

RULE 410.6A Petroleum Solvent Dry Cleaning Operations - Adopted 5/6/91

I. Applicability

This Rule applies to petroleum solvent washers, dryers, solvent filters, settling tanks, vacuum stills, and other containers and conveyors of petroleum solvents that are used in petroleum solvent dry cleaning facilities.

II. Definitions

- A. Cartridge Filter: a discrete filter unit containing both filter paper and activated carbon that traps and removes contaminants from petroleum solvents, together with the piping and ductwork used in the installation of this device.

- B. Dryer: a machine used to remove petroleum solvents from articles of clothing or other textile or leather goods, after washing and removing of excess petroleum solvent, together with the piping and ductwork used in the installation of this device.

- C. Leak: the dripping of liquid petroleum solvent at a rate of more than three drops per minute from equipment in organic service; or an emission of organic compounds which causes a portable hydrocarbon detection instrument to register at least 10,000 ppm a methane, as determined by EPA Method 21.

- D. Liquid and Vapor Leak: liquid and vapor leaks shall be determined by visual inspection of the following sources:
 - 1. Hose connections, union, couplings and valves;
 - 2. Machine door gasket and seating;
 - 3. Filter head gasket and seating;
 - 4. Pumps;
 - 5. Base tanks and storage containers;
 - 6. Water separators;
 - 7. Filter sludge recovery;
 - 8. Distillation unit;
 - 9. Diverter valves;

10. Saturated lint from lint basket; and

11. Cartridge filters.

- E. Petroleum Solvent Dry Cleaner: a dry cleaning facility that uses petroleum solvent in a combination of washers, dryers, filters, stills, and settling tanks.
- F. Petroleum Solvent: any clear petroleum distillate having a minimum flash point of 38 C (100 F), and the following distillation ranges: not less than 50% over at 177 C (350 F), 90% over at 190 C (375 F), and the end point not higher than 210 C (410 F). The distillation is performed at standard conditions.
- G. Portable Hydrocarbon Detection Instrument: a hydrocarbon analyzer which uses the flame ionization detection or thermal conductivity methods and satisfies Method 21, 40 CFR Part 60. The instrument shall be equated to calibrating on methane and sampling at one liter per minute.
- H. Solvent Recovery Dryer: a class of dry cleaning dryers that employs a condenser to condense and recover solvent vapors evaporated in a closed-loop stream of heated air, together with the piping and ductwork used in the installation of this device.
- I. Washer: a machine which agitates fabric articles in a petroleum solvent bath and spins the articles to remove the solvent, together with the piping and ductwork used in the installation of this device.

III. Exemptions

Dry cleaning facilities which use perchloroethylene dry cleaning solvents exclusively are not subject to this Rule.

IV. Requirements

A petroleum solvent dry cleaner shall comply with all of the following requirements.

- A. Petroleum solvent dry cleaning equipment shall not be operated if solvent liquid and/or vapor is leaking from any portion of the equipment.
- B. Solvents shall be stored in closed containers, except where closed containers are prohibited by law, regulation, or fire control authority.
- C. All washer lint traps, button traps, access doors and other parts of the equipment where solvent may be exposed to the atmosphere shall be kept closed at all times except as required for proper operation or maintenance.

- D. All wastes from dry cleaning facilities subject to Department of Health Services regulation shall be stored, transported and disposed of in accordance with Department of Health Services regulations.
- E. The used filtering material shall be put into a sealed container immediately after removal from the filter, unless the dry cleaning system is equipped with one of the following filtering systems:
1. Cartridge filters containing paper or carbon or a combination thereof which are fully drained in a sealed filter housing for at least 24 hours before being discarded, or 12 hours if the filter is dried in a dryer vented to an emission control device; or
 2. Reduce the petroleum solvent content in all filtration wastes to 1.0 kilograms or less per 100 kilograms dry weight of articles dry cleaned, before disposal, and exposure to the atmosphere.
- F. A clearly visible label specifying leak inspection and leak repair cycle information for petroleum solvent dryers shall be posted. Such information should state:
- "To protect against fire hazards, loss of valuable solvents, and emissions of solvents to the atmosphere, periodic inspection of this equipment for evidence of leaks and prompt repair of any leaks is recommend. The EPA recommends that the equipment be inspected every 15 days. Each owner or operator shall repair all petroleum solvent vapor and liquid leaks within 3 working days after identifying the sources of the leaks. If necessary repair parts are not on hand the owner or operator shall order these parts within 3 working days after identifying the sources of the leaks. If necessary repair parts are not on hand the owner or operator shall order these parts within 3 working days, and repair the leaks no later than 3 working days following the arrival of the necessary parts."
- G. Articles which have been cleaned shall be transferred to the dryer within five minutes after they are received from the washer, or shall be stored in closed transfer carts.
- H. Emission Control Requirements: A person shall not operate any petroleum solvent dry cleaner unless one of the following requirements is satisfied;
1. Add-On Control Device: All exhaust gases from drying tumblers, washers, and cabinets are vented through a control device, which reduces the total emissions of petroleum solvent vapors by at least 90 percent by weight.
 2. Solvent Recovery Dryer: A solvent recovery dryer that recovers at least 90 percent of petroleum solvent by weight shall be installed. For the purpose of determining compliance with the 90 percent recovery efficiency of this Subsection, 3 kilograms of petroleum solvent emitted per 100 kilograms dry weight of articles cleaned shall be deemed to be in compliance.

- I. The flow rate of recovered solvent from the solvent recovery dryer at the termination of the recovery cycle shall not exceed 0.05 liters per minute.

V. **Administrative Requirements**

A. **Record Keeping**

The following records shall be retained for a minimum of two years and made available for inspection by the Control Officer upon request.

1. **Usage Records**: Any person seeking to satisfy the requirements of this Rule shall maintain purchase and actual usage records showing amounts of solvents purchased and use.
2. **Solvent Filtration Records**: Any person subject to the requirements of this Rule shall maintain records of pre-washed weight of articles cleaned per load.
3. **Solvent Filtration Waste Records**: Any person subject to the requirements of this Rule shall maintain records which indicated the amount of volatile organic compounds contained in the filtration waste material per 100 kilograms dry weight of articles dry cleaned.

B. **Test Methods**

1. **Determination of Emissions**: Emissions of petroleum solvent subject to the Rule shall be determined using EPA reference Method 18, EPA Method 25 and EPA Method 25A.
2. The flow rate of recovered solvent from the solvent recovery dryer shall be determined by EPA CFR Part 60, Subpart JJJ, § 60.624.
3. Leak detection shall be performed with a portable hydrocarbon detection instrument in accordance with EPA Method 21.

VI. **Compliance Schedule**

- A. The owner or operator of any existing petroleum dry cleaning facility subject to this Rule shall comply with the following increments of progress:
 1. By August 1, 1991, submit to the Control Officer a plan describing the methods to be used to comply with the applicable Rule.

2. By November 1, 1991, submit a completed application for Authority to Construct if needed.
 3. By November 1, 1992, be in full compliance.
- B. The owner of any new petroleum dry cleaning facility shall be in full compliance with this Rule upon initial operation.