Guidance for Compliance with the Operational Standards of 40 CFR Part 63.322

FOR DRYCLEANERS USING PERCHLOROETHYLENE

Information for Using this Guidance Document:

This checklist is to be used as a guide for determining compliance with the operational standards of the National Perchloroethylene (Perc) Air Emission Standards for Dry Cleaning Facilities, specified in Title 40 Code of Federal Regulations (CFR) Part 63.322.

Definitions:

Dry cleaning means the process of cleaning articles using perchloroethylene or perc.

Dry cleaning facility means an establishment with one or more dry cleaning systems.

Dry cleaning machine means a dry-to-dry machine or each machine of a transfer machine system.

Dry cleaning machine drum means the perforated container inside the dry cleaning machine that holds the articles during dry cleaning.

Dry cleaning system means a dry-to-dry machine and its ancillary equipment or a transfer machine system and its ancillary equipment.

Dry-to-dry machine means a one-machine dry cleaning operation in which washing and drying are performed in the same machine.

Existing dry cleaning facility means commenced construction or reconstruction before December 9, 1991.

New dry cleaning facility means commenced construction or reconstruction on or after December 9, 1991.

A. System Operation

1.	Is each dry cleaning system at the facility operated and maintained according to the manufacturer's specifications and recommendations (§63.322(d))?	☐ Yes	☐ No
2.	Is the door of each dry cleaning machine closed immediately after transferring articles to or from the machine, and is the door kept closed at all other times (§63.322(c))?	☐ Yes	☐ No
3.	If your dry cleaning machine uses greater than 140 gallons of perc on a 12-month basis, **or** was installed after December 9, 1991, is it equipped with a refrigerated condenser or an equivalent control device?	☐ Yes	☐ No
4.	If your dry cleaning machine is equipped with a refrigerated condenser, is it operated to prevent the venting or release of perc to the atmosphere while the dry cleaning machine drum is rotating (§63.322(e))?	☐ Yes	☐ No
5.	When air is drawn into the dry cleaning machine when the door is open, is the passage of an air stream through the refrigerated condenser prevented (§63.322(e))?	☐ Yes	☐ No

6. If your dry cleaning system is equipped with a carbon adsorber, do you ensure that the carbon adsorber is not bypassed, causing venting or release of perc to the atmosphere (§63.322(g))? ☐ Yes ☐ No

7. For dry cleaning systems installed after December 21, 2005:

   a. Is the air-perc gas-vapor stream contained within each dry cleaning machine routed through a refrigerated condenser and pass the air-perc gas-vapor stream from inside the dry cleaning machine drum through a non-vented carbon adsorber or equivalent control device immediately before the door of the dry cleaning machine is opened (§63.322(o))? ☐ Yes ☐ No

   b. Is the carbon adsorber desorbed in accordance with manufacturer's instructions (§63.322(o))? ☐ Yes ☐ No

B. Perc Management

1. Are all cartridge filters drained in their housing or other sealed container for at least 24 hours before removal from the dry cleaning facility (§63.322(i))? ☐ Yes ☐ No

2. Are all PCE and wastes that contain PCE stored in solvent tanks or solvent containers with no perceptible leaks (sight, smell or touch) (§63.322(j))? ☐ Yes ☐ No

   The exception to this requirement is that containers for separator water may be uncovered, as necessary, for proper operation of the machine and still.

C. System Monitoring

1. **For systems with refrigerated condensers (§63.322(e)):** Are refrigerated condensers monitored in accordance with the following requirements?

   a. Is the refrigeration system high pressure and low pressure during the drying phase monitored weekly to determine if pressures are in the range specified in the manufacturer's operating instructions? **OR** ☐ Yes ☐ No

   b. Is the temperature of the air-perc gas-vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine monitored weekly with a temperature sensor to determine if it is equal to or less than 7.2 °C (45 °F) before the end of the cool-down or drying cycle while the gas-vapor stream is flowing through the condenser? ☐ Yes ☐ No

      The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2 °C (45 °F) to an accuracy of ±1.1 °C (±2 °F).

2. **For systems with carbon adsorbers installed before September 22, 1993 (§63.322(g)):**
   Monitoring for perc concentrations in the primary carbon adsorber exhaust using a colorimetric detector tube or PCE gas analyzer must be performed as follows**:**

a. Is the concentration measured weekly, and the measurement taken while the dry cleaning machine is venting to the carbon adsorber at the end of the last dry cleaning cycle (prior to desorption of the carbon adsorber or replacement of the activated carbon) to determine that the PCE concentration in the exhaust is equal to or less than 100 parts per million by volume? ☐ Yes ☐ No

b. Is the colorimetric detector tube or PCE gas analyzer used designed to measure a concentration of 100 parts per million by volume of PCE in air to an accuracy of 25 parts per million by volume? ☐ Yes ☐ No

c. Is the colorimetric detector tube or PCE gas analyzer used according to the manufacturer's instructions? ☐ Yes ☐ No

d. Is a sampling port provided for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least eight (8) stack or duct diameters downstream from any flow disturbance such as a bend, expansion, contraction, or outlet; downstream from no other inlet; and two (2) stack or duct diameters upstream from any flow disturbance such as a bend, expansion, contraction, inlet, or outlet? ☐ Yes ☐ No

3. **For systems with secondary carbon adsorbers installed after December 21, 2005 (63.322(g)):** Is the concentration of PCE in the dry cleaning machine drum measured weekly at the end of the dry cleaning cycle with a colorimetric detector tube or PCE gas analyzer to determine that the PCE concentration is equal to or less than 300 parts per million by volume? ☐ Yes ☐ No

a. Is the colorimetric detector tube or PCE gas analyzer used designed to measure a concentration of 300 parts per million by volume of PCE in air to an accuracy of ±75 parts per million by volume? ☐ Yes ☐ No

b. Is the colorimetric detector tube or PCE gas analyzer used according to the manufacturer's instructions? ☐ Yes ☐ No

c. Is weekly monitoring conducted by inserting the colorimetric detector or PCE gas analyzer tube into the open space above the articles at the rear of the dry cleaning machine drum immediately upon opening the dry cleaning machine door? ☐ Yes ☐ No

D. System Inspection and Leak Detection

Inspection with a halogenated hydrocarbon detector or PCE gas analyzer also fulfills the requirement for inspection of perceptible leaks.

1. Are the following dry cleaning system components inspected weekly for perceptible leaks (sight, smell or touch) while the system is in operation (§63.322(k))? ☐ Yes ☐ No

- ☐ Hose and pipe connections, fittings, couplings, and valves
- ☐ Door gaskets and seatings
- ☐ Filter gaskets and seatings
- ☐ Pumps
- ☐ Solvent tanks and containers
- ☐ Water separators
- ☐ Muck cookers
- ☐ Stills
- ☐ Exhaust dampers
- ☐ Diverter valves
- ☐ All filter housings

2. For perceptible leaks detected, are repairs made within 24 hours (§ 63.322(m))? ☐ Yes ☐ No
3. If a part must be ordered to repair a perceptible leak, is the order initiated within 2 working days, and are the parts installed within 5 working days after receipt (§ 63.322(m))? ☐ Yes ☐ No
4. If parameter values monitored under Sections C, D, and E do not meet the required values or acceptable operating specifications, have adjustments or repairs been made to the dry cleaning system or control device to meet those values {§63.322(n)}? ☐ Yes ☐ No
5. Are all components of the dry cleaning system listed in Section D.1 inspected monthly for vapor leaks using a halogenated hydrocarbon detector or PCE gas analyzer while the system is in operation? ☐ Yes ☐ No
6. Is the halogenated hydrocarbon detector or PCE gas analyzer operated according to the manufacturer's instructions? ☐ Yes ☐ No
7. Is the vapor leak inspection conducted by placing the probe inlet at the surface of each component interface where leakage could occur and moving it slowly along the interface periphery? ☐ Yes ☐ No

E. Systems Installed in Buildings with a Residence

1. **For any dry cleaning system located in a building with a residence:** ☐ Yes ☐ No

   Are all emissions of PCE eliminated from the dry cleaning system installed after December 21, 2005 (this includes relocation of a used machine)?
2. After December 21, 2020, will emissions of PCE be eliminated from any dry cleaning system that is located in a building with a residence? ☐ Yes ☐ No

If you have questions concerning this guidance document, please contact:

Georgia Small Business
Environmental Assistance Program
(404) 362 4842
toll free 1-877-427-6255

Dr. Art Stelson
Georgia Environmental Protection Division
Air Protection Branch
(404) 363-7116