

State Coalition for Remediation of Drycleaner

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The State Coalition for Remediation of Drycleaners (SCRD), established in 1998, is designed to promote collaboration among states who have a common interest; cleaning up soils and ground water at drycleaner sites. It is comprised of representatives of state governments with operating drycleaner remediation programs. These state programs cover about a third of the drycleaner sites in the United States. SCRDR offers its member states an opportunity to learn from their colleagues, techniques for improving the effectiveness of their individual cleanup efforts. The group was formed with the help of the U.S. EPA Technology Innovation Office and the National Ground Water Association.

SCRDR objectives are to: (1) provide a forum for the exchange of information and the discussion of both technical and implementation issues related to state programs, (2) share information and lessons learned with states without drycleaner-specific programs, (3) serve as a resource for remediation issues, and (4) encourage the use of innovative technologies in remediation.

Members of the SCRDR are states that have formal drycleaner remediation programs: Alabama, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, and Wisconsin. Associate members, currently Louisiana and New Mexico, are states considering a formal cleanup program. In addition, participation in SCRDR as "Represented States" is open to states without drycleaner-specific programs but active in the remediation of sites under other authorities. New York currently participates as a "Represented State". SCRDR members, associate members, and represented states meet twice yearly. Other interested parties, including industry representatives and individual drycleaners, may attend as visitors.

The day-to-day work of the Coalition is carried out by subgroups during monthly conference calls overseen by an elected chairperson. SCRDR accomplishments include; improved communications among states with drycleaner-specific programs through semi-annual meetings, including discussions of the status of state program implementation and funding and other related programmatic issues, and training on investigative and remedial technologies; the development of a World Wide Web site that includes links to individual state, industry, and health-related sites, information on the elements of state programs, summaries of SCRDR meetings and conference calls, and a private area where members can pose questions and discuss drycleaner operations and/or cleanup topics; and, provided training to members through the presentation and discussion of case studies of drycleaner site cleanups and formal technical training provided by NGWA on relevant technologies. Members conducted a survey of 28 states concerning the technologies they either used or planned to use to assess and remediate sites. Also the 11 member states provided information concerning the administrative aspects of implementing a drycleaner remediation program.

State Programs Survey Report

There are about 22,300 active drycleaning plants in the nation. Most states agree that about 75% of all sites (17,000) have some level of contamination although not all will require active remediation. Approximately 5,000 of these sites can be addressed through a state drycleaner remediation program.

Over \$14,000,000 is available for the investigation and remediation of these sites through existing state programs. While there are significant differences between each state program, most drycleaners (and often solvent suppliers) pay fees in exchange for financial relief for site remediation. The primary types of fees include annual fees charged to a facility, gross receipts surcharges on services and solvent fees charged for each gallon of solvent used. In addition to raising revenues for remediation programs, solvent fees also provide an incentive for drycleaners to use solvents as efficiently as possible. Reduction in solvent use has been accomplished primarily by industry's switching to new high efficiency machines that use significantly less solvent.

Nearly all state programs are generating significantly less revenue than the amounts projected during the development of legislative budgets. Most programs are experiencing revenues that range from 60% to 70% of the initial projections. Many programs are in the process of reconsidering program funding to better meet the needs of the program.

Drycleaner programs differ in several ways between the states. Florida was the first state to establish a program. Contractors for the state investigate the sites and determine what level of remediation is needed. Both assessment and remedial work are conducted by the contractors. The facility owner pays fees and receives remediation liability protection. Those sites that wish to conduct their own remedial activities may receive tax credits. The Illinois program provides an insurance pool from which drycleaners can draw to pay for their remedial costs but there are limits to the costs per site. Wisconsin's program is simply a reimbursement program, where the drycleaner is responsible for investigating and remediating its own site. At various milestones, the drycleaner is eligible for reimbursement after paying a deductible.

Even though many of the programs are fairly new and most have very limited budgets, they have been effective in performing the necessary tasks in a timely manner. As of 2000, the state's drycleaning programs have performed at least 236 assessments, 100 remedial actions, and closed 16 drycleaning sites. These numbers are increasing rapidly as the programs in each state become more experienced.

Assessment and Remediation Technologies Survey Report

The level of assessment and cleanup is directly related to the cleanup standards adopted by the individual states. Many states have adopted risk-based levels for soil and groundwater. Alternative evaluation methods considered included: presence of receptors, risk pathways, beneficial use of water, future land use, and location of the facility. Ground-water cleanup guidelines varied from the maximum contaminant levels established by the USEPA to state approved risk-based standards.

Twenty-eight states responded to a survey concerning the use or intended use of technologies to

characterize and clean up sites. The majority of site assessments included the use of monitoring wells and core sampling (91%), direct push technology (87%) and soil gas sampling (78%). The use of geophysical techniques included soil conductivity (39%), magnetometer and ground penetrating radar surveys (both 30%). The majority of sites (over 90%) used a fixed lab for sample analyses; however, the use of mobile labs, portable chromatographs and immunoassays are increasing. Fewer than 20% of the states surveyed applied DNAPL detection techniques, but those used included UV fluorescence, hydrophobic dye and partition tracer tests. The technologies used for soil remediation were excavation, SVE and bioventing, inclusively. Surveyed states reported the following groundwater remediation technologies either being used or planned to be used: natural attenuation (71%), air sparging (57%), multiphase extraction (33%), HRC (29%), hydrogen peroxide (24%), potassium permanganate (19%); permeable walls, recirculating wells and surfactant flush (all 14%), with less than 10% using ORC, sodium permanganate, ozone, co-solvent flush, steam injection and electrical heating. The results of the survey showed that a wide variety of innovative technologies are either being used or considered. The Coalition is collecting case study information concerning the lessons learned when these technologies are applied.

The SCRD World Wide Web site (www.drycleancoalition.org) is the primary and most effective way for the organization to share information among its members and colleagues. Notices of meetings, summaries of meeting proceedings, and reports on other SCRD activities are regularly posted on the site. In addition, the web site includes links to individual state web sites, as well as links to web sites for more information on industry practices and trends, health related information for drycleaning chemicals, and notices of conferences and events of interest.