



Virginia Small Business Assistance Program
"Serving Business and the Environment"

An Environmental Compliance Refresher

"Getting Back on Track"



Brought to you in cooperation
with MidAtlantic Association of
Cleaners and the Virginia
Department of Environmental
Quality



Regulatory Update

New Federal Regulation **Alert**

- Additional emission controls for new or reconstructed dry cleaners installed after December 21, 2005.
 - Secondary carbon adsorber for machines
- More monitoring and recordkeeping required.
- Requires a special notification of compliance status by July 27, 2008. DEQ will provide the form in the future.
- Must eliminate transfer machines by July 27, 2008.
- Special rules for dry cleaners co-located in residential building.*

Additional Emission Controls for New/Reconstructed Dry Cleaners

- New or used perc machine are now defined as installed after December 21, 2005.
- These machines must be a “generation 4” machine:
 - Must be dry-to-dry refrigerated
 - Must have secondary non-vented carbon adsorber
 - Must recirculates air-perc stream inside wheel (dryer drum) prior to door being opened
- Carbon adsorber must be desorbed according to manufacturer’s instructions

Monitoring and Record Keeping Requirements

Monitoring and Record Keeping

Dry Cleaners Existing before December 21, 2005

- Still have to keep the records you have been keeping since the beginning.
- For example, machines that still have vented carbon adsorbers must measure perc concentration weekly at outlet vent of carbon adsorber with a colormetric tube or PCE gas analyzer after last machine cycle before desorbing carbon. The reading must be no more than **100 ppm**.
- Must maintain for 5 years
 - Perc Purchase Log
 - Leak Detection Chart
 - Repair Chart
 - Temperature Log
 - Yearly DEQ Compliance Calendar

Monitoring and Record Keeping

Dry cleaners existing before December 21, 2005 must comply with new monitoring and recordkeeping requirements **by July 28, 2008**.

New or reconstructed machines installed on or after December 21, 2005 must comply **now**.

Monitoring and Record Keeping Requirements

Logs and Chart Review

Perc Purchases Running Total

Total From Last Month		55 ← <i>Enter running total from previous month</i>
Subtract Perc Purchased in April 2006		-10 ← <i>Enter amount of PERC you bought the same month last year</i>
Subtotal		45 ← <i>This is 12-month running total, if you do not purchase PERC</i>
Purchase Date	Purchase Amount	12 Month Running Total
4/09	+15	60 ← <i>12-month running total, if you purchase PERC. Record this number on next month's chart as "Total from Last Month."</i>
	+	

Perc purchase log requirements have not changed.

Initial fill not counted in running total, so never subtracted.

Weekly Dry Cleaning Equipment Inspections

Date						
Staff Initials						
Are the following components without leaks? (Circle Y for Yes, N for No)						
Method (Choose one: Circle P for Feel, Sight or Smell, or D for Detector)		P D	P D	P D	P D	P D
WASH CYCLE	Hose connections, unions, couplings and valves	Y N	Y N	Y N	Y N	Y N
	Machine door gasket and seating	Y N	Y N	Y N	Y N	Y N
	Pumps	Y N	Y N	Y N	Y N	Y N
	Button Trap	Y N	Y N	Y N	Y N	Y N
	Filter housings	Y N	Y N	Y N	Y N	Y N
	Filter gaskets and seatings	Y N	Y N	Y N	Y N	Y N
	Solvent tanks	Y N	Y N	Y N	Y N	Y N
DRY CYCLE	Machine door gasket and seating	Y N	Y N	Y N	Y N	Y N
	Deodorizing and aeration valves on dryers	Y N	Y N	Y N	Y N	Y N
	Air and exhaust ductwork	Y N	Y N	Y N	Y N	Y N
	Heating and cooling coil doors	Y N	Y N	Y N	Y N	Y N
	Hose connections, unions, couplings and valves	Y N	Y N	Y N	Y N	Y N
	Water separators	Y N	Y N	Y N	Y N	Y N
	Lint Trap	Y N	Y N	Y N	Y N	Y N
DISTILLATION/ MISCELLANEOUS	Hose connections, unions, couplings and valves	Y N	Y N	Y N	Y N	Y N
	Water separators	Y N	Y N	Y N	Y N	Y N
	Distillation unit	Y N	Y N	Y N	Y N	Y N
	Solvent tanks	Y N	Y N	Y N	Y N	Y N
	Muck cookers	Y N	Y N	Y N	Y N	Y N
	Waste tanks and storage containers	Y N	Y N	Y N	Y N	Y N

Weekly Dry Cleaning Equipment Inspections

- **P** stands for Perceptible – sight, feel, smell, touch
- **D** stands for Halogenated HydroCarbon Detector

Repair Log	
Date	Description of Repair

- Must repair all leaks detected within 24 hours.
- If repair parts must be ordered, either a written or verbal order for those parts must be made within 2 working days of detecting such a leak. Write it down here.
- Repair parts must be installed within 5 working days after receipt.

Refrigerated Condenser Monitoring Log

	Week	1	2	3	4	5
Record pressures of the high and low pressure gages, or the refrigerated condenser outlet temperature						
Are pressure gauges within the ranges specified in the manual, or is the temperature gauge at the condenser coil indicating a temperature $\leq 45^{\circ}\text{F}$?	Y N	Y N	Y N	Y N	Y N	Y N
Record the inlet temperature weekly						
Record the outlet temperature weekly						
Calculate the difference (inlet – outlet)						
Is the difference $\geq 20^{\circ}\text{F}$	Y N	Y N	Y N	Y N	Y N	Y N

1. high and low pressure gauges, or
2. outlet temperature at the condenser coil at end of drying cycle equal to or less than 45°F , or
3. inlet temperature/outlet temperature

Must be monitored weekly and kept within manufacturer's specifications.

Waste Generation/Treatment Log

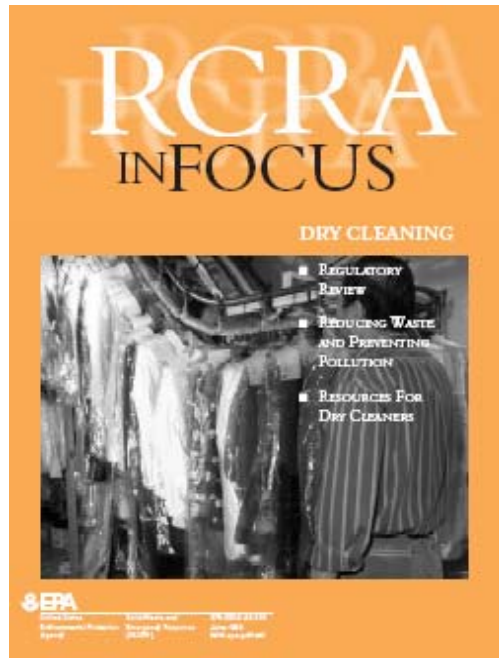
Waste Type	Date	Amount	Units
Still Bottom/Muck			pounds
Lint Filter			pounds
Atom/Mister Filter			pounds
Contact/Sep. Water			gallons

Dry Cleaning Hazardous Waste

RCRA In Focus: Dry Cleaning in English and Korean

www.epa.gov/epaoswer/hazwaste/id/infocus/dryclean.pdf

www.epa.gov/epaoswer/hazwaste/id/infocus/k99005k.pdf



APC Secondary Carbon Adsorber Monitoring

	Week	1	2	3	4	5
Is Perc concentration less than 100 PPM? (for machines that vent to carbon adsorbers immediately upon machine door opening)		Y N	Y N	Y N	Y N	Y N
Is Perc concentration less than 300 PPM? (for machines that vent to carbon adsorbers prior to machine door opening)		Y N	Y N	Y N	Y N	Y N

For perc machines with *non-vented* carbon adsorbers

- Must determine *weekly* that perc concentration is less than 300 ppm.
- Perc concentration must be measured by *colorimetric detector tube* or *perc (PCE) gas analyzer* in space above clothes in rear of dry cleaning machine drum right after opening machine door.
- Colorimetric detector tube or perc gas analyzer must be designed to measure to 300 ppm by volume with accuracy within 75 ppm.

More Monitoring and Record Keeping Required

- At least each month, must use halogenated hydrocarbon detector or PCE (perc) gas analyzer to check all the same components that you check weekly for leaks by perceptible inspection (feel, sight, smell).
- Leak checks must be done while machine is operating.
- Halogenated hydrocarbon detector or perc gas analyzer must be able to detect perc at concentration of at least 25 ppm. Halogenated HydroCarbon Detectors are the cheapest and will give off a recognizable visual or audible alarm when a leak greater than 25 ppm is found.
- Date and results of all inspections, monitoring, and repairs must be recorded—It is easiest to use the dry cleaning calendar for this.

Requires notification of compliance status by July 27, 2008

Each owner or operator of a dry cleaner must submit to DEQ and EPA by registered mail a Notification of Compliance Status by July 27, 2008. This notice must include the following:

- Name and address of owner or operator
- Address/physical location of shop
- Is shop located in a building with a residence?
- Is shop in a building with no other tenants, leased space, or owner occupied?
- Yearly perc consumption
- Certification that you comply with the federal dry cleaning rule found in Sec.63.322

DEQ will provide form with next year's calendar.

Special rules for dry cleaners co-located in residential building

Facilities with perc machines installed before December 21, 2005:

- May not use transfer machines.
- May use existing perc machine until wears out but no later than December 21, 2020.
- May not relocate existing perc machine to the shop.
- Must use PCE (perc) Gas analyzer to check for leaks.

Special rules for dry cleaners co-located in residential building

Facilities with perc machines installed between December 21, 2005 and July 13, 2006:

- May not use transfer machines
- May use existing perc machine within a vapor barrier enclosure
 - Exhaust system must operate when machine operates and during maintenance
 - Door to enclosure must be kept closed. Open only when people enter or exit the enclosure.
- Must be “generation 4” machine with refrigerated condenser and carbon adsorber.
- May not use perc on or after July 27, 2009

Special rules for dry cleaners co-located in residential building

Facilities with machines installed on or after July 13, 2006:

- May not use perc machines.

Questions?

Thank you for attending!