

capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source.

*Refrigerated condenser* means a vapor recovery system into which an air-perchloroethylene gas-vapor stream is routed and the perchloroethylene is condensed by cooling the gas-vapor stream.

*Refrigerated condenser coil* means the coil containing the chilled liquid used to cool and condense the perchloroethylene.

*Residence* means any dwelling or housing in which people reside excluding short-term housing that is occupied by the same person for a period of less than 180 days (such as a hotel room).

*Responsible official* means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more dry cleaning facilities;

(2) For a partnership: A general partner;

(3) For a sole proprietorship: The owner; or

(4) For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking official.

*Room enclosure* means a stationary structure that encloses a transfer machine system, and is vented to a carbon adsorber or an equivalent control device during operation of the transfer machine system.

*Source*, for purposes of this subpart, means each dry cleaning system.

*Still* means any device used to volatilize and recover perchloroethylene from contaminated perchloroethylene.

*Temperature sensor* means a thermometer or thermocouple used to measure temperature.

*Transfer machine system* means a multiple-machine dry cleaning operation in which washing and drying are performed in different machines. Examples include, but are not limited to:

- (1) A washer and dryer(s);
- (2) A washer and reclaimer(s); or
- (3) A dry-to-dry machine and reclaimer(s).

*Vapor barrier enclosure* means a room that encloses a dry cleaning system and is constructed of vapor barrier material that is impermeable to perchloroethylene. The enclosure shall be equipped with a ventilation system that exhausts outside the building and is completely separate from the ventilation system for any other area of the building. The exhaust system shall be designed and operated to maintain negative pressure and a ventilation rate of at least one air change per five minutes. The vapor barrier enclosure shall be constructed of glass, plexiglass, polyvinyl chloride, PVC sheet 22 mil thick (0.022 in.), sheet metal, metal foil face composite board, or other materials that are impermeable to perchloroethylene vapor. The enclosure shall be constructed so that all joints and seams are sealed except for inlet make-up air and exhaust openings and the entry door.

*Vapor leak* means a PCE vapor concentration exceeding 25 parts per million by volume (50 parts per million by volume as methane) as indicated by a halogenated hydrocarbon detector or PCE gas analyzer.

*Washer* means a machine used to clean articles by immersing them in perchloroethylene. This includes a dry-to-dry machine when used with a reclaimer.

*Water separator* means any device used to recover perchloroethylene from a water-perchloroethylene mixture.

*Year or Yearly* means any consecutive 12-month period of time.

[58 FR 49376, Sept. 22, 1993, as amended at 71 FR 42744, July 27, 2006]

**§ 63.322 Standards.**

(a) The owner or operator of each existing dry cleaning system and of each new transfer machine system and its ancillary equipment installed between December 9, 1991 and September 22, 1993 shall comply with either paragraph (a)(1) or (a)(2) of this section and shall comply with paragraph (a)(3) of this section if applicable.

- (1) Route the air-perchloroethylene gas-vapor stream contained within

## Environmental Protection Agency

## § 63.322

each dry cleaning machine through a refrigerated condenser or an equivalent control device.

(2) Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a carbon adsorber installed on the dry cleaning machine prior to September 22, 1993.

(3) Contain the dry cleaning machine inside a room enclosure if the dry cleaning machine is a transfer machine system located at a major source. Each room enclosure shall be:

(i) Constructed of materials impermeable to perchloroethylene; and

(ii) Designed and operated to maintain a negative pressure at each opening at all times that the machine is operating.

(b) The owner or operator of each new dry-to-dry machine and its ancillary equipment and of each new transfer machine system and its ancillary equipment installed after September 22, 1993:

(1) Shall route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser or an equivalent control device;

(2) Shall eliminate any emission of perchloroethylene during the transfer of articles between the washer and dryer(s); and

(3) Shall pass the air-perchloroethylene gas-vapor stream from inside the dry cleaning machine drum through a carbon adsorber or equivalent control device immediately before or as the door of the dry cleaning machine is opened if the dry cleaning machine is located at a major source.

(c) The owner or operator shall close the door of each dry cleaning machine immediately after transferring articles to or from the machine, and shall keep the door closed at all other times.

(d) The owner or operator of each dry cleaning system shall operate and maintain the system according to the manufacturers' specifications and recommendations.

(e) Each refrigerated condenser used for the purposes of complying with paragraph (a) or (b) of this section and installed on a dry-to-dry machine, dryer, or reclaimer:

(1) Shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating;

(2) Shall be monitored according to § 63.323(a)(1); and

(3) Shall prevent air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser.

(f) Each refrigerated condenser used for the purpose of complying with paragraph (a) of this section and installed on a washer:

(1) Shall be operated to not vent the air-perchloroethylene gas-vapor contained within the washer to the atmosphere until the washer door is opened;

(2) Shall be monitored according to § 63.323(a)(2); and

(3) Shall not use the same refrigerated condenser coil for the washer that is used by a dry-to-dry machine, dryer, or reclaimer.

(g) Each carbon adsorber used for the purposes of complying with paragraph (a) or (b) of this section:

(1) Shall not be bypassed to vent or release any air-perchloroethylene gas-vapor stream to the atmosphere at any time; and

(2) Shall be monitored according to the applicable requirements in § 63.323 (b) or (c).

(h) Each room enclosure used for the purposes of complying with paragraph (a)(3) of this section:

(1) Shall be operated to vent all air from the room enclosure through a carbon adsorber or an equivalent control device; and

(2) Shall be equipped with a carbon adsorber that is not the same carbon adsorber used to comply with paragraph (a)(2) or (b)(3) of this section.

(i) The owner or operator of an affected facility shall drain all cartridge filters in their housing, or other sealed container, for a minimum of 24 hours, or shall treat such filters in an equivalent manner, before removal from the dry cleaning facility.

(j) The owner or operator of an affected facility shall store all PCE and wastes that contain PCE in solvent tanks or solvent containers with no perceptible leaks. The exception to this

requirement is that containers for separator water may be uncovered, as necessary, for proper operation of the machine and still.

(k) The owner or operator of a dry cleaning system shall inspect the system weekly for perceptible leaks while the dry cleaning system is operating. Inspection with a halogenated hydrocarbon detector or PCE gas analyzer also fulfills the requirement for inspection for perceptible leaks. The following components shall be inspected:

- (1) Hose and pipe connections, fittings, couplings, and valves;
- (2) Door gaskets and seatings;
- (3) Filter gaskets and seatings;
- (4) Pumps;
- (5) Solvent tanks and containers;
- (6) Water separators;
- (7) Muck cookers;
- (8) Stills;
- (9) Exhaust dampers;
- (10) Diverter valves; and
- (11) All Filter housings.

(l) The owner or operator of a dry cleaning facility with a total facility consumption below the applicable consumption levels of § 63.320(d) or (e) shall inspect the components listed in paragraph (k) of this section biweekly for perceptible leaks while the dry cleaning system is operating.

(m) The owner or operator of a dry cleaning system shall repair all leaks detected under paragraph (k) or (o)(1) of this section within 24 hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within 2 working days of detecting such a leak. Such repair parts shall be installed within 5 working days after receipt.

(n) If parameter values monitored under paragraphs (e), (f), or (g) of this section do not meet the values specified in § 63.323(a), (b), or (c), adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If repair parts must be ordered, either a written or verbal order for such parts shall be initiated within 2 working days of detecting such a parameter value. Such repair parts shall be installed within 5 working days after receipt.

(o) Additional requirements:

(1) The owner or operator of a dry cleaning system shall inspect the com-

ponents listed in paragraph (k) of this section for vapor leaks monthly while the component is in operation.

(i) Area sources shall conduct the inspections using a halogenated hydrocarbon detector or PCE gas analyzer that is operated according to the manufacturer's instructions. The operator shall place the probe inlet at the surface of each component interface where leakage could occur and move it slowly along the interface periphery.

(ii) Major sources shall conduct the inspections using a PCE gas analyzer operated according to EPA Method 21.

(iii) Any inspection conducted according to this paragraph shall satisfy the requirements to conduct an inspection for perceptible leaks under § 63.322(k) or (l) of this subpart.

(2) The owner or operator of each dry cleaning system installed after December 21, 2005, at an area source shall route the air-PCE gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser and pass the air-PCE gas-vapor stream from inside the dry cleaning machine drum through a non-vented carbon adsorber or equivalent control device immediately before the door of the dry cleaning machine is opened. The carbon adsorber must be desorbed in accordance with manufacturer's instructions.

(3) The owner or operator of any dry cleaning system shall eliminate any emission of PCE during the transfer of articles between the washer and the dryer(s) or reclaimer(s).

(4) The owner or operator shall eliminate any emission of PCE from any dry cleaning system that is installed (including relocation of a used machine) after December 21, 2005, and that is located in a building with a residence.

(5)(i) After December 21, 2020, the owner or operator shall eliminate any emission of PCE from any dry cleaning system that is located in a building with a residence.

(ii) Sources demonstrating compliance under Section 63.320(b)(2)(ii) shall comply with paragraph (o)(5)(ii)(A) through (C), in addition to the other applicable requirements of this section:

(A) Operate the dry cleaning system inside a vapor barrier enclosure. The exhaust system for the enclosure shall

## Environmental Protection Agency

## § 63.323

be operated at all times that the dry cleaning system is in operation and during maintenance. The entry door to the enclosure may be open only when a person is entering or exiting the enclosure.

(B) Route the air-perchloroethylene gas-vapor stream contained within each dry cleaning machine through a refrigerated condenser and pass the air-perchloroethylene gas-vapor stream from inside the dry cleaning drum through a carbon adsorber or equivalent control device immediately before the door of the dry cleaning machine is opened. The carbon adsorber must be desorbed in accordance with manufacturer's instructions.

(C) Inspect the machine components listed in paragraph (k) of this section for vapor leaks weekly while the component is in operation. These inspections shall be conducted using a halogenated hydrocarbon detector or PCE gas analyzer that is operated according to the manufacturer's instructions. The operator shall place the probe inlet at the surface of each component interface where leakage could occur and move it slowly along the interface periphery.

[58 FR 49376, Sept. 22, 1993, as amended at 61 FR 49265, Sept. 19, 1996; 71 FR 42744, July 27, 2006]

### § 63.323 Test methods and monitoring.

(a) When a refrigerated condenser is used to comply with § 63.322(a)(1) or (b)(1):

(1) The owner or operator shall monitor on a weekly basis the parameters in either paragraph (a)(1)(i) or (ii) of this section.

(i) The refrigeration system high pressure and low pressure during the drying phase to determine if they are in the range specified in the manufacturer's operating instructions.

(ii) The temperature of the air-perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser on a dry-to-dry machine, dryer, or reclaimer with a temperature sensor to determine if it is equal to or less than 7.2 °C (45 °F) before the end of the cool-down or drying cycle while the gas-vapor stream is flowing through the condenser. The temperature sensor shall be used according to the manufac-

turer's instructions and shall be designed to measure a temperature of 7.2 °C (45 °F) to an accuracy of ±1.1 °C (±2 °F).

(2) The owner or operator shall calculate the difference between the temperature of the air-perchloroethylene gas-vapor stream entering the refrigerated condenser on a washer and the temperature of the air-perchloroethylene gas-vapor stream exiting the refrigerated condenser on the washer weekly to determine that the difference is greater than or equal to 11.1 °C (20 °F).

(i) Measurements of the inlet and outlet streams shall be made with a temperature sensor. Each temperature sensor shall be used according to the manufacturer's instructions, and designed to measure at least a temperature range from 0 °C (32 °F) to 48.9 °C (120 °F) to an accuracy of ±1.1 °C (±2 °F).

(ii) The difference between the inlet and outlet temperatures shall be calculated weekly from the measured values.

(b) When a carbon adsorber is used to comply with § 63.322(a)(2) or exhaust is passed through a carbon adsorber immediately upon machine door opening to comply with § 63.322(b)(3), the owner or operator shall measure the concentration of PCE in the exhaust of the carbon adsorber weekly with a colorimetric detector tube or PCE gas analyzer. The measurement shall be taken while the dry cleaning machine is venting to that carbon adsorber at the end of the last dry cleaning cycle prior to desorption of that carbon adsorber or removal of the activated carbon to determine that the PCE concentration in the exhaust is equal to or less than 100 parts per million by volume. The owner or operator shall:

(1) Use a colorimetric detector tube or PCE gas analyzer designed to measure a concentration of 100 parts per million by volume of PCE in air to an accuracy of ±25 parts per million by volume; and

(2) Use the colorimetric detector tube or PCE gas analyzer according to the manufacturer's instructions; and

(3) Provide a sampling port for monitoring within the exhaust outlet of the carbon adsorber that is easily accessible and located at least 8 stack or