

Comparison of Remedial Systems Employed at Drycleaner Sites

SCRD compared data from over one hundred drycleaning site remediation projects across the United States to evaluate the various remedial technologies and assessment techniques used at chlorinated and petroleum solvent sites. The analysis can be downloaded at www.drycleancoalition.org/download/site_profile_paper.pdf.

Drycleaner Site Profiles

Perhaps one of the most useful sources of information about cleanup technologies being used to address contamination at drycleaner sites is the drycleaner site profiles section of the SCRDR website (www.drycleancoalition.org/profiles). These profiles provide details about cleanup systems that have been installed and operating for at least one year at drycleaner sites in the United States and in other countries.

Each profile includes the site name, location, description, hydrology, type and level of contamination, remediation technology used, results achieved, costs, lessons learned, and point-of-contact for further information. A search engine allows users to enter key words and search all profiles at the same time. There currently are approximately 175 profiles that can be found on the SCRDR website. Industry professionals are welcome to add site profiles to the database at any time. A guide to submitting profiles can be found at www.drycleancoalition.org/profiles/profiles_guide.pdf.

Chemicals Used in Drycleaning Operations

This viewable, downloadable document and searchable, on-line database is intended to provide those engaged in the assessment and cleanup of contaminated drycleaner sites with information on drycleaner chemicals. The data also may be of use to regulators conducting compliance inspections at drycleaning facilities. The document provides current and historical information on the types of drycleaning solvents, equipment maintenance materials, pre-cleaning/spotting agents, garment treatments, and other drycleaning chemicals. The database can be found at www.drycleancoalition.org/chemicals/SelectInfo.cfm and the document can be found at www.drycleancoalition.org/chemicals/ChemicalsUsedInDrycleaningOperations.pdf.



For more information about SCRDR or to provide feedback on the SCRDR website, please contact SCRDR Chair Scott Huckstep (scott.huckstep@dnr.mo.gov) or leave a comment at: www.drycleancoalition.org/gbook.cfm

State Resources

A brief description of each state's drycleaner program, along with a direct link to the state program's website, can be found under the State Resources section of the SCRDR website (www.drycleancoalition.org/state.cfm).

Federal Resources

A list of federal resources, including EPA fact sheets on drycleaning, Federal Register notices, federal guidance documents, and links to other websites that focus on assessing and cleaning up drycleaners, can be found at www.drycleancoalition.org/federal.cfm.

References

A reference section provides links to multimedia presentations (including a virtual tour of a drycleaning operation) and sources of additional information on the drycleaning process, technologies used to clean up contaminated drycleaning sites, case studies, and resources relating to vapor intrusion. Also included in this section of the SCRDR website is a searchable bibliography of drycleaning resources and a comprehensive glossary of drycleaning terms. These reference materials can be found at www.drycleancoalition.org/reference.cfm.



Links of Interest

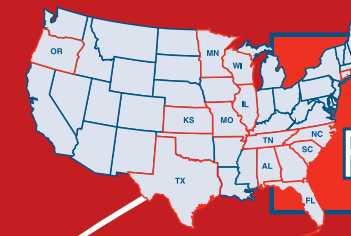
The SCRDR website includes a list of links to national and regional industry associations and other non-governmental resources at www.drycleancoalition.org/links.cfm.

SCRDR Members Contact List

A listing of all SCRDR state representatives, complete with contact information and links to state drycleaner program websites, can be found by visiting www.drycleancoalition.org/members.cfm#contacts.

Solid Waste and
Emergency Response
(5203P)

EPA 542-F-11-009
May 2011
www.drycleancoalition.org/



State Coalition for
Remediation of Drycleaners

STATE COALITION FOR REMEDICATION OF DRYCLEANERS

WEBSITE RESOURCES

The State Coalition for Remediation of Drycleaners (SCRDR) prepared this brochure to explain some of the health and environmental concerns associated with contaminated drycleaner sites and to provide an overview of the many resources available on their website. Many of these resources may be useful to state regulators, assessment and cleanup contractors, drycleaner owners and operators, other industry professionals, and community members.



www.drycleancoalition.org



About SCRD

SCRD was formed in 1998 as a coordinating body for state government regulators involved in administering drycleaner assessment and cleanup programs. Since then, SCRD has worked to increase collaboration among states with established drycleaner cleanup programs and improve the effectiveness of cleanups at contaminated drycleaner sites. SCRD's primary objectives are to:



- ▶ Provide a forum for exchanging information and discussing the best ways to implement and run state drycleaner programs;
- ▶ Share information and lessons learned with those states that do not have drycleaner-specific programs; and
- ▶ Encourage the use of new technologies when cleaning up contamination at drycleaner sites.

SCRD members come from 13 states—Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin—that have enacted formal drycleaner remediation programs. While these programs vary, they generally require fees paid by drycleaners or solvent suppliers, registration or licensing of drycleaners, compliance with applicable federal and state laws, and implementation of pollution prevention measures. In addition, seven states without official drycleaner programs—Alaska, California, Delaware, Maryland, New York, New Jersey, and Virginia—have taken a proactive role in addressing contaminated drycleaners and actively participate in SCRD as Associate Member States.

Since its inception, SCRD's work has been supported by the U.S. Environmental Protection Agency's Technology Innovation and Field Services Division.

The Problem

There are approximately 36,000 active drycleaning facilities in the United States, and an estimated 75% of them are potentially contaminated. This includes commercial, industrial, and coin-operated facilities where soil and groundwater have been contaminated by chemicals used to clean fabrics (also known as drycleaning solvents). In addition, an unknown number of former drycleaning sites are contaminated.

Because a majority of drycleaning facilities are located in urban areas, contamination from chemicals used in drycleaning has impacted a large number of public water supply wells and threatens many others.

Contamination from drycleaners often is the result of past industry-accepted practices rather than the typical spill or release common with other types of contaminated sites. Historically, many drycleaners disposed of wastes containing solvents by pouring wastewater into sanitary sewers, septic tanks, storm sewers, and floor drains; throwing spent filters and sludge into the trash; or dumping wastewater on the ground outside their facilities. In addition to contamination associated with waste disposal, solvents have been released to the environment during solvent delivery, transfer, and storage and through drycleaning equipment operation and maintenance.

Cleaning up contaminated soil and groundwater at active and inactive drycleaner sites is an issue facing state governments and drycleaners, alike. Cleanup is especially critical in areas where groundwater serves as the primary drinking water source. In addition, the migration of vapors from these solvents into indoor air of homes and buildings from underlying soil and groundwater contamination is a concern.

Perchloroethylene, or "perc" (also known as tetrachloroethylene or PCE), remains the most widely used drycleaning solvent in the United States. Perc is a dense, nonaqueous phase liquid and is heavier than water. As such, it can penetrate concrete and can sink underneath buildings through floor cracks. Perc is a listed hazardous substance and is classified as a pollutant in both air and water regulations. It may pose serious health hazards if exposure is not properly controlled.

More environmentally friendly types of solvents, such as carbon dioxide and silicon-based solvent, have been introduced in recent years.

Resources Available on SCRD's Website

On SCRD's website, you'll find information directly related to addressing contamination at drycleaners, along with information about how each member state administers its drycleaner cleanup program.

SCRD Newsletter

Twice a year, SCRD produces a newsletter to announce recent events and activities. Typically, the newsletter includes:

- ▶ An overview of new publications relating to cleaning up drycleaners;
- ▶ A summary of the most recent SCRD annual meeting;

- ▶ Brief updates on each state's drycleaning program;
- ▶ Statistics documenting progress made at drycleaning sites in all member states;
- ▶ A list of remedial technologies being used at drycleaner sites; and
- ▶ A list of upcoming conferences, meetings, or events of interest to SCRD members.

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

Meeting and Conference Call Summaries

Summaries of SCRD annual meetings and conference calls are regularly posted to the SCRD website. Meeting summaries include overviews of both technical and administrative topics, along with links to presentation materials. SCRD conference calls are held approximately every eight weeks. Past meeting summaries can be found at www.drycleancoalition.org/members.cfm#meet, and past conference call summaries are available at www.drycleancoalition.org/members.cfm#cc.

Upcoming Conferences and Courses

A list of upcoming conferences, courses, and other meetings of interest to drycleaners, regulators, assessment and remediation contractors, and other industry professionals is available at www.drycleancoalition.org/courses.cfm.

Publications

Several publications about the chemicals used to clean fabrics, how states administer their drycleaner programs, and the technologies used to assess and clean up sites are available on the SCRD website at www.drycleancoalition.org/pubs.cfm. Examples of recent publications include:

Conducting Contamination Assessment Work at Drycleaning Sites

SCRD prepared this report in fall 2010 to provide helpful information for states and others involved in conducting site characterization work at drycleaning facilities. It includes background information on drycleaning operations, planning and conducting site assessment and characterization, and a range of assessment technologies. The report can be downloaded at www.drycleancoalition.org/download/assessment.pdf.

