

WEST VIRGINIA LEGISLATIVE RULES
BOARD OF HEALTH

Coin-operated Dry Cleaning Establishments

Chapter 16-1
Series 22
(1983)

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Subject: Coin-operated Dry Cleaning Establishments

Section 1. General

1.1. Scope - These legislative rules establish requirements for the protection of workmen and the general public from vapors and mists of solvents used in, released from or disseminated by coin-operated dry cleaning machines.

1.2. Authority - These legislative rules are issued under the authority of and related to Chapter 16, Article 1, Section 7 of the West Virginia Code of 1931, as amended.

1.3. Filing Date - These legislative rules were filed on the 28th day of November 1967, in the Secretary of State's office.

1.4. Effective Date - These legislative rules became effective on the 29th day of December 1967.

1.5. Refiling Date - These legislative rules were refiled pursuant to Chapter 29A, Article 2, Section 5 of the West Virginia Code of 1931, as amended on the 30th day of December 1982, in the Secretary of State's office.

Section 2. Application and Enforcement

2.1. Application - These legislative rules apply to the owners and operators of coin-operated dry cleaning establishments.

2.2. Enforcement - The enforcement of the legislative rules is vested with the director of the West Virginia department of health or his lawful designee.

Section 3. Definitions

3.1. Coin-operated Dry Cleaning - Means the business or process of cleaning wearing apparel, cloth, fabrics, and textiles of any type or kind, by immersion and agitation, or immersion only, in a non-aqueous solvent applied by means of a mechanical appliance which may be loaded, activated, or unloaded by the customer.

3.2. Establishment - Means the area of an establishment which is available to customers in order that they may make use of a coin-operated dry cleaning machine.

3.4. Maintenance Area - Means those portions of an establishment in which all working or mechanical portions of the dry cleaning appliances and appurtenances, except the customer side of the appliance, are accessible.

Section 4. General Requirements

4.1. No person shall erect, construct, maintain, or operate any establishment except in accordance with the provisions of this regulation.

4.2. No establishment shall be operated or maintained in any basement, cellar, or other space below the ground level, or in any story above the first story in any building unless approved by agencies concerned with proper safeguards to public health and safety.

4.3. No building containing an establishment shall be used for any other purpose than commercial operation. It shall not be used for occupancy as an apartment or other dwelling unless approved by agencies concerned with proper safeguards to public health and safety.

4.4. Enclosures for a steam boiler, furnace, steam generator, or open flame burner shall not be interconnected with dry cleaning machine enclosures and must obtain air for combustion from the outside atmosphere or

other areas, but not from the dry cleaning machine enclosure.

4.5. Only the solvent for which the equipment was designed shall be used. Each solvent container shall bear a label specifying the contents. A tradename alone is not considered in compliance with this requirement.

4.6. The dry cleaning units shall be so designed that they are inoperable when their front or loading doors are open. Furthermore, such dry cleaning devices shall be so designed that the loading doors cannot be opened during the normal operating cycle, nor during an abnormal interruption thereof due to electrical, mechanical, or power failure. Each dry cleaning unit shall have a drying cycle of sufficient duration to prevent the opening of the loading doors until after all cleaning solvent has been removed from the cleaned items within the unit.

4.7. No solvent shall be settled or stored in any open or unprotected vessels or tanks.

4.8. All transfers of solvents shall be effected through continuous piping and all pipe connections or threaded joints shall be made with a suitable sealing compound and all outlets or drain lines shall be drained to settling or storage tanks. Daily make-up solvent may be transferred from storage to machine using flexible solvent resistant tubing or a covered container rather than through continuous piping if maintenance area ventilation described in Section 5.5 is in effect during the transfer.

4.9. The discharge of lint to the outside atmosphere shall be prohibited.

4.10. Filter residue and other residues containing solvent shall be stored in suitable covered containers and disposed of in accordance with existing disposal regulations. Containers shall be locked if stored outside

of building.

4.11. Properly fitted respiratory protective equipment of adequate capacity approved by the U. S. Bureau of Mines for protection against organic vapors shall be provided for maintenance personnel and must be kept in good repair and available for immediate use. Maintenance personnel shall be instructed in the proper use and limitations of such protective equipment.

Section 5. Installation and Operation Requirements

5.1. Only the front or customer side of the dry cleaning machine shall be exposed in the customer area. Access doors to the maintenance area shall be kept locked.

5.2. The maintenance area shall be separated from the front of the machine by suitable partitions.

5.3. As a means of minimizing any solvent build-up in the customer area and also to control any minor solvent leakage, mechanical exhaust ventilation shall be installed to maintain air concentrations of the solvent at less than 0.4 of the applicable Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists in the customer area.

This exhaust ventilation shall be provided on a continuous basis while the establishment is open for business. The fan motor wiring shall be such that the dry cleaning equipment cannot be operated unless the fan system is in operation.

Although the performance criterion above may be met, in a well-maintained and properly-operated establishment, by considerably lower ventilation rates, the following are offered at the maximum which should be

necessary:

No. of Machines	Air Flow Per Machine (cfm)
1 - 3	500
4 - 8	400
9 - 16	375
17 or more	360

5.4. Grille openings are to be installed in the partition to facilitate air movement and should be sized on the basis of 500 cfm per square foot of net grille area. Grilles shall be placed as close to the machines as possible, preferably near the base or just above the machines.

5.5. One or more general ventilation fans, wired independently, shall be provided to exhaust air from the maintenance area to the outside if the event of accidental solvent vapor dispersion. Air flow of at least 1000 cfm per machine shall be exhausted when these fans and those required by Section 5.3 are operated simultaneously.

5.6. The cleaning equipment must be provided with an exhaust system which maintains a minimum of 100 feet per minute face velocity through the loading door whenever the door is open. The ductwork connections from this system must be sealed (soldered or taped) and the discharge stack extended to a height above the highest point of the roof line.

5.7. A satisfactory means of preventing liquid leaks from escaping the enclosure must be provided. This shall include some method of "diking" the floor of the enclosure or machine base to hold a liquid volume equal to the maximum quantity of solvent which might possibly escape from a single

system. Some means must be provided for draining solvent in the event of a leak and containment. This can be done by gravity flow with the solvent transferred to a standby holding tank. This tank shall be vented to the outside.

5.8. The establishment shall be checked twice weekly and kept in good repair. All maintenance personnel must be familiar with necessary machine repairs and instructed as to the solvent hazards.

5.9. A supply of make-up air (heated to at least 60°F.) equal to or greater than the total volume of air exhausted from the plant shall be provided in order to eliminate any negative pressure conditions which might otherwise develop. The emergency ventilation capacity required in Section 5.5 need not be considered as part of the total volume of air exhausted from the plant.

5.10. Exhaust ventilation stacks from dry cleaning machines shall be located as far as possible from combustion air or dryer air intakes. (The concentration of solvent vapor in combustion air shall not exceed 5 parts per million parts of air.)

5.11. Use of devices or substances which are intended to mask the solvent odor shall be prohibited.

5.12. Detailed installation, operation, and maintenance manuals for equipment must be made available to authorized representative of agencies having jurisdiction over the installation.

5.13. Warning Signs - Instructions posted on machines or within the establishment shall include warnings as to the potential dangers associated with cleaning solvents and information as to articles which should not be cleaned because they might retain solvent.

5.14. Emergencies - A trained operator shall be available or on call as long as the premises are open for business. A telephone shall be listed for emergency assistance.