



Dry Cleaner Reference Manual

Complying with Washington State and Federal Environmental Regulations



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Introduction

The purpose of this manual is to help dry cleaners understand and comply with state and federal environmental regulations. It is intended to be used as a desktop reference manual. It summarizes current requirements and recommendations for dry cleaners on dangerous waste management and disposal, sewer discharge, solid waste management and disposal, spill prevention and control, and general operating practices.

This manual does not include information on local regulations. Local authorities such as solid waste districts, county health departments, air pollution control agencies, and sewage treatment districts may have additional environmental requirements. A list of agencies to contact for technical assistance on requirements in your area is included. For more detailed information on topics included in this manual, see the actual regulations for air, dangerous waste and waste water. These are available from the Department of Ecology, PO Box 47600, Olympia, WA 98504-7600.

Environmental Hazards

The main source of pollution from a dry cleaner is the solvent used in the cleaning process. In Washington, about 800 dry cleaners use perchloroethylene (PERC); about 50 use petroleum solvents; and a small number use freon-type solvents. Altogether, dry cleaning businesses in Washington release about 110,000 gallons per year of PERC and 50,000 gallons per year of petroleum solvent into the air, water, and soil. These pollutants can affect human health and safety and the environment.

- ❖ PERC is a known cancer-causing chemical in animals and may contribute to cancers in humans. In the workplace, air concentrations of PERC should not exceed 25 parts per million. Long-term outdoor air concentrations of PERC as low as one-tenth part per billion are a possible public health problem. In addition, spills and leaks can lead to PERC contamination of soil, surface water, and ground water.
- ❖ Petroleum solvents used in dry cleaning are "volatile organic compounds." They are flammable. The extent of their flammability varies with each commercial blend. When released to the environment in liquid form, petroleum solvents can contaminate soil, surface water, and ground water. When released into the air, they react with sunlight and contribute to smog.
- ❖ Freon-type solvents break down the protective ozone layer in the earth's upper atmosphere. Freon production is being phased out internationally. Operating practices described in this manual for PERC dry cleaners are also applicable to dry cleaners using freon.

Required Operating Practices

General Requirements

The following are requirements for all dry cleaners:

- ❖ File a Notice of Construction with your local air pollution control agency before adding or replacing dry cleaning equipment. Call your local air pollution control agency for more information about the Notice of Construction (see page 25 for listing).
- ❖ Determine whether you are a regulated dangerous waste generator or a small quantity dangerous waste generator (see page 6, Identify Your Generator Status). Follow the requirements for handling dangerous waste beginning on page 5.
- ❖ Keep proper records and file required reports. See page 20, Record Keeping and Reporting Requirements.
- ❖ Keep Material Safety Data Sheets (MSD sheets) on-site and readily accessible to employees and regulator inspectors for PERC, other solvents, detergents, and all other chemical supplies. Be sure to get these MSD sheets from your supplier.

PERC Requirements

The following are requirements for all PERC dry cleaners. They are strongly recommended (where applicable) for dry cleaners using other solvents:

Equipment Installation, Use, Maintenance and Repair

- ❖ **Transfer equipment:** Do not install transfer equipment. You may continue to use transfer equipment installed before 9/21/93.
- ❖ **Leaks:** Check equipment weekly for leaks, and keep records of any leaks and repairs. Order repair parts as soon as possible and install them within five days of receipt. Vapor leaks around the door of the dryer can sometimes be detected by running a finger or squirting a soapy solution along the door edge. However, an electronic halogen leak detector is more reliable.

If you repair equipment yourself, refer to the vendor, owner's manual, or manufacturer.

- ❖ **Design and operation specifications:** Keep design specifications and operating manuals on-site for all equipment and emissions control devices.
- ❖ **Operation and maintenance:** Operate and maintain equipment according to manufacturer's specifications and recommendations. At a minimum, follow the Recommended Maintenance Schedule for Dry Cleaners on page 35 as it applies to your equipment. For a detailed maintenance guide, call the U.S. Environmental Protection Agency (EPA) library, (919) 541-5514 and ask for EPA document 4531R-94-073, General Recommended Operating and Maintenance Practices for Dry Cleaning Equipment.

Record Keeping

See page 20, Record Keeping and Reporting Requirements.

PERC Storage

Store all PERC and waste containing PERC in sealed containers. See page 8, Store Dangerous Wastes and Materials Properly.

PERC Recovery

- ❖ **For a refrigerated condenser on the dryer vent:** Be sure the temperature in the outlet of the refrigerated condenser is not above 45 degrees Fahrenheit.
- ❖ **For a refrigerated condenser on the vent from the washer in transfer equipment:** Be sure the difference between the inlet and outlet temperatures of the refrigerated condenser is greater than 20 degrees Fahrenheit.
- ❖ **For an activated carbon adsorber on the dryer vent:** Measure the PERC concentration in the outlet from the adsorber with a colorimetric detector tube or hand-held detector when you do your weekly leak inspections and while the dryer is in use. It must be less than 100 parts per million. If the PERC concentration is higher than that, the carbon in the adsorber needs to be regenerated or replaced. The activated carbon is a dangerous waste when you decide to dispose of it. (See page 10, Transport and Dispose of Dangerous Waste Properly.)

Dangerous Wastes and Materials

Dangerous wastes and materials may not be put in the garbage or discharged into the sewer. Only rest room or hand washing waste water and laundering waste water that has not been contaminated with dry cleaning solvent may be disposed of in a municipal sewer system. Only restroom or hand washing water may be disposed of in a septic system.

Handle dangerous wastes in a manner that prevents leaks, spills and explosions, as described in this chapter. Develop and follow a written operating plan. Your operating plan should include an inspection schedule for all dangerous waste storage areas, containers and tanks; and procedures for emergencies, safety and monitoring of equipment. See page 19, Emergency Planning, for more information.

Old supplies such as spotting chemicals and laundry materials that you no longer use should be disposed of. An inspector may determine that they are "accumulated" dangerous wastes, and you may be in violation of disposal requirements (see page 10) unless you can show clearly when, where and how you plan to use them. Check the labels and MSD sheets to see if they are dangerous materials. If so, dispose of them as prescribed in this section. If they are not dangerous materials, they may be disposed of in the trash.

Identify Your Dangerous Wastes

Any waste that is toxic, corrosive, flammable or explosive is a dangerous waste, as is anything contaminated with PERC.

Common dangerous wastes present at dry cleaning facilities are:

- Filters
- Filter coatings
- Still bottoms
- Discarded solvent
- Some spotting solutions when discarded
- Activated carbon that will not be regenerated
- Muck
- Separator water*
- Solvent-contaminated lint
- PERC sludge
- Cleanup materials from solvent spills

* Separator water is a dangerous waste and may not be disposed of in sewer systems or septic tanks. See Page 12, Separator Water, for more information.

Count Your Dangerous Wastes

All dry cleaners must keep track of their dangerous wastes in pounds toward a monthly total. (See common dangerous wastes in Section 1 above.) If you have questions about how to count your dangerous wastes, see page 25 for who to contact in your area.

PERC dry cleaners: Include in your dangerous waste total: (1) the amount of PERC in the equipment reservoir at the end of each month; and (2) the amount of PERC added during the month, **unless you meet all of the following conditions:**

- ❖ The PERC still and filters are completely enclosed and connected directly to the dry cleaning machine. This means the PERC is not exposed to the environment when it is transferred between the dry cleaning reservoir, machine, still, or filters.
- ❖ Any air leaving the equipment during the drying cycle passes through a solvent capture device such as a condenser or activated carbon unit.
- ❖ All dangerous wastes, including separator water, are disposed of in accordance with dangerous waste regulations (see page 10, Transport and Dispose of Dangerous Waste Properly).

Identify Your Generator Status

All dry cleaners need to know whether they are a Regulated Generator or a Small Quantity Generator in order to know what requirements apply to them. Regulated Generators must meet more extensive and expensive requirements than Small Quantity Generators. For technical assistance on managing your dangerous wastes, contact your local dangerous waste agency (page 25) or Department of Ecology regional office (page 33).

Small Quantity Generators

A dry cleaner is a Small Quantity Generator if:

- ❖ you always generate less than 220 pounds of dangerous waste per month; and
- ❖ you always dispose of your dangerous waste before it reaches 2,200 pounds on-site at any one time.

If a dry cleaner remains a Small Quantity Generator, it is easier and cheaper to manage wastes. The following requirements apply to Small Quantity Generators:

- ❖ Small Quantity Generators are only required to ensure that dangerous wastes and materials are transported to an appropriate disposal site, and may transport their dangerous wastes themselves.

Some county solid waste districts have drop-off sites for Small Quantity Generators. For more information on this, call your local dangerous waste agency (see page 25 for listing).

Whether you transport your dangerous waste yourself or hire a registered transporter, you must be sure that dangerous wastes are handled in one of two ways:

- ❖ They are treated, stored or disposed of at a permitted dangerous waste facility; or
- ❖ They are legitimately recycled or reclaimed by the facility to which they are delivered.

Small quantity generators can also take their waste to:

- ❖ Any permitted dangerous waste fixed facility or local small quantity generator collection event that will accept it; or
- ❖ Any landfill whose operator and health district allow that waste.

Regulated Generators

A dry cleaner is a Regulated Generator if:

- ❖ you have ever generated more than 220 pounds of dangerous waste per month; or
- ❖ you have ever accumulated 2,200 pounds or more of dangerous waste.

Regulated Generators must meet more extensive and expensive requirements than Small Quantity Generators. A Regulated Generator can return to Small Quantity Generator status under the following conditions:

- ❖ If you became a Regulated Generator because you generated 220 pounds or more of dangerous waste in a month, you will be a Small Quantity Generator again when you reduce your dangerous waste generation to below 220 pounds per month.
- ❖ If you became a Regulated Generator because you accumulated 2,200 pounds of dangerous waste, you will be a Small Quantity Generator again when there is no dangerous waste left at your facility.

The following is required of Regulated Generators only. However, Small Quantity Generators (SQGs) should note the areas marked to the side pointing out those procedures which are recommended for SQGs.

Obtain a Generator Identification Number

Regulated Generators must obtain a generator identification number or RCRA number. A generator identification number is used on Department of Ecology report forms.

For information about getting a generator identification number (also known as a RCRA number), contact the Department of Ecology, (360) 407-6737.

Store Dangerous Wastes and Materials Properly

For Regulated Generators, there are time limits on dangerous waste accumulation. See page 10, Track Accumulation of Dangerous Wastes and Materials.

Regulated Generators must meet the following requirements for storing dangerous wastes and materials:

Use Proper Containers.

- ❖ Accumulate and store your dangerous wastes and materials in sturdy, leak-proof, sealed and properly labeled containers. Acceptable containers include those made of polyethylene plastic, but only short term in the case of PERC or waste containing PERC (see next paragraph). Uncoated metal containers are not acceptable for PERC and PERC-containing wastes.
- ❖ Store all PERC and waste containing PERC in sealed containers. Plastic or coated metal containers are acceptable for short term storage. However, PERC will deteriorate common plastics and cause exposed steel to rust. If you use plastic or metal buckets to store waste containing PERC, examine them frequently for deterioration and potential leaks. Otherwise, contact

***Recommended
for SQG***

an appropriate supplier for PERC resistant containers (see page 29 for a listing of vendors). Examples of wastes containing PERC are:

- still bottoms
 - spent filters
 - any activated carbon that will not be regenerated
 - muck
 - separator water
- ❖ If filters are drained outside the filter housing, drain them into containers that are then sealed.
 - ❖ Keep containers closed except when adding or removing materials.
 - ❖ Keep a tight lid on your water separator. Run a vent line from it through a water trap to prevent evaporation of solvent vapors into the air.
 - ❖ If you are collecting your separator water by letting your separator tank overflow drip into a bucket, the bucket must be kept covered to minimize evaporation. (A small hole in the cover to allow entry of the hose from the separator water tank is acceptable.) The bucket must not be allowed to overflow. Check it frequently.
 - ❖ Store reactive and ignitable wastes and materials according to the Uniform Fire Code. Call your local fire marshal for information on these requirements.

Recommended for SQG

Label Containers Properly.

All waste containers must be clearly labeled with the following information:

- ❖ The words "Dangerous Waste."
- ❖ The waste's major risk. For example, waste containing PERC or Valclene should be labeled "Toxic." Wastes containing petroleum solvent should be labeled "Ignitable."
- ❖ The date you started to fill the container with dangerous waste.

Recommended for SQG

Store Waste and Materials in Proper Locations.

- ❖ Store dangerous wastes and materials indoors if possible. Do not store in alleys or parking lots.
- ❖ Establish and clearly mark an accumulation area.

If constructed after September 30, 1986, the accumulation area must have a containment system capable of holding spills and leaks. Examples of acceptable containment systems include:

- a barrel to hold the main storage drum;
- a concrete curb around the dangerous waste drum; or
- a commercially available spill tank.

The containment system must be able to hold at least 10 percent of the maximum amount of dangerous waste you are capable of accumulating; or the volume of the largest container you use to hold dangerous waste, whichever is greater.

Track Accumulation of Dangerous Wastes and Materials

*Recommended
for SQG*

If you accumulate less than 2,200 pounds of dangerous waste before disposing of it, you can keep the dangerous waste on site for up to 180 days. If you accumulate 2,200 pounds or more of dangerous waste, it must be disposed of in 90 days or less. The 90 days or 180 days begin when you first start to store dangerous waste after having shipped out the previous batch.

Transport and Dispose of Dangerous Wastes Properly

Do not discharge separator water or any other dangerous waste down the sewer or into septic systems, into any other drain, or onto the ground. Only rest room or hand washing waste water and laundering waste water that has not been contaminated with dry cleaning solvent may be disposed of in a municipal sewer system. Only restroom or hand washing waste water may be disposed of in a septic system. See page 12, Separator Water, for more information.

Regulated Generators must meet the following requirements for transporting and/or disposing of dangerous wastes:

Transporting Dangerous Wastes

- ❖ Regulated Generators must hire a transporter with a RCRA identification number. See page 29 for a listing of transporters.
- ❖ Any dangerous waste being transported must be:
 - treated, stored or disposed of at a permitted dangerous waste facility;
 - or

- legitimately recycled or reclaimed by the facility to which it is delivered.
- ❖ Regulated Generators must prepare a Uniform Dangerous Waste Manifest Form (manifest form) before having their wastes transported (see the instructions and sample forms beginning on page 36). Waste haulers for Regulated Generators must use a manifest and not just a bill of lading or receipt.
 - The manifest form must identify what the wastes are, who is transporting them and where they are going.
 - The manifest form goes with the wastes until they reach their final destination. It is then returned to the dry cleaner. The copy of the manifest form that is returned to you from the disposal facility is your documentation that your wastes were disposed of properly, and should be kept in your records (see page 20, Record Keeping and Reporting Requirements).
- ❖ Dangerous wastes must be transported according to U.S. Department of Transportation regulations. For more information on this, call your local dangerous waste agency listed on page 25.

Report Dangerous Wastes

Regulated Generators must submit a dangerous waste report by March 1 for the previous calendar year, even if you have not generated dangerous waste during that year. Report on the following Ecology forms: the General Site Information Form, the Generation and Management Form; and the Off-site Identification Information Form. Examples of the Generation and Management Form are shown beginning on page 38. An example is shown for each of the three most common types of dangerous waste.

For assistance on filling out and submitting reporting forms, contact your Ecology regional office (see page 33 for a listing).

Keep Proper Records of Dangerous Waste Activities

See page 20, Record Keeping and Reporting Requirements.

Separator Water

Separator water is a dangerous waste. Do not discharge separator water or any other dangerous waste down the sewer, into any other drain or onto the ground. Only rest room or hand washing waste water and laundering waste water that has not been contaminated with dry cleaning solvent may be disposed of in a municipal sewer system. Only restroom or hand washing waste water may be disposed of in a septic system.

Two options are available to you regarding separator water:

Option 1:

- ❖ To store and dispose of separator water, follow the procedures described beginning on page 5, Dangerous Wastes and Materials.
- ❖ In addition, if you are collecting your separator water by letting your separator tank overflow drip into a bucket, the bucket must be kept covered to minimize evaporation. (A small hole in the cover to allow entry of the hose from the separator water tank is acceptable.) The bucket must not be allowed to overflow. Check it frequently.

Option 2:

- ❖ You may evaporate your separator water IF it has first been treated to reduce its PERC concentration to below 0.7 parts per million. A possible way to do this is:
 - Be sure you let the separator water stand long enough so that it is clear (in other words, you can see through it and it is not in any way "milky"); and
 - Be sure that the separator water has been separated from any PERC that may be in the bottom of the container in which you have been collecting the separator water; and
 - Pass the separator water through two granular activated carbon units in series prior to evaporation. The activated carbon units must be operated and maintained so that the separator water never exceeds 0.7 parts per million PERC concentration.

Adding separator water to the cooling tower or boiler is the same as evaporating it, and the above treatment requirements apply to the separator water before it is added to the cooling tower or boiler.

A list of vendors who may be able to provide information on equipment which will perform this treatment and evaporation is provided on page 29. Before purchasing any equipment, you should check with your local air pollution control agency for necessary approvals (see page 25 for a listing of local air pollution control agencies).

If separator water is not treated to reduce its PERC concentration to below 0.7 parts per million, it must be handled, transported and disposed of in the same manner as any other dangerous waste (see the Dangerous Wastes and Materials section beginning on page 5).

Trash, Garbage, and Solid Wastes

Identify Non-Dangerous Waste Materials

Solid wastes are waste materials that are not listed as dangerous wastes on page 5. Solid wastes can be disposed of in the garbage or recycled.

Do not put the following materials in the trash:

- ❖ PERC sludge or filters
- ❖ Solvents or solvent-contaminated materials
- ❖ Anything that is toxic, corrosive, flammable or explosive

These materials are dangerous wastes and must be disposed of according to dangerous waste regulations, as described beginning on page 5.

Recycle If Possible

Many non-dangerous waste materials that accumulate in dry cleaning operations can be recycled, reducing your garbage disposal costs. Examples of recyclable materials are:

- ❖ Cardboard and cardboard boxes
- ❖ Plastic containers and plastic film or wrap
- ❖ Metal and aluminum objects such as coat hangers
- ❖ Glass (rinsed clean)
- ❖ Used lubricating oil

Call your local solid waste/recycling agency listed beginning on page 25 to find out where in your area the above items can be recycled; or call Ecology's Recycle Information Line at 1-800-RECYCLE (732-9253).

Pollution Prevention

Pollution prevention activities are any actions you take that reduce emissions of pollutants or the generation of dangerous waste. Preventing pollution can save a business money in addition to benefiting human health and the environment. For example, by converting from transfer equipment to a closed loop dry-to-dry system, a dry cleaner can reduce solvent use by about 70 percent. This is a savings of about \$1,100 per year for a typical PERC dry cleaner. Potential savings for freon dry cleaners are much greater because freon solvents are becoming extremely expensive.

Keep dated records of pollution prevention activities. These are any actions you take that reduce emissions of pollutants or the generation of dangerous waste. Examples include:

- ❖ If you have transfer equipment, don't open the washer until the wet articles can be immediately put into the dryer.
- ❖ Be sure bulky items are completely dry before removing them from the dryer. Do not finish-dry them outside the dryer.
- ❖ Make your cartridge filters last:
 - Install a lint filter in front of them.
 - Make sure any additives you put in the solvent are completely dissolved before the solvent goes through the filter.
 - Keep the filter housing full of solvent when you are not using the equipment.
- ❖ When you run the still, do not let the solvent return temperature go above 90 degrees Fahrenheit (32 degrees Centigrade). This will minimize solvent loss through the storage tank vent.
- ❖ Convert a vented dry-to-dry machine to closed loop to reduce air pollution emissions.
- ❖ Replace an activated carbon adsorber PERC trap with a refrigerated condenser to reduce the generation of PERC-contaminated separator water.

- ❖ Recent research by the EPA has shown wet cleaning systems to be a competitive alternative to using hazardous cleaning solvents for many types of fabrics. The higher labor costs of wet cleaning are offset by its much lower equipment and supply costs. Extensive testing has shown a high level of customer satisfaction. Worker exposure to the potential health hazards of perc are eliminated. Because wet cleaning is not used for fabrics that shrink or are hard to dry, it is convenient for use alongside existing equipment in shops which are expanding their volume of business.
- ❖ Be prepared for possible spills.
 - Have an emergency spill response plan.
 - Block off floor drains to help prevent potential spills from entering sewer systems, ground water, etc.
- ❖ Train employees on how to respond to different types of emergencies in your facility. See page 19, Emergency Planning, for more information.
- ❖ Train employees on operating practices that emphasize pollution prevention and environmental protection.

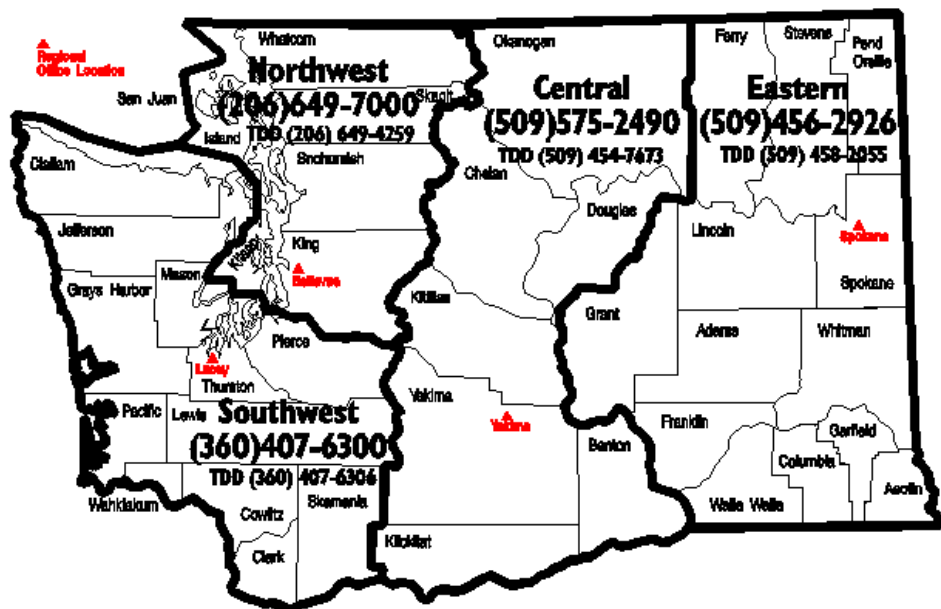
Dry cleaning trade publications, trade associations, product vendors and technical assistance staff at environmental agencies may be able to provide information on other possible pollution prevention actions. See the listing beginning on page 25 for contacts.

Loans for purchasing equipment for pollution prevention are now available from the Cascadia Revolving Fund. For loan information, call (206) 447-9226 and ask about the "pollution prevention lending project."

Spill Prevention and Response

Control Spills Immediately

- ❖ Immediately take the following actions to keep the spill from entering storm drains or sewers, spreading off-site or affecting human health:
 - Use absorbent materials to block storm water drains or gutters ahead of the spill.
 - Stay clear of the spilled material until qualified responders arrive on the scene.
- ❖ Call the Department of Ecology's Regional Office 24-hour Oil and Hazardous Material Spill Reporting number for your area (see below) to determine how serious the spill is. Do this for all spills unless there is no chance the spilled material will leak out of the building, no chance it will get into the sewer, and no danger to employees, customers, or neighbors.



- ❖ Immediately follow your emergency spill response plan for all spills. See below for a description of what should be in a spill response plan.
- ❖ If you do not have a spill response plan, prepare one and make sure it can be easily accessed by employees. This plan should include:
 - the telephone number of the Department of Ecology's Regional Office 24-hour Oil and Hazardous Material Spill Reporting line for your area;

- the telephone number for the National Response Center;
- telephone numbers of the local fire department and local health department; and
- precautionary measures to be taken immediately following a spill to keep the spilled material from entering storm drains or sewers, spreading offsite or affecting human health. These measures include:
 - Use absorbent materials to block storm water drains or gutters ahead of the spill.
 - Stay clear of the spilled material until qualified responders arrive on the scene.

Dispose of Spill Cleanup Materials Properly

If the spilled materials cannot be recovered for their intended use, they are waste materials. If they are waste and contain dry cleaning solvent or other dangerous materials, they must be accounted for, handled, and disposed of as described on page 5, Dangerous Waste and Materials. If the spilled materials are not dangerous waste, they may be disposed of in the trash.

Prevent Spills

- ❖ Handle dangerous materials or chemical storage in a manner that prevents leaks and spills.
 - Develop and follow a written operating plan which includes an inspection schedule for all dangerous waste storage areas and containers and tanks, and procedures for emergencies, safety and monitoring of equipment.
- ❖ Seal off floor drains around dry cleaning equipment and in storage areas used for dangerous materials.
- ❖ Seal all cracks in floors and coat them with material impervious to PERC and petroleum solvents. For information on applicable floor coating products, contact vendors of equipment, parts, and supplies listed on page 29.
- ❖ When possible, install secondary containment or absorbent materials around dry cleaning equipment and storage areas for PERC and dangerous waste.

- ❖ Store and keep ready spill response equipment such as absorbent materials or booms in areas near dry cleaning equipment and storage areas for PERC and chemical or dangerous materials. Absorbent materials include kitty litter, "spill pigs," or vermiculite.
- ❖ Store solvents, bleach and supplies containing acids indoors in separate areas. The storage areas must be separated far enough so that the different materials cannot come into contact with each other in the event of an accidental spill.

Emergency Planning

- ❖ Keep necessary emergency equipment such as fire extinguishers and telephones on hand and accessible to employees.
- ❖ Keep the telephone numbers of appropriate spill response agencies easily accessible.
- ❖ Regularly maintain and test all your emergency equipment.
- ❖ Have an emergency spill response plan to follow in the event of a spill. See page 17, Spill Prevention and Response, for information on what should be included in this plan.
- ❖ Notify police, fire departments and local hospitals of the characteristics of dangerous materials and waste at your site. Give them adequate location information and a drawing of your facility layout with access points clearly marked.
- ❖ Train employees on how to respond to different types of emergencies in your facility. You and/or an employee must act as the emergency coordinator. The emergency coordinator must be:
 - on-premises or on call at all times;
 - familiar with the operations and activities of the facility; and
 - authorized to commit resources necessary to deal with a dangerous waste emergency.

Record Keeping and Reporting Requirements

The table on page 34 provides information on waste codes to be used where needed on the forms for the following records and reports. Samples of record keeping and report forms begin on page 37.

Files you should keep for as long as you are in business

- ❖ Notification of Dangerous Waste Activities
- ❖ Annual dangerous waste reporting forms
- ❖ Records of inspections by regulatory agencies
- ❖ Results from waste analyses or tests
- ❖ Waste shipment manifests
- ❖ Records from emergency and spill plans, if required
- ❖ Reportable spills records
- ❖ Employee training records (Regulated Generators only -- see page 6, Identify Your Generator Status)

Files you should keep for at least five years

- ❖ Manifest forms.
- ❖ PERC dry cleaners must keep records of all PERC purchases and dangerous waste shipments. Every month, calculate and record the total amount of PERC purchases made during the past 12 months.

PERC Purchase Log			
MONTH OF PURCHASE	DATE OF ENTRY	AMOUNT (GALLONS)	RUNNING 12 MONTH TOTAL (GALLONS)
April 1995	4/15/95	10	10
May 1995			10
June 1995	6/20/95	10	20
July 1995			20
Aug 1995			20
Sep 1995	9/3/95	15	35
Oct 1995			35
Nov 1995	11/28/95	10	45
Dec 1995			45
Jan 1996			45
Feb 1996	2/10/96	20	65
Mar 1996			65
April 1996	4/8/96	15	70

For the April 1996 running 12-month total, subtract the April 1995 purchase from the March 1996 running total, and add the April 1996 purchase. In the above table, the 12-month running total for April 1995 through March 1996 is 65 gallons. The 12-month running total for May 1995 through April 1996 is 70 gallons.

- ❖ PERC dry cleaners must keep records of all equipment inspections done by the owner, employees, or other hired personnel. Record any leaks detected and other indications of maintenance and repair needs.

- ❖ PERC dry cleaners must keep records of all equipment maintenance and repair.
- ❖ PERC dry cleaners must keep dated records of pollution prevention activities. See page 15, Pollution Prevention, for examples of activities.



Appendices



Who to Call for Compliance, Pollution Prevention and Technical Assistance

County	Air Quality Agency	Wastewater Agency	Solid Waste Agency and Recycling Information	Dangerous Waste Agency
Adams	Dept of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	Public Works (509) 659-0090	Public Works (509) 659-0090
Asotin	Dept of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	County Landfill (509) 758-1965	County Landfill (509) 758-1965 Health District (509) 758-3344
Benton	Benton County Clean Air Authority (509) 943-3396	Dept. of Ecology (509) 575-2491	Engineering Dept. (509) 786-5611	Dangerous Waste (509) 786-5611 Environmental Health (509) 582-7761
Chelan	Dept. of Ecology (509) 752-2491	Dept. of Ecology (509) 575-2491	Public Works (509) 664-5415	Public Works (509) 664-5415 Health District (509) 664-5310
Clallam	Olympic Air Pollution Control Authority (360) 438-8768	Dept. of Ecology (360) 407-6300	Public Works (360) 452-1305	Environmental Health (360) 417-2415
Clark	Southwest Air Pollution Control Authority (360) 574-3058	Dept. of Ecology (360) 407-6300	Public Works (360) 699-2375	Southwest WA Health District (360) 696-8208
Columbia	Dept. of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	County Solid Waste (509) 382-2534	Walla Walla County Regional Planning (509) 382-4676 Health Dept (509) 382-2181
Cowlitz	Southwest Air Pollution Control Authority (360) 574-3058	Dept. of Ecology (360) 407-6300	Public Works (360) 577-3125	Public Works (360) 577-3125 Health District (360) 425-7400
Douglas	Dept. of Ecology (509) 752-2491	Dept. of Ecology (509) 575-2491	Solid Waste (509) 886-0899	Public Works (509) 886-0899 Health District (509) 664-5310
Ferry	Dept. of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	Public Works (509) 775-2492	Public Works (509) 775-5217 N.E. Tri-County Health District (509) 684-2262

Who to Call for Compliance, Pollution Prevention and Technical Assistance

County	Air Quality Agency	Wastewater Agency	Solid Waste Agency and Recycling Information	Dangerous Waste Agency
Franklin	Dept. of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	Public Works (509) 545-3514	Public Works (509) 545-3514 Benton-Franklin Health District (509) 582-7761
Garfield	Dept. of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	Engineering Dept. (509) 843-1262	Engineering Dept. (509) 843-1301 Health District (509) 843-3412
Grant	Dept. of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	Public Works (509) 754-2011	Public Works (509) 754-2011. ext 422 Health District (509) 754-2011
Grays Harbor	Olympic Air Pollution Control Authority (360) 438-8768	Dept. of Ecology (360) 407-6300	Public Works (360) 249-4413	Public Works (360) 249-4222
Island	Northwest Air Pollution Authority (360) 428-1617	Dept. of Ecology (206) 649-7000	Public Works (360) 679-7340	Public Works (360) 679-7386 Health District (360) 679-7350
Jefferson	Olympic Air Pollution Control Authority (360) 438-8768	Dept. of Ecology (360) 407-6300	Public Works (360) 385-0722	Public Works (360) 379-6911 Health District (360) 385-0722
King	Puget Sound Air Pollution Control Agency (206) 343-8800 or 1-800-552-3565	Metro/King County (206) 689-3000 Dept. of Ecology (206) 649-7000	King County Solid Waste (206) 296-4406 Seattle Solid Waste (206) 684-7655	Business Waste Line (206) 296-3976
Kitsap	Puget Sound Air Pollution Control Agency (206) 343-8800 or 1-800-552-3565	Dept. of Ecology (206) 649-7000	Public Works 1-800-825-4940	Public Works 1-800-825-4940 Health District (360) 478-5247
Kittitas	Dept. of Ecology (509) 575-2491	Dept. of Ecology (509) 575-2491	Solid Waste (509) 962-7698	Solid Waste (509) 962-7577
Klickitat	Dept. of Ecology (509) 575-2491	Dept. of Ecology (509) 575-2491	Public Works (509) 773-4616	Public Works (509) 773-4616 S.W. Washington Health District (206) 696-8428

Who to Call for Compliance, Pollution Prevention and Technical Assistance

County	Air Quality Agency	Wastewater Agency	Solid Waste Agency and Recycling Information	Dangerous Waste Agency
Lewis	Southwest Air Pollution Control Authority (360) 574-3058	Dept. of Ecology (360) 407-6300	Public Works (360) 748-9121	Public Works (360) 740-1403 Health District (360) 740-1233
Lincoln	Dept. of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	Health District (509) 725-2501	Planning Dept. (509) 725-7911 Health District (509) 725-2501
Mason	Olympic Air Pollution Control Authority (360) 438-8768	Dept. of Ecology (360) 407-6300	Public Works (360) 427-9670 ext. 271	Public Works (360) 427-9670, ext. 271 General Services (360) 427-9670 ext. 364
Okanogan	Dept. of Ecology (509) 575-2491	Dept. of Ecology (509) 575-2491	Public works (509) 422-7300	Public works (509) 422-7300 Health District (509) 422-7140
Pacific	Olympic Air Pollution Control Authority (360) 438-8768	Dept. of Ecology (360) 407-6300	Health and Human Services (360) 875-9356	Health and Human Services (360) 875-9356
Pend Oreille	Dept. of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	Public Works (509) 447-4513	Public Works (509) 447-4513 N.E. Tri-County Health District (509) 684-2262
Pierce	Puget Sound Air Pollution Control Agency (206) 343-8800 or 1-800-552-3565	Dept. of Utilities (206) 565-3013 Dept. of Ecology (360) 407-6300 Tacoma: (206) 591-5581	Dept. of Utilities (206) 591-6528 Tacoma Refuse Utility (360) 591-5543	Dept. of Utilities (360) 593-4050 Health Dept. (360) 591-6528
San Juan	Dept. of Ecology (206) 649-7000	Dept. of Ecology (206) 649-7000	Solid Waste (360) 378-2114	Solid Waste (360) 378-3421 Health District (360) 378-4474
Skagit	Northwest Air Pollution Authority (360) 428-1617	Dept. of Ecology (206) 649-7000	Public Works (360) 336-9333	Public Works (360) 424-9532 Health District (360) 336-9380
Skamania	Southwest Air Pollution Control Authority (360) 574-3058	Dept. of Ecology (360) 407-6300	Public Works (509) 427-5141	Skamania Co. Public Works (509) 427-9448

Who to Call for Compliance, Pollution Prevention and Technical Assistance

County	Air Quality Agency	Wastewater Agency	Solid Waste Agency and Recycling Information	Dangerous Waste Agency
Snohomish	Puget Sound Air Pollution Control Agency (206) 343-8800 or 1-800-552-3565	Dept. of Ecology (206) 649-7000	Solid Waste (206) 388-6473 Everett (206) 290-0893	Solid Waste (206) 388-6473 Health District (206) 339-5250
Spokane	Spokane County Air Pollution Control Authority (509) 456-4727	Dept. of Ecology (509) 456-2926	Solid Waste (509) 456-7403	Solid Waste (509) 625-7898 Health District (509) 324-1577
Stevens	Dept. of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	Public Works (509) 738-6937	Public Works (509) 788-6106 N.E. Tri-county Health District (509) 684-2262
Thurston	Olympic Air Pollution Control Authority (360) 438-8768	Dept. of Ecology (360) 407-6300	Public works (360) 786-5136	Public Health (360) 754-4663 Health Dept. (360) 786-5136
Wahkiakum	Southwest Air Pollution Control Authority (360) 574-3058	Dept. of Ecology (360) 407-6300	Public Works (360) 795-3301	Public Works (360) 795-3301 Health Dept. (360) 425-7400
Walla Walla	Dept. of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	Regional Plan Office (509) 527-3285	Regional Plan Office (509) 527-3282 Health Dept. (509) 527-3290
Whatcom	Northwest Air Pollution Authority (360) 428-1617	Dept. of Ecology (206) 649-7000	Public Works (360) 676-7695	Bellingham (360) 676-6692
Whitman	Dept. of Ecology (509) 456-3114	Dept. of Ecology (509) 456-2926	Public Works (509) 397-6280	Public Works (509) 397-6206 Health District (509) 397-6280
Yakima	Yakima County Clean Air Authority (509) 575-4116	Dept. of Ecology (509) 575-2491	Public Works (509) 575-4128	Public Works (509) 575-2457 Health Dept. (509) 575-4265 City of Yakima (509) 575-6005

Services and Vendors for Dry Cleaners

PLEASE NOTE: Businesses may change frequently. This was the most up-to-date listing available at the time of printing. This list is not inclusive. You may find further listings in the phone book. This list is for your convenience only. No recommendations or approvals are implied.

Name and Phone Number	Equipment	Parts	Supplies	Solvents	Service	Haz. Waste Disposal	Specialty (if any)
Northwest Dry Cleaners Assoc. (360) 851-6327	Trade organization						
Korean Dry Cleaners Association (206) 878-2353 (Mike Parks) (206) 630-3333 (Jensen Yi)	Trade organization						
International Fabricare Institute (301) 622-1900	Trade organization						
International Dry Cleaners Congress (406) 252-1746	Trade organization						
Adco, Tukwila WA (206) 244-4110			X				
Alliance Equipment Salt Lake City UT 1-800-331-1136	X						
American Laundry Equipment Cincinnati OH (513) 731-5500	X						
Arent Machinery Co., Inc. Clackamas OR 1-800-547-2527	X						
Ashland Chemical Portland OR				X			
CESCO Seattle WA (206) 824-9055	X				X		
ChemCentral Kent WA (206) 251-8500 (509) 534-0519				X			
ChemSafe Services Kittitas WA (509) 968-3973						X	
Chemical Waste Management Seattle WA 1-800-843-3604						X	
Dynamic Laundry Systems Woodinville WA (206) 485-9274	X				X		

Services and Vendors for Dry Cleaners

PLEASE NOTE: Businesses may change frequently. This was the most up-to-date listing available at the time of printing. This list is not inclusive. You may find further listings in the phone book. This list is for your convenience only. No recommendations or approvals are implied.

Name and Phone Number	Equipment	Parts	Supplies	Solvents	Service	Haz. Waste Disposal	Specialty (if any)
Envirotech Systems Inc. Seattle WA (206) 363-9000						X	
Hill Equipment Co. Oklahoma City OK (405) 943-9773	X	X					Dry-to-dry petroleum solvent dry cleaning equipment
Hoyt Corp. Westport MA (508) 636-8811	X						
Kent Thomas Supply Salt Lake City UT (801) 467-0998	X	X			X		
Kim's Plumbing and Equipment Seattle WA (206) 246-5919					X		
Lab Safety (800) 356-0783			X				PERC leak detection tools: Drager tubes, halogen detectors, calorimetric detector tubes
Lind Laundry Supply Lynnwood WA (206) 775-8294	X				X		
New Era Equipment Tacoma WA 1-800-562-7902	X	X			X		Aqua Clean Systems
Northwest EnTech Spokane WA (509) 489-9176						X	
Northwest Enviroservice Seattle WA (206) 622-1085					X		Will accept only non-dangerous waste water
Olympic Cleaning Equipment Co. Seattle WA (206) 529-1301	X	X			X		
Peterson Equipment Co. Woodburn OR (206) 625-1021 1-800-981-4032	X				X		

Services and Vendors for Dry Cleaners

PLEASE NOTE: Businesses may change frequently. This was the most up-to-date listing available at the time of printing. This list is not inclusive. You may find further listings in the phone book. This list is for your convenience only. No recommendations or approvals are implied.

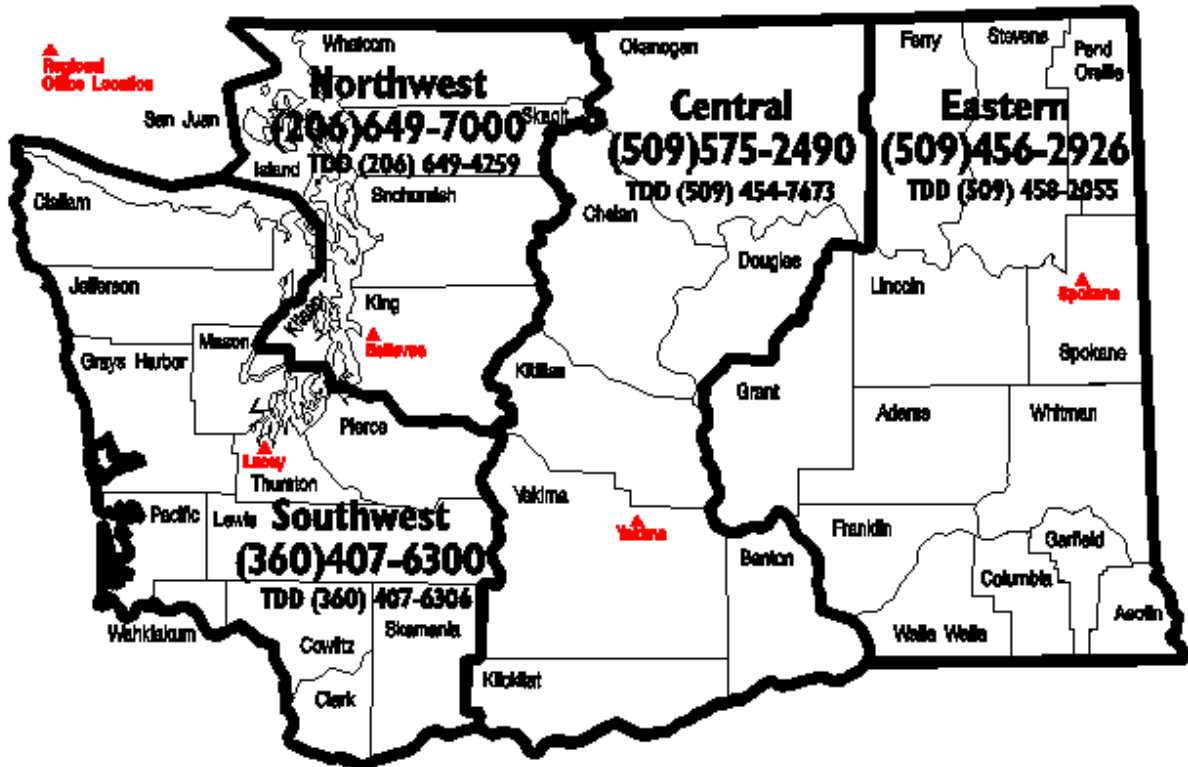
Name and Phone Number	Equipment	Parts	Supplies	Solvents	Service	Haz. Waste Disposal	Specialty (if any)
Phillips Environmental Seattle WA 1-800-228-7872						X	Will accept small quantity generator dropoff
Phillips Distributing Redmond WA (206) 775-8294	X						Will accept small quantity generator waste for a fee
Safety Kleen Corp. Auburn: (206) 939-2022 Lynnwood: (206) 775-7030 Spokane: (509) 928-8353						X	
Sanderson Safety Seattle: (206) 340-4300 Bellingham: (360) 734-1110			X				PERC leak detection tools: Drager tubes, halogen detectors, calorimetric detector tubes
SK America New York NY (212) 906-8000	X		X				PERC leak detection: Drager tubes
ThermoTech Reno, NV 702 221 0323 1-800-805-8656	X						Separator water evaporator
T&W Leasing Federal Way WA (206) 922-0739	X						Leasing
Unipress Corp Tampa FL (813) 623-3731	X	X			X		
Van Waters and Rogers Seattle WA (206) 872-5000 Spokane WA (509) 534-0405				X		X	Petroleum solvents
Vic Manufacturing Minneapolis MN 1-800-669-8777	X						
Washex Machinery Corp. Wichita Falls TX (817) 855-3990	X						

Services and Vendors for Dry Cleaners

PLEASE NOTE: Businesses may change frequently. This was the most up-to-date listing available at the time of printing. This list is not inclusive. You may find further listings in the phone book. This list is for your convenience only. No recommendations or approvals are implied.

Name and Phone Number	Equipment	Parts	Supplies	Solvents	Service	Haz. Waste Disposal	Specialty (if any)
Wesport Spokane WA (509) 922-4887 (800) 275-3954	X						
Western Cascade Equipment Co. Bellevue WA (206) 562-9400	X				X		
WTW Industries Barrett Van Zeipel (Manufacturers Representative) 13210 NE 8th Av. Vancouver, WA 98685 (206) 573-3961	X	X					Separator water evaporator
ZeroWaste Santa Monica CA (619) 558-2526	X	X					Separator water evaporator

Ecology Regional Offices and 24-Hour Spill Reporting Numbers



❖ **TDD (only)**

- ERO (Spokane) (509) 458-2055
- SWRO (Lacey) (360) 407-6306
- NWRO (Bellevue) (206) 649-4259
- CRO (Yakima) (509) 454-7673
- Kennewick (Hanford) (509) 736-3039

❖ **Or Call:**

Dept. of Emergency Management 24-Hour Number: 1-800-258-5990

❖ **For EPA and US Coast Guard Reporting, Call:**

National Response Center: 1-800-424-8802

Idaho:	Communications Center:	(208) 327-7422
Oregon:	Emergency Management	(503) 378-6377
B.C.:	Provincial Emergency Program	1-800-663-3456
EPA Region X, Seattle:		(206) 553-1263

❖ **Need to Know**

- | | |
|---|-------------------|
| -- Reporting Party | -- Quantity |
| -- Contact Phone(s) | -- Concentration |
| -- Responsible Party | -- Location |
| -- Material Released | -- Cleanup Status |
| -- Resource Damages
(i.e. dead fish) | |

Identifying Your Dangerous Wastes

Waste Stream Description	Waste Codes
Cartridge filters, spent activated carbon, and activated carbon filters from PERC ¹ dry cleaners	F002, D039, WP01
Muck, still bottoms, lint, and filter coatings from PERC dry cleaners	F002, D039, WP01, WT02
Waste water containing PERC	F002, D039, WP02
Used PERC ²	F002, D039, WP01, WT02
Cleanup materials from spills of unused PERC	U210, D039, WP01, WT01
Wastes from dry cleaners using petroleum solvent ³ :	D001 ⁴
Partially filled solvent containers Used solvent	D001 ⁴
Separator water from petroleum solvent dry cleaners	Have it tested
Wastes similar to the above and separator water from dry cleaners using CFC-113 as their cleaning solvent	WP01

¹ PERC is short for perchloroethylene, also called tetrachloroethylene

² See Step 1 under General Dangerous Waste Requirements in this manual to determine if you must count the PERC in your equipment reservoir.

³ Petroleum solvent includes dry cleaning solvents known as petroleum naphtha, mineral spirits, or Stoddard solvent as well as other commercial names. Check the material safety data sheet for the solvent to confirm its identity.

⁴ D001 applies only to petroleum solvent with a flashpoint of 140 degrees F or less. Recycled petroleum solvent may also contain a significant amount of PERC as a contaminant, which would change the waste designation.

Identifying Your Dangerous Wastes

Waste Stream Description	Waste Codes
Cartridge filters, spent activated carbon, and activated carbon filters from PERC ¹ dry cleaners	F002, D039, WP01
Muck, still bottoms, lint, and filter coatings from PERC dry cleaners	F002, D039, WP01, WT02
Waste water containing PERC	F002, D039, WP02
Used PERC ²	F002, D039, WP01, WT02
Cleanup materials from spills of unused PERC	U210, D039, WP01, WT01
Wastes from dry cleaners using petroleum solvent ³ :	D001 ⁴
Partially filled solvent containers Used solvent	D001 ⁴
Separator water from petroleum solvent dry cleaners	Have it tested
Wastes similar to the above and separator water from dry cleaners using CFC-113 as their cleaning solvent	WP01

¹ PERC is short for perchloroethylene, also called tetrachloroethylene

² See Step 1 under General Dangerous Waste Requirements in this manual to determine if you must count the PERC in your equipment reservoir.

³ Petroleum solvent includes dry cleaning solvents known as petroleum naphtha, mineral spirits, or Stoddard solvent as well as other commercial names. Check the material safety data sheet for the solvent to confirm its identity.

⁴ D001 applies only to petroleum solvent with a flashpoint of 140 degrees F or less. Recycled petroleum solvent may also contain a significant amount of PERC as a contaminant, which would change the waste designation.

The following pages are examples of how to fill out the Annual Dangerous Waste Report and the Generation and Management Form. If you have applied for a Dangerous Waste Generator Identification Number, you will be mailed the necessary forms and instructions. Fill out one Generation and Management form for each type of waste you are reporting on. The three examples given are for: (1) PERC filters; (2) PERC separator water; and (3) PERC muck, still bottoms, and filter coatings.

These are examples only -- you will need to insert the correct amount for your specific dry cleaning business. For help, or information on workshops for generators, call 1-800-ARFORMS.

Dry Cleaner 1995 Annual Reporting Example

February 27, 1995

I am a Dry Cleaner. During 1995 I generated enough perchloroethylene waste to be considered a Regulated Generator. I recycle my perchloroethylene waste on-site by doing filtration/distillation in a closed-loop recycling¹ system. As a result of this recycling, the only dangerous wastes that count towards my generator status and need to be reported on my Annual Dangerous Waste Report Forms GSI, GM, and OSI are the three perchloroethylene residual waste streams (as shown below). I have these residuals picked up regularly for off-site management by my Treatment Storage Disposal Recycling (TSDR) facility.

Note: The following waste amounts have been calculated two ways, **monthly generation** for determining generator status and **yearly generation** for annual reporting.

Solvent closed-loop recycled (not reportable waste):

Spent Perchloroethylene = approx. 20 gal/month = 240 gal/year.

Residuals sent off-site to TSDR (reportable waste):

1. Perchloroethylene filters = approx. 50 lbs/month = 600 lbs/year.

(50 lbs/ month x 12 month/ year = 600 lbs/ year)

2. Perchloroethylene separator water = approx. 20 gal/month = 167 lbs/month = 240 gal/year

(20 gal/ month x 8.34 lbs/ gal = 167 lbs/ month)

(20 gal/ month x 12 month/ year = 240 gal/ year)

3. Perchloroethylene muck, still bottoms and filter coatings - approx. 12 gal/month = 100 lbs/month = 144 gal/year

(12 gal/ month x 8.34 lbs/ gal = 100 lbs/ month)

(12 gal/ month x 12 month/ year = 144 gal/ year)

¹ WAC 173-307-200. "Closed-loop recycling" means that the entire process, through completion of any reclamation, is closed by being entirely connected with pipes or other comparable enclosed means of conveyance. Recycled materials are returned to the original process or processes.

GENERATION AND MANAGEMENT FORM

Answer Sheet

Please enter your EPA/State ID number and site name at right, before making as many two-sided copies of this answer sheet as you will need to report all of your waste streams. Then complete one answer sheet for each waste stream.

Please Enter:

EPA/State ID No.: WAD 123 456 789

Site Name: Happy Day Cleaners

FOR ECOLOGY USE ONLY

Date Received: _____

A. Description of Dangerous Waste Stream			
A-1. _____			
A-2. <u>Perchloroethylene Filter</u> -----			
A-3. <u>D039</u> <u>F002</u> _____		A-4. <u>WP01</u> _____	
A-5. <input type="checkbox"/> EHW <input checked="" type="checkbox"/> DW	A-6. <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		A-7. A <u>19</u> _____
A-8. <u>B 407</u>	A-9 <input type="checkbox"/> i. <input type="checkbox"/> ii <input type="checkbox"/> iii <input type="checkbox"/> iv <input checked="" type="checkbox"/> v (if v, answer A-9.a.)		
	A-9.a. M <u>024</u>		
B. Waste Management Activities			
B-1. <u>600</u> <input type="checkbox"/> ST <input type="checkbox"/> MT <input type="checkbox"/> P <input type="checkbox"/> K <input checked="" type="checkbox"/> G <input type="checkbox"/> L <input type="checkbox"/> C (If G, L, or C, answer B-1.a.)			
B-1.a. _____ <input type="checkbox"/> lbs/gal <input type="checkbox"/> Specific Gravity <input type="checkbox"/> lbs/yd ³			
B-2. <input type="checkbox"/> On-site <input type="checkbox"/> Off-site <input type="checkbox"/> Both			
B-3. _____ M _____	B-3.a. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK		B-3.b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK
B-4. <i>i.</i> Receiving Facility ID	<i>ii.</i> System Code	<i>iii.</i> Quantity	<i>iv.</i> Recycling Percent
<u>ORD 991834780</u>	<u>M043</u>	<u>600</u>	_____
_____	M _____	_____	_____
_____	M _____	_____	_____
_____	M _____	_____	_____

GENERATION AND MANAGEMENT FORM

Answer Sheet

Please enter your EPA/State ID number and site name at right, before making as many two-sided copies of this answer sheet as you will need to report all of your waste streams. Then complete one answer sheet for each waste stream.

Please Enter: EPA/State ID No.: <u>WAD 123 456 789</u> Site Name: <u>Happy Day Cleaners</u> _____
FOR ECOLOGY USE ONLY
Date Received: _____

A. Description of Dangerous Waste Stream			
A-1. _____			
A-2. <u>Perchloroethylene Separator Water</u> _____			
A-3. <u>D039</u> <u>F002</u> _____		A-4. <u>WP02</u> _____	
A-5. <input type="checkbox"/> EHW <input checked="" type="checkbox"/> DW	A-6. <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	A-7. A <u>19</u> _____	
A-8. <u>B 101</u>	A-9 <input type="checkbox"/> i. <input type="checkbox"/> ii <input type="checkbox"/> iii <input type="checkbox"/> iv <input checked="" type="checkbox"/> v (if v, answer A-9.a.)		
	A-9.a. <u>M 024</u>		
B. Waste Management Activities			
B-1. <u>240</u> <input type="checkbox"/> ST <input type="checkbox"/> MT <input type="checkbox"/> P <input type="checkbox"/> K <input checked="" type="checkbox"/> G <input type="checkbox"/> L <input type="checkbox"/> C (If G, L, or C, answer B-1.a.)			
B-1.a. <u>8.34</u> <input checked="" type="checkbox"/> lbs/gal <input type="checkbox"/> Specific Gravity <input type="checkbox"/> lbs/yd ³			
B-2. <input type="checkbox"/> On-site <input type="checkbox"/> Off-site <input type="checkbox"/> Both			
B-3. _____ M _____	B-3.a. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK	B-3.b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK	
B-4. <i>i.</i> Receiving Facility ID	B-4. <i>ii.</i> System Code	B-4. <i>iii.</i> Quantity	B-4. <i>iv.</i> Recycling Percent
<u>ORD 991834780</u>	<u>M 021</u>	<u>240</u>	<u>1</u>
_____	M _____	_____	_____
_____	M _____	_____	_____
_____	M _____	_____	_____

GENERATION AND MANAGEMENT FORM

Answer Sheet

Please enter your EPA/State ID number and site name at right, before making as many two-sided copies of this answer sheet as you will need to report all of your waste streams. Then complete one answer sheet for each waste stream.

Please Enter: EPA/State ID No.: <u>WAD 123 456 789</u> Site Name: <u>Happy Day Cleaners</u> _____ <hr/> FOR ECOLOGY USE ONLY Date Received: _____
--

A. Description of Dangerous Waste Stream			
A-1. _____			
A-2. <u>Perchloroethylene Muck, Still Bottoms and Filter Coatings</u> _____			
A-3. <u>D039</u> <u>F002</u> _____		A-4. <u>WP02</u> <u>WT02</u>	
A-5. <input type="checkbox"/> EHW <input checked="" type="checkbox"/> DW	A-6. <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		A-7. A <u>19</u>
A-8. <u>B 601</u>	A-9. <input type="checkbox"/> i. <input type="checkbox"/> ii. <input type="checkbox"/> iii. <input type="checkbox"/> iv. <input checked="" type="checkbox"/> v (if v, answer A-9.a.)		
	A-9.a. <u>M 024</u>		
B. Waste Management Activities			
B-1. <u>144</u> <input type="checkbox"/> ST <input type="checkbox"/> MT <input checked="" type="checkbox"/> P <input type="checkbox"/> K <input type="checkbox"/> G <input type="checkbox"/> L <input type="checkbox"/> C (If G, L, or C, answer B-1.a.)			
B-1.a. <u>8.34</u> <input type="checkbox"/> lbs/gal <input type="checkbox"/> Specific Gravity <input type="checkbox"/> lbs/yd ³			
B-2. <input type="checkbox"/> On-site <input checked="" type="checkbox"/> Off-site <input type="checkbox"/> Both			
B-3. _____ M_____	B-3.a. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK		B-3.b. <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> DK
B-4. <i>i.</i> Receiving Facility ID	<i>ii.</i> System Code	<i>iii.</i> Quantity	<i>iv.</i> Recycling Percent
<u>ORD 991834780</u>	<u>M 021</u>	<u>144</u>	<u>44</u>
_____	M_____	_____	_____
_____	M_____	_____	_____
_____	M_____	_____	_____

PERC Purchase Log

For first 12 months of recordkeeping

Please note the following:

1. RUNNING TOTAL gives yearly consumption based on previous 12 months.
2. DATE OF ENTRY should be the first WORKING day of each month.
3. RUNNING TOTAL = Preceeding RUNNING TOTAL + current AMOUNT.
4. If purchases are made more than once a month, use the total amount purchased monthly.
5. After initial 12 months proceed to attachment C2. Attachment C1 is used only once.

	MONTH OF PURCHASE	DATE OF ENTRY	AMOUNT (GALLONS)	RUNNING TOTAL (GALLONS)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				

Perchloroethylene Dry Cleaner Equipment Inspection and Repair Log

This log provides room for three months of entries (six months for Small Area Sources). The first three columns must be completed even if no leaks are found. This sheet should be duplicated before use to provide for future logs.

The following components must be checked for PERCEPTIBLE leaks every week.
(Every other week for Small Area Sources).

Perceptible leaks are ones that are detectable by odor, visual observation such as pools or drops, and touch when passing fingers over equipment.

1. Hose and pipe connections Fitting, couplings, and valves	6. Water separators
2. Door gasket/seatings	7. Muck cookers
3. Filter gaskets/seatings	8. Stills
4. Pumps	9. Exhaust dampers
5. Solvent tanks and containers	10. Diverter valves
	11. Cartridge filter housings

	Name or Initials (optional)	Inspect Date (weekly or biweekly)	Leaky Component(s) (write "None" if no leaks are found)	Leaky Component(s) Location	Part Order Date	Part Rec'd Date	Repair Date
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

Refrigerated Condenser Weekly Temperature Log

For a dry-to-dry machine, a dryer, or a reclaimer, measure the temperature on outlet side of refrigerated condenser.

DATE	INSPECTOR'S INITIALS	MACHINE NO.	TEMPERATURE	IS TEMPERATURE > 45° F?
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No

If the temperature was greater than 45° F (7.2° C), attach a completed Correction Action form.

Carbon Adsorber Weekly PERC Concentration Log

Measure the concentration of the PERC in the exhaust duct after the carbon adsorber.

DATE	INSPECTOR'S INITIALS	MACHINE NO.	CONCENTRATION (PPM)	IS CONCENTRATION > 100 PPM?
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No

If concentration is greater than 100 ppm, attach a completed Corrective Action form.

Corrective Action Form

Date of Initial Inspection _____

Machine No. _____

Inspector _____

Describe Problem:

Are Parts Needed Yes No

Date Ordered _____

Date Received _____

Date Installed _____

Date Problem Corrected

Explain:

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