

Drycleaning NESHAP Compliance Summary

Dry-to-dry machines installed after December 9, 1991 using a refrigerated to control emissions of Perchloroethylene

Forms, logs, documents and information regarding this NESHAP can be obtained from <http://www.in.gov/idem/ctap/2358.htm>

Notify IDEM within **30 days** of opening a new Perc drycleaning facility or upon a change.

Air-perc vapor must pass through the refrigerated condenser several times per operation.

Keep all drycleaning machine doors closed, except when loading and unloading.

Keep machine manuals on-site and operate machine according to manufacturer's instructions.

Drain filters for a minimum of **24** hours in a closed container or housing to reclaim perc before disposing of filters.

Machines installed after **December 21, 2005** must include a non-vented carbon adsorber or a secondary vapor recovery unit (comparable to a **4th** and **5th** **generation** machine described below) prior to the door of the machine being opened.

On the first business day of each month, record the amount of Perc purchased during the previous month and the total for the previous **12 months**. Please keep the Perc receipts and the rolling total log together. Each entry in the log must have a receipt. Even if you do not purchase any Perc in a month, you must record zero gallons and calculate your rolling total.

Keep all perc and perc wastes in closed, non-leaking containers. Containers for separator water may be uncovered, as necessary, for proper operation of the machine and still.

Maintain a log of vapor leak inspections to be conducted **biweekly** if consumption/usage of Perchloroethylene has never exceeded **140** gallons (**530** liters); otherwise, **weekly**.

Vapor leak inspections shall be conducted **monthly** while the component is in operation using a halogenated hydrocarbon analyzer or perc gas analyzer.

If leaks are detected, they must be repaired within **24 hours**, unless parts must be ordered. If parts must be ordered, they must be ordered within **2 working days** and installed within **5 working days** of receiving the parts.

The log should also include monitoring for temperature or the refrigeration system recorded **weekly**.

If the **temperature on the outlet side of the refrigerated condenser** prior to the end of the drying cycle is greater than **45 °F**, the machine must be repaired within **24 hours**, unless parts must be ordered. If parts must be ordered, they must be ordered within **2 working days** and installed within **5 working days** of receiving the parts.

As an alternative, the **refrigeration system high and low pressure** can be monitored during the drying phase to determine if it is within the range specified in the manufacturer's operating instructions. If outside the ranges, the machine must be repaired within **24 hours**, unless parts must be ordered. If parts must be ordered, they must be ordered within **2 working days** and installed within **5 working days** of receiving the parts.

Keep all records **5 years**, including perc purchase receipts.

Air drawn into the drycleaning machine when the door of the machine is open shall be prevented from passing through the refrigerated condenser.

1st Generation - Transfer Machine

2nd Generation - Dry-to-Dry Vented Machine

3rd Generation - Dry-to-Dry Enclosed Machine - the drying air is continuously recirculated within a closed system. This design feature distinguishes these machines from 2nd generation machines. Typically, a refrigerated condenser is used instead of a water cooler to remove solvent vapour from the recirculated drying air.

4th Generation - Dry-to-Dry Enclosed Machine with Carbon Adsorber - This machine is a modified 3rd generation machine in which a secondary vapor recovery unit (i.e., a carbon adsorber) is used to further reduce PERC emissions from the drum before the basket door is opened.

5th Generation - Dry-to-Dry Enclosed Machine with Carbon Adsorber and PERC Sensor - Unlike the timer control for the drying cycle on 4th generation machines, a sensor measures the PERC vapour concentration in the basket.

Regarding relocation of a machine which changes ownership, a **3rd generation** machine would need to include a secondary vapor recovery unit much like what is typically found on a **4th** and **5th generation** machine.