Iowa Department of
Natural Resources

Dry Cleaning Emission Rules

40 CFR Part 63
Subpart M

Dry Cleaning Emission Regulations

In September 1993, the US Environmental Protection Agency (EPA) issued national regulations to control air emissions of perchloroethylene (perc) from dry cleaners. The regulation affects all dry cleaners who use perchlororethylene — about 250 cleaners in Iowa, and 30,000 nationally.

Why is DNR regulating dry cleaners who use perc?

The Clean Air Act Amendments of 1990 directs EPA to regulate emissions of 188 toxic chemicals, including perc, from many industrial sources. DNR is carrying out the Clean Air Act in Iowa and regulates perc emissions from dry cleaners to meet federal requirements.

Perc is suspected to cause cancer and is considered toxic. It also causes dizziness, nausea, headaches, nose and eye irritation, loss of coordination, respiratory failure, and lack of muscular control.

Dry cleaners are the largest source of perc emissions in the U.S. and in Iowa. Since dry cleaners are located in many residential areas in Iowa, perc emissions are often released in close proximity to large numbers of people. EPA expects the new regulation to eliminate 7,000 tons of perc emissions into the air annually.

Viviane Clark, Owner of Cozad's Master Drycleaners in Newton, says her dry-to-dry machine saves her up to $300 per month in perc purchases

How Does the Regulation Affect you?

The regulation affects all dry cleaners who use perc in both transfer and dry-to-dry machines.

How you are affected depends on the **type of machinery you use** and the **amount of perc you purchase each year.**

In determining how a facility may be affected, it is important to know your size classification and machine installation dates. Determine your facility size with the charts at the bottom of the page. "Small" dry cleaners, do not need to install perc vapor recovery systems on "existing" machines.

December 9, 1991 is an important date under the regulation. It is important to know when your machines were installed to determine whether they are "new" or "existing" according to EPA classification.

"Existing" means machines were installed before December 9, 1991. Machines that were installed by this date and have transferred ownership are still classified as "existing."

If a machine or facility has changed ownership, it is important that records are maintained to prove installation occurred before December 9, 1991.

"New" includes any machine installed on or after December 9, 1991.

"LARGE" DRY CLEANERS

Type of Machine	Perc Purchases*	Required Control
Transfer machines	200 or more gallons/yr	Refrigerated condensers or existing carbon adsorber** "Existing" transfer machines may remain in use, but new start-ups must use dry-to-dry.
Dry-to-dry machines	140 or more gallons/yr	
Dry-to-dry and transfer	140 or more gallons/yr	

** Usage is based on the total amount of perc purchased at a facility location for the previous twelve months.*

"SMALL" DRY CLEANERS

Type of Machine	Perc Purchases	Required Control
Transfer machines	Less than 200 gallons/yr	None for "existing" machines. For "new" machines, a refrigerated dry-to-dry machine must be used.
Dry-to-dry machines	Less than 140 gallons/yr	
Dry-to-dry and transfer	Less than 140 gallons/yr	

*** Adsorbers in place before September 22, 1993, can be used.*

What are the Reporting and Compliance Requirements?

All perc dry cleaners must comply with the pollution prevention measures now!

• Each facility must submit an initial notification and pollution prevention report to DNR or to the Polk and Linn County pollution control programs if located in those counties. If you have not submitted these forms, please do so immediately. Contact the DNR for forms.

• All facilities with "new" machines (installed on or after December 9, 1991) must comply upon start-up with all requirements and submit a compliance report within 30 days after start-up. This compliance report is submitted to DNR one time; it is not required annually. However, a report must be submitted to DNR whenever any facility undergoes a change, such as an increase in the amount of perc purchased annually or the purchase of new equipment.

• Any dry cleaning facility that installs a "new" machine must install a dry-to-dry machine with a refrigerated condenser. Also, " large" facilities (see chart) must install perc vapor recovery systems on each "existing" machine.

• "Large" dry cleaners must install perc vapor recovery systems on each "existing" machine.

• Transfer machines that use perc can no longer be installed. New carbon adsorbers cannot be used without a refrigerated condenser for required perc vapor recovery.

• Refrigerated condensers must cool the perc vapor in the machine down to 45° F or less at the end of the dry cleaning cycle. Carbon adsorbers must not emit more than 100 parts per million of perc out the stack, which should be monitored by a carbon adsorber test. The test is performed with a colormetric (chemical) test kit, available from trade associations and vendors, and is now required for "existing" machines. Facilities that use carbon adsorbers for control requirement compliance, the test is required weekly.

$ How Much Will it Cost?

Compliance costs vary. Pollution prevention or "good housekeeping" practices, such as repairing leaks, can be relatively inexpensive or even result in savings by recovering perc otherwise "lost" into the environment.

While some large dry cleaners may need to invest in refrigerated condensers, pay-back is estimated by one Iowa dry cleaner to be 3-5 years. The add-on equipment can lead to savings of up to $3000 on a tightly-sealed machine.

Depending on the total volume of clothes cleaned using a refrigerated condenser, **the annual cost could be less expensive or result in cost savings by recovering perc.**

Pollution Prevention Steps

The regulation requires all perc dry cleaners regardless of size to take the following pollution prevention steps. These steps will reduce emissions and your perc purchases, which will save you money!

Inspect all dry cleaning equipment at least every other week for leaks obvious from sight, smell or touch. For example, visible drops of perc on the machine or streams of air felt coming from the machine. Larger dry-cleaners (those required to install emission control equipment) must inspect equipment every week. All leaks must be repaired.

Keep logs of: 1) the leak detection and repair results, and 2) perc amounts purchased for the past 12 months. At any time know how much perc was purchased during the previous 12-month period. DNR inspectors will need this data.

Follow good housekeeping practices, including: 1) keeping all perc and perc wastes in covered, non-leaking containers, 2) draining cartridge filters in closed containers 3) keeping machine door shut unless clothing is being transferred.

Operate and maintain all dry cleaning equipment according to manufacturer's instructions.

Where to Find Help

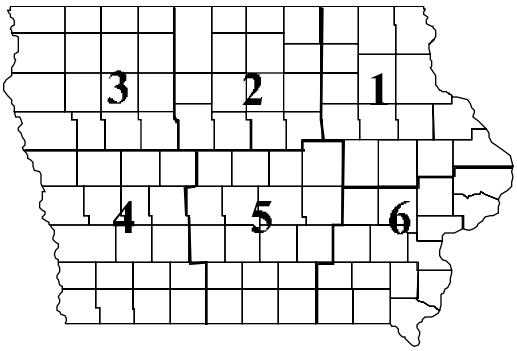
Linn County
Air Pollution Control 319/398-3551

Polk County
Air Pollution Control 515/286-3351

DNR Air Quality Bureau
Toxics Coordinator 515/281-4927

DNR Field Offices

Region	Office	Phone Number
1	Manchester	319/927-2640
2	Mason City	515/424-4073
3	Spencer	712/262-4177
4	Atlantic	712/243-1934
5	Des Moines	515/281-9069
6	Washington	319/653-2135



The DNR funded **Iowa Air Emission Assistance Program** provides small businesses with free, non-regulatory technical assistance to meet air emissions requirements. IAEAP is located at the University of Northern Iowa. For information call: (800)422-3109.

Policies and statements in this brochure are intended solely as guidance, cannot be used to bind the agency, and are not a substitute for reading applicable statutes and regulations.

Reference: EPA 453/F-94-025, "New Regulation Controlling Emissions from Dry Cleaners," United States Environmental Protection Agency, May 1994.