



DRYCLEANERS

Environmental Regulations



This fact sheet was compiled to highlight some of the common drycleaning emissions, and the most significant environmental regulations pertaining to those emissions. This sheet is merely informational and is not intended to be an exclusive source of information for the environmental requirements to which drycleaners may be subject.

AIR EMISSIONS

Dry cleaners in Colorado must meet both State and Federal Air Pollution rules. For dry cleaners that use perc (perchloroethylene), the rules have been divided into six categories: **Reporting, Permit Requirements, Pollution Control, Housekeeping, Monitoring and recordkeeping.** If you use stoddard as your cleaning solvent, see the section on Stoddard solvent.

Reporting Requirements

If your facility uses 4 gallons, or more, of perc in a year, then you are required to file an Air Pollution Emission Notice (APEN) with the Colorado Air Pollution Control Division. An APEN form is included in this packet for your convenience.

The Federal government also requires reporting. You should have received a set of reporting forms from the U.S. Environmental Protection Agency (EPA). If you have not, please contact Nick Melliadis with the Small Business Assistance Program at the Colorado Department of Public Health and Environment, at 692-3175.

There are two separate reports that you must send to EPA:

1. The Initial Report should have been sent into EPA by December 20, 1993.
2. The Compliance Report. There are two parts to the Compliance Report. The first part is for reporting Pollution Prevention measures, such as leak inspection. The second part is for reporting which type of Pollution Control Equipment you use on your machines, such as refrigeration or a sniffer. The instructions that EPA includes with the forms will tell you when you must send in these reports.

Colorado State Permit Requirements

If your business is in the Ozone Nonattainment Area, you will need a permit if you use 297 gallons of perc or 615 gallons of stoddard solvent. The Ozone Nonattainment Area includes all of Jefferson, Douglas and Denver Counties, Boulder County (except Rocky Mountain National Park), and Adams and Arapahoe Counties (west of Kiowa Creek). Outside of this area you will need a permit if you use 743 gallons of perc or 1,538 gallons of stoddard solvent. If your facility uses both perc and stoddard, contact Nick Melliadis with the Small Business Assistance Program at (303)692-3175 for further information.

Pollution Control Equipment Requirements

If you are located in the Ozone Nonattainment Area, all emissions from your dryer or reclaimer must be vented through an emission control device regardless of the amount of perc you use.

Federal regulations require that your perc dry cleaning machine be equipped with a refrigerated condenser. However, if your dry cleaning equipment was installed before December 9, 1991, and if the machine was equipped with a sniffer, prior to that date, then you can keep the sniffer instead of retrofitting a refrigerated condenser.

If you meet ALL THREE of the following conditions you are not required to use pollution control equipment:

1. The dry cleaning equipment was installed prior to December 9, 1991; and
2. Your business is located outside the nonattainment area, as described above; and
3. You have a dry-to-dry facility that uses less than 140 gallons of perc per year, or a transfer system that uses less than 200 gallons per year, or a combination of both dry-to-dry and transfer machines that uses less than 140 gallons per year.

Transfer systems that were installed prior to December 9, 1991, and that use more than 1800 gallons of perc per year are required to use a room enclosure vented to a refrigerated condenser.

No new transfer systems are allowed. A dry-to-dry unit with a reclaimer is considered to be a transfer unit.

Housekeeping Requirements

- No dry cleaners may dispose of perc by evaporation or spillage.
- All dry cleaners must store and dispose waste perc in sealed containers.
- All dry cleaners must drain filters for at least 24 hours before they can be discarded.
- Leaks: Federal law requires a weekly inspection for leaks for dry-to-dry facilities that use 140 gallons or more of perc per year, and for transfer units that use 200 gallons or more per year. For facilities that use less than these amounts, leak inspections must be performed every 2 weeks. Leaks must be repaired within 24 hours. If replacement parts are required, they must be ordered within 2 days, and installed within 5 days of receipt.

Monitoring requirements

Federal law requires you to perform weekly testing of pollution control equipment. This testing is called "monitoring."

For refrigerated condensers you must measure the temperature of the air going into and the temperature of the air leaving the unit. There should be at least a 20 degree difference (Fahrenheit).

For sniffers you must test the concentration of perc leaving the unit. The concentration should not exceed 100 parts per million by volume. For information about how to perform these measurements call the Small Business Assistance Program.

Recordkeeping Requirements

Federal law requires that you record the amount of perc purchased each month and keep a record of perc purchased in the preceding 12 months. This is considered to be your annual usage of perc.

You must also maintain a record of leak inspections, including the date when each leak inspection was performed, the results of each inspection and when leaks were repaired, or when replacement parts were ordered and installed.

You must maintain a record of control equipment monitoring, including the date of each test and the temperatures recorded for refrigerated condensers and the outlet concentrations for sniffers.

Stoddard Cleaners

- Dry cleaners using petroleum solvents to clean clothing are required to send in an APEN if they use 307 gallons of solvent per year.
- The Air Division will review the APEN to see if a permit is required.
- If you are in the nonattainment area (see description above) then you will need a permit if you use 615 gallons per year. Outside of the nonattainment area you will need a permit if you use 1,538 gallons per year.
- If your dryer has a capacity of 84 pounds of clothing or more then you will have to follow a set of federal rules called New Source Performance Standards. If this is the case, call the Small Business Assistance Program for more information about the requirements of these rules.

LIQUID EMISSIONS

Pollution can contaminate groundwater and render it undrinkable for years. In some areas, there is evidence that Perc has made its way through the concrete in the sewers into the soil and there are cases of public and private wells being closed because of Perc contamination through improper handling or excessive discharges into wastewater systems by drycleaners. Whether or not drycleaners are to blame, owners have been forced to close their doors and pay enormous liability and cleanup costs.

Drycleaners must practice safe handling of solvent to avoid water contamination problems. Floor drains, if present, should not be connected to subsurface structures that discharge wastes above or into the groundwater. These structures are called shallow injection wells, and disposal into them is regulated by federal and state Underground Injection Control (UIC) Programs, as well as by local Publicly Owned Treatment Works (POTWs). Shallow injection wells receiving industrial wastes may be subject to closure and abandonment. Many local sanitation districts in the US are beginning to pass laws preventing drycleaners from pouring their water into the sewers.

In short, NEVER pour your separator water down a drain or on the ground. Separator water can contain relatively high concentrations of Perc (sometimes as much as 150 parts per million) and is therefore a hazardous waste under federal regulations, and must be stored and disposed of in a legal manner. The following suggestions can help you avoid contaminating groundwater:

Spill recovery

1. Obtain a supply of absorbent cotton blankets and keep them in a specially marked container near the areas where solvent is used or stored.
2. If a spill occurs, use the blankets to absorb the spill. Then run them through the machine to recover the solvent.

Flooring

1. The floor under the drycleaning equipment and solvent storage area should be concrete that is coated with epoxy. If there is a doorway near this area, there should be a coated concrete barrier to prevent solvent from flowing out the door in case of a major spill.
2. Make sure there are no floor drains leading to the sewer, septic tank or storm water drain in these areas.

Solvent Delivery

1. Hose delivery can be dangerous. If the hose breaks or the nozzle slip out of the tank, a major spill can occur. Supervise any transfer of solvent on your premisses. The final responsibility is always yours.
2. Alternatively, deliver your solvent in small drums, preferably with a safe way of transferring the solvent into your machine. Several companies are beginning to introduce such systems.

Containments

1. A containment tray is a structure that goes under and around the machine, filter, still and any tank which contains solvent. It will control leaks from a button trap, an open door, a cracked base tank or any similar occurrence. Containments should always be installed when a new plant is built, but retrofits are possible and strongly advised.
2. A containment tray should be non-porous, made of epoxy-coated concrete, fiberglass, steel or other suitable material, and be capable of holding 110% of the solvent tank above it.

Separator Water

1. Keep your water separator well maintained. Some older machines have separators which are prone to malfunction. Inadequate maintenance can compound the problems of dated water separators.
2. Monitor the temperature settings on your water separator. Improperly high temperatures in the separator can cause pure solvent to spill over into the receiving vessels which accumulate the wastewater for discharge. This is known as "burping" and results in high concentrations of Perc in the water. The cooler you can keep your water separator, the better. Some water separators are water-cooled, and many are equipped with a temperature gauge. Ideally, you want to keep your separator cooler than 85° F.

HAZARDOUS WASTE

Perc is considered a hazardous waste, and is regulated as such under state and federal law. It is YOUR responsibility to understand the hazardous waste regulations and ensure that your hazardous waste is managed properly. Any business generating hazardous waste falls into one of three tiers based on the amount of waste produced each month. If you always produce less than 220 pounds (about 25 gallons, or less than half of one 55-gallon drum) of hazardous waste, and no more than 2.2 pounds of acutely hazardous waste within any month, you are conditionally exempt from the hazardous waste provisions under the Resource Conservation and Recovery Act (RCRA).

But in order to maintain conditionally exempt status, you must:

1. Identify all hazardous waste generated
2. Limit the total amount of waste generated to less than 220 pounds each month (still bottoms, separator water, hazardous prespotters, for instance, all are added to this amount).

3. Never accumulate more than 2,200 pounds on site (about five drums)

If you fall under one of the larger generator tiers, contact the Colorado Department of Public Health and Environment's Hazardous Materials Division at (303)692-3300 for information regarding your requirements.

Hazardous Waste Storage

1. Your hazardous waste containers should be stored in an area away from doorways. Diking the containers in a manner similar to spill containment for the machine is highly recommended.
2. Hazardous waste must be given to a licensed hauler. No process which is possible to do on the premise can remove all the solvent captured in the waste. Therefore, still bottoms and wet or dry cartridges must never be given to a common waste hauler.

Sources: *Fact Sheet for Drycleaners: Environmental Regulations*, September, 1994, Montana Pollution Prevention Program.

Air Pollution Requirements: Dry Cleaners, CDPHE Small Business Assistance Program.

This fact sheet was compiled by the Colorado Department of Public Health and Environment's Pollution Prevention Program. For more information call Kirk Mills at (303)692-2977.