KSDCFS-1
May 2008

FACT SHEET

New Air Quality Requirements for Perchloroethylene Dry Cleaners

On July 27, 2006 and April 1, 2008, the U.S. Environmental Protection Agency (EPA) amended the National Emission Standards for Hazardous Air Pollutants (NESHAP) for perchloroethylene (perc or PCE) dry cleaners. All dry cleaners using perc solvent in Kansas are required to meet the NESHAP standards. The standards are documented within EPA 40 CFR, Part 63, Subpart M. The Kansas Department of Health and Environment's (KDHE) Bureau of Air and Radiation (BAR) enforces the NESHAP standards in Kansas. KDHE's Kansas Dry Cleaning Program within the Bureau of Environmental Remediation (BER) coordinates outreach to Kansas dry cleaners and is providing this fact sheet to help small and large area source facility owners and operators understand the new requirements.

Who is affected?

EPA promulgated revised standards to lower the impact to human health by limiting perc emissions from existing and new dry cleaning facilities. The new federal requirements affect "area" and "major" source dry cleaners. Most Kansas facilities are area sources that are typically found in shopping centers, stand-alone buildings, or on the ground floor of residential (apartment) buildings.

Key Definitions:

	Small	Large
Area Source	Facilities using <140 gallons perc per year with dry-to-dry machines, <200 gallons perc per year with only transfer machines, or <140 gallons perc per year with both transfer and dry-to-dry machines.	Facilities using 140 to 2,100 gallons perc per year with dry-to-dry machines, 200 to 1,800 gallons perc per year with only transfer machines, or 140 to 1,800 gallons perc per year with both transfer and dry-to-dry machines.
Major Source	Facilities using >2,100 gallons perc per year with dry-to-dry machines, >1,800 gallons perc per year with only transfer machines, or >1,800 gallons perc per year with both transfer and dry-to-dry machines.	

Bi-Weekly Inspections: Inspections conducted on 14-day intervals.

Carbon Adsorber: Bed of activated carbon into which an air-perc gas-vapor stream is routed and which adsorbs the perc on the carbon.

Enhanced LDAR: Enhanced Leak Detection and Repair program requires facilities to perform vapor leak checks on a monthly basis using a halogenated hydrocarbon detector or perc gas analyzer, depending upon the source designation. Perceptible leak checks shall also be continued weekly or bi-weekly, depending upon the source designation.

Existing units: All machines installed before December 9, 1991 and transfer machines installed before September 23, 1993.

New units: Units installed on or after December 9, 1991.

Perceptible Leak: Those you can see, feel, or smell. Inspection for vapor leaks using an approved detector or analyzer will suffice for perceptible leak inspections.

Residence: A residence is defined as any dwelling or housing in which people reside, excluding short-term housing that is occupied by the same person for a period of less than 180 days (e.g. hotel room).

Kansas Department of Health & Environment

Key Changes to NESHAP Regulations

Residential Area Sources

- Perc dry cleaning machines may not be installed in residential buildings after July 27, 2006.
- Perc dry cleaning machines that were installed in residential buildings between December 21, 2005 and July 12, 2006, must eliminate perc use by July 27, 2009, by converting to alternative solvents or ceasing operations. In the interim, all perc dry cleaning facilities must continue to comply with the requirements of the NESHAP standards. In addition, all machines must be checked weekly to verify that the perc vapor level in the drum at the end of the cycle is below 300 parts per million (ppm). Dry cleaners will need to purchase the appropriate equipment or analyzers for this screening requirement.

- Perc dry cleaning machines that were installed in facilities before December 21, 2005 must eliminate perc use by December 21, 2020 by converting to alternative solvents or ceasing operations.

Transfer Dry Cleaning Machines

Existing Small Area, Large Area, and Major Sources must discontinue the use of transfer machines by July 28, 2008. ***New*** Small Area, Large Area, and Major Sources are prohibited from using new or relocated transfer machines. Please see the attached source-specific tables for operation requirements for ***Existing*** Small Area, Large Area, and Major Source machines prior to the discontinue date of July 28, 2008.

All Source Categories

Effective July 27, 2006, if a dry cleaning machine is equipped with a pressure gauge on the refrigeration system, the operator is preferred to monitor and record the high and low pressure during the drying phase once per week *versus* the temperature of the gas-vapor outlet. Use of the refrigerated condenser temperature is acceptable though. KDHE recommends dry cleaners record both the high/low pressures and the refrigerated condenser temperature weekly if so equipped.

Recordkeeping must include the inspection dates and leak detection results. The Kansas Dry Cleaning Compliance Calendar is available for easy documentation of the inspection requirements.

KDHE recommends dry cleaning facilities record all observations and readings on the dry cleaning compliance calendar that was mailed to each facility in December. You can download a copy of the calendar at the Small Business Environmental Assistance Program (SBEAP) web site at http://www.sbeap.org/. Once you are on the main web page click on "Publications - Industry-Specific," "Dry Cleaners" and you will see various guidance documents and the KDHE-approved Dry Cleaners Compliance Calendar. You can also get a copy by calling SBEAP at 1-800-578-8898.

The SBEAP web site also has two KDHE-BAR documents 1) *Subpart M Compliance Requirements Worksheet for Notification of Compliance Status for Perchloroethylene Dry Cleaning Facilities* and 2) *Notification of Compliance Status for Perchloroethylene Dry Cleaning Facilities.* The *Notification of Compliance Status for Perchloroethylene Dry Cleaning Facilities* form ***must*** be submitted to both KDHE-BAR ***and*** EPA by July 28, 2008. Copies of both forms were included in the calendars that were mailed to each dry cleaner in late 2007.

Help is Available:

As the state's environmental protection and public health agency, KDHE promotes responsible choices to protect the health and environment for all Kansans. Through education, direct services and the assessment of data and trends, coupled with policy development and enforcement, KDHE will improve health and quality of life. We prevent illness, injuries, and foster a safe and sustainable environment for the people of Kansas.

Interpretation of state and federal regulations can be challenging. KDHE provides this fact sheet as guidance to help the dry cleaning industry understand the changing NESHAP requirements. Owners and operators should not feel they are in this alone because help is available from the SBEAP and KDHE.

SBEAP provides free confidential advice on all environmental regulations, including NESHAP air standards, hazardous waste management, and pollution prevention as required by the Kansas Dry Cleaner Environmental Response Act. SBEAP can provide information via telephone or by scheduling a site visit. SBEAP also has information and guidance documents available on their web site. Please feel free to contact SBEAP at:

Kansas Small Business Environmental Assistance Program
Kansas State University
133 Ward Hall
Manhattan, Kansas 66506-2508

Web Page: www.sbeap.org

Toll Free Phone: (800) 578-8898

KDHE's Dry Cleaning Program does not specifically enforce the NESHAP requirements, but we are always available to help dry cleaners get assistance with understanding applicable statutes and regulations. Please feel free to contact KDHE's Dry Cleaning Program at:

Kansas Dry Cleaning Program
Kansas Department of Health & Environment
Bureau of Environmental Remediation
1000 SW Jackson, Suite 310
Topeka, Kansas 66612-1366

Web Page: www.kdheks.gov/dryclean

Phone: (785) 296-6370

E-mail: Bob Jurgens, Unit Manager - bjurgens@kdhe.state.ks.us

K**DHE's Bureau of Air and Radiation** enforces the NESHAP requirements in Kansas, including conducting inspections at dry cleaning facilities. Please feel free to contact KDHE's Bureau of Air and Radiation at:

Kansas Department of Health & Environment
Bureau of Air & Radiation
1000 SW Jackson, Suite 410
Topeka, Kansas 66612-1367

Web Page: http://www.kdheks.gov/bar/

Phone: (785) 296-1593

A Guide to NESHAP Requirements at Dry Cleaning Facilities

Provided by:

Kansas Dry Cleaning Program

Kansas Department of Health & Environment
1000 SW Jackson, Suite 410
Topeka, Kansas 66612-1367

www.kdheks.gov/dryclean

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Kansas Department of Health & Environment
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SMALL AREA SOURCE DRY CLEANING FACILITIES

Small Area Source: Facilities using <140 gallons perc per year with dry-to-dry machines, <200 gallons perc per year with only transfer machines, or <140 gallons perc per year with both transfer and dry-to-dry machines.

Table 1. Small Area Source Facility - New NESHAP Requirements

Requirement	Existing - installed before 12/9/91	New - installed on or after 12/9/91
Process Vent and Fugitive Controls	**Dry-to-dry:** No control required **Transfer:** No control required. Existing transfer machines installed prior to 9/22/93 can still be used until 7/28/08.	**Dry-to-dry:** Machines must be equipped with a refrigerated condenser. Machines installed after December 21, 2005, must be non-venting and equipped with a refrigerated condenser a **and** a secondary carbon adsorber. Transfer: New transfer machines are prohibited.
Monitoring/ Inspections	Continuation of perceptible leak inspections bi-weekly as currently required. Dry cleaning machine must be in operation during the inspection. By July 28, 2008, operators must comply with Enhance LDAR Program and begin using a halogenated hydrocarbon leak detector monthly to detect perc leaks. Records must be maintained.	Sources installed from 12/9/91 to 12/21/05 must comply with Enhanced LDAR by 7/28/08. Weekly perceptible leak inspections are required. Sources installed after 12/21/05 must immediately comply with Enhance LDAR Program. Weekly documentation of the high and low pressure of the **refrigerated condenser** during the drying phase is preferred if equipped with a pressure gauge, but documentation of the exit temperature is acceptable. KDHE recommends the operator document the exit temperature even if the pressure readings are noted. Equipment with a **carbon adsorber** shall record the weekly leak testing date and the perc concentration.
Residential Buildings - Additional Requirement	Dry cleaners **must** discontinue using perc in residential buildings by December 21, 2020.	New dry cleaning machines can no longer be installed or relocated to dry cleaners in residential buildings. New dry cleaning machines installed on or after December 21, 2005 in residential buildings must eliminate perc use by July 27, 2009. Dry cleaners with machines installed before December 21, 2005 must discontinue using perc in residential buildings by December 21, 2020. During the perc elimination period (July 27, 2006 to July 27, 2009), new sources will be required to use a refrigerated condenser and secondary carbon adsorber, with equipment housed inside a vapor barrier enclosure. Weekly inspections to detect and repair perc leaks must be conducted with a halogenated leak detector or perc gas analyzer.
Notification	On or before July 28, 2008, a *Notification of Compliance Status* form must be submitted to EPA **and** KDHE-BAR.	
Deadlines	Affected dry cleaners must be in compliance with both the applicable 1993 requirements and the 2006 amendments by **July 28, 2008.**	Affected dry cleaners must be in compliance with both the applicable 1993 requirements and the 2006 amendments beginning on July 27, 2006 or immediately upon start up, whichever is later.

LARGE AREA SOURCE DRY CLEANING FACILITIES

Large Area Source: Facilities using 140 to 2,100 gallons perc per year with dry-to-dry machines, 200 to 1,800 gallons perc per year with only transfer machines, or 140 to 1,800 gallons perc per year with both transfer and dry-to-dry machines. *Please note that dry cleaners cannot use any new or relocated transfer machines installed after September 23, 1993.*

Table 2. Large Area Source Facility - New NESHAP Requirements

Requirement	Existing - installed before 12/9/91	New - installed on or after 12/9/91
Process Vent and Fugitive Controls	**Dry-to-dry:** Must have either a refrigerated condenser or carbon adsorber. The carbon adsorber must have been installed prior to 9/22/93. **Transfer:** Same requirements. Existing transfer machines installed prior to 9/22/93 can still be used until 7/28/08.	**Dry-to-dry:** Machines must be a closed loop system equipped with a refrigerated condenser and a secondary carbon adsorber. **Transfer:** New transfer machines are prohibited.
Monitoring/ Inspections	By July 28, 2008, must initiate an Enhanced LDAR Program. Continuation of weekly perceptible leak inspections as currently required (visual or instrument).	Sources installed from 12/9/91 to 12/21/05 must comply with Enhanced LDAR by 7/28/08. Weekly perceptible leak inspections are required. Sources installed after 12/21/05 must immediately comply with Enhance LDAR Program. Enhanced LDAR Program. Continuation of weekly leak inspections as currently required (visual or instrument).
	Monitoring the high and low pressure of the refrigeration system is preferred if equipped with a pressure gauge, however documenting the exit temperature is acceptable. KDHE recommends the dry cleaner note the pressures and exit temperature, when possible.	
Residential Buildings - Additional Requirement	By July 28, 2008, operators must begin using a halogenated hydrocarbon leak detector monthly to detect perc leaks. Records must be maintained. Dry cleaners must discontinue using perc in residential buildings by December 21, 2020.	New dry cleaning machines can no longer be installed or relocated to dry cleaners in residential buildings. New dry cleaning machines installed on or after December 21, 2005 in residential buildings must eliminate perc use by July 27, 2009. Dry cleaners with machines installed before December 21, 2005 must discontinue using perc in residential buildings by December 21, 2020. During the perc elimination period (July 27, 2006 to July 27, 2009) , new sources must use a refrigerated condenser and secondary carbon adsorber, with equipment housed inside a vapor barrier enclosure. Weekly inspections to detect and repair perc leaks must be conducted with a halogenated leak detector or perc gas analyzer.
Notification	On or before July 28, 2008, a *Notification of Compliance Status* form must be submitted to EPA **and** KDHE-BAR.	
Deadlines	Affected dry cleaners must be in compliance with both the applicable 1993 requirements and the 2006 amendments by **July 28, 2008**.	Affected dry cleaners must be in compliance with both the applicable 1993 requirements and the 2006 amendments beginning on July 27, 2006 or immediately upon start up, whichever is later.