

**NOTICE**  
National Emission Standards for Hazardous Air Pollutants  
for Perchloroethylene **Dry Cleaning** Facilities

The purpose of this notice is to inform you about Federal requirements for the control of perchloroethylene (PERC) emissions from dry cleaning facilities. All dry cleaners that have on their premises dry cleaning machines which use PERC as a cleaning solvent must comply with the requirements of the national emission standards for hazardous air pollutants for perchloroethylene dry cleaning facilities, which were published in the Federal Register on September 22, 1993. Enclosed is a summary of this rule. The reporting requirements referred to in this letter are taken directly from the regulations. A copy of the rule may be obtained from the contact persons listed below.

This regulation requires that each owner or operator of a dry cleaning facility that uses PERC as a cleaning solvent must submit 2 reports to the United States Environmental Protection Agency (EPA): an INITIAL REPORT and a COMPLIANCE REPORT. For convenience, the dry cleaner may use the forms enclosed in this notice to report the required information to the EPA. Translations of these 2 forms in Korean, Spanish, Chinese, Vietnamese, and French are available upon request from the EPA contact person listed below.

Filing the completed form provided for the INITIAL REPORT to the EPA will satisfy the requirement in the regulation for each dry cleaner to submit initial reporting information. The initial reporting information is due to the EPA at the address below by June 18, 1994. This report will inform the EPA of the street address of the facility, the estimated annual PERC use at the facility, the types of machines at the facility, and the control option that will be used to comply with the standards (if controls are required). A dry cleaner that is only a pick-up store and does not conduct dry cleaning on site may answer only questions #1 and #2 of the INITIAL REPORT, and return the form to the EPA.

Filing the completed form or forms provided for the COMPLIANCE REPORT to the EPA will satisfy the requirement in the regulation for each dry cleaner to submit compliance certification. The compliance certification is due to the EPA at the address given below by June 18, 1994 for pollution prevention requirements and by October 22, 1996 if control equipment is required. These reports will provide certification to the EPA that the facility is in compliance with the regulation for the amount of PERC that the facility has been using.

At a later time, if a dry cleaning facility should exceed the PERC consumption limit stated in their original notification submittal, then the dry cleaner must submit an updated compliance certification for control equipment.

For any new machine or machines installed after September 22, 1993, the dry cleaning owner or operator must meet all of the requirement of the regulation upon startup of the new machine or machines which were installed. In this case, both compliance certification forms would be necessary.

EPA Region 6 Contact:

U.S. Environmental Protection Agency, Region 6  
Air Enforcement Branch (6T-E)  
1445 Ross Avenue, Suite 700  
Dallas, Texas 75202  
(214) 655-7223

State of Louisiana Contact:

Should you require assistance in complying with the required response to this new federal regulation, please contact any of the following offices.

## **Louisiana Small Business Assistance Program (SBAP)**

Capitol Region (Baton Rouge) 504-295-8910	Acadiana Region (Lafayette) 318-262-5584
Northeast Region (Monroe) 318-362-5439	Northwest Region (Shreveport) 318-676-7476
Southeast Region (Kenner) 504-471-2800	Southwest Region (Lake Charles) 318-475-8644
Louisiana Small Business Ombudsman (Baton Rouge) 1-800-256-1488	Louisiana Small Business Assistance Program 1-800-259-2890

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS  
FROM PERCHLOROETHYLENE DRY CLEANING FACILITIES -- FINAL RULE

FACT SHEET

BACKGROUND

- Dry cleaners are a major source of perchloroethylene (also referred to as PCE, PERC, tetrachloroethene, and tetrachloroethylene), one of the toxic air pollutants Congress has required the Environmental Protection Agency (EPA) to regulate under the Clean Air Act of 1990. PCE is known to cause cancer in animals and is suspected to cause cancer in humans. PCE also has non-cancer toxic effects that make it desirable to minimize PCE emissions.
- Under Section 112 of the Clean Air Act, the EPA proposed on December 9, 1991, national emission standards for hazardous air pollutants (NESHAP) to limit PCE emissions from both new (constructed on or after December 9, 1991) and existing (constructed before December 9, 1991) dry cleaning facilities.
- In response to public comments received on the proposal, a notice of availability of new information on control of PCE emissions during clothing transfer was published on October 1, 1992. Additional comments were received.
- The final rule was published on September 22, 1993, in the Federal Register, volume 58, starting on page 49356.

REQUIREMENTS OF THE EPA DRY CLEANER RULE

- The rule breaks dry cleaners into three separate categories--"small" area sources, "large" area sources, and "major" sources--and contains different requirements for each category. (See Table 1)
- There are two types of dry cleaning machine systems: dry-to-dry and transfer. A dry-to-dry machine consists of one machine, which does both the washing and the drying of the articles being cleaned. A transfer machine consists of two machines: a washer and a dryer. Transfer of clothing between a washer and a dryer is considered to be a significant source of emissions.

TABLE 1. REQUIREMENTS OF THE PCE DRY CLEANING NESHAP (PAGE 1 OF 2)

Requirement	Small Area Source	Large Area Source	Major Source
<u>Applicability:</u>  Dry Cleaning Facilities with: (1) Only Dry-to-Dry Machines (2) Only Transfer Machines (3) Both Dry-to-Dry and Transfer Machines	Consuming less than:  140 gallons PCE/year  200 gallons PCE/year  140 gallons PCE/year	Consuming equal to or between:  140-2,100 gallons PCE/yr  200-1,800 gallons PCE/yr  140-1,800 gallons PCE/yr	Consuming More than:  2,100 gallons PCE/yr  1,800 gallons PCE/yr  1,800 gallons PCE/yr
<u>Process Vent Controls:</u>  Existing Facilities	None	Refrigerated condenser (or equivalent)  Carbon adsorbers installed on existing machines before 9/22/93 can remain	
New Facilities	Refrigerated condenser (or equivalent)	Refrigerated condenser and small carbon adsorber (or equivalent)	
<u>Fugitive Controls:</u>  Existing Facilities	- - Leak detection/repair Store all PCE solvent & waste in sealed containers	Transfer machine systems are contained inside a room enclosure	
New	- - Leak detection/repair Store all PCE solvent & waste in sealed containers No new transfer machine systems allowed		

TABLE 1. REQUIREMENTS OF THE PCE DRY CLEANING NESHAP (PAGE 2 OF 2)

Requirement	Small Area Source	Large Area Source	Major Source
<u>Monitoring:</u>	New: Same as large area source  Existing: None	Refrigerated condenser (RC): Measure the RC outlet temperature at the end of the cycle on a dry-to-dry machine or dryer. (Needs to be less than or equal to 45°F.) Measure the RC inlet and outlet temperature difference on a washer. (Needs to be greater or equal to 20°F.)  Carbon adsorber (CA): Measure the PCE concentration out of the CA with a colorimetric detector tube. (Needs to be less than or equal to 100 ppm.)	
<u>Operation/Maintenance:</u>	Operate and maintain dry cleaning systems according to manufacturer's specifications and recommendations.		
<u>Records:</u>	Each facility must maintain records of PCE purchases and the calculation of yearly PCE consumption each month, along with dated records of all monitoring and leak detection and repair activities. The last five years of records must be kept.		
<u>Reporting &amp; Compliance:</u>	<p>Existing Facilities</p> <p>Each facility must submit an initial report and compliance report by June 18, 1994. Reports must be certified by a responsible official. Each facility also has until December 20, 1993 to comply with pollution prevention and record-keeping requirements. Large Area and Major facilities must comply with process controls by September 23, 1996 and must submit an additional compliance report by October 22, 1996.</p>		
New Facilities	<p>All other new facilities must comply upon start-up with all requirement and submit a compliance report within 30 days from the date the dry cleaner must be in compliance. However, there are special compliance and notification requirements for dry cleaning systems that were constructed during December 9, 1991 and September 21, 1993.</p>		

- The EPA's final rule requires all new dry cleaning machines to be dry-to-dry machines. It does not, however, require the replacement of existing transfer machines with new dry-to-dry machines.
- There are two sources of PCE emissions at dry cleaning facilities: process vent emissions (that is, the dry cleaning machine vent); and fugitive emissions (for example, clothing transfer, equipment leaks, and solvent exposed to air, and so forth). Process vent emissions are controlled through the use of refrigerated condensers or carbon adsorbers. Fugitive emissions from clothing transfer at transfer machines are controlled through room enclosures. Other fugitive emissions are controlled through leak detection and repair, keeping PCE and PCE wastes in sealed containers, keeping machine doors shut, and proper operation and maintenance of equipment.
- The EPA's rule requires control of process vent emissions at all new dry cleaning facilities. It also requires control of process vent emissions at existing large area source and major source dry cleaning facilities.
- The rule requires control of fugitive emissions at all new dry cleaning facilities. It also requires control of fugitive emissions at all existing dry cleaning facilities. However, only transfer machines at major source dry cleaning facilities are required to control fugitive emissions by installing a room enclosure.
- The rule requires the use of refrigerated condensers to control process vent emissions at new dry cleaning facilities. It also requires the use of refrigerated condensers to control process vent emissions at existing dry cleaning facilities, except those existing facilities that have already installed a carbon adsorber for control of process vent emissions prior to September 22, 1993. These facilities may continue to use this carbon adsorber to comply with the requirements of the rule.
- All existing dry cleaners must submit an initial notification report by June 18, 1994, to the EPA Region for each of their locations. The notification reporting requirements are in the rule. Forms supplied by EPA may be used to fulfill this notification requirement. Dry cleaning systems that were constructed between December 9, 1991, and September 21, 1993, can either meet the requirements for new facilities or comply with the special rule of Section 112 (I) (2) of the Clean Air Act. For assistance with complying with the special rule, refer to the EPA forms or contact EPA.
- Each existing facility must comply with all requirements of the rule except for the refrigerated condenser by December 20, 1993. Existing large area source and major source dry cleaning facilities must comply with installing a refrigerated condenser and also, for any major source transfer machines, a room enclosure, by September 23, 1996. All new dry cleaning facilities must comply with the rule when they begin operation. However, dry cleaning systems that were constructed between December 9, 1991, and September 21,

1993, can either comply with the requirements for new facilities or comply with the special rule of Section 112 (I) (2) of the Clean Air Act. For assistance with complying with the special rule, refer to the EPA forms or contact EPA.

- Each existing facility must submit a compliance report to EPA certifying that the facility is in compliance with all the requirements of the rule except for the refrigerated condenser installation requirement by June 18, 1994. Existing large area source and major source dry cleaning facilities must submit an additional compliance report to EPA certifying that the facility is in compliance with the control requirements for a refrigerated condenser and also, for any major source transfer machines, a room enclosure, by October 22, 1996. All new dry cleaners must submit a compliance report within 30 days from the date the dry cleaner constructs the new facility or installed the new dry cleaning machine or dry cleaning system.

## IMPACTS

- Nationwide Impacts
  - Note: Impacts are estimates given for 1996. 1996 is the year that all facilities must comply with the rule, and will be the first year that the rule is expected to have its maximum impact.
  - In 1996 about 25,000 commercial and industrial dry cleaning facilities will be in operation. Although the dry cleaning industry's growth is currently stable, about 7,700 of these 25,000 facilities will be new facilities built to replace existing facilities that retire. Of these 7,700 new facilities, about 400 are estimated to be uncontrolled in the absence of the rule and, as a result of the rule, will be required to install process vent control. In addition, the EPA rule will require about 3,200 existing uncontrolled facilities to install controls on process vents.
  - The rule will result in a total maximum national PCE emissions reduction of 6,600 megagrams (Mg) (7,300 tons) from projected 1996 emission levels.
  - Energy: Total maximum national increase in electricity use (needed to operate the control devices) of 280,000 kilowatt hours per year (kwh/yr) in 1996 for new facilities and 2.5 million kwh/yr for existing facilities.
  - Annualized Cost: Total national increase of \$0.5 million per year for new dry cleaning facilities and \$3.4 million per year for existing facilities in 1996.
  - Capital Cost: Total national increase of \$3 million for new dry cleaning facilities and \$32 million for existing dry cleaning facilities in 1996.
- Typical facility impacts for an existing, uncontrolled, 35-pound dry-to-dry

machine located at an area source:

- Perchloroethylene Emission Reductions: Individual reduction of 0.82 megagrams per year (0.91 tons per year) from projected 1996 emission levels.
- Wastewater: Total maximum increase of 0.03 kilograms per year (0.07 pounds per year) of PCE in wastewater in 1996.
- Solid Waste: No increase for the typical facility.
- Noise: No incremental impacts.
- Energy: The increase in electricity use (needed to operate refrigerated condenser) of 604 kilowatt hours (kwh) per year in 1996.
- Annualized Cost: Increase of \$1,100 per year in 1996. This includes the annualized cost of purchasing a refrigerated condenser and the annual operation and maintenance costs associated with the refrigerated condenser.
- Capital Cost: Increase of \$6,300 year in 1996. This is the average cost of a refrigerated condenser.

Please Note: This fact sheet is not a substitute for reading and understanding the EPA PCE dry cleaning rule.