



**Connecticut Department of
Environmental Protection**

Garment Care Fact Sheets

Environmental Regulations and
Pollution Prevention Opportunities for
The Garment Care Industry

September 2004



Connecticut Department of Environmental Protection
79 Elm Street, Hartford, CT 06106-5127
Arthur J. Rocque, Jr., Commissioner
Office of Pollution Prevention (860) 424-3297
www.dep.state.ct.us/wst/p2/garcare/gcindex.htm



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All fact sheets have been prepared by the Connecticut Department of Environmental Protection. For more information, please call the DEP Office of Pollution Prevention at (860) 424-3297. The two fact sheets "Remediation Fund" and "Property Transfer" are also available in the Korean language. To request a copy, please contact the Office of Pollution Prevention.

The following information is also available at no charge from the Department of Environmental Protection:

General Permit for the Discharge of Minor Boiler Blowdown Wastewaters (and registration form)

General Permit for the Discharge of Minor Non-Contact Cooling Water (and registration form)

List of federal Hazardous Air Pollutants (HAPs)

List of state Hazardous Air Pollutants (HAPs) from the Regulations of Connecticut State Agencies (RCSA) 22a-174-29

The CT DEP Waste Engineering and Enforcement Division has also developed various fact sheets and other regulatory guidance documents to assist owners and/or generators with their obligations to comply with the applicable solid and hazardous waste laws and regulations. These documents may be requested through the Compliance Assistance (Compass) Program. Please call the Compass hotline at (888)-424-4193 with your questions and/or visit the CT DEP website at www.dep.state.ct.us.

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Preventing Pollution in the Garment Care Industry

The Connecticut Department of Environmental Protection (CT DEP) has prepared these fact sheets for the garment care industry. The fact sheets outline basic regulatory requirements and best management practices. Although they do not constitute legal advice, they represent a starting point for understanding where your business is subject to environmental regulation. In addition, these fact sheets may help you in identifying areas where you can reduce the regulations that you must comply with, protect yourself from fines and liabilities, and protect you and your employees from hazards in the shop.

How to Use These Fact Sheets

Each fact sheet deals with a specific issue or material you may deal with in your business. Most fact sheets are divided into five sections:

- ◆ **Potential Environmental Impacts** - Describes the effect of a particular activity or material on the environment.
- ◆ **Legal Requirements** - Provides a quick reference for environmental compliance.
 - CGS refers to the Connecticut General Statutes,
 - RCSA refers to the Regulations of Connecticut State Agencies, and
 - CFR refers to the Code of Federal Regulations.
- ◆ **Best Management Practices** - Offers ways to reduce environmental impacts that may also reduce your regulatory obligations, save money, and protect the health of you and your employees.
- ◆ **Pollution Prevention Checklist** - A reminder to help you implement some of the best management practices.
- ◆ **Did You Know?** - Tells an interesting fact relevant to the material in the fact sheet.

The fact sheets also contain an Appendix, which summarizes the hazardous waste management requirements that apply to garment care facilities.

The last page is **contact information** with CT DEP and Environmental Protection Agency (EPA) phone numbers you may find useful.

Other Resources

These fact sheets are also available on the CT DEP web site and are periodically updated. The site is dep.state.ct.us/wst/index.htm. There are other resources that you may want to consult:

- ◆ EPA's Design For the Environment (DfE) Garment and Textile Care Project works with the garment care industry and individual shops to increase awareness of the health and environmental concerns associated with cleaning activities and to identify and encourage the use of safer, cleaner, more efficient practices and technologies. www.epa.gov/oppt/dfe/projects/garment/index.htm
- ◆ The Center for Neighborhood Technology promotes alternatives to toxic and hazardous chemicals. www.cnt.org/wetcleaning
- ◆ The Connecticut Occupational Safety and Health Administration (Conn-OSHA) provides training and education programs and on-site consulting. Conn-OSHA does not enforce occupational safety and health standards in private businesses in Connecticut. These standards are enforced by Federal OSHA. The two Federal OSHA Area Offices in Connecticut are located in Bridgeport and Hartford. www.ctdol.state.ct.us/osha/osha.htm

Be aware that implementation of some pollution prevention options (such as installation of a solvent distillation unit) may require authorization, permits or modification to existing permits from the DEP or other agencies.

Disclaimer

Vendors, products and services listed in these fact sheets are supplied as a source of information and are neither approved nor endorsed by the CT DEP. You should fully investigate any vendor performance claims before investing in such product or service.

Acknowledgments

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For more information on this guide, please contact:

CT DEP - Office of Pollution Prevention

79 Elm Street

Hartford, CT 06106

(860) 424-3297

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What is Green Cleaning?

Green Cleaning refers to fabric cleaning processes that are environmentally preferable to the use of perchloroethylene (perc), a probable carcinogen that also may harm liver and kidneys via inhalation. Petroleum solvents were first used in dry cleaning but lost ground to the use of perc because perc is less of a fire hazard. However, there has been considerable interest in alternatives to perc due to concerns over toxicity, and regulatory and liability burdens associated with it, as many dry cleaning plants are located in residential neighborhoods. The U.S. EPA Design for the Environment, in partnership with the garment cleaning industry and others, has encouraged a number of alternative technologies. This fact sheet describes wet cleaning, which is the most promising environmentally preferable process alternative. Other alternatives to dry cleaning are also identified. Environmental impacts and legal requirements for alternative technologies are also listed.

Why Use Green Cleaning Technologies?

Background

Conventional dry cleaning cleans garments with either perchloroethylene, commonly referred to as perc, or petroleum or hydrocarbon solvents. Perc is the solvent used in 80% of dry cleaning facilities. Petroleum or hydrocarbon solvents, which include Stoddard solvent, DF-2000 and 140 degrees F solvent are used in the remaining 20% of facilities. The primary drawback to dry cleaning is that perc and/or petroleum solvents are hazardous substances. Perc is a chlorinated solvent and is listed as a probable carcinogen. Newer processes, from professional wet cleaning, to non-chlorinated solvents, and liquid carbon dioxide, may help the professional cleaning industry avoid liability and minimize costly regulation.

Wet Cleaning

Machine wet cleaning is a commercially available cleaning process to replace dry cleaning. Wet cleaning refers to garment cleaning that uses water as the primary solvent following essentially the same steps as dry cleaning. Wet cleaning utilizes spot removers, a solvent (water) in computer-controlled washing machines, with specialized detergents. It also uses dryers and skilled technicians to effectively and safely clean a wide variety of textiles. Studies show that wet cleaning can effectively remove a wide variety of soils from textiles with reduced environmental and health and safety concerns.

Machine wet cleaning eliminates the use of perc and the air emissions and regulatory requirements associated with use of it. The wet cleaning process uses detergents, stain removers and finishes that are generally non-toxic and not hazardous, although water use and wastewater discharges may increase. Water from the wet cleaning process is considered domestic sewage and may be discharged to the sewage treatment plant. Some stain removers may generate hazardous waste (see Appendix A).

Emerging Technologies

Carbon dioxide: A carbon dioxide (CO₂) process that uses CO₂ in a liquid state is being developed for fabric cleaning. CO₂ eliminates the use of toxic chemicals and the management of waste and emissions but presents safety and management challenges due to the high pressure required in the cleaning machine.

Organic hydrocarbon solvent: New non-chlorinated petroleum solvents are being formulated that are less of a fire hazard (having flash points lower than 140 degrees F). Liquid wastes from using these substances may be hazardous, but their air emissions may not be. Higher flash point organic hydrocarbon solvents have been developed and are in use under proprietary technologies such as Rynex™.

Ozone; Ultrasonic: Other garment cleaning methods being researched include ozonated water and ultrasonic cleaning. Aqueous-based ultrasonic cleaning which has been used in industrial cleaning applications is now being researched for garment cleaning.

For More Information on Wet Cleaning

1. Training Curriculum for Alternative Clothes Cleaning. Published by the Massachusetts Toxics Use Reduction Institute. PDF version:
www.epa.gov/opptintr/dfe/pubs/garment/tech_rep/clothes.pdf
2. Wetcleaning Equipment Report, A report on washers, dryers, finishing equipment, and detergents for machine-based professional wetcleaning. By Anthony Star and Cindy Vasquez. Published by the Center for Neighborhood Technology, Chicago, IL. PDF version: www.cnt.org/wetcleaning/equip1.html
3. CT has one garment cleaning shop that lists a wetcleaning option, Pure Elegance, in Westport, CT. Owner is Mike Wizell, (203) 221-7448.
4. Pollution Prevention Products for Illinois Dry Cleaners: Testing and Recommendations of Chemicals for Drycleaning, A Report of the Center for Neighborhood Technology, Chicago, IL, April 2004. Website PDF:
http://www.wmrc.uiuc.edu/main_sections/info_services/library_docs/RR/RR-106.pdf
5. Commercialization of Professional Wet Cleaning: An Evaluation of the Opportunities and Factors involved in Switching to a Pollution Prevention Technology in the Garment Care Industry. *Pollution Prevention Education and Research Center: Occidental College*. October 28, 2002 (.pdf file, 947 KB, 145 pp.) Website PDF:
<http://departments.oxy.edu/uepi/pperc/resources/Finial%20Report%202.0.pdf>
6. EPA Design for the Environment Garment and Textile Care Partnership Publications <http://www.epa.gov/dfe/pubs/index.htm#garm>

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Purchasing Environmentally Preferable Products (EPPs)

What are EPPs?

EPPs are defined as products or services that have a reduced negative impact on human health and the environment when compared with competing products or services that serve the same purpose.

Potential Environmental Impacts

EPPs may contain recycled content, minimize waste, conserve energy or water, protect natural resources, and reduce the use and release of toxic chemicals. EPPs also offer human health and economic benefits such as reduced worker illness, improvements in public health and decreased costs associated with waste management and regulatory compliance.

Why should my business buy EPPs?

An increasing number of businesses, government agencies and households are purchasing environmentally preferable products and services to protect their health and provide a safer, less toxic workplace, potentially reduce the amount of regulation they are subjected to, reduce liabilities, and protect the environment. Offering an EPP service, such as "wet cleaning" can make good business sense, as your customers may consider it a "plus" when choosing where they spend their money.

What types of EPP products or services are available?

Due to consumer demand, there are a growing number of products and services that have environmental benefits without sacrificing high performance or cost competitiveness. A list of suppliers is included with this fact sheet. Please note that the list is not comprehensive and does not constitute an endorsement by the State of Connecticut. You can also ask your suppliers or check the Internet for additional products.

Best Management Practices

- ★ Purchase the largest practical container, but don't purchase more than you need. Purchase frequently used products in bulk (e.g., plastic bags) to reduce packaging waste.
- ★ Purchase the least toxic product available. Check the Material Safety Data Sheets (MSDS) for products you purchase. If the product is toxic, ask your supplier for alternatives.
- ★ If you do have excess or unneeded materials, see if your supplier can take them back.
- ★ Include the cost of disposal when you make purchasing decisions. What looks like the cheaper option may cost more because of disposal or other management costs.
- ★ Store materials in a way that keeps them from being damaged.
- ★ Use the oldest items first (first-in, first-out).

- ★ Purchase products made with recycled content to close the recycling loop (i.e., create a market for the products you recycle). The quality of these products is just as good as those made with virgin materials and prices are competitive.

Environmentally Preferable Products and Services

Disclaimer

The following is a list of suppliers the CT DEP and/or the Connecticut Department of Administrative Services (CT DAS) are aware of that supply environmentally preferable products or services. It is not a comprehensive listing. Nor does a listing in this directory represent an endorsement by the State of Connecticut. Listings are subject to change, so please contact the company for current information. Categories are: Wet Cleaning, Fluorescent Lamp Recycling, and Miscellaneous Products (cleaners, absorbents, etc.).

Category	Phone & Fax	Web Site
Wet Cleaning		
Center for Neighborhood Technology Chicago, IL 60647 An extensive listing (many with prices) of washers, dryers, finishing equipment, and detergents for machine-based professional wet cleaning	Phone: 773/278-4800 ext. 299	www.cnt.org/wetcleaning
Fluorescent Lamp Recycling (Call DEP at 860/424-3297 for other resources)		
Northeast Lamp Recycling	Phone: 888/657-5267	www.nlrlamp.com
Miscellaneous		
Carey Wiping Materials Corp. Cloth and paper wipers, environmental spill products	Phone: 860/224-2459 Fax: 860/229-7870	www.careywiping.com

Dawg, Inc. Recycled absorbent sacks, pillowcases, pads	Phone: 1-800-YEL-DAWG (935-3294) Fax: 1-800-LIL-PAWS (545-7297)	www.dawginc.com
New Pig Absorbent mats, socks, pillows, wipers and rags	Phone: 1-800-HOT-HOGS (468-4647)	www.newpig.com
Northeast Industrial Flooring Chemical resistant coatings for floors, concrete repair and sealing	Phone: 860/292-5920 Fax: 860/292-5922	
Odor Gone of Connecticut Non-chemical odor control additive for use with washing systems and gray water tanks	Phone: 860/564-8968	www.odorgone.com

Pollution Prevention Checklist

✓ Do you look for and purchase alternatives to less toxic products?

YES

NO

N/A



Did You Know?

Did you know that the United States consumes approximately 25% of the world's resources with only 5% of the world's population?

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Potential Environmental Impacts

Lint, filters, used rags (also called wipes, wipers, and shop towels) and absorbent materials (such as mats, socks, and loose material such as speedi-dry) that are contaminated with perc or another solvent, must be carefully managed to prevent or reduce the risk of fire, and protect human health and the environment.

Legal Requirements

- ◆ How lint, used rags, filters and absorbents are managed depends on what they are contaminated with. [40 CFR 279 and RCSA Section 22a-449(c)-119; 40 CFR 261 and RCSA Section 22a-449(c)-101; CGS Section 22a-454]

If the item is:

- contaminated with perc, manage as a hazardous waste (see Appendix A).
 - contaminated with flammable solvents or other hazardous wastes, manage as hazardous waste (see Appendix A).
 - contaminated with pre-spotters/spot removers, manage as hazardous waste (see Appendix A) or perform a hazardous waste determination.
 - contaminated with non-hazardous materials, such as mild cleaners or soaps, dispose of in regular trash.
- ◆ If you dispose of used carbon adsorber cartridges, you must manage them as hazardous waste.
 - ◆ Waste aerosol cans:
 - If the aerosol can contained a chemical that must be managed as hazardous waste (such as some spot cleaners), the can must be managed as hazardous waste, unless it is completely empty. If it is empty, it may be disposed in the trash or recycled.
 - ◆ Keep lint, used rags or absorbents that have been contaminated with hazardous materials such as perc or solvents separate from the regular trash.

Best Management Practices

- ★ Store ignitable rags in NFPA-approved (National Fire Prevention Association), labeled containers until they are picked up for laundering or disposal.
- ★ Contract with a permitted industrial laundry service that delivers clean cloth rags and will pick up the used rags on a regular basis. The laundry service may require you to limit the solvent and other chemical content of the soiled rags because of the limits on their permit to discharge wastewater.

- ★ All laundries in Connecticut that handle industrial rags must have a wastewater discharge permit from the CT-DEP. Have your laundry service certify that they hold the appropriate permits and they are in compliance with the permit conditions. For a list of facilities that have valid discharge permits and their compliance status with the permit conditions, call the CT-DEP at (860) 424-3018.
- ★ Reduce the amount of hazardous materials used in spot cleaning through improved work practices.
- ★ Ask suppliers for non-toxic spot cleaners.
- ★ Always ask for the Material Safety Data Sheet (MSDS) when considering purchase of a new product and use this information as part of your product evaluation, checking for the presence of regulated chemicals. Try to reduce the purchase of products containing these chemicals to reduce your hazardous waste generation.



Proper storage of lint, rags & filters

Pollution Prevention Checklist

- ✓ Do you read the MSDS before purchasing a new product?
- YES NO N/A



Did You Know ?

Some pre-spotters contain Trichloroethane or Tetrachloroethylene (perc) - both of which must be managed as a hazardous waste when disposed.

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Recycling

Potential Environmental Impacts

Throwing recyclables in the trash has negative impacts on air and water quality and wastes energy and natural resources. Diverting reusable materials from the waste stream through recycling results in extraction and processing of fewer raw materials and reduces the amount of waste that must be landfilled or incinerated.



Illegally disposed corrugated cardboard and mixed waste

Legal Requirements

- ◆ Businesses are required to recycle certain materials [CGS Section 22a-241b(c)]. See table below for the mandated items that must be recycled by your facility.

What Are The Mandated Items That Must Be Recycled In Connecticut?

Your facility probably does not generate large volumes of some of the mandated items listed in the table below. However, there are easy ways to deal with even small quantities. Removing these items from your regular waste can reduce the amount you pay for trash disposal. There are no facilities or trash haulers permitted in Connecticut to “pick through” mixed trash to retrieve designated recyclable materials. It is your responsibility to separate your recyclables.

MANDATED ITEM	HOW TO RECYCLE
Corrugated Cardboard (has three layers -- a wavy layer between two flat paper layers)	Keep corrugated cardboard separate from other wastes. Remove any contaminants from corrugated boxes (e.g., plastic, foam, wood), open and flatten the boxes and place them in a dumpster or compactor used only for corrugated cardboard.
Office Paper and Newspaper	Take it to your municipal recycling center/transfer station or join with other small businesses to develop a cooperative office paper collection program or have employees take small amounts of newspapers home for collection with their residential program.
Scrap Metal	Recycle items consisting predominantly of ferrous metals (steels), brass aluminum, copper, lead, chromium, tin, nickel or alloys.
Glass and Metal Food/Beverage Containers	The small number of containers generated by the employees who work at your facility can be taken home for recycling or taken to your town's recycling drop-off center or transfer station.
Nickel-cadmium Batteries	Call (800) 8BATTERY to find the nearest participating retail outlet that collects these batteries for recycling.
Leaves and Grass	Rake leaves to a wooded area on the site, or compost leaves on site

MANDATED ITEM	HOW TO RECYCLE
Clippings	in a small contained pile. In some towns you may be able to place leaves at the curb for municipal collection or take them to a municipal leaf composting pile. It is recommended that grass clippings be left on the lawn areas since they act as a natural organic fertilizer.

In addition to the items listed above, many municipalities have programs to recycle other items, such as plastics and cardboard for shirt boxes. To find out about those additional items, contact your municipal recycling contact or refer to your local solid waste and recycling ordinance. Specific questions about recycling options can be answered by your municipality, or call the CT DEP's Recycling Program at (860) 424-3365 for more information.

Best Management Practices

- ★ Educate employees about separating recyclables from the trash.
- ★ Considering cooperating with other nearby businesses to simplify recycling and reducing costs. Your municipal recycling coordinator may be able to help you set up a program.
- ★ Purchase products made with recycled content to close the recycling loop (i.e., create a market for the products you recycle). The quality of these products is just as good as those made with virgin materials and prices are competitive.
- ★ Dumpsters should be covered and have intact drain plugs or be positioned in a roofed area which does not allow dumpster leakage to enter any stormwater drainage system.
- ★ Accept hangers back from customers for reuse or recycling if not useable.

Pollution Prevention Checklist

✓ Do you have separate, labeled containers for recyclables at your facility?

YES

NO

N/A



Support your community

Some shops put a penny toward a local charity for each hanger returned by customers. It provides an incentive to recycle and helps the community too!

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Spill Reporting

Legal Requirements

In Connecticut, any oil or petroleum product, chemical or waste that is released in any manner constitutes a spill [CGS Section 22a-452c]. Spills also include leaks from underground and above ground tanks. Any size spill must be reported to the CT DEP's Oil and Chemical Spill Response Division.

What Immediate Actions Should be Taken?

In case of a spill, stop the flow, contain the spill, call 911, report the spill to CT DEP, and then report to the National Response Center if necessary.

When Should a Spill be Reported to the CT DEP?

In Connecticut, any size spill of oil or petroleum product, any chemical, or waste, must be reported to the CT DEP. The party causing the spill or pollution and the property owner are responsible for:



- Immediately reporting the spill to the CT DEP's Oil and Chemical Spill Response Division at (860) 424-3338, and beginning the appropriate containment and cleanup efforts, which must be performed by a licensed contractor [CGS Section 22a-454]. The telephone number is staffed 24-hours/seven days a week.
- Completing a written "Report of Petroleum or Chemical Product Discharge, Spillage, Seepage, Filtration" and mailing it to CT DEP within 24 hours. Contact the CT-DEP at (860) 424-3377 for the form or it may be downloaded – www.dep.state.ct.us/wst/oilspill/spillrep.pdf.

Connecticut law establishes what is called "strict liability" for spills of most pollutants into the environment. This means that the person or business causing the spill and the owner of the property where the pollution occurred are financially responsible for clean up, regardless of fault. All spills must be reported and dealt with quickly.

When Should an Oil Spill be Reported to the Federal Government?

Section 311 of the Clean Water Act disallows the discharge of oil into or upon the navigable waters of the United States, their adjoining shorelines, or where natural resources may be affected [33 USC 1321, 40 CFR 110].

You must report an oil spill to the National Response Center at (800) 424-8802 if:

1. the spill is to navigable waters or the adjoining shoreline, or
2. water quality standards could be violated, or
3. the spill causes a sheen or discoloration, or
4. the spill causes a sludge or emulsion.

When you call the National Response Center to report an oil spill or release, the staff person will ask you the following questions:

1. Name, location and telephone number;
2. Name and address of the party responsible for the incident;
3. Date and time of the incident;
4. Location of the incident;
5. Source and cause of the release or spill;
6. Types of materials released or spilled;
7. Quantity of material released or spilled;
8. Danger or threat posed by the release or spill;
9. Number and type of injuries (if any);
10. Weather conditions at the incident location; and
11. Any other information that may help emergency personnel respond to the incident.

When Should a Hazardous Chemical Spill be Reported to the Federal Government?

You must report a hazardous chemical spill to the National Response Center at (800) 424-8802 if the release could threaten human health off the property.

When you call the National Response Center to report a hazardous chemical spill, the staff person will ask you the following questions:

- .. The chemical name;
- .. An indication of whether the substance is extremely hazardous;
- .. An estimate of the quantity released into the environment;
- .. The time and duration of the release;
- .. Whether the release occurred into air, water, and/or land;
- .. Any known or anticipated acute or chronic health risks associated with the emergency, and where necessary, advice regarding medical attention for exposed individuals;
- .. Proper precautions, such as evacuation or sheltering in place; and
- .. Name and telephone number of contact person.

The facility owner or operator is also required to provide a written follow-up emergency notice as soon as practicable after the release. The follow-up notice or notices must:

- .. Update information include in the initial notice, and
- .. Provide information on actual response actions taken and advice regarding medical attention necessary for exposed individuals.

Did you know? In the case of spill, the CT DEP will give you the opportunity to hire a licensed environmental contractor. If you do not make immediate proper arrangements, the CT DEP may make direct arrangements for the clean up, billing you later for the cost. You have 30 days to pay from the date that the CT DEP demands payment. After that time, interest and administration costs start to accrue.

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Potential Environmental Impacts

Wastewater from garment care includes water from separators used in condensers, carbon adsorbers, cartridge strippers, stills, muck cookers, vacuums, washing machines, compressors, boiler blowdown and mop water from floor cleaning. Improperly disposed wastewater containing perchloroethylene (tetrachloroethylene or “perc”) and other solvents from dry cleaners have been found in many drinking water wells over the years. Perc is denser than water and tends to sink quickly down through soils into the water table until it reaches an impervious layer such as clay or rock. It then dissolves very slowly into the ground water as the water flows past the spill. Perc persists long after the spill occurs, continuing to dissolve into the groundwater for many years. Perc is very dense and even in very small amounts it can migrate through the soil to contaminate nearby wells. The legal limit for perc in drinking water is 5 ug/l (parts per billion).

Legal Requirements

- ◆ Any discharge of dry cleaning process wastewater to a dry well, a septic system, or surface water (stream, river, lake, etc.) is prohibited.
- ◆ You must obtain an individual CT DEP wastewater permit before discharging any dry cleaning process wastewater to a sanitary sewer (a sewer line that connects to a sewage treatment plant). For more information, contact the CT DEP Water Bureau at (860) 424-3018.
- ◆ If your facility has floor drains, they:
 - are considered a wastewater discharge outlet even if they are not used regularly to discharge water. A permit from the CT DEP is required and you may be eligible for coverage under the *General Permit for Miscellaneous Discharges of Sewer Compatible Wastewater*;
 - must not discharge to a septic system, a drywell, or a storm sewer;
 - must connect to either a sanitary sewer or a holding tank. If you do not know where your floor drains lead, the building plans that you have or that are on file at the town hall may show locations of drain discharges; and
 - must not be located where solvent spills or leaks can enter.
- ◆ Keep dry cleaning equipment and solvent transfer lines in good condition with no leaks. Inspect equipment weekly.
- ◆ Bermed storage area must be adequate to contain the total amount of solvent stored in the event of a spill or leak.
- ◆ Solvent contaminated water may be placed in a container, such as a 55-gallon drum. You must determine if it is a hazardous waste and manage it accordingly. (See Appendix A.) If it is determined to be a hazardous waste, it must be transported by a permitted hauler to a permitted disposal facility. For a list of permitted haulers, contact the CT DEP at (860) 424-4193.

- ◆ Non-contact cooling water from solvent distillation systems may be discharged to a sanitary sewer. To discharge non-contact cooling water to the sanitary sewer, you must:
 1. Receive permission from the municipality for your discharge, and
 2. Obtain the appropriate permit from the CT DEP for your discharge (most likely the *General Permit for the Discharge of Minor Non-Contact Cooling and Heat Pump Water*). You must not discharge any hazardous waste (e.g. perc, solvents) into the sewer. You must not discharge any substance that is prohibited by the municipality or your CT DEP permit. You must meet all conditions of the discharge permit.

- ◆ Facilities without sanitary sewers are encouraged to install a recirculating system for their non-contact cooling water, thus eliminating the water discharge. In some limited areas, it may be permitted to discharge non-contact cooling water to streams and storm drains if your shop is not connected to a sanitary sewer. If you wish to pursue this option, you must hire a professional engineer to prepare your permit application. For more information, contact the CT DEP Water Bureau at (860) 424-3018.

- ◆ You must maintain practices, procedures and the facility in such a manner as to minimize and control spills of toxic or hazardous substances (such as perc) from entering into the environment.

For copies of the general permits, registration forms or guidance documents explaining the requirements, visit the “Permits, Licenses and Registrations” section of the CT DEP website at www.dep.state.ct.us/pao/download.htm - [WaterGP](#) or call the CT DEP’s Bureau of Water Management at (860) 424-3018.

Best Management Practices

- ★ We recommend sealing all floor drains unless required by a local building code. A permanently sealed floor drain should first have a plumber's plug inserted inside the drain. Concrete should then be poured on top of the plumber's plug.

- ★ Keep dry cleaning equipment and solvent transfer lines in good condition, with no leaks. Inspect equipment regularly.

- ★ Keep your shop floor dry and clean.
 1. Prevent spills from ever reaching the floor by using appropriate equipment, such as spigot pumps, funnel drum covers and floor pans.
 2. Never hose down your work area.

- ★ Consider sealing your shop floor with epoxy or other suitable sealant so spills won't be absorbed and clean-ups will be quicker. Concrete is porous and perc will penetrate into the soil below over time. Sealing your floor can reduce the liability for a clean-up of a contaminated shop floor and soil below.

- ★ Use double carbon wastewater treatment devices to clean up perc-contaminated wastewater and recycle wastewater to the process boiler.

- ★ If it becomes necessary to wash the floor, use only the quantity of water needed to produce the appropriate level of cleanliness. Flushing floor wastes outside constitutes an illegal discharge.
- ★ Post this notice by all sinks and drains – **“DO NOT POUR ANY SOLVENTS OR OTHER WASTES DOWN SINKS, TOILETS OR DRAINS”**.
- ★ Only use absorbents like speedi-dry or "kitty litter" when the spill cannot be cleaned with rags, dedicated mops, or squeegees. See the Lint, Rags and Filters Fact Sheet on how to properly manage spent absorbents.
- ★ Clean up spills immediately so that the spilled material does not get tracked outside the building.
- ★ If your wastewater is collected in a holding tank and hauled to a permitted facility, you can reduce your costs by segregating the regulated wastewater from “household” type wastewater. Only wastewater from bathrooms and cafeterias can be discharged to a septic system.

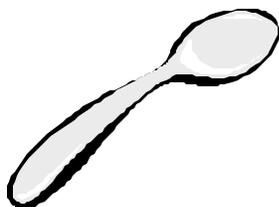
Pollution Prevention Checklist

✓ Do you inspect dry cleaning equipment and solvent transfer lines at least weekly?

YES

NO

N/A



Did You Know?

As little as a teaspoon of "perc" will contaminate enough water to fill two Olympic size swimming pools.

2004 Garment Care Fact Sheets

Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127
 Office of Pollution Prevention (860) 424-3297 www.dep.state.ct.us/wst/p2/garcare/gcindex.htm
 Fact Sheet: DEP-P2-GARMENT-CARE-FS-006

Last Updated: September 2004



Potential Environmental Impacts

Many facilities have parking lots and outside loading or storage areas. Stormwater runoff from these areas can carry pollutants such as oils, solvents, and heavy metals directly into streams or other surface waters, killing aquatic life and polluting areas where people swim, fish and boat. Some activities that are potential sources of stormwater runoff pollution include:

- Compactor and dumpster leakage,
- Open topped dumpsters,
- Truck loading docks: spillage, pavement drains,
- Shop floor washwater directed outside,
- Internal floor drains or trenches connected to storm drains,
- Outdoor storage including machines, parts, drums or other containers, and
- Building roof run-off with an accumulation of condensate from dry cleaning equipment.



Stormwater runoff discharging into a stream

Legal Requirements

- ◆ The CT DEP has developed general permits to cover the discharge of stormwater runoff. [CGS Section 22a-430]
 - A garment care facility must register under the *General Permit for the Discharge of Stormwater Associated with Commercial Facilities* if the facility has 5 acres or more of contiguous impervious surface (including roofs, paved parking, roadways and sidewalks).
- ◆ If your facility does not fall under the category mentioned above, best management practices must still be used to help prevent pollutants from reaching the groundwater or surface waters.
- ◆ A stormwater discharge means the discharge of precipitation runoff from any conveyance, such as a pipe, ditch, channel, or swale that is used for collecting and conveying stormwater from areas related to the commercial or industrial activities at the site. [CGS Section 22a-430]
- ◆ Any interior floor drains that connect to storm sewers, ground, groundwater, or surface water and do not have a permit are illegal in Connecticut [CGS Section 22a-430]. (See the Shop Wastewater fact sheet for more information.)

For more information about the stormwater requirements, call the CT DEP's Bureau of Water Management at (860) 424-3018 or visit the "Permits, Licenses, and Registrations" section of the CT DEP website at www.dep.state.ct.us/pao/download.htm#WaterGP.

Best Management Practices

- ★ Clean up spills immediately. Have spill kits with absorbent materials and brooms, shovels, or scoops readily available.
- ★ Store drums, machines or parts in a way that avoids exposure to rain or snow. This can include storing indoors, under a permanent roof on an impervious surface, in leak-proof covered containers or under temporary cover (like tarps).
- ★ Keep dumpsters covered or position them in a roofed area. Make sure their drain plugs are intact.
- ★ Position downspouts so that runoff is directed to vegetated areas. Avoid draining to concrete or asphalt.



Covered dumpster with intact plugs

Pollution Prevention Checklist

- ✓ Do you store drums, machines or parts indoors or under cover?

YES

NO

N/A

- ✓ Do you have spill kits readily available?

YES

NO

N/A



Did You Know?

Pollutants carried in storm drainage systems now make up between 50% and 90% of all pollutants reaching Connecticut's surface waters.

2004 Garment Care Fact Sheets

Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127
Office of Pollution Prevention (860) 424-3297 www.dep.state.ct.us/wst/p2/garcare/gcindex.htm
Fact Sheet: DEP-P2-GARMENT-CARE-FS-007

Last Updated: September 2004



Potential Environmental Impacts

Perchloroethylene (perc), also called tetrachloroethylene, is classified as a probable carcinogen by the U. S. Environmental Protection Agency (EPA). Perc vapors are most easily taken in via inhalation and can impact the liver and kidneys. Perc vapors have also been found to contaminate drinking water wells - see the Shop Wastewater Fact Sheet for more information.

Legal Requirements

- ◆ All dry cleaners using perchloroethylene are considered a source of air emissions and must comply with environmental regulations. [40 CFR 63 M, RCSA Section 22a-174-29 (Maximum Allowable Stack Concentration) and Section 22a-174-20(w) (Dry Cleaning CTG)]

Dry cleaning facilities and machines are classified in three ways:

1. Type of cleaning machine (dry-to-dry, transfer or reclaimer) located at the facility. (*See definitions at the end of this fact sheet.*)

2. Date of installation of each machine.

Existing machine: Dry-to-Dry machine installed/reconstructed before December 9, 1991
 Transfer machine installed/reconstructed before December 9, 1991

New machine: Dry-to-Dry machine installed on or after December 9, 1991

No new transfer systems may be installed.

3. Facility source classification based on annual perchloroethylene consumption.

My shop has these:	SOURCE CLASSIFICATION: 12 consecutive month shop perc consumption (gallons)		
	Small	Large	Major ²
Only Dry-to-Dry machines	less than 140	140 - 2,100	more than 2,100
Only Transfer Machines ¹	less than 200	200 - 1,800	more than 1,800
Both Dry-to-Dry & Transfer Machines ¹	less than 140	140 - 1,800	more than 1,800

Note (1) All transfer machines must have been installed before December 9, 1993.

Note (2) Major sources must contact CT DEP and apply for a New Source Review permit and a Title V permit before operating.

Existing Machines - Small Source Requirements

Requirement Category	Requirement
Process Vent Emissions	Existing facilities - none New facilities - Refrigerated condenser or the equivalent control device
Fugitive Emissions	Room enclosure, sealed containers, leak detection and repair schedule.
Operation & Maintenance	<ul style="list-style-type: none"> • No new transfer systems may be installed. • Keep machine door closed at all times, except when actually transferring clothes. • Drain cartridge filters in sealed container for a minimum of 24 hours. • Store solvent product and wastes in closed tanks with no leaks. • Inspect "all" equipment for perceptible leaks bi-weekly. <i>(See definition at the end of the fact sheet.)</i> <ul style="list-style-type: none"> – The leak check shall include inspection of the following: Hose and pipe connections, Fittings, Couplings and Valves, Door gaskets and Seatings, Filter gaskets and Seatings, Solvent tanks and containers, Pumps, Water separators, Cartridge filter housings, Muck cookers, Stills, Exhaust dampers and Diverter valves. <li style="padding-left: 40px;">Repair all leaks within 24 hours (if parts must be ordered, must do so within 2 days and installed within 5 days). • Operate and maintain system according to manufacturers specifications and recommendations. • Keep each machine's specifications and operating manuals on-site.
Record keeping and Reporting	<ul style="list-style-type: none"> • Keep receipts of all perc purchases. • Maintain a log of volume of perc purchased each month. (If none purchased enter zero in log) • Maintain a log of calculated "rolling 12 month" perc consumption. • Maintain a log of dates and details of biweekly inspections for leaks. • Maintain a log of dates and all repairs and parts orders. • Records shall be retained on premise indicating continual compliance with all above conditions at all times. These records shall be made available upon request by the EPA Administrator and/or the CT DEP Commissioner for a period of 5 years. • Maintain a log of dates and temperature sensor monitoring results, if a refrigerated condenser is used • Maintain a log of dates and colorimetric detector tube monitoring results, if a carbon adsorber is used for compliance.

Notification	<p>All notifications and reports must be submitted to the U.S. Environmental Protection Agency at the following address:</p> <p>Director, Air Compliance Program; U.S. EPA New England; One Congress Street (SEA); Suite 1100; Boston, MA 02114-2023; Attn: MACT Compliance Clerk</p> <p>Existing source notifications were due June 18,1994. Were required to include: name and address of owner or operator; address of facility; type of machines; annual perc consumption; control device information; and documentation on room enclosure within 30 days after startup.</p>
Compliance Report	Submit Compliance Report for Pollution Prevention & Air Pollution Control to EPA. See address above.
Increase in annual perc consumption	If annual perc consumption increases to the Large Source threshold, you must comply with Large Source requirements.
Title V Permit	Required for "Major sources" only. For "Small and Large" sources, deferred until 12/9/2004 & maybe permanently (EPA working on rule). Contact CT DEP Air Bureau for more information at (860) 424-4152.

Existing Machines - Large Source Requirements

Large Sources must meet all of the above requirements for Small Sources, plus the following:

Requirement Category	Requirement
Process Vent Emissions	<p>Existing facilities - Refrigerated Condenser or the equivalent control device. Carbon Adsorbers installed prior to September 22, 1993 do not need to be replaced.</p> <p>New facilities - Refrigerated Condenser or the equivalent control device.</p>
Fugitive Emissions	Room enclosure, sealed containers, leak detection and repair schedule. No new transfer systems may be installed.
Operation & Maintenance	<p>Maintain a log of details of weekly inspections for leaks.</p> <p>If annual perc consumption increases to the Major Source threshold, you must comply with Major Source requirements.</p>

Major Source Requirements

Major sources must meet all of the above requirements for Large and Small Sources, plus the following:

Process Vent Emissions	<ul style="list-style-type: none"> Existing facilities - Refrigerated Condenser or the equivalent control device. Carbon Adsorbers installed prior to September 22, 1993 do not need to be replaced. New facilities - Refrigerated Condenser or the equivalent control device followed by a small Carbon Adsorber.
Fugitive Emissions	<ul style="list-style-type: none"> Room enclosure, sealed containers, leak detection and repair schedule. No new transfer systems may be installed.

Compliance Options Standards

The following options apply to all sources.

Option 1 Room Enclosure	<ul style="list-style-type: none"> Exhaust all air from the room enclosure through a carbon adsorber or an equivalent control device. Shall be equipped with a carbon adsorber that is not the same carbon adsorber used to comply with existing dry cleaning systems or dry cleaning systems at major sources. <p>Transfer Machine System (Applicable for Major Sources only)</p> <ul style="list-style-type: none"> Room enclosure shall be constructed of materials impermeable to perc. Room enclosures shall be designed and operate at negative pressure at each opening at all times that the machine is in operation.
Option 2: Refrigerated Condenser	<ul style="list-style-type: none"> Exhaust only through refrigerated condenser. Never bypass condenser to vent to atmosphere. Monitor for exhaust temperature (not to exceed 45 degrees F - with a device capable of +/- 2 degrees F accuracy) at least weekly. Have diverter valve to prevent air drawn into the machine when the door is open from passing through the refrigerated condenser. Monitor for condenser inlet & exhaust temperature difference (must be at least 20 degrees F - with a device capable of +/- 2 degrees F accuracy) at least weekly. Have a separate refrigerated condenser (must not use the same condenser as for any dry-to-dry, dryer or reclaimer machine).
Option 3: Carbon Adsorber Device (only if installed before September 22, 1993)	<ul style="list-style-type: none"> Only vent through carbon adsorber. Never bypass vent. Monitor perc concentration in exhaust at least weekly with a colorimetric detector tube, while the dry cleaning machine is venting to that carbon adsorber at the end of the last dry cleaning cycle prior to desorption of that carbon adsorber. The maximum allowed perc concentration is 100 ppm.

	<ul style="list-style-type: none"> • Use a colorimetric tube designed to measure a concentration of 100 ppm of perc in air to an accuracy of +/- 25 ppm, in accordance with the manufacturers instructions. • Use a sampling port located at least 8 duct diameters downstream from any flow disturbance (such as a bend, expansion, contraction or outlet) in the exhaust duct and 2 duct diameters upstream from any such flow disturbance. • Operating adjustments or repairs must be initiated if exhaust temperature or perc concentration limits are exceeded - same time requirements as any other repairs.
Option 4: Equivalent Emission Control Technology	Any person requesting that the use of certain equipment or procedures be considered Equivalent Emission Control Technology shall submit information to the EPA Administrator.
Record Keeping	Maintain a log of dates and monitoring results and show it upon request for a period of 5 years. These records shall be made available upon request by the EPA Administrator and/or the CT DEP Commissioner.

New Machines - Small & Large Source Requirements

Any Dry-to-Dry machine installed on or after December 9, 1991 is a "new machine"

Federal regulations require that you "Eliminate **ANY** emission of perchloroethylene during the transfer of articles between the washer and dryer(s)." This requirement effectively eliminates the legal use of any transfer machine installed after December 22, 1993.

All other requirements remain the same as for the two "existing machines" source categories shown above.

Best Management Practices

- ★ Track your "solvent mileage" for each machine to see which machines are most and least efficient. Solvent mileage is the gallons of perc used per 1,000 pounds of garments processed. Keep track of the pounds of garments processed in each machine per week and the amount of perc added per week. Plan ahead to replace the least efficient machine when business needs dictate.
- ★ Follow the manufacturers recommendations when loading the machine. Under loading wastes perc and overloading reduces cleaning effectiveness.
- ★ Switch to wet cleaning at the local shop and send items that must be cleaned with solvents to a larger, regional shop.

Definitions

Term	Definition
Dry-to-dry machine	A one-machine dry cleaning operation in which washing and drying are performed in the same machine
Transfer machine system	A multiple-machine dry cleaning operation in which washing and drying are performed in different machines. Examples include: (1) a washer and dryer, (2) a washer and a reclaimer, or (3) a dry-to-dry machine and reclaimer.
Perceptible leak	A leak that can be determined by the odor of perc, visual observation such as pools of liquid or droplets, or by passing the fingers over the surface of equipment. No special equipment is needed.

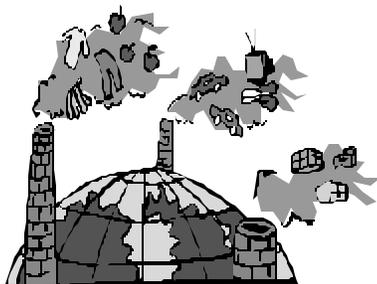
Pollution Prevention Checklist

✓ Do you track your equipment solvent mileage every week?

YES

NO

N/A



Did you know?

Dry cleaners use approximately 192 million pounds of perc each year.

2004 Garment Care Fact Sheets

Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127
Office of Pollution Prevention (860) 424-3297 www.dep.state.ct.us/wst/p2/garcare/gcindex.htm
Fact Sheet: DEP-P2-GARMENT CARE-FS-009 Last Updated: September, 2004



The Dry Cleaning Establishment Remediation Fund is administered by the Connecticut Department of Economic and Community Development (DECD). This program provides grants to eligible dry cleaning business operators for the containment or clean-up of pollution resulting from releases of perc, Stoddard solvent, or other chemicals used for dry cleaning to the environment. The grants may also be used for measures undertaken to prevent such pollution, and for providing drinking water when necessary.

Eligibility Requirements

- .. The applicant for remediation funds must:
 - Be current in filing any state and federal taxes and the dry cleaning establishment surcharge returns imposed by CGS Section 12-263m.
 - Prove that the affected establishment is using or has previously used perc or Stoddard solvent.
 - Be in business at least one year prior to the application for assistance.
 - Prove that you cannot obtain conventional financing on reasonable terms or in reasonable amounts from at least two banks.
 - Be the current operator of the establishment.
 - Certify that there are no outstanding litigation proceedings involving the applicant and/or his/her representatives.
 - Identify the responsible party to complete the site investigation and remediation and the funding source to complete the project for costs over and above approved state funding.

Evaluation Criteria

- .. Grant applications are evaluated based on the following:
 - Risk to public health,
 - Magnitude of the problem,
 - Effectiveness of proposal (cost and environmental effectiveness),
 - Date of application, and
 - Availability of funds.

Grant Size Restriction

- No dry cleaning establishment shall receive more than \$50,000 from the fund in a given calendar year.
- If a dry cleaning establishment initially reported a release to the Department of Environmental Protection (CT DEP) Commissioner before December 31, 1990, the applicant must bear the first \$20,000 in costs for a given project.
- All other dry cleaning establishments are to bear the first \$10,000 in costs for a given project.
- Applicants can apply for funds once per year.

Length of Project

Maximum eligible project length is three years. Applicants may get maximum state funding up to \$150,000 over three-year period.

How to Apply

To apply for a remediation grant, contact the Connecticut Department of Economic and Community Development (DECD).



- .. **Program Manager**- Dimple Desai at (860) 270-8151, or
- .. **Project Engineer** – Teresa Hanlon at (860) 270-8213, or
- .. **DTC, Environmental Project Managers** - Rich Hathaway/Chris Koelle at (203) 239-4200.

- Applications are invited twice a year.
- **Application Deadlines are the last Friday of March and August by NOON.**

To print copies of Guidelines and Eligibility Requirements; Instructions and Application; Project Financing Plan and Budget and other materials, please visit the DECD web page at www.ct.gov/ecd/cwp/view.asp?a=1101&q=249816.

2004 Garment Care Fact Sheets

Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127

Office of Pollution Prevention (860) 424-3297

www.dep.state.ct.us/wst/p2/garcare/gcindex.htm

Fact Sheet: DEP-P2-GARMENT-CARE-FS-009

Last Updated: September 2004



The Property Transfer Program requires that the seller of certain properties or businesses disclose the environmental conditions to the buyer. If further investigation and/or remediation is necessary, the buyer and seller can negotiate the responsibility prior to the sale. At the time of the sale, the parties involved must file a form notifying the CT DEP of the condition of the property. This provides the CT DEP the opportunity to ensure that any identified environmental impacts associated with the property are addressed appropriately.

Legal Requirements

- ◆ The Property Transfer law [CGS Section 22a-134 through 22a-134e and 22a-134h] requires the disclosure of environmental conditions when certain properties or businesses (referred to as “establishments”) change ownership.

For the garment care industry, establishments include:

- any real property at which, or business operation from which the process of dry cleaning was conducted on or after May 1, 1967, even if the business is no longer in operation, or
- any real property at which, or business operation from which, on or after November 19, 1980, there was generated more than 100 kilograms of hazardous waste in any one month. This does not include hazardous waste that was generated as a result of the remediation of polluted soil, groundwater or sediment.



- ◆ One of the four Property Transfer forms must be filed, along with its associated fee, with the CT DEP no later than 10 days after the transfer of the establishment. (Note: If the establishment has been sold since October 1, 1987, the parties to the past transfer should also have filed a form with the CT DEP at the time of that sale.)

In order to determine which form to file, the parties to the transfer must evaluate the environmental condition of the entire parcel being sold. See the following for a description of the forms.

- Use **Form I** when there has been no release of hazardous wastes or hazardous substances.

Form I can also be used if any release(s) of hazardous substances (not hazardous wastes) have been cleaned up in accordance with the remediation standards [RCSA Section 22a-133k]. An Environmental Condition Assessment Form summarizing the environmental conditions at the site must accompany the filing.

- Use **Form II** when there has been a release(s) of hazardous waste or hazardous substance, but the site has been cleaned up in accordance with the remediation standards [RCSA Section 22a-133k].

Written documentation, either from the CT DEP or a Licensed Environmental Professional, substantiating this filing must be submitted with Form II. Licensed Environmental Professionals (LEPs) are individuals authorized by the CT DEP to certify clean-ups in lieu of the CT DEP review.

- Use **Form III** when a release of hazardous waste or hazardous substance has occurred at the site which has not been cleaned up or when the environmental conditions of the site are unknown. An Environmental Condition Assessment Form must accompany the filing of Form III.

- Use **Form IV** when a release(s) of hazardous waste or hazardous substance has occurred at the site, the site was cleaned up in accordance with the remediation standards [RCSA Section 22a-133k] and the only outstanding issue is monitoring. An Environmental Condition Assessment Form must accompany the filing of Form IV. Written documentation, which substantiates this filing, either from the CT DEP or a Licensed Environmental Professional, must be submitted with Form IV.

For more information or for copies of the Property Transfer forms, contact the CT DEP's Property Transfer Program at (860) 424-3705 or you may download the Property Transfer forms from www.dep.state.ct.us/pao/download.htm.



Did you know?

The penalty for violating the property transfer law can be up to \$25,000 per day.

2004 Garment Care Fact Sheets

Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127
Office of Pollution Prevention (860) 424-3297 www.dep.state.ct.us/wst/p2/garcare/gcindex.htm
Fact Sheet: DEP-P2-GARMENT-CARE-FS-010

Last Updated: September, 2004



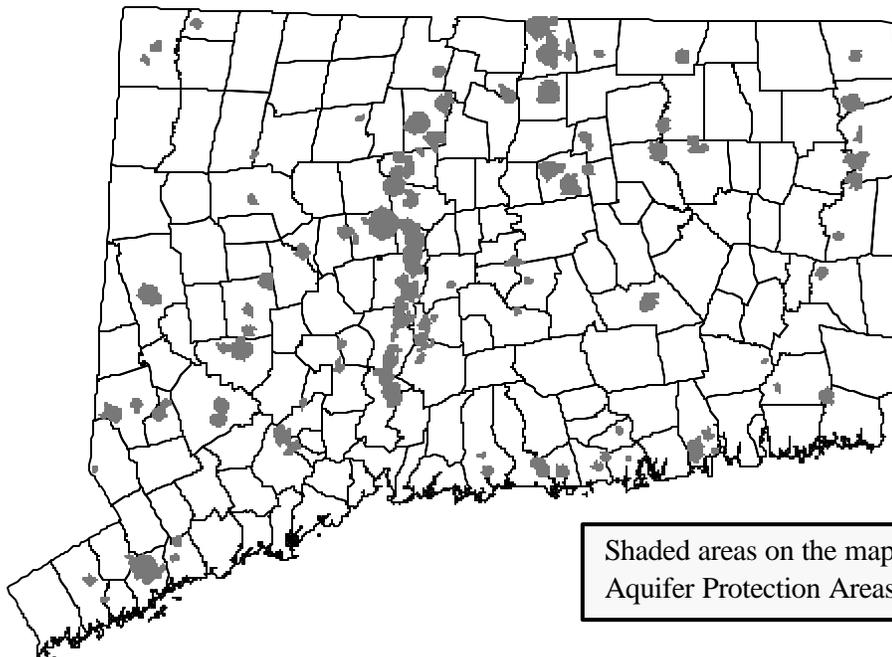
Potential Environmental Impacts

Most garment care facilities use dry cleaning solvents and also may have other hazardous materials and/or wastes. These substances pose a threat to the drinking water supply if improperly stored, handled or accidentally released to the ground. Once in the groundwater system, solvents can move readily through the system and contaminate water supply wells. Remediation of the spill and treatment of the drinking water is expensive, long-term, and not always successful. Connecticut's Aquifer Protection Program was developed to protect major public water supply wells from contamination by controlling land use activities in areas feeding the wells. The goal of the program is to ensure a plentiful supply of high quality public drinking water for present and future generations.

Aquifer Protection Areas (sometimes referred to as "wellhead protection areas") will be designated around the state's 122 active well fields in sand and gravel aquifers that serve more than 1,000 people. Preliminary mapping indicates that 82 towns will have aquifer protection areas designated for existing wells (see the listing and map below). Eventually, additional protection areas will be designated for sites of future wells.

Municipalities with Proposed Aquifer Protection Areas

Avon, Beacon Falls, Berlin, Bethany, Bethel, Bethlehem, Bolton, Bristol, Brooklyn, Burlington, Canton, Cheshire, Clinton, Colchester, Coventry, Cromwell, Danbury, Darien, Derby, East Lyme, East Windsor, Enfield, Essex, Farmington, Glastonbury, Granby, Goshen, Guilford, Griswold, Hamden, Killingly, Killingworth, Ledyard, Litchfield, Madison, Manchester, Mansfield, Meriden, Middletown, Montville, Naugatuck, New Canaan, New Hartford, New Milford, Newtown, North Canaan, North Haven, Norwalk, Old Saybrook, Oxford, Plainfield, Plainville, Plymouth, Portland, Prospect, Putnam, Ridgefield, Rocky Hill, Salisbury, Seymour, Shelton, Simsbury, Somers, Southbury, Southington, Stafford, Stamford, Stonington, Thomaston, Thompson, Tolland, Torrington, Vernon, Wallingford, Watertown, Westbrook, Weston, Westport, Willington, Windsor, Windsor Locks, Woodbury



Shaded areas on the map are identified as proposed Aquifer Protection Areas as of April 2004

Legal Requirements

- ◆ Once the Aquifer Protection Areas are formally designated, existing businesses will be notified by the CT DEP or the municipality. If your dry cleaning facility is in one of these affected areas, you will have to comply with the legal requirements listed below [RCSA Sec. 22a-354i-1 through 10]:
 - Register with the CT DEP and/or municipality within 180 days of the Aquifer Protection Area designation [RCSA Sec. 22a-354i-7]. Existing facilities are “grandfathered” into the program - but only if they are registered. It is therefore important for existing facilities to register. Note: New dry cleaning facilities are prohibited from locating in Aquifer Protection Areas [RCSA Sec. 22a-354i-5(a)].
 - Renew registrations every five years. Transfer of the registration to a new owner is allowed [RCSA Sec. 22a-354i-7(g)].
 - Obtain a permit to add a regulated activity to a registered facility [RCSA Sec. 22a-354i-8]. The CT DEP or the municipality will issue permits for a ten-year period. Permits may be renewed, or transferred to another owner [RCSA Sec. 22a-354i-8(g) and (i)].
 - Certify compliance with the Best Management Practices outlined in the regulations [RCSA Sec. 22a-354i-9]. For instance, hazardous materials must be stored inside a building or under a roofed area and a materials management plan must be developed and implemented at the facility.

For more information, contact the CT DEP's Aquifer Protection Area Program at (860) 424 -3020 or visit the web site at www.dep.state.ct.us/wtr/aquiferprotection/index.htm.



Did you know?

Clean water is vital for our very survival. Until recently, people assumed that it would always be plentiful in Connecticut. The events of the past decade have shown that groundwater, like surface water, is increasingly at risk from our chemical-dependent society.

2004 Garment Care Fact Sheets

Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127

Office of Pollution Prevention (860) 424-3297 www.dep.state.ct.us/wst/p2/garcare/gcindex.htm

Fact Sheet: DEP-P2- GARMENT- CARE-FS - 011

Last Updated: September, 2004



- Q.** I usually throw lint into the regular trash. Is this legal?
- A.** No, if the lint is contaminated with even a tiny amount of perc or another solvent during the cleaning process it may be considered a hazardous waste. Please see Appendix A for more information on how to determine which of your wastes are hazardous.
- Q.** I was told that fluorescent lamps contain mercury. Does this mean that I cannot throw them in the trash?
- A.** Yes. Fluorescent lights and other mercury-containing lamps (sodium vapor, metal halide and high intensity discharge) are considered "Universal Wastes" and are subject to special disposal requirements. Although they cannot be thrown in the trash, these lamps can be recycled. (See the EPP Fact Sheet for a listing of fluorescent lamp recyclers.) For more information on Universal Waste requirements, call the CTDEP at (860) 424-4193 and ask for a copy of the Universal Waste Rule fact sheet or it can be downloaded from www.dep.state.ct.us/wst/mercury/uwrule.htm.
- Q.** Can I throw used metal hangers into the trash?
- A.** Yes. But the most environmentally preferred method is to reuse these hangers until they are no longer acceptable, and then recycle them as scrap metal.
- Q.** I have a bunch of aerosol cans with products that I can't use anymore. What should I do with them?
- A.** Aerosol cans that have not been emptied may be a hazardous waste due to the leftover propellant or the product inside the can. A hazardous waste determination must be completed before disposal. Try to return defective cans to the manufacturer and look into replacing the use of aerosols with refillable spray canisters.

- Q.** Can I use a MSDS (Material Data Safety Sheet) to make a hazardous waste determination?
- A.** MSDSs can be helpful in beginning a hazardous waste determination. They should not be relied on solely since the manufacturer is not required to list constituents that are present in amounts of less than 1 percent (10,000 ppm). For example, if your waste contains as little as 0.7 ppm of tetrachloroethylene (perc), it would be considered a characteristically hazardous waste (DO39). The waste may also carry "listed" waste codes, as applicable.



Did You Know?

Nearly 3 billion wire hangers are consumed yearly in the Garment Care and Manufacturing Industries.

2004 Garment Care Fact Sheets

Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127
Office of Pollution Prevention (860) 424-3297 www.dep.state.ct.us/wst/p2/garcare/gcindex.htm
Fact Sheet: DEP-P2-GARMENT-CARE-FS-012

Last Updated: September, 2004



Hazardous Waste Management in Connecticut

Hazardous wastes are a group of solid wastes that are subject to special handling requirements because their mismanagement may lead to serious hazards to human health and the environment. The mismanagement of these wastes can also bring about loss of property value or legal action against persons that mismanage them. **Many types of wastes can be classified as hazardous wastes, including some materials commonly generated at garment care facilities.** This section takes you through a step-by-step process to help comply with hazardous waste requirements. Proper management of hazardous waste depends on a number of factors: determining which wastes are hazardous, determining your hazardous waste generator status, and then applying the correct requirements based on your hazardous waste generator status.

The CT DEP regulates hazardous waste pursuant to RCSA Sections 22a-449(c) -100 through 119 and Section 22a-449(c) -11 of the Hazardous Waste Management Regulations. These regulations are posted on CT DEP's web site at www.dep.state.ct.us/wst/hw/hwregs.htm. A complete copy of these regulations may also be obtained by writing to the CT DEP or calling the Compliance Assistance (COMPASS) hotline at (888) 424-4193.

If you already know that your waste is hazardous and know your generator status, then turn to Step Three for information on how to handle your hazardous waste.

Step One:

Determine Which of Your Wastes are Hazardous

Anyone who generates a waste is required by law to determine whether or not that waste is hazardous [RCSA 22a-449(c)-102 incorporating 40 CFR 262.11]. Some general knowledge of the basic characteristics of the wastes may be helpful in making this determination, but some laboratory testing is usually required. For more guidance on hazardous waste testing, see the list of CT DEP documents at the end of this section, or call CT DEP's Waste Engineering and Enforcement Division at (860) 424-4193 for assistance.

There are two ways a waste may be considered a hazardous waste: (1) if it is Characteristically Hazardous, or (2) if it is a Listed Hazardous Waste.

Characteristically hazardous wastes are wastes that exhibit any one of the four characteristics listed in the following table. An abbreviated definition is given for each one. They are fully defined in the federal hazardous waste regulations [40 CFR 261.21 through 261.24], which may be obtained by contacting CT DEP or through U.S. EPA's web site at www.epa.gov. Characteristically hazardous wastes are identified by the letter "D" that begins their 4-digit EPA waste code.

Characteristically Hazardous Wastes (“D” Wastes)

Characteristic Wastes	Definition	Testing	Garment Care Facility examples
Ignitability	Liquid wastes with a <i>flash point lower than 140°F</i> , <i>ignitable solids</i> , and materials that are designated by the U.S. DOT as <i>oxidizers</i> .	Laboratory certified by the CT Dept. of Public Health	<ul style="list-style-type: none"> • waste Stoddard solvent • waste petroleum solvents
Corrosivity	Liquid wastes with a pH less than or equal to 2.0, or greater than or equal to 12.5	The most accurate way to determine pH is with a laboratory test.	<ul style="list-style-type: none"> • old drain cleaners • waste muriatic acid
Reactivity	Materials that are: normally unstable; react violently, explode, or emit toxic fumes when mixed with water; or, are capable of exploding at room temperature and pressure or when heated under confinement.	Laboratory certified by the CT Dept. of Public Health	<ul style="list-style-type: none"> • non-empty aerosol cans
Toxicity	Materials containing greater than the regulated concentration of any of 40 contaminants listed in the federal hazardous waste regulations [40 CFR 261.24] The level for Perc is 0.7 mg/l. Perc = D039	Determined in a certified lab by a test called the Toxicity Characteristic Leaching Procedure (TCLP)	<ul style="list-style-type: none"> • Materials contaminated with Perc [e.g., lint and sludge, spent filter cartridges, cooled powder residue, still residue from solvent distillation, process water (such as separator water)]

Listed hazardous wastes (see following table) are wastes that are specifically identified in one of four lists developed by U.S. EPA in the federal hazardous waste regulations [40 CFR 261.31 through 261.33]. Each hazardous waste listing includes a description of a specific type of waste that EPA considers hazardous enough to warrant regulation. Hazardous waste listings describe wastes that are generated by certain industries, come from common industrial processes, or include specific chemical compounds as their main active ingredient. Several hundred specific solvents, metal finishing waste streams and sludges, pesticides, various organic and inorganic chemicals and discarded commercial chemical products are included in these lists. The four groups of listed hazardous wastes are easily identified by the letter that begins their 4 -digit EPA waste code (i.e., “F,” “K,” “U,” or “P”).

Listed Hazardous Wastes

Listed Wastes	Definition	Garment Care Facilities Examples
“F” Wastes	Wastes from certain common, non-specific industrial activities	<ul style="list-style-type: none"> • spent chlorinated solvents [e.g., Tetrachloroethylene, Valclene, methol chloroform, trichloroethylene, carbon tetrachloride] • waste paint solvents [e.g., acetone, methyl alcohol, n-butyl alcohol, xylene, methyl ethyl ketone (MEK), methyl isobutyl ketone (MIBK), ethyl acetate]
“K” Wastes	Wastes from certain specific industrial processes	Rarely, if ever, generated by garment care facilities
“U” and “P” Wastes	Discarded commercial chemical products, off-spec products, container residues, and spill residues of such products	Occasionally generated by garment care facilities <ul style="list-style-type: none"> • certain old pesticides, solvents, and other chemical products • some stain removers with expired shelf life

Non-RCRA-Hazardous “Connecticut Regulated” Wastes.

If a waste is neither characteristically hazardous nor listed, then it is not subject to Connecticut’s hazardous waste requirements. However, under separate state law [CGS Section 22a-454], certain wastes may not be disposed of at regular solid waste (i.e., trash) disposal facilities, but must instead be sent to specially-permitted facilities that are equipped to handle industrial wastes. In general, the kinds of wastes that are subject to these special requirements include certain waste oils, petroleum or chemical liquids, and chemical solids (generally referred to collectively as “Connecticut-Regulated Wastes”).

An example of a CT Regulated Waste that might be generated at a garment care facility

- Non-hazardous absorbents (e.g., rags, wipers, mats, socks, and loose material such as speedi-dry) contaminated with cleaners, detergents, etc. These wastes must NOT contain or become contaminated with any hazardous waste, such as perc or other solvents.

These wastes cannot be placed in an on-site trash dumpster, but must instead be segregated and picked up by a hauler that is permitted to transport Connecticut-Regulated Wastes. However, there is an exemption from transporter permit requirements for “waste chemical solids” (e.g., dried non-hazardous paint or paint chips). Such wastes do not have to be hauled by a permitted transporter, but they must still be sent to a permitted storage treatment or disposal facility. If sent to a facility in Connecticut for treatment or disposal, this facility must be permitted to take Connecticut-Regulated Wastes. There are no requirements for generators of these materials, other than that they ensure that they are properly disposed. However, as a best management practice, store these materials in a manner similar to that for hazardous waste (i.e., in secure, closed containers, in a storage area with an impervious base and secondary containment, etc.). When the material is shipped, the law does not require that the generator prepare a waste manifest. However, as a practical matter, generators will often find that their haulers will ask for one (either for their record keeping purposes, or because it is required under the receiving facility’s operating permit).

For more information on Connecticut Regulated Wastes, contact CT DEP’s Compliance Assistance Hotline at (888) 424-4193 and ask for the fact sheet entitled, “Non-RCRA Hazardous Wastes.”

FREQUENTLY ASKED QUESTIONS ABOUT HAZARDOUS WASTE DETERMINATIONS

Q: I'm pretty sure that my waste is hazardous. Do I still have to test it?

A: There are two “tools” that may be used to determine if a waste is hazardous. The first of these is analytical testing. The second is to use information about the source, nature and contaminants of the waste (i.e., so-called “knowledge of process” information). Common sources of knowledge of process information include Material Safety Data Sheets (MSDSs), product specification sheets, or analytical results from the testing of an identical waste stream generated at another site. Although knowledge of process information can be very useful (especially in identifying hazardous constituents that are known to be present), it typically is not adequate to fully and properly characterize a waste. In particular, knowledge of process cannot account for factors such as trace contaminants that may not be listed on a MSDS, contaminants introduced during use, and cross-contamination from other wastes. As a result, some sampling is typically required to properly characterize a waste. For more information, please visit the CT DEP website at www.dep.state.ct.us/wst/hazardous/hwd.htm.

Q: Where can I get my waste tested?

A: The Connecticut Department of Public Health licenses analytical laboratories in Connecticut, and several dozen of these labs are capable of doing hazardous waste testing. To get a list of these labs, call CT DEP's Waste Engineering and Enforcement Division at (860) 424-4193. Many of these labs are also listed in the Yellow Pages under “Laboratories – Analytical” or on the Connecticut Department of Public Health's website at www.dph.state.ct.us/BRS/Environmental_Lab/environmental_laboratorytext.htm.

Q: How often do I have to test my wastes?

A: Connecticut's hazardous waste rules require that generators test their waste annually, or whenever there is a raw material or process change that could affect the waste. However, if a generator can document that a waste has not changed over time (such as by having several previous years' analyses showing consistent testing results), this may constitute a valid basis on which to make a “knowledge of process” claim (see first question above).

Q: What if my waste is hazardous for more than one thing?

A: Some wastes can be hazardous for more than one characteristic, or can be both listed and characteristically hazardous. For example, waste perc still bottoms would be hazardous for the toxicity characteristic for tetrachloroethylene (waste code D039) AND is a listed hazardous waste (waste code F002). Hazardous waste rules require generators to determine *all* the applicable waste codes that apply to a waste, and list them on the manifest when the waste is shipped off-site.

Q: If my hauler tests the waste, do I have to test it, too?

A: Oftentimes transporters and/or receiving facilities will test waste that they accept (either to confirm information provided by the generator, or because their operating permit requires them to perform certain testing for quality control purposes). If the transporter or receiving facility is willing to provide this information, the generator may use it in complying with hazardous waste determination requirements. However, it must be stressed that this kind of test data may not be adequate to fully characterize a waste, and additional testing or “knowledge of process” information may be needed to round out the waste determination.

Step Two:

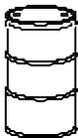
Determine Your Hazardous Waste Generator Status

If, at the end of Step One, you have determined that you do not generate any hazardous wastes, then congratulations! You're done! If none of the wastes that you generate are hazardous (or if you can eliminate any hazardous wastes you do generate), then you do not have to comply with any hazardous waste requirements. You just need to keep records of your test results documenting that your wastes are non-hazardous.

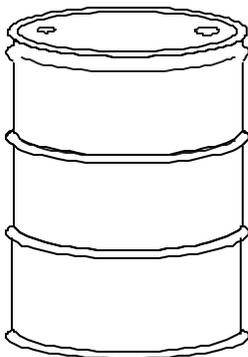
However, if any of your wastes are hazardous, you must take some additional steps to determine the requirements that apply to your handling of these wastes. Generators of hazardous waste are subject to different requirements, depending on the amount of waste they generate and store on-site. There are three types of hazardous waste generators:



Conditionally Exempt Small Quantity Generators (CESQG): facilities generating less than 220 pounds (about 26 gallons) per month and accumulating no more than 2,200 pounds of hazardous waste on-site at any one time and that generate less than 2.2 pounds per month of acutely hazardous waste.*



Small Quantity Generators (SQG): facilities generating between 220 and 2,200 pounds (about 26 to 260 gallons) per month and accumulating no more than 2,200 pounds on-site of hazardous waste at any one time and that generate less than 2.2 pounds per month of acutely hazardous waste.*



Large Quantity Generators (LQG): facilities generating more than 2,200 pounds (about 260 gallons) per month or accumulating more than 2,200 pounds on-site at any one time of hazardous waste, or that generate more than 2.2 pounds per month of acutely hazardous waste.*

*Acutely hazardous wastes are a subset of hazardous wastes that are particularly hazardous, and are therefore regulated in much smaller amounts than regular hazardous wastes. Typically, the wastes generated by garment care facilities will not fall into this category, although certain wastes may (for example, certain pesticides which are "P" listed wastes).

For more detailed information, call the CT DEP's Waste Engineering & Enforcement Division at (860) 424-4193 and ask for the fact sheet, Hazardous Waste Generator Category, which will help you determine what set of requirements you are subject to or visit the CT DEP web site at www.dep.state.ct.us/wst/hw/hwregs.htm for an electronic version of the CT Hazardous Waste Management Regulations.

Step Three:

Properly Store and Dispose of Your Hazardous Waste

Once you have determined your generator status, the next step is to determine the requirements

that apply, and ensure that your facility is in compliance with them. Table 1 at the end of this section provides an overview of the various requirements that apply based on generator status. Details on these requirements are to follow.

Conditionally Exempt Small Quantity Generators (CESQGs)

Many garment care facilities will qualify as CESQGs, which have the fewest requirements of the three hazardous waste generators. The requirements and best management practices (BMPs) for CESQGs are listed below. If you would like more information on these requirements and BMPs, contact the CT DEP's Waste Engineering and Enforcement Division at (860) 424-4193 and ask for the CESQG Guidance booklet. Several other helpful documents that are available are also listed at the end of this section.



Proper waste storage-- closed, labeled drum stored inside with secondary containment

In general, if you are a CESQG, then you must do the following:
[RCSA Sections 22a-449(c)-101, 102, 113, 40 CFR 261.5]

- Ensure that your waste is disposed of at a permitted hazardous waste treatment or disposal facility, or at a household hazardous waste facility (or one-day collection event that is permitted to take CESQG waste). Businesses must call to make an appointment.
- If you hire a waste hauler to take away your waste, be sure that hauler has a valid EPA Identification number and transporter's permit to haul waste in Connecticut.
- Perform an annual hazardous waste determination on all the wastes you generate, and keep records of all test results and other information used to make these determinations for at least three years from the date that the waste was last sent off-site for disposal.
- Comply with Universal Waste requirements for any Universal Wastes that you generate. Universal Wastes are wastes that are subject to a special, reduced set of requirements in RCSA Section 22a-449(c)-113, and include batteries, recalled pesticides, mercury thermostats, used electronics, fluorescent lights and other mercury-containing lamps. For more information on Universal Waste requirements, call the CT DEP at (860) 424-4193 and ask for a copy of the Universal Waste Rule fact sheet or it can be downloaded from www.dep.state.ct.us/wst/mercury/uwrule.htm
- Remember: if at any time your waste generation or storage amounts increase beyond CESQG levels, you must comply with the requirements for the higher generator category.

Best Management Practices (BMPs) for CESQGs :

- Look for ways to reduce or eliminate the generation of hazardous waste (see the table at the end of this appendix for "Hazardous Waste Minimization Tips"). If possible, completely eliminate the generation of hazardous waste, and avoid having to comply with hazardous waste requirements altogether.
- If you store waste in containers, keep them in an area that has an impervious base and secondary containment to capture any leaks or spills. Use containers that are compatible with the waste you are putting in them, and store waste containers away from other wastes or raw materials with which they may be incompatible. In addition, ensure that the containers are kept

closed and in good condition, and immediately replace or over-pack any damaged or leaking containers. Do not store hazardous waste within 50 feet of the facility property line, or immediately adjacent to rivers, streams, or shoreline areas.

- If you store waste in tanks, provide the tank with an impervious base and secondary containment to capture any leaks or spills (or, as an alternative, use double-walled tanks). Maintain the tanks to ensure they remain in good condition. Ensure that the fill opening for the tank is properly equipped so as to prevent spillage down the outside of the tank, and keep this opening closed at all times except when filling the tank. Be sure that the waste(s) that you place in the tank are compatible with the tank, and do not store wastes that are incompatible with one another in the same tank.
- Inspect all waste storage areas on a regular basis (e.g., weekly), looking for leaks, spills, damaged containers, and other hazardous conditions. Correct any problems as quickly as possible. Document your inspections in a written inspection log.
- If you discontinue the use of a tank or container storage area, remove all waste, thoroughly clean and decontaminate the area, and perform post-decontamination testing to confirm that no waste residues remain.
- Develop written emergency procedures to respond to leaks, spills, fires, storms, floods, etc.
- Provide training for all personnel involved in waste management. Include, at a minimum, training in proper waste handling and emergency response procedures. Retain documentation of all training that is provided.

Small Quantity Generators (SQGs)

Some garment care facilities will qualify as SQGs, which have more requirements than CESQGs, but fewer than LQGs. The requirements and best management practices for SQGs are listed below. If you would like more information on these requirements and BMPs, contact the CT DEP's Waste Engineering and Enforcement Division at (860) 424-4193 and ask for the Small Quantity Generator Guidance booklet. Several other helpful documents that are available are also listed at the end of this section.

In general, if you are a SQG, then you must do the following:

[RCSA Sections 22a-449(c) - 101, 102a-c, 113, 40 CFR 262.34(d)]

- If you have not done so already, apply for and obtain an EPA Identification Number. To do this, you will need to contact CT DEP's Waste Engineering and Enforcement Division and request EPA Form 8700 - 12, Notification of Hazardous Waste Activity. Once you have filled out this form and sent it to CT DEP, you will be provided with the EPA ID Number.
- Be sure your waste hauler has a valid EPA Identification number and transporter's permit to haul waste in Connecticut.
- Ensure that your waste is disposed of at a permitted hazardous waste treatment or disposal facility.
- Perform an annual hazardous waste determination on all the wastes you generate, and keep records of all test results and other information used to make these determinations for at least three years from the date that the waste was last sent off-site for disposal.

- Prepare a hazardous waste manifest for each shipment of waste off-site, and retain a copy of the manifest for each shipment. Ensure that the required Land Disposal Restriction (“LDR”) Notices accompany each manifested shipment, and retain copies of these notices on-site.
- Ensure that you do not store waste for more than 180 days.
- If you store waste in containers, mark each container with the words “hazardous waste,” a description of the contents, such as the chemical name, and the date of initial accumulation. Store containers in an area that has an impervious base, and secondary containment that is capable of containing the volume of the largest container stored in the area, or ten percent of the total volume of waste stored in the area (whichever is greater). Use only containers that are compatible with the waste you are putting in them, and store waste containers away from other wastes or raw materials with which they may be incompatible. In addition, ensure that containers are kept closed and in good condition, and immediately replace or over-pack any damaged or leaking containers. And, when shipping containers of hazardous waste off-site, ensure that they are properly packaged, marked and labeled in accordance with U.S. DOT shipping requirements for hazardous materials.
- If you store waste in tanks, mark each tank with the words “hazardous waste,” and a description of the contents, such as the chemical name. Ensure that the waste is compatible with the tank (e.g., don’t put corrosive waste in an unlined steel tank) and do not store wastes that are incompatible with one another in the same tank. Do not use uncovered tanks. Ensure that ignitable and reactive wastes that are stored in tanks are separated from sources of ignition or reaction (e.g., open flames, smoking, welding, sparks, etc.).
- If you discontinue the use of a tank or container storage area, remove all waste, thoroughly clean and decontaminate the area, and perform post-decontamination testing to confirm that no waste residues remain.
- Develop a written inspection schedule that lists the areas of the facility to be inspected and describes procedures to be followed during inspections. Perform inspections of all hazardous waste storage areas (weekly for containers, daily for tanks), looking for leaks, spills, damaged containers, and other hazardous conditions. Correct any problems as quickly as possible. Document your inspections (and any corrective actions taken to address noted problems) in a written inspection log, and keep these records for at least three years.
- Designate an emergency coordinator and post the name and telephone number of this coordinator next to the on-site telephone, along with the locations of fire extinguishers and spill control material, the fire alarm (if you have one), and the telephone number of the local fire department (i.e., 911). Make arrangements with local emergency response authorities to coordinate emergency services in the event of an emergency.



Cabinet with spill response materials

- Ensure that whenever waste is being handled, personnel have access to an internal alarm or emergency communication device.
- In the event of an emergency (e.g. fire, explosion, waste spill, severe storm, flood, etc.), take appropriate steps to ensure that hazardous waste is not released into the environment. Notify

local emergency response authorities (i.e., local fire and/or police departments). If a spill has occurred, report it to the CT DEP's Oil and Chemical Spill Response Division via its 24-hour spill reporting hotline at (860) 424-3338. If there is a release of hazardous waste that could threaten human health outside your facility, you must also contact the National Response Center at (800) 424-8802. Contain and properly dispose of any spilled or leaked waste (or hire a permitted spill cleanup contractor to perform this work).

- Train all personnel involved in hazardous waste management in proper waste handling and emergency procedures relevant to their specific job duties.
- Comply with Universal Waste requirements for any Universal Wastes that you generate. Universal Wastes are wastes that are subject to a special, reduced set of requirements in RCSA Section 22a-449(c) -113, and include batteries, recalled pesticides, mercury thermostats, and fluorescent lamps. For more information on Universal Waste requirements, call the CT DEP at (860) 424-4193 and ask for a copy of the Universal Waste Rule fact sheet or it can be downloaded from www.dep.state.ct.us/wst/mercury/uwrule.htm
- Remember: if at any time your waste generation or storage amounts increase beyond SQG levels, you must comply with Large Quantity Generator Requirements.

Best Management Practices for SQGs:

- Look for ways to reduce or eliminate the generation of hazardous waste (see “Hazardous Waste Minimization Tips”). For some SQGs, eliminating even a small amount of waste generation will be enough to allow them to reduce to CESQG status.
- Do not store hazardous waste within 50 feet of the facility property line, or immediately adjacent to rivers, streams, or shoreline areas.
- If you store waste in tanks, provide the tank with an impervious base and secondary containment to capture any leaks or spills (or, as an alternative, use double-walled tanks). Ensure that the fill opening for the tank is properly equipped so as to prevent spillage down the outside of the tank.
- Develop written emergency procedures to respond to leaks, spills, fires, storms, floods, etc.
- Document the hazardous waste training that you provide to your employees.

Large Quantity Generators (LQGs)

There may be a few garment care facilities that fall into the LQG generation category. In general, LQGs must comply with all the requirements for SQGs as well as additional requirements [RCSA Sections 22a-449(c) -101,102, 40 CFR 262.34(a) and (b)].

See the table that follows for an overview of the three generator categories. If you would like more information on any of these requirements or BMPs, contact the CT DEP's Waste Engineering and Enforcement Division at (860) 424-4193 and ask for the guidance documents. Several other helpful documents that are available are also listed at the end of this section along with a table with waste minimization tips so you can reduce (or eliminate) the amount of hazardous waste you generate.



Did You Know?

You are legally responsible for your hazardous waste from the point of generation to its final disposal.

Table 1: Overview of Hazardous Waste Requirements Based on Generator Category

	Large Quantity Generator (LQG)	Small Quantity Generator (SQG)	Conditionally Exempt SQGs (CESQG)
Hazardous Waste Generation Rate (per calendar month)	More than 2,200 lbs of hazardous waste OR more than 2.2 lbs of acute hazardous waste.	More than 220 lbs but less than 2,200 lbs of hazardous waste AND less than 2.2 lbs of acute hazardous waste.	Less than 220 lbs of hazardous waste AND Less than 2.2 lbs of acute hazardous waste.
Maximum amount of Hazardous Waste allowed on-site	No limit	2,200 lbs.	2,200 lbs.
Maximum storage time allowed	90 days	180 days	No limit
Annual Waste Determination Required?	Yes	Yes	Yes
Generator EPA ID Number Required?	Yes	Yes	No
Manifest required for shipment off-site?	Yes	Yes	No
Permitted transporter required?	Yes	Yes	Yes
Allowed disposal facilities	Permitted hazardous waste treatment, storage, or disposal facilities.	Permitted hazardous waste treatment, storage, or disposal facilities.	Permitted hazardous waste treatment, or disposal facilities; authorized household hazardous waste collections - by appointment only.
Storage requirements	See LQG guidance for details.	See SQG guidance for details.	None. However, see BMPs for CESQGs.
Emergency Procedures/Plans	Full written contingency plan. See text for details.	Emergency coordinator and post information near on-site telephone. See SQG guidance for details.	None. However, see BMPs for CESQGs.
Inspection requirements	Written inspection schedule and log. See LQG guidance for details.	Written inspection schedule and log. See SQG guidance for details.	None. However, see BMPs for CESQGs.
Personnel training requirements	Written training plan and formal classroom training. See LQG guidance for details.	Employees must be familiar with waste handling & emergency procedures. See SQG guidance for details.	None. However, see BMPs for CESQGs.
Record keeping requirements	Must retain manifests, biennial reports, waste determinations (w/ test results), inspection logs, and records of incidents requiring implementation of the contingency plan.	Must retain manifests, waste determinations (w/ test results), and inspection logs.	Records of waste determinations (with test results)
Biennial report	Yes – full report	No longer required but past records should be kept for 3 years	No

HAZARDOUS WASTE MINIMIZATION TIPS

Waste minimization means finding ways to reduce or eliminate the generation of hazardous waste. Some general ways to do this include:

- Maintain all equipment in good order to prevent loss due to leaks and spills.
- Inspect all equipment at least weekly to discover small leaks before they cause harm and cost you extra money.
- Eliminate activities that generate hazardous waste (e.g., by discontinuing certain services, or sub-contracting them out to off-site companies).
- Switch from hazardous products to non-hazardous ones.
- Alter work practices and/or equipment so that you use less virgin material. Obviously, using less virgin material means generating less waste.
- Recycle or reuse materials on-site.

Some specific waste minimization options for garment care facilities include:

- **Perc:** It may be possible to switch to wet cleaning for up to 80% of your work.
- **Old Virgin Products:** Expired or damaged products can be costly to dispose of. See if the manufacturer will take the material back, or if there is someone else who can legitimately use it. To avoid this, order products in appropriate amounts and try not to stock items that are hazardous. Review the Material Safety Data Sheets (MSDSs) from your supplier prior to purchase.
- **Filters:** Purchase reusable instead of disposable.
- **Batteries (Lead-Acid and Household Types):** Send batteries for recycling rather than disposing of them. Manage batteries under reduced “Universal Waste Rule” requirements [40 CFR 273].

TITLE	GENERAL TOPIC
Hazardous Waste Management Regulations and Fact Sheets	CT's rules for the management of hazardous waste, which incorporate the federal rules with certain additions and modifications and fact sheets summarizing the recent changes. www.dep.state.ct.us/wst/hw/hwregs.htm
Conditionally Exempt Small Quantity Generator Handbook	Requirements for generators of less than 100 kg/month of hazardous waste.
Small Quantity Generator Guidance	Requirements for generators of between 100 kg/month and 1,000 kg/month of hazardous waste.
Hazardous Waste Generator Category	Helps generators determine what set of requirements they are subject to.
Hazardous Waste Determinations/ Knowledge of Process	Guidance on how to determine if a waste is hazardous. www.dep.state.ct.us/wst/hazardous/hwd.htm
Hazardous Waste Personnel Training	Describes personnel training requirements for large quantity generators.
Hazardous Waste Inspections	Describes inspection requirements for large quantity generators.
Hazardous Waste Contingency Plan	Describes emergency planning and response requirements for large quantity generators.
Hazardous Waste Container Management	Describes container management requirements for large quantity generators.
Permitted Waste Transporter's List	List of companies who are permitted to haul hazardous waste in or through CT.
List of Commercial Hazardous Waste and Connecticut Regulated Waste Facilities in Connecticut	List of facilities in CT that are permitted to store, treat, or dispose of commercial and industrial wastes.
Non-RCRA Hazardous Wastes (Connecticut Regulated Wastes)	List of non-hazardous wastes which are subject to special requirements in CT.
COMPASS (Hazardous Waste Compliance Assistance Program) Document Package	Summary of COMPASS program, plus fact sheets regarding hazardous waste generator category, use of manifests, container management, inspections, personnel training, and contingency plan requirements.
Management of Aerosol Cans	Two-page fact sheet on the proper management and disposal of aerosol cans.
Universal Waste Rule	Overview of special reduced hazardous waste requirements for batteries, mercury thermostats, recalled pesticides, and fluorescent lamps. www.dep.state.ct.us/wst/mercury/uwrule.htm

2004 Garment Care Fact Sheets

Connecticut Department of Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127

Office of Pollution Prevention (860) 424-3297

www.dep.state.ct.us/wst/p2/garcare/gcindex.htm

Fact Sheet: DEP-P2-GARMENT-CARE-FS-013

Last Updated: September, 2004



Contact Information

Connecticut Department of Environmental Protection

24-hour Emergency Spill Reporting	(860) 424-3338
Bureau of Air Management	(860) 424-3027
Bureau of Waste Management, Engineering & Enforcement	(860) 424-3023
Hazardous Waste Compliance Assistance (COMPASS)	1-888-424-4193
Solid Waste Program	(860) 424-3366
Remediation and Property Transfer Programs	(860) 424-3705
Bureau of Water Management Aquifer Protection	(860) 424-3018 (860) 424-3020
Office of Pollution Prevention	(860) 424-3297
Permit Assistance - Small Business and Compliance Assistance	(860) 424-3003
State Emergency Response Commission	(860) 424-3373
Source Reduction and Recycling	(860) 424-3365
Underground Storage Tank Enforcement Program	(860) 424-3374

Other Numbers

U.S. EPA - Air Quality Program: Information on air toxics (including perc) and to report complaints www.epa.gov/region01/eco/airtox/greatest.html	(617) 918-1858
CONN OSHA - Worker safety and health information and assistance www.ctdol.state.ct.us/osha/osha.htm	(860) 566-4550
DECD - Dry Cleaning Establishment Remediation Fund	(860) 270-8151

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2004 Garment Care Fact Sheets

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Office of Pollution Prevention (860) 424-3297 www.dep.state.ct.us/wst/p2/garcare/gcindex.htm
Fact Sheet:DEP-P2-GARMENT-CARE-FS-014 Last Updated: September, 2004