

## MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

## Dry-to-Dry Machine Inspection, Monitoring and Repair Record NESHAP: Perchloroethylene Dry Cleaning Facilities

40 CFR Part 63, Subpart M

Required by 1994 PA Act 451, as amended, and the Federal Clean Air Act of 1990. Failure to provide this information may result in penalties and/or imprisonment.

**INSPECTIONS:** All dry-cleaning facilities that use perchloroethylene (perc), except coin-operated machines operated by the customer, are required to inspect machine components for PERCEPTIBLE leaks and record the results. PERCEPTIBLE leaks are those that are detectable by odor, visual observation, such as pools or droplets of liquid, or touch when passing fingers over equipment. If a leak is detected, repairs must be made within 24 hours. If repair parts must be ordered, a written or verbal work order for the parts must be initiated within 2 working days of detecting the leak. Repairs must be completed within 5 working days after receipt of parts.

Facilities were to begin checking and documenting leaks as of December 20, 1993. Facilities designated as a large area or major source are required to conduct inspections on a weekly basis, and a small area source must perform inspections once every two weeks. If you have not been conducting inspections and/or recording the results, begin doing so immediately. Records of the inspection must remain on-site for 5 years.

Please print or type all information.

Facility Name		Facility Location			
Machine ID	Date	Date			
Inspection for Perceptible Leaks (Note Location of Leak if Found)	Leak	Date Part Ordered	Date Part Received	Date of Repair	
Hose and Pipe Connections	☐ Yes ☐ No				
Fittings, Couplings and Valves	☐ Yes ☐ No				
Heating Coils	☐ Yes ☐ No				
Cooling Coils	☐ Yes ☐ No				
Pumps	☐ Yes ☐ No				
Door Gasket and Seating	☐ Yes ☐ No				
Filter Gasket and Seating	☐ Yes ☐ No				
Solvent Tank and Containers	☐ Yes ☐ No				
Thermo Sensors	☐ Yes ☐ No				
Water Separator	☐ Yes ☐ No				
Muck Cooker	☐ Yes ☐ No				
Still	☐ Yes ☐ No				
Exhaust Damper	☐ Yes ☐ No				
Diverter Valve	☐ Yes ☐ No				
Cartridge Filter Housing	☐ Yes ☐ No				

THIS IS A MASTER COPY. PLEASE MAKE COPIES FROM THIS MASTER COPY.



MONITORING: All dry cleaning facilities that are required to have process vent control devices installed on their machines must comply with the monitoring requirements. Therefore, only facilities designated as small area sources that only operate EXISTING machines (those installed before December 9, 1991) will not have to monitor because process vent control is not required. For those facilities that have machines subject to the process vent control requirements, the following monitoring schedule must be complied with: Facilities must be monitoring NEW machines (installed on or after December 9, 1991) on December 20, 1993, or 30 days after installation, whichever is later. Facilities must begin monitoring EXISTING machines on September 23, 1996. Monitoring must be conducted on a weekly basis and results logged.

If the monitoring parameter values are not within the required range, then the facility must make repairs or adjustments to meet the required range. If repair parts must be ordered, a written or verbal order for the parts must be initiated within 2 working days of detecting such a parameter value. Repairs must be completed within 5 working days after receipt of parts. Records must remain onsite for 5 years.

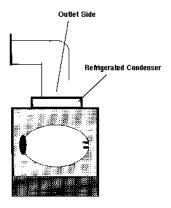
Please print or type all information.

Plant Name	Plant Location	Plant Location			
Machine ID	Date				
Check Emission Control Devices	PPM¹ or Temp²	Date Part Ordered	Date Part Received	Date of Repair	
(A) Refrigerated condenser on dry-to-dry machine.	outlet= deg C or F				
(B) Carbon adsorber on dry-to-dry machine or supplemental carbon adsorber-exhaust passes through it immediately upon door opening.	PPM				
(C) Supplemental carbon adsorber-exhaust passes through it before door is opened.	PPM				

- Parts per million
- Degrees Celsius or Fahrenheit

**A - Refrigerated condenser on a dry-to-dry machine.** If you installed a refrigerated condenser on a dry-to-dry machine to meet the control requirements, then you must:

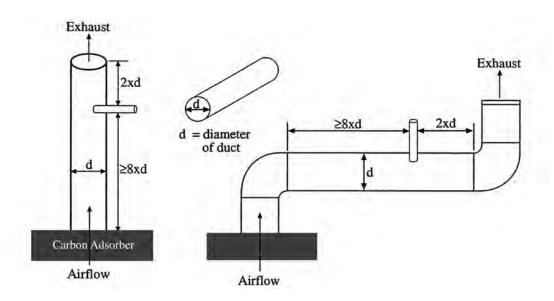
Measure the temperature of the air-perc mixture at the outlet of the refrigerated condenser. The temperature must be equal to or less than 45 deg F (7.2 deg C). The thermometer or temperature sensing device should measure up to 45 deg F (7.2 deg C) with an accuracy of 2 deg F (1.1 deg C).



**B - Carbon adsorber on a dry-to-dry machine.** If you installed a carbon adsorber on a dry-to-dry machine to meet the control requirements or (for major sources only) you installed a supplemental carbon adsorber on a dry-to-dry machine and the exhaust passes through a supplemental carbon adsorber immediately upon door opening:

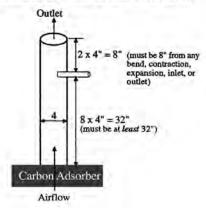
Use a colorimetric detector tube to measure the concentration of perc at the exhaust outlet of the carbon adsorber. The concentration should be less than or equal to 100 ppm by volume. Accuracy should be  $\pm 25$  ppm by volume. The measurement must be made after the last dry cleaning cycle prior to desorption of the carbon adsorber. A sampling port for monitoring within the exhaust outlet of the carbon adsorber must be provided that is easily accessible: located at least eight times the diameter of the stack or duct downstream from any flow disturbance (bend, expansion, contraction or outlet); not downstream from any other inlet and two times the diameter of the stack or duct upstream from any flow disturbance.

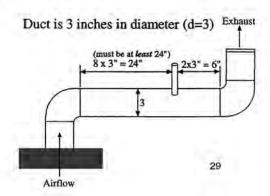




## Duct is 4 inches in diameter (d=4)

## Example:





**C - Supplemental carbon adsorber.** If you installed a supplemental carbon adsorber on a dry-to-dry machine to meet the control requirements and the exhaust passes through the supplemental carbon adsorber before the door is opened:

Use a colorimetric detector tube to measure the concentration of perc inside the open space at the rear end of the drum immediately after door opening. The concentration must be less than or equal to 300 ppm by volume. The measurement should be made after the last dry cleaning cycle. The accuracy of the tube should be  $\pm 75$  ppm by volume.

