



## Perchloroethylene (PERC) Fact Sheet

Polk County -Air Quality Division

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***On July 27, 2006, the Environmental Protection Agency (EPA) strengthened air toxics requirements for all dry cleaners that use the chemical perchloroethylene (PERC).***

***The rule affects three types of dry cleaners that use PERC: large industrial and commercial dry cleaners; small area source dry cleaners (found in strip malls or stand-alone); and small dry cleaners located in residential buildings. The majority of dry cleaners in Polk County, Iowa are small area source dry cleaners.***

### **SMALL AREA SOURCE DRY CLEANERS**

**Requirements for existing area source dry cleaners** (machines installed prior to December 21, 2005)

- Eliminate all transfer machines by July 27, 2008.
- Begin using a halogen leak detector monthly by July 27, 2008 to detect PERC leaks and maintain records.

**Requirements for new area source dry cleaners** (machines installed after December 21, 2005)

- Eliminate all transfer machines by July 27, 2006.
- Add carbon adsorbers to the closed-loop machines with refrigerated condensers that are required under the 1993 rule.
- Use a halogen leak detector monthly to detect PERC leaks and maintain records.

*(Note: Both new and existing dry cleaners must still perform weekly or bi-weekly leak checks on each machine. All leak detection checks and findings should be recorded on your dry cleaning compliance calendar)*

### **SMALL CO-RESIDENTIAL DRY CLEANERS**

The final rule eliminates PERC emission risks for small dry cleaners co-located in residential buildings:

**Requirements for existing co-residential dry cleaners**

- Eliminate all transfer machines by July 27, 2008.
- Begin using a halogen leak detector monthly by July 27, 2008, to detect PERC leaks, and maintain records.
- Phase-out PERC machines as the units wear out. All existing PERC machines must be removed from residential buildings by December 21, 2020. These dry cleaners may replace worn-out PERC machines with newer available non-PERC technology.

**Requirements for new co-residential dry cleaning machines**

- PERC use will not be allowed.
- Any new PERC dry cleaning machine in a residential building that began operations between December 21, 2005 and July 27, 2006 must eliminate PERC use by July 27, 2009. ***(During the three (3) year interim PERC elimination period (July 27, 2006 to July 27, 2009), new PERC co-residential sources will be required to use refrigerated condensers, and secondary carbon adsorbers, with equipment housed inside a vapor barrier enclosure<sup>1</sup> with general ventilation<sup>2</sup> to the outside air.)***
- Must conduct weekly leak inspections using a leak detection device such as a halogenated hydrocarbon detector<sup>3</sup> or PERC gas analyzer<sup>4</sup>

### **EPA TECHNICAL CORRECTION**

**Alternative monitoring requirements**

- Refrigerated condenser monitoring - Owners and operators must monitor the high and low pressure of the refrigeration system rather than the exit temperature, in the cases where the system is equipped with pressure gauges. For refrigeration systems that are not equipped with pressure gauges, owners and operators are required to monitor the temperature of the gas-vapor outlet stream.
- Both new and existing dry cleaners must still perform weekly or bi-weekly leak checks on each machine. All leak detection checks and findings should be recorded on your dry cleaning compliance calendar.
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**Definitions:**

***Vapor Barrier Enclosure<sup>1</sup>***-A room that encloses a dry cleaning system and is constructed of vapor barrier material that is impermeable to perchloroethylene.

***General ventilation<sup>2</sup>***-The vapor barrier enclosure shall be equipped with a ventilation system that exhausts outside the building and is completely separate from the ventilation system for any other area of the building.

***Halogenated hydrocarbon detector<sup>3</sup>***- A portable device capable of detecting PERC vapor concentrations of 25 ppm by volume.

***PERC gas analyzer<sup>4</sup>***-A flame ionization, photoionization, or infrared analyzer capable of detecting PERC vapor concentrations of 25 ppm.

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