dry Cleaning Sites

Remediation is currently being conducted at drycleaning sites in all of the member states. As of December 18, 2009, cumulative statistics for the State Coalition for Remediation of Drycleaners member states are as follows:

3,720 Sites in drycleaning programs
2,103 Sites where contamination assessment work has been initiated
1,223 Sites where contamination assessment work has been completed
556 Sites where remediation has been initiated
201 Sites where remediation has been completed
644 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
- Granular activated carbon
- Surfactant/Co-solvent flushing
- Co-oxidation
- Nanno-scale zero-valent iron
- Diffusive Emitter
- Permeable Reactive Barrier (iron filings)
- Zero-Valent Iron Soil Mixing
- Zero valent iron
- Electrical Resistance
- Vapor control/venting
- Monitored Natural Attenuation (MNA)

Upcoming Events

- February 10-11, 2010, Drexel University, Philadelphia, Pennsylvania – Green Cleanup Symposium: Integrating Green Approaches for Site Cleanup and Sustainable Reuse (http://drexel.edu/cities/greencleanupsymposium.html).

- April 11-15, 2010, Denver, Colorado – National Ground Water Association's 2010 Ground Water Summit (www.ngwa.org/summit2010).

- May 24-27, 2010, Monterey, California – Remediation of Chlorinated and Recalcitrant Compounds, The Seventh International Conference (www.battelle.org/conferences/chlorinated/).

- June 15-17, 2010, University of Massachusetts-Amherst – International Conference on Green Remediation: Environment · Energy · Economics. Sponsored by the Environmental Institute, University of Massachusetts Amherst and the U.S. EPA office of Superfund Remediation and Technology Innovation (www.umass.edu/tei/conferences/GreenRemediation/GreenHome.html).

SCRD Facts

- As of December 18, 2009, there are 756 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).