STATE OF NEW YORK

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2025-2026 Regular Sessions

IN ASSEMBLY

January 16, 2025

Introduced by M. of A. ROSENTHAL -- Multi-Sponsored by -- M. of A. LEVENBERG -- read once and referred to the Committee on Environmental Conservation

AN ACT to amend the environmental conservation law, in relation to regulating perchloroethylene dry cleaning facilities

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

Section 1. Article 19 of the environmental conservation law is amended by adding a new title 13 to read as follows:

§ 19-1301. Definitions.

EXPLANATION--Matter in *italics* (underscored) is new; matter in brackets [-] is old law to be omitted.

LBD05739-01-5

For the purpose of this title, the following definitions shall apply:

(1) Adsorptive cartridge filter. A replaceable cartridge filter that contains diatomaceous earth or activated clay as the filter medium.

(2) Ancillary equipment. The equipment used with a dry cleaning machine in a dry cleaning system including, but not limited to, emission control devices, pumps, filters, muck cookers, stills, solvent tanks, solvent containers, water separators, exhaust dampers, diverter valves, interconnecting piping, hoses and ducts.

(3) Articles. Clothing, garments, textiles, fabrics, leather goods, and the like, that are dry cleaned.

(4) Azeotropic control device. A dry cleaning control system where perc emissions from the dry cleaning machine are first cooled and condensed, and are then treated with water to further displace perc from the articles upon being returned to the dryer, condenser, and solvent storage tank. There is no exhaust to the atmosphere during the drying cycle.

(5) Carbon adsorber. An air cleaning device that consists of an inlet for exhaust gases from a dry cleaning machine; activated carbon in the form of a fixed bed, cartridge, or canister, as an adsorbent; an outlet for exhaust gases; and a system to regenerate, or reclaim saturated adsorbent.

(6) Cartridge filter. A replaceable cartridge filter that contains one of the following as the filter medium: paper, activated carbon, or paper and activated carbon. A cartridge filter contains no diatomaceous earth or activated clay. Cartridge filters include, but are not limited to: standard filters, split filters, "jumbo" filters, and all carbon polishing filters.

(7) Closed-loop machine. Dry cleaning equipment in which washing, extraction, and drying are all performed in the same single unit (also known as a dry-to-dry unit) and which recirculates perc-laden vapor through a primary control system (e.g. refrigerated condenser) with no exhaust to the atmosphere during the drying cycle. A closed-loop machine may allow for venting to the ambient air through a local exhaust ventilation system, such as a door fan, after the drying cycle is complete and only while the machine door is open.

(8) Co-located. Sharing a common wall, floor, or ceiling with a residence or business.

(9) Colorimetric detector tube. A glass tube (sealed prior to use), containing material impregnated with a chemical that is sensitive to perc and is designed to measure the concentration of perc in air.

(10) Commercial building. Any building where only commercial business is conducted, such as an office building or strip mall.

(11) Condenser. An air cleaning device that removes condensable vapors by a reduction in the temperature of the exhaust gases or, in the case of a surface condenser, by contact of the exhaust gases with structures that are cooled by a circulating cooling fluid.

(12) Converted machine. An existing vented machine that has been modified to be a closed-loop machine by eliminating the aeration step, installing a primary control system, and providing for recirculation of the perc-laden vapor with no exhaust to the atmosphere or workroom during the drying cycle. A converted machine may allow for venting to the ambient air through a local exhaust ventilation system, such as a door fan, after the drying cycle is complete and only while the machine door is open.

(13) Cool-down. The portion of the drying cycle that begins when the heating mechanism deactivates and the refrigerated condenser continues

to reduce the temperature of the air recirculating through the drum to reduce the concentration of perc in the drum.

(14) Desorption. Regeneration or stripping of an activated carbon bed, or any other type of vapor adsorber by removal of the adsorbed solvent using hot air, steam, or other means.

(15) Dip tank. A separate tank that contains perc and is used for purposes other than dry cleaning (e.g. waterproofing).

(16) Diverter valve. A flow control device that prevents room air from passing through a refrigerated condenser when the door of a dry cleaning machine is open.

(17) Door fan. A local exhaust ventilation system designed to provide for a minimum 100 fpm inward air velocity or equivalent into the effective door open area of a dry cleaning machine whenever the door is opened, and where the perc emissions are controlled by a carbon adsorber or equivalent control prior to venting to the outer air.

(18) Drum. The rotating cylinder or wheel of the dry cleaning machine that holds the articles being cleaned.

(19) Dry cleaning. The process used to remove soil, greases, paints and other unwanted substances from articles with the use of perc.

(20) Dry cleaning control system. Equipment (e.g. carbon adsorber, refrigerated condenser, azeotropic unit, etc.) or an air cleaning device used to reduce the amount of air pollutant or pollutants in an air stream prior to discharge to the atmosphere.

(21) Dry cleaning equipment. Any machine, device, or apparatus used to dry clean articles.

(22) Dry cleaning facility. An establishment with one or more dry cleaning systems.

(23) Dry cleaning system. All of the following equipment, devices, or apparatus associated with the perc dry cleaning operations, including, but not limited to: dry cleaning equipment; filter or purification systems; waste holding, treatment, or disposal systems; perc supply systems; dip tanks; pumps; gaskets; piping, ducting, fittings, valves, or flanges that convey perc-contaminated air; and dry cleaning control systems.

(24) Drying cabinet. A housing in which materials that have been previously dry cleaned in perc are dried instead of being dried by tumbling in a dry cleaning machine.

(25) Drying cycle. The operation used to actively remove the perc remaining in the materials after washing and extraction. For closed-loop machines, the heated portion of the cycle is followed by cool-down and may be extended beyond cool-down by the activation of a control system. The drying cycle begins when heating coils are activated and ends when the machine ceases rotation of the drum.

(26) Drying sensor. A device that senses when articles being cleaned are relatively dry and automatically controls the drying cycle. Drying sensors include but are not limited to: infrared analyzers, float switches, and resistance probes. The device detects the concentration of synthetic solvents in the drying air or that the liquid solvent recovery rate is at a minimal rate. The drying sensor extends the drying cycle for a minimum time beyond the activation point to dry articles.

(27) Dry-to-dry machine. A one-machine dry cleaning operation in which drying and washing are performed in the same machine.

(28) Dry-to-dry vented machine. Dry cleaning equipment in which washing, extraction, and drying are all performed in the same single unit and in which fresh air is introduced into the drum in the last step of

the drying cycle and exhausted to the outdoor atmosphere, either directly or through a control device (second generation equipment).

(29) Environmental training program. An initial course or a refresher course of the environmental training program, for owners and operators of perc dry cleaning operations that has been authorized by the department.

(30) Equivalent closed-loop vapor recovery system. A device or combination of devices that achieves, in practice, a perc recovery performance equal to or exceeding that of refrigerated condensers.

(31) Existing facility. Any facility that was permitted by this title or at which dry cleaning equipment was operated prior to the effective date of this title.

(32) Facility. Any structure or building or group of structures or buildings, owned by one person, and located on the same parcel or contiguous parcels, in which perc dry cleaning equipment is operated or set up to operate.

(33) Filter muck. The residue from a filter using loose diatomaceous earth, which must be replaced periodically.

(34) First generation equipment. Transfer machines where cleaning and drying (reclaiming) take place in separate machines with the manual transfer of articles from one machine to another.

(35) Fourth generation equipment. A primary closed-loop refrigerated dry cleaning machine that has a "secondary control system" (i.e. closed-loop refrigerated condenser with a drying sensor and an integral carbon adsorber).

(36) fpm. Feet per minute.

(37) Fugitive emissions. Those emissions of regulated air contaminants which could not reasonably pass through a stack, chimney, vent or other functionally-equivalent openings.

(38) Full-time employee. Any person who is employed at the dry cleaning facility and averages at least thirty hours per week in any ninety-day period.

(39) Full-size carbon unit. A carbon unit that is used to adsorb perc from a dry cleaning machine when the vapors are recirculating or venting from the drum during the drying cycle. (Normally used on first and second generation equipment).

(40) General exhaust ventilation system. A mechanical exhaust ventilation system consisting of fresh air make-up inlets and one or more exhaust fans in a dry cleaning facility, that primarily exhausts a dry cleaning workroom; also used with a room enclosure.

(41) Halogenated-hydrocarbon detector. A portable device capable of detecting vapor concentrations of perc and indicating an increasing concentration by emitting an audible signal or visual indicator that varies as the concentration changes.

(42) Liquid leak. A leak of liquid containing perc of more than one drop every three minutes.

(43) Local exhaust ventilation system. A mechanical exhaust ventilation system connected directly to vent a dry cleaning machine or other related dry cleaning equipment. For example, the exhaust system on a door fan for a third generation machine.

(44) Major source. A dry cleaning facility that emits or has the potential to emit more than 9.1 megagrams per year (10 tons per year) of perchloroethylene to the atmosphere. In lieu of measuring a facility's potential to emit perchloroethylene emissions or determining a facility's potential to emit perchloroethylene emissions, a dry cleaning facility is a major source if: (a) it includes only dry-to-dry machines

and has a total yearly perchloroethylene consumption greater than 8,000 liters (2,100 gallons) or, (b) it includes only transfer machine systems or both dry-to-dry machines and transfer machine systems and has a total yearly perchloroethylene consumption greater than 6,800 liters (1,800 gallons).

(45) Mixed-use facility. A facility that is co-located.

(46) Muck cooker. A device for heating filter muck to drive off perc vapors for reclaiming.

(47) New facility. A facility that was not used for the operation of any dry cleaning equipment prior to the effective date of this title.

(48) Occupancy. Any building or part of a building, excluding the dry cleaning facility.

(49) Openings. Any window, door or air intake.

(50) Perceptible leak. Any perc vapor or liquid leaks that are obvious from the odor of perc, pools or droplets of perc or the detection of gas flow by passing a finger over the surface of the equipment, or as detected by an appropriate portable monitoring instrument.

(51) Perc. A colorless volatile chlorinated hydrocarbon. Perc is also known as tetrachloroethylene and PCE. The chemical formula for perc is C1{2}C:CC1{2}. The CAS registry number for perc is 00127-18-4.

(51-a) Perc-based dry cleaning facility. All equipment, devices or apparatus associated with perc dry cleaning operations, including but not limited to: dry cleaning equipment; filter or purification systems; waste holding, treatment or disposal systems; perchloroethylene supply systems; dip tanks, pumps, gaskets, piping, ducting, fittings, valves or flanges that convey perc-contaminated air; and dry cleaning control systems.

(52) Perc-contaminated wastewater evaporator. A device that vaporizes wastewater through the addition of thermal energy, or through physical action.

(53) ppb. Parts per billion by volume in air or by weight in water.

(54) ppm. Parts per million by volume in air or by weight in water.

(55) Primary control system. A refrigerated condenser, or an equivalent closed-loop vapor recovery system approved by the department.

(56) Process ventilation emission. An emission from any dry cleaning machine normally vented to the outer air; that occurs during the aeration cycle and also when the machine door is open; excluding door fans on azeotropic and third generation equipment.

(57) Refrigerated condenser. A closed-loop vapor recovery system into which perc vapors are condensed by cooling below the dew point of the perc using a mechanical refrigerated system.

(58) Residential building. Any dwelling or housing that is owned, rented, or occupied by the same person for a period of one hundred eighty days or more in a year, excluding short-term housing such as a motel or hotel room rented and occupied by the same person for a period of less than one hundred eighty days.

(59) Room enclosure. A room that encloses the dry cleaning machine or equipment. It is constructed of material that is impermeable to perc and designed and operated to maintain negative pressure at all times that the equipment is operating and is used with a general exhaust ventilation system.

(60) Second generation equipment. Dry-to-dry vented, unrefrigerated dry cleaning machines properly vented to a control device such as a carbon adsorber, or azeotropic control device plus a small carbon adsorber, or equivalent.

(61) Secondary control system. A device or apparatus that reduces the concentration of perc in the recirculating air at the end of the drying cycle beyond the level achievable with a refrigerated condenser alone. (e.g. integral carbon adsorber used in fourth generation equipment).

(i) An "integral" secondary control system is designed and offered as an integral part of a production package with a single make and model of dry cleaning machine and primary control system.

(ii) An "add-on" secondary control system is designed or offered as a separate retrofit system for use on multiple machine makes and models.

(62) Self-service dry cleaning machine. A perc dry cleaning machine that is loaded, activated, or unloaded by the customer.

(63) Small carbon adsorbers. A carbon unit that is used to adsorb perc from the machine drum when the machine door is opened to remove clothes at the end of the drying cycle, (e.g. adsorbers used to control emissions from supplemental door fans and azeotropic control devices).

(64) Solvent mileage. The average weight of articles cleaned per volume of perc used.

(65) Solvent tank. Any container that is used to store perc prior to use in the dry cleaning operation and from which the perc is introduced into the drum of the machine at the start of the cleaning cycle.

(66) Stand-alone facility. A facility that is not co-located.

(67) Still. Distillation equipment used to volatilize and recover perc from contaminated solvent removed from the cleaned materials.

(68) Third generation equipment. A closed-loop dry cleaning machine equipped with a refrigerated condenser or other equivalent primary control system.

(69) Trained operator. A person who holds a certificate of completion for the initial course of an environmental training program and maintains such person's status by successfully completing refresher courses as required.

(70) Transfer machine. Perc dry cleaning equipment in which washing and extraction are performed in one unit and drying is performed in a separate unit (first generation equipment).

(71) Vapor adsorber. A bed of activated carbon or other adsorbent into which vapors are introduced and trapped for subsequent desorption.

(72) Vapor barrier. A material surface or coating that is impermeable to perc.

(73) Vapor leak. A fugitive emission of perc vapor from unintended openings in the dry cleaning system. A vapor leak can be indicated by a rapid audible signal or visual signal from a halogenated-hydrocarbon detector or other approved instrument.

(74) Water separator. A vessel that uses gravity to physically separate liquid perc from liquid water.

§ 19-1303. Variances.

(1) Unless otherwise precluded by federal law or subdivision four of this section, the department may, upon written application from any person who is subject to this title, grant a variance from one or more specific provisions of this title under the conditions set forth in this section; provided, however, that variances shall only be granted under exceptional or extraordinary circumstances.

(2) Every application for a variance must:

(a) identify the specific provisions of this title from which a variance is sought;

(b) demonstrate that compliance with the identified provisions would, on the basis of conditions unique to the person's particular situation in contrast to the rest of the industry or any segment thereof, tend to

impose an unreasonable economic, technological, or safety burden on the person or the public; and

(c) demonstrate that the proposed activity will have no significant adverse impact on the public health, safety, or welfare, the environment or natural resources and will be consistent with the provisions of this chapter and the performance expected from an activity permitted under the provisions of this title.

(3) In granting any variance under this subdivision, the department may impose specific conditions necessary to assure that the subject activity will have no significant adverse impact on the public health, safety, or welfare, the environment or natural resources.

(4) Phase-out dates for dry cleaning equipment cannot be extended by a variance.

§ 19-1305. Prohibitions.

(1) The use of any dry-to-dry vented or non-vented equipment as a transfer machine is prohibited.

(2) The installation of self-service dry cleaning equipment after the effective date of this title is prohibited.

(3) The use or offering for use of self-service dry cleaning equipment six months after the effective date of this title is prohibited.

(4) The use of immersion heaters to evaporate solvent from the untreated water effluent of solvent water separators is prohibited.

(5) Except as provided in this title, pre-permitting requirements, the commencement of construction or modification of a dry cleaning facility without first obtaining a valid permit issued by the department is prohibited.

(6) The construction or operation of a dry cleaning facility without first obtaining a valid permit issued by the department is prohibited.

(7) Venting of perc emissions from dry cleaning equipment or emission control devices into the workroom or facility is prohibited.

(8) No new perc-based dry cleaning facilities shall be permitted within residential buildings after the effective date of this subdivision.

§ 19-1307. Pre-permitting requirements for existing facilities.

Existing facilities must comply with the following requirements in accordance with the timeframes established in this section in advance of applying for and obtaining permits required under this section. Prior approvals from the department are not needed for construction of the room enclosure, vapor barrier, or changes in vent stack locations. New facilities must comply with all the items contained in this section upon start-up.

(1) Vapor barriers and general exhaust ventilation.

(a) Stand-alone dry cleaning facilities that are designated as major sources, pursuant to the National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities under 40 CFR 63 Subpart M, and that have transfer type machines should have contained all such machines inside room enclosures by September twenty-third, two thousand three. Each room enclosure must 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) Co-located dry cleaning facilities must be equipped with a vapor barrier or room enclosures and general exhaust ventilation that meets the design and performance requirements established in this title by the following dates:

(i) transfer machines - within six months after the effective date of this title.

(ii) dry-to-dry vented machines - within fifteen months of the effective date of this title.

(iii) third generation dry-to-dry machines - within eighteen months of the effective date of this title.

(iv) fourth generation dry-to-dry machines - within two years of the effective date of this title.

(c) The facility owner must notify the department by mail within thirty days of installation of the required vapor barrier and general exhaust ventilation system and certify that it meets all regulatory requirements. Such notification must be sent by certified mail to the appropriate regional office of the Department addressed to the Department of Environmental Conservation, Attention: Regional Air Pollution Control Engineer.

(2) Relocation of emission points. The relocation of process ventilation emission points to the outdoor atmosphere must comply with the retrofitting requirements and be completed by the deadlines established under this title.

(3) Public information notice. The facility owner must post a copy of the notice prepared by the department as required under this title.

(4) Leak inspection. The facility owner must initiate the leak inspection requirements established in this title immediately upon the effective date of this title.

(5) Operation and maintenance. The facility owner must initiate all operation and maintenance requirements which apply to dry cleaning machines and existing emission control systems established in this title, within six months of the effective date of this title. However, all requirements that are already in effect pursuant to the National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities in 40 CFR 63 Subpart M, continue to be in effect.

(6) Compliance inspections. The compliance inspection requirements under this title are effective immediately upon the effective date of this title. Facility owners must initiate the first compliance inspection at their facility within six months of the effective date of this title.

(7) Recordkeeping. The facility owner must initiate all applicable recordkeeping required under this title within sixty days of the effective date of this title. Such recordkeeping must cover all requirements established for dry cleaning systems and facilities in general and must also comply with requirements for specific dry cleaning machine types and emission control systems. However, all requirements that are already in effect pursuant to the National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities in 40 CFR 63 Subpart M, continue to be in effect.

(8) Perc-contaminated wastewater management. Facilities must comply with the perc-contaminated wastewater management requirements under this title within twelve months of the effective date of this title.

(9) Hazardous waste management and emergency response. The hazardous waste management requirements under this title and the emergency response requirements under this title are effective immediately upon the effective date of this title.

§ 19-1309. Equipment standards and specifications.

(1) Specific equipment standards and emission control specifications:

(a) Vapor barriers. Vapor barriers must, at a minimum, enclose the dry cleaning equipment. Vapor barriers can be constructed of polyvinyl chloride, PVC sheet 22 mil thick (0.022 in.), sheet metal, metal foil face composite board, or other equivalent materials that are impermeable to

perc vapors. Vapor barriers must be constructed so that all joints and seams are sealed except for inlet make-up air and exhaust openings in entry doors, which must only be open when a person is entering or exiting the room enclosure.

(b) General exhaust ventilation. Dry cleaning facilities co-located with residential living quarters, food service establishments or any non-industrial facility must be equipped with a vapor barrier and with a general exhaust ventilation system that is completely separate from the ventilation system serving other areas of the building. The general exhaust ventilation system must be located near the dry cleaning machinery or connected to a separate room enclosure with a vapor barrier exhausting emissions to the outer air. This dry cleaning general exhaust ventilation system must be operated at all times when the dry cleaning machines are in operation, and during maintenance operations and must be capable of at least one air change per five minutes.

(c) Door fan/local exhaust ventilation systems:

(i) All first, second and third generation dry cleaning equipment must be equipped with a door fan/local exhaust ventilation system. This system must include a mechanical exhaust fan that is activated when the loading door is open, drawing air from the machine drum causing fresh air to be drawn in through the loading door. A minimum inward air velocity of 100 fpm, must be maintained through the effective door opening area of the loading door of the machine.

(ii) Door fan/local exhaust ventilation systems must not recirculate vapors into the workroom and must be properly vented to the outer air.

(iii) Door fan/local exhaust ventilation emissions must be controlled to a design emission standard of 5 ppm perc with an in-use maximum compliance standard of 20 ppm.

(d) Process ventilation - interim standards:

(i) Process vents on first and second generation machines that exhaust during the aeration cycle and when the machine door is open must be vented to the outer air above the roof and more than twenty-five feet from all openings in nearby occupancies.

(ii) Process ventilation emissions from existing first and second generation vented machines having emission controls as part of the original equipment or retrofitted to comply with the 100 ppm perc emission standard effective May tenth, nineteen hundred eighty-one under the prior version of this title must continue to meet this standard until such time as retrofitting, replacement, or shutdown is required under this section.

(iii) Process ventilation emissions from existing second generation machines that are retrofitted with control equipment to comply with interim standards established under this section must be designed to achieve a perc concentration of 5 ppm or less in the exhaust and achieve an in-use compliance standard of less than 20 ppm perc in the exhaust.

(iv) The exhaust damper of a vented first or second generation machine must be completely closed when the machine is not being vented, and must not leak vapors into the workroom or the outer air.

(e) Primary emission control systems. Refrigerated condensers or equivalent closed-loop vapor recovery systems must meet the following requirements:

(i) Refrigerated condensers must be capable of achieving an outlet vapor temperature downstream of any by-pass of the condenser less than or equal to 45°F (7.2°C) during the final cool down cycle, and achieve a concentration of 8600 ppm or less perc in the drum upon completion of the drying cycle.

(ii) Refrigerated condensers must have a graduated thermometer, thermocouple or equivalent instrument with a minimum range from 0°F (-18°C) to 150°F (66°C), that measures the temperature of the outlet vapor stream downstream of any by-pass of the condenser, and is easily visible to the operator.

(iii) New third and fourth generation equipment with refrigerated condenser control systems must be equipped with a drying sensor/controller that extends the drying time at least four minutes beyond the point that the solvent recovery rate is less than 40 ml/min or solvent vapor concentration in the drum is less than 8600 ppm perc.

(iv) The refrigerated condenser must be operated with a diverter valve.

(v) Equivalent closed-loop vapor recovery systems or other control device must use a technology that has been demonstrated, pursuant to the requirements of this title, to achieve at least 90 percent by weight emission reduction based upon the amount of perc entering and leaving the control device.

(f) A secondary control system must:

(i) be designed to function with a primary control system complying with all requirements for third generation equipment.

(ii) be capable of reducing the perc concentration in the drum from 8600 ppm or greater to 300 ppm.

(iii) any integral carbon adsorber used as a secondary control system must be sized correctly for the machine and be capable of reducing the perc concentration in the drum from 8600 ppm or greater to 300 ppm or less.

(iv) the integral carbon adsorber must be designed for non-contact steam or hot air stripping operation, and must be stripped or desorbed in accordance with manufacturer's instructions or at least weekly, whichever is more stringent.

(g) Spill containment. All new third and fourth generation, or used, reinstalled dry cleaning equipment must be equipped with a spill containment system capable of containing 125 percent of the capacity of the largest dry cleaning perc tank or vessel associated with the dry cleaning machine.

(2) To determine which standards will apply to a particular dry cleaning facility, first determine whether the facility is new or existing (one that existed prior to the effective date of this title). Then determine whether the facility is a stand-alone or is located in a mixed-use building. If in a mixed-use building, determine whether it is a commercial or residential building. Finally, for each piece of equipment there are two primary issues addressed in the regulations--the type of emissions control and the location of any process vents (see definition of process vent). Process vents apply only to transfer and dry-to-dry vented equipment, not to door fans, general or other ventilation.

In all, there are six different categories for which equipment standards are provided as follows:

1. New stand-alone facilities--Equipment requirements

2. Existing stand-alone facilities--Replacement or addition of equipment

3. Existing stand-alone facilities--Retrofitting of equipment

4. New mixed-use facilities--New equipment

5. Existing mixed-use facilities--Replacement or addition of equipment

6. Existing mixed-use facilities--Retrofitting of equipment

(a) New stand-alone facilities--equipment requirements. The following types of new and/or used equipment are allowed in new stand-alone facilities.

(i) New equipment - Fourth generation.

(A) Vapor Barrier - Not required.

(B) Spill Containment - Required as specified herein.

(C) General Ventilation - Optional.

(D) Primary and secondary control systems, and drying sensor - Required as specified in this section.

(E) Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.

(ii) New equipment - Third generation. The installation of this type of equipment is prohibited after December thirty-first, two thousand twenty-seven.

(A) Vapor Barrier - Not required.

(B) Spill Containment - Required as specified herein.

(C) General Ventilation - Optional.

(D) Primary and secondary control systems, drying sensor, and door fan - Required as specified in this section.

(E) Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.

(F) An additional option would be to convert to a fourth generation machine with less than or equal to 300 ppm in drum. Under this option a door fan would not be required.

(iii) Used equipment - Third generation.

(A) Vapor Barrier - Not required.

(B) Spill Containment - Required as specified herein.

(C) General Ventilation - Optional.

(D) Primary control systems and door fan - Required as specified in this section.

(E) Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm perc at any time.

(F) An additional option would be to convert to a fourth generation machine with less than or equal to 300 ppm perc in the drum. Under this option a door fan would not be required.

(b) Existing stand-alone facilities - replacement or addition of equipment. The equipment standards for new stand-alone facilities must be followed. However, transfer machines may be replaced with upgraded dry-to-dry vented equipment in accordance with the retrofitting requirements.

(c) Existing stand-alone facilities - retrofitting of equipment.

(i) Transfer machines - no retrofitting is allowed. All transfer machines must be removed from service on the following schedule.

(A) If the process vent is located above the roof and more than 25 feet from all openings in nearby occupancies, and if previously retrofitted to meet the less than 100 ppm perc vented emission level and is operating in compliance with that emission level, the equipment must be replaced with third or fourth generation equipment by January first, two thousand twenty-eight.

(B) If the process vent is below the roof or less than twenty-five feet from any opening in a nearby occupancy, or if process ventilation emissions do not meet the 100 ppm perc emission level, the equipment must be replaced with third or fourth generation equipment within six months after the effective date of this title.

(C) Vapor barrier - Not required.

(D) General ventilation - Optional.

(ii) Dry-to-dry vented. Second generation.
(A) Vapor barrier - Not required.
(B) General ventilation - Optional.
(C) Process vent emission point location.
(1) If the process vent is above the roof and more than twenty-five feet from all openings in nearby occupancies, the relocation of the process vent is not required.
(2) If the process vent is below the roof or less than twenty-five feet from any opening in a nearby occupancy, the process vent must be changed to be over the roof and more than twenty-five feet from all openings in nearby occupancies within six months after the effective date of this title. Alternatively, the equipment must be replaced with third or fourth generation equipment within the same time limit.
(D) Emission controls.
(1) Controlled.
(a) If the machine has been controlled with either an azeotropic control plus small carbon adsorber or converted to a closed-loop third generation machine having an integral or external primary refrigerated condenser (the water cooler condensing system having been eliminated) and has a door fan, meeting the requirements of this section, no additional control is required.
(b) If the machine is equipped with either a full sized carbon adsorber or a refrigerated condenser with a water cooler condensing system, it must be retrofitted with either an azeotropic control plus small carbon adsorber, provided EPA publishes a determination that azeotropic control is equivalent to a carbon adsorber, or converted to a closed-loop third generation machine by adding an integral or external primary refrigerated condenser (eliminating the water cooled condensing system) and a door fan with a small carbon adsorber must be added by four years after the effective date of the title. Alternatively, the equipment must be replaced with a third generation machine with a door fan by December thirty-first, two thousand twenty-seven, or with a fourth generation by January first, two thousand twenty-nine.
(2) Uncontrolled. Equipment must be retrofitted with either an azeotropic control plus small carbon adsorber, provided EPA publishes a determination that azeotropic control is equivalent to a carbon adsorber, or converted to closed-loop third generation by adding an integral or external primary refrigerated condenser (eliminating the water cooled condensing system) and a door fan with a small carbon adsorber must be added within six months after the effective date of this title. Alternatively, equipment must be replaced with third or fourth generation equipment within the same time limit.
(E) Fugitive perc emissions from any part of the dry cleaning system, must not exceed 50 ppm at any time.
(iii) Dry-to-dry non-vented. Third generation.
(A) Vapor barrier - Not required.
(B) General ventilation - Optional.
(C) Equipment must be retrofitted with a door fan by four years after the effective date of this title; or
(D) An additional option would be to convert this type of equipment to a fourth generation machine that achieves a perc concentration of less than or equal to 300 ppm in the drum by four years after the effective date of this title. Under this option a door fan would not be required.
(E) Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.
(iv) Dry-to-dry non-vented. Fourth generation.

(A) Vapor barrier - Not required.
(B) General ventilation - Optional.
(C) Primary and secondary control system and drying sensors must meet requirements specified in this section. However, for facilities that purchased machines prior to the effective date of this title the following provision applies:
If the owner/manager or operator can demonstrate that the machine is operating in the best possible working condition, no action is required if the measured perc concentration in the drum is less than 500 ppm. If the level exceeds 500 ppm, a door fan that meets the requirements of this section must be installed by January first, two thousand twenty-eight.
(D) Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.
(d) New mixed-use facilities--new equipment. Only new dry-to-dry fourth generation equipment is allowed in new mixed-use facilities. No used or retrofitted equipment is allowed.
(i) Vapor barrier and general ventilation - Required as specified herein.
(ii) Spill containment - Required as specified herein.
(iii) Primary and secondary control systems and drying sensor - Required as specified in this section. Any machine not meeting the 300 ppm requirement, and, where the owner/manager or operator can demonstrate that the machine is operating in the best possible working condition must have a door fan installed that meets the requirements of this section within six months of an inspection indicating high ppm levels.
(iv) Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.
(e) Existing mixed-use facilities -- replacement or addition of equipment. The equipment standards for new mixed-use facilities must be followed.
(f) Existing mixed-use facilities -- retrofitting of equipment.
(i) Transfer machines. No emission control retrofitting is allowed. All transfer machines must be removed from service on the following schedule. All transfer machines are required to meet the general ventilation and vapor barrier requirement within six months after the effective date of this title as specified in this section.
(A) If the process vent is located above the roof and more than twenty-five feet from all openings in nearby occupancies, and if the equipment has been previously retrofitted to comply with the less than 100 ppm perc vented emission level and is operating in compliance with that emission level, the equipment must be removed from service by September twenty-second, two thousand twenty-six.
(B) If the process vent is not above the roof and more than twenty-five feet from all openings in nearby occupancies, or if the equipment has not previously been retrofitted or is not in compliance with the less than 100 ppm perc emission level, the equipment must be removed from service within six months after the effective date of this title.
(C) A vapor barrier and general ventilation are required within six months after the effective date of this title as specified in this section.
(ii) Dry-to-dry vented. Second generation.
(A) Vapor barrier and general ventilation - Required within fifteen months of the effective date of this title as specified in this section.
(B) Process vent emission location.

(1) If the process vent is above the roof and more than twenty-five feet from all openings in nearby occupancies, the relocation of the process vent is not required.

(2) If the process vent is below the roof or less than twenty-five feet from any opening in a nearby occupancy, change the process vent to be over the roof and more than twenty-five feet from all openings in nearby occupancies within six months after the effective date of this title. Alternatively, equipment must be replaced with fourth generation equipment within the same time limit.

(C) Emission controls.

(1) Mixed-use - commercial - uncontrolled. Equipment must be retrofitted with either an azeotropic control plus a small carbon adsorber, or converted to a closed-loop third generation machine by adding an integral or external primary refrigerated condenser (eliminating the water cooled condensing system) and a door fan must be added as specified in this section within six months after the effective date of this title. Alternatively, equipment must be replaced with fourth generation equipment within the same time limit.

The retrofit of this equipment is only an interim measure, and all retrofitted equipment of this type must be removed from service by January first, two thousand thirty-three.

(2) Mixed-use - commercial - controlled.

(a) If the machine has been controlled with either an azeotropic control plus small carbon adsorber or converted to a third generation machine having an integral or external primary refrigerated condenser (the water cooled condensing system having been eliminated) and has a door fan as specified in this section, no interim retrofitting action is required. This equipment must be removed from service and replaced with fourth generation equipment by January first, two thousand thirty-three.

(b) If the machine is equipped with either a full-sized carbon adsorber or a refrigerated condenser with a water cooled condensing system, it must be retrofitted with either an azeotropic control plus small carbon adsorber, provided EPA publishes a determination that azeotropic control is equivalent to a carbon adsorber, or converted to a third generation machine by adding an integral or external primary refrigerated condenser (eliminating the water cooled condensing system) and a door fan must be added as specified in this section by January first, two thousand twenty-nine. Alternatively, equipment must be replaced with fourth generation equipment by January first, two thousand twenty-nine. The retrofit of this equipment is an interim measure only and all retrofitted equipment must be replaced with fourth generation equipment by January first, two thousand thirty-three.

(3) Mixed-use - residential - uncontrolled. Equipment must be retrofitted with either an azeotropic control device plus small carbon adsorber, provided EPA publishes a determination that azeotropic control is equivalent to a carbon adsorber, or converted to third generation equipment by adding an integral or external primary refrigerated condenser (eliminating the water cooled condensing system) and a door fan must be added as specified in this section within six months after the effective date of this title. Alternatively, the equipment must be replaced with fourth generation equipment within the same time limit. The retrofit of this equipment is only an interim measure and all retrofitted equipment of this type must be removed from service by January first, two thousand twenty-eight.

(4) Mixed-use - residential - controlled.

(a) If the machine has been controlled with either an azeotropic control device plus a small carbon adsorber or has been converted to a third generation machine having an integral or external primary refrigerated condenser (the water cooled system having been eliminated) and has a door fan as specified in this section, no additional retrofitting is required. However, all equipment of this type must be replaced with fourth generation equipment by January first, two thousand twenty-eight.

(b) If the machine is equipped with full-sized carbon adsorber with a water cooled condensing system, it must be operated in compliance with the 100 ppm standards of the previous regulations and must be replaced with fourth generation equipment by January first, two thousand twenty-eight.

(c) Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.

(iii) Dry-to-dry non-vented. Third generation.

(A) Vapor barrier and general ventilation - Required within eighteen months of the effective date of this title as specified in this section.

(B) Equipment must be retrofitted with a door fan meeting the requirements of this section by four years after the effective date of this title.

(C) An additional option is to convert this piece of equipment to a fourth generation machine that achieves a perc concentration of less than or equal to 300 ppm in the machine drum by four years after the effective date of this title. Under this option a door fan would not be required.

(D) Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.

(iv) Dry-to-dry non-vented. Fourth generation.

(A) Vapor barrier and general ventilation - required within two years of the effective date of this title as specified in this section.

(B) Primary and secondary controls and drying sensor - required as specified in this section. However, for non-major facilities under the national emission standards for hazardous air pollutants in 40 CFR Part 63 that purchased machines prior to the effective date of this title the following provision applies: if the owner/manager or operator can demonstrate that the machine is operating in the best possible working condition, no action is required if the measured perc concentration in the drum is less than 500 ppm. If the level exceeds 500 ppm, a door fan as specified in this section is required.

(C) Fugitive perc emissions from any part of the dry cleaning system must not exceed 50 ppm at any time.

§ 19-1311. Leak inspection and self monitoring requirements.

(1) Leak check requirements. The trained operator must inspect the dry cleaning system for perceptible (liquid and vapor) leaks and other fugitive emissions. The trained operator or a designee, must record the status of each component on a checklist supplied by the department. Completed checklists must be kept for at least five years from the date of the inspection.

(a) The dry cleaning system must be thoroughly inspected, at least weekly, for vapor leaks using one of the following for detecting vapor leaks:

(i) a halogenated-hydrocarbon detector;

(ii) a portable gas analyzer;

(iii) an air sampling pump and colorimetric tube; or

(iv) an alternative method approved by the department.

(b) All equipment referenced in paragraph (i) of subdivision two of this section must be properly calibrated.

(2) The following components of the dry cleaning system must be inspected weekly for perceptible (liquid and vapor) leaks and for proper operation as required by section 19-1313 of this title while the dry cleaning system is operating:

(a) hose and pipe connections, fittings, coupling and valves;

(b) door gaskets and seatings;

(c) filter gaskets and seatings;

(d) pumps;

(e) solvent (including spent solvent) tanks and containers;

(f) water separators;

(g) muck cooker;

(h) stills;

(i) exhaust dampers;

(j) diverter valves; and

(k) cartridge filter housings.

(3) Carbon adsorber vents must be tested weekly using colorimetric detector tubes or portable halogen detectors as required by reference method 21 or equivalent, and test results must be noted on the checklist.

(a) carbon adsorber vents in mixed-use facilities must also be tested weekly using colorimetric detector tubes, and test results must be noted on the checklist.

(b) carbon adsorber vents on small carbon adsorbers used for controlling second and third generation equipment in mixed-use facilities must be tested weekly using colorimetric detector tubes, and test results must be noted on the checklist.

(4) The temperature of the vapor stream on the inlet and outlet side of a refrigerated condenser must be measured weekly and recorded on the checklist.

(5) Preparedness and prevention equipment and conditions as required in this title must be inspected weekly to ensure proper operation and maintenance. A notation must be made on the checklist at the time of inspection.

(6) The inward air velocity for a loading door fan must be checked weekly with a portable velometer or equivalent measurement instrument. A notation of the instrument reading must be made on the checklist.

(7) Any liquid leak, vapor leak, or malfunction that has been detected by the operator must be noted on the checklist and, if at all possible, repaired immediately. If the leak cannot be repaired at the time of detection, the leaking component must be physically marked or tagged in a manner that is readily observable by an inspector and must be repaired within twenty-four hours of detection, unless repair parts are unavailable.

(a) If repair parts are not available at the facility, the parts must be ordered within two working days of detecting such a leak. Such repair parts must be installed within five working days after receipt. Equipment with a leak that has not been repaired by the end of the fifteenth working day after detection must not be operated until the leak is repaired, unless the facility owner or operator receives a leak-repair extension from the department.

(b) The department may grant a leak-repair extension to a facility owner for a single period of thirty days or less, if the department makes these findings:

(i) the delay in repairing the leak could not have been avoided by action on the part of the facility owner or operator;

(ii) the facility owner and operator used reasonable preventive measures and acted promptly to initiate the repair;

(iii) the leak will not significantly increase perc exposure near the facility; and

(iv) the facility is in compliance with all other requirements of this section and has a history of compliance.

(c) Such extension may be granted verbally, but must be followed up by a written confirmation within three days.

(d) Once a repair is completed, the completion date must be recorded on the checklist.

(e) Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

(f) All uncontainable releases, fires or explosions must be reported to the department and appropriate emergency response agencies immediately.

(8) A fugitive emission concentration of 50 ppm of perc emanating from any part of the dry cleaning system is a violation; except for short-term maintenance operations involving the opening of dry cleaning system components for inspection or repair.

(9) Any exceedance of the leak inspection requirements in this title that has been detected by the operator must be noted on the checklist and repaired/adjusted immediately.

§ 19-1313. Operation and maintenance requirements.

(1) Dry cleaning facilities must be maintained and operated to minimize the release of perc to the environment.

(2) The operator must operate and maintain all components of the dry cleaning system in accordance with the requirements of this title and the conditions specified in a facility's operating permit. For operations not specifically addressed, the components must be operated and maintained in accordance with the manufacturer's recommendations. The facility operator must retain, on site, a copy of the design specifications and the operating manuals for each dry cleaning system and each emission control device located at the dry cleaning facility.

(3) The department shall provide an operation and maintenance checklist to the facility. Each operation and maintenance function and the date performed must be recorded on the checklist. Completed checklists must be maintained on site for at least five years from the date of the checklist.

(4) Operators must comply with the following operation and maintenance requirements, as applicable:

(a) Fourth generation machines.

(i) Refrigerated condensers must be operated in accordance with manufacturer's specifications.

(ii) Integral refrigerated condensers must be operated to ensure that exhaust gases are recirculated until the air-vapor stream temperature is 45°F or less at the outlet. The difference between the temperature of the air-perc gas vapor stream exiting the refrigerated condenser must be greater than or equal to 20°F (11.1°C). The temperature differential must be determined at least weekly with a thermometer with a temperature range of from 32°F (0°C) to 120°F (48.9°C) to an accuracy of ±2°F (1.1°C).

(iii) Vapor adsorbers used with a primary control system or secondary control system must be operated to ensure that exhaust gases are recirculated at the temperature specified for optimum adsorption.

(iv) Cartridge filters and adsorptive cartridge filters must be handled using one of the following methods:

(A) Drained in the filter housing, before disposal, for no less than twenty-four hours for cartridge filters and forty-eight hours for adsorptive cartridge filters.

If the filters are then transferred to a separate device to further reduce the volume of perc, this treatment must be done in a system that routes any vapor to a primary closed-loop control system, with no exhaust to the atmosphere. Such transfer must be performed closing the filter housing as soon as possible to minimize vapor leaks. The general exhaust ventilation system must be operated during this activity.

(B) Dried, stripped, sparged, or otherwise treated, within the sealed filter housing, to reduce the volume of perc contained in the filter.

(v) All steam and condensing coils must be maintained to be free of lint and hard lint build-up on interior surfaces.

(vi) For dry cleaning equipment equipped with a door fan, such as where the applicable drum concentration upon machine opening cannot be met, the operator must use a portable velometer or equivalent measurement instrument to verify that the required 100 fpm inward air velocity is maintained through the effective door opening when the loading door is open. The inward air velocity must be checked on a weekly basis.

(b) Third generation machines.

(i) Refrigerated condensers must be operated in accordance with manufacturer's specifications.

(ii) Integral and external refrigerated condensers must be operated to ensure that exhaust gases are recirculated until the air-vapor stream temperature is 45°F or less at the outlet. The difference between the temperature of the air-perc gas vapor stream exiting the refrigerated condenser must be greater than or equal to 20°F (11.1°C). The temperature differential must be determined at least weekly with a thermometer with a temperature range of from 32°F (0°C) to 120°F (48.9°C) to an accuracy of ±2°F (1.1°C).

(iii) Vapor adsorbers used when the machine has been retrofitted as a fourth generation machine must be operated to ensure that exhaust gases are recirculated at the temperature specified by the manufacturer for optimum adsorption.

(iv) Cartridge filters and adsorptive cartridge filters must be handled using one of the following methods:

(A) Drained in the filter housing, before disposal, for no less than twenty-four hours for cartridge filters and forty-eight hours for adsorptive cartridge filters. If the filters are then transferred to a separate device to further reduce the volume of perc, this treatment must be done in a system that routes any vapor to a primary closed-loop control system, with no exhaust to the atmosphere. Such transfer must be performed closing the filter housing as soon as possible to minimize vapor leaks. The general exhaust ventilation system must be operated during this activity.

(B) Dried, stripped, sparged, or otherwise treated, within the sealed filter housing, to reduce the volume of perc contained in the filter.

(v) All steam and condensing coils must be maintained to be free of lint and hard lint build-up on interior surfaces.

(vi) For dry cleaning equipment equipped with a door fan, the operator must use a portable velometer or equivalent measurement instrument to verify that the required 100 fpm inward air velocity is maintained through the effective door opening when the loading door is open. The inward air velocity must be checked on a weekly basis.

(c) Second generation machines.

(i) A vented machine operated with full-sized carbon adsorbers (dry-to-dry vented) that function during the drying cycle must meet the following requirements:

(A) Desorption must be performed at the frequency specified by the manufacturer or as specified by this title, whichever is more stringent. The minimum frequency for desorption of full-size carbon units is as follows, each time all dry cleaning equipment exhausted to the device has cleaned a total of three pounds of articles for each pound of activated carbon. Desorption must be performed with the minimum steam pressure and air flow capacity specified by the manufacturer.

(B) Once desorption is complete, the carbon bed must be fully dried according to the manufacturer's instructions.

(C) No perc vapors may bypass the carbon adsorber to the outdoor atmosphere at any time, nor be recirculated into the facility.

(D) The filter located in front of the carbon adsorber must be checked and cleaned weekly.

(E) For dry cleaning equipment in mixed-use settings, the carbon adsorber vent must be tested weekly using colorimetric detector tubes. Test results must be recorded on the checklist. Test results of 5 ppm or greater perc require an immediate stripping of the carbon adsorber.

(ii) Small external carbon adsorbers used for azeotropic control systems, must be stripped at least weekly when in use. If not in continuous daily use, adsorbers must be stripped after they have been used for ten days.

(A) Small external carbon adsorbers must be vented to outside the building and must not recirculate vapor into the facility.

(B) Small external carbon adsorbers used in mixed-use settings must be tested weekly using colorimetric detector tubes or equivalent measuring devices. Test results must be recorded on the inspection checklist. A test result of 5 ppm perc or greater require an immediate stripping of the carbon adsorber.

(iii) The exhaust damper of a vented machine must be completely closed when the machine is not being vented and must be repaired or replaced within five working days if malfunctioning.

(iv) Cartridge filters and adsorptive cartridge filters must be handled using one of the following methods:

(A) Drained in the filter housing, before disposal, for no less than twenty-four hours for cartridge filters and forty-eight hours for adsorptive cartridge filters.

If the filters are then transferred to a separate device to further reduce the volume of perc, this treatment must be done in a system that routes any vapor to a primary closed-loop control system, with no exhaust to the atmosphere. Such transfer must be performed closing the filter housing as soon as possible to minimize vapor leaks. The general exhaust ventilation system must be operated during this activity.

(B) Dried, stripped, sparged, or otherwise treated, within the sealed filter housing, to reduce the volume of perc contained in the filter.

(v) All water-cooled condensers must include temperature gauges installed in the inlet and outlet water lines of the condensing coil on the dryer. The temperature difference must be maintained according to manufacturer's specifications.

(vi) Azeotropic control units must be maintained and operated in accordance with manufacturer's instructions and specifications.

(d) First generation machines.

An existing facility with a transfer machine operating a full-sized carbon adsorber or azeotropic control system, and cartridge filters must meet the applicable requirements of second generation machines.

(e) Ancillary equipment.

(i) All filter muck must be treated in a still or muck cooker, which routes perc-contaminated vapors to a condenser or other control device and recycles condenser vapors into the machine. Still or muck cooker emissions must not be vented into the facility. Any still, or muck cooker, must not be operated in a manner that exceeds seventy-five percent of its capacity; or other alternate value recommended by the manufacturer. Any still, or muck cooker, must be cooled to 100°F (38°C) or less before being emptied or cleaned.

(ii) Button and lint traps must be cleaned each working day and the lint must be placed in a tightly sealed container. Whenever possible such operations must be performed so that the opening of such traps is done quickly with the local or general exhaust system operating to minimize perc emissions.

(iii) Perc-contaminated wastewater treatment units.

(A) Carbon filtration units - carbon cartridges must be replaced according to a schedule as specified by the manufacturer to assure an effluent quality that does not exceed 20 ppb perc.

(B) Evaporators - perc contaminated wastewater evaporators must be operated to ensure that no liquid perc or visible emulsion is allowed to vaporize.

(iv) Dip tanks and drying cabinets must be exhausted to maintain an inward air flow, and be maintained under negative pressure, to ensure that fugitive emissions shall be no greater than 50 ppm. Vented emissions from dip tanks and drying cabinets must not exceed 20 ppm.

(f) The owner or operator of a dry cleaning system must maintain the following equipment as recommended by manufacturer specifications:

(i) hose and pipe connections, fittings, couplings, and unions;

(ii) door gaskets and seatings;

(iii) filter gaskets and seatings;

(iv) pumps;

(v) water separators;

(vi) muck cooker;

(vii) stills;

(viii) exhaust dampers;

(ix) diverter valves;

(x) cartridge filter housings;

(xi) drying sensors.

(g) Preparedness and prevention.

(i) All dry cleaning operations must be equipped with the following:

(A) adequate spill control equipment including sorbent materials, or alternative method for absorbing spills,

(B) vapor-proof containers for storing spill-contaminated material, and

(C) fire control equipment.

(ii) The facility owner must maintain aisle space to allow proper inspection of the dry cleaning equipment.

(iii) A reasonable supply of spare parts for repairing dry cleaning equipment must be available at the dry cleaning facility.

(h) All parts of the dry cleaning system including solvent containers where perc may be emitted to the atmosphere must be kept closed at all times except when access is required for proper operation and maintenance.

§ 19-1315. Perc-contaminated wastewater management.

Perc-contaminated wastewater generated by facilities subject to this title must be managed as follows:

(1) Perc-contaminated wastewater discharges.

(a) Perc-contaminated wastewater that is discharged to a sewer system must be treated by physical separation (water separator) and double carbon filtration, or an equivalent control which has been approved by the department, which has been properly designed to assure an effluent quality that:

(i) is less than or equal to 20 ppb perc without perc evaporation; and,

(ii) conforms to appropriate local sewer use ordinances.

(b) All perc-contaminated wastewater discharges to surface and groundwaters must conform to the requirements of this chapter.

(2) Evaporation of perc-contaminated wastewater.

Perc-contaminated wastewater that is evaporated must be treated by physical separation (water separator) and double carbon filtration prior to evaporation.

§ 19-1317. Hazardous waste management.

(1) Any perc-contaminated wastes generated must be managed in accordance with this chapter. Perc-contaminated wastewater must be handled as provided in section 19-1315 of this title.

(2) All perc-contaminated wastes (including spent cartridge filters, spent carbon, still bottoms, and lint) must be stored in tightly sealed containers, which are impermeable to the solvent; so that no perc is emitted to the atmosphere.

(3) Containers must be appropriately labeled and stored in a designated area.

(4) Containers must be in good condition and must be kept closed except when necessary to add or remove waste.

(5) Receipts or records showing the date and volume of hazardous waste shipments must be retained for five years.

§ 19-1319. Emergency response.

(1) Dry cleaning systems must be operated and maintained to ensure that perc releases are contained and do not migrate to sewer systems or groundwater.

(a) For existing dry cleaning equipment:

(i) floor drains and flooring in the vicinity of the equipment must be sealed so as to be impermeable to spills, or

(ii) temporary dikes, berms and containment devices must be placed in areas where spills are most likely to occur and procedures for preventing spill migration must be established and followed.

(b) For new dry cleaning equipment, a spill containment system must be installed under the equipment.

(2) In the event of a perc release, the owner, operator or a designee must take all reasonable measures to ensure the release is contained. These measures must include, where applicable, stopping processes and operations, increasing room exhaust ventilation, collecting and containing released perc and removing and maintaining containers.

(3) If the facility operator determines the facility has had an uncontainable release, fire or explosion, such facility operator must report the findings to the department and appropriate emergency response agencies immediately.

(4) Any emergency response action must be recorded. This record must include, at a minimum:

(a) The date, duration and nature of any malfunction, spill or incident of the dry cleaning system;

(b) The notification procedures; and

(c) The corrective actions taken.

§ 19-1321. Reporting and recordkeeping.

(1) Operators of all dry cleaning facilities or their designees must record the following:

(a) The date, duration and nature of any malfunction, spill, incident, or emergency response at the facility;

(b) The date of maintenance on any air cleaning component or exhaust system (such as the regeneration and/or replacement of the carbon in a carbon adsorber);

(c) The number of loads between regenerations; cleaning and replacement of lint filters, and carbon adsorber pre-filters; repair or replacement of exhaust fans;

(d) The amount of activated carbon in carbon adsorbers (dry weight in pounds);

(e) The date of maintenance of drying sensors;

(f) The date and volume of hazardous waste shipments; and

(g) The dates of perc-contaminated wastewater treatment unit carbon cartridge replacement.

(2) Each owner or operator of a dry cleaning facility must keep receipts of perc purchases, a log of the following information, maintain such information on site and provide it upon request for a period of five years:

(a) The volume of perc purchased each month by the dry cleaning facility as recorded from perc purchases; if no perc is purchased during a given month then the owner or operator would enter zero gallons into the log;

(b) The owner or operator must perform the following calculation on the first day of every month:

(i) Sum the volume of all perc purchases made in each of the previous twelve months, as recorded in the log.

(ii) If no perc purchases were made in a given month, then the perc consumption for that month is zero gallons.

(iii) The total sum calculated is the yearly perc consumption at the facility.

(3) Each owner or operator of a dry cleaning facility must record the following information on an inspection checklist.

(a) The dates when the dry cleaning system components are inspected for perceptible leaks as specified under the inspection and testing requirements, and the name or location of dry cleaning system components where perceptible leaks are detected;

(b) The date, time and colorimetric detector tube monitoring results, if a carbon adsorber is used for primary or secondary emission control;

(c) The date, time and temperature sensor monitoring results for refrigerated condensers;

(d) The dates of repair and records of written or verbal orders for repair parts to demonstrate compliance with the inspection and testing requirements, in section 19-1311 of this title.

(4) Each owner or operator of a dry cleaning facility must retain on site copies of the operation and maintenance checklists and compliance inspection reporting forms.

(5) Each owner or operator of a dry cleaning facility must retain on site a copy of the design specifications and the operating manuals for

each dry cleaning system and each emission control device located at the dry cleaning facility.

(6) All records must be maintained on site for at least five years and must be made available to the department upon written or verbal request.

(7) New facilities, or facilities installing new equipment, must submit a compliance report within thirty days of commencing operation to certify compliance with the federal NESHAP requirements. This statement must include:

(a) The name and address of the owner or operator;

(b) The address (that is, physical location) of the dry cleaning facility;

(c) An estimation of the annual perc consumption;

(d) A description of the machines' control devices;

(e) A statement verifying compliance with each applicable requirement under 40 CFR Sections 63.322, 63.323, and 63.324; and

(f) A statement certifying that all information contained in the statement is accurate and true.

(8) Facilities exceeding the consumption thresholds identified in 40 CFR Section 63.320(d), (e), or (g) must submit a compliance report within thirty days of the compliance deadline of one hundred eighty days certifying compliance with any additional federal requirements. This statement must include:

(a) The name and address of the owner or operator;

(b) The address (that is, physical location) of the dry cleaning facility;

(c) An estimation of the annual perc consumption;

(d) A description of the machines' control devices;

(e) A statement verifying compliance with each applicable requirement under 40 CFR sections 63.322, 63.323, and 63.324; and

(f) A statement certifying that all information contained in the statement is accurate and true.

§ 19-1323. Equipment testing and certification.

(1) Prohibitions and requirements. The provisions of this subdivision shall be effective sixty days after the date that the first qualifying testing program is approved by the department or its agent.

(a) Only the following kinds of dry cleaning equipment are permitted to be installed in perc dry cleaning facilities subject to this title: new closed-loop dry cleaning machines; converted dry cleaning machines; door fan systems; or, add-on secondary control systems which meet the design and performance standards and testing requirements of this section. Unless otherwise specified in this title, the dry cleaning equipment as manufactured and installed must comply in all respects with the unit upon which certification by the department or its agent was based.

(b) Any manufacturer or vendor of any new closed-loop dry cleaning equipment that is to be installed in and used by a dry cleaning facility in New York state must apply for and receive certification from the department or its agent that the equipment to be installed and operated complies in all respects with the performance standards and testing requirements of this title. Such certification must include operating parameters under which the equipment was tested to receive certification.

(c) It is unlawful for any person to sell, offer for sale, cause to be offered for sale, lease or represent new closed-loop dry cleaning equipment or any other machine or system described in paragraph (a) of this

subdivision as one which can be used by a dry cleaning facility in New York state unless it has been certified by the department or its agent.

(d) The contract of sale, lease, or use between the manufacturer or vendor and dry cleaning equipment user must contain, at a minimum, a provision stating that the manufacturer or vendor must, upon request, provide the user with a copy of the certification of the equipment by the department or its agent, as required in this title.

(e) The manufacturer or vendor must provide immediate notification to the department of any generic design or functional defect discovered in the equipment. Such notice must include a detailed plan of the manufacturer's or vendor's remedy.

(f) After the certified dry cleaning equipment has been installed at the user's facility, the manufacturer or manufacturer's representative must supply at least a two-day training session to the purchaser or leasee. The training must include instruction on how to maintain and operate the dry cleaning machine. This requirement does not apply to add-on door fan systems designed to capture drum vapors when the door is open.

(2) Equipment testing. For a given design, a single test program must be conducted in accordance with the following procedures: the person conducting the test program must prepare a written test plan that describes, in detail, the dry cleaning machine and control systems being tested, the test protocol, and test methods.

(a) Test program and scope. A minimum of three tests must be conducted for each test program on each control system design. All tests for a single test program must be conducted on a single dry cleaning machine.

(b) Test conditions. Testing must be conducted under normal operating conditions, unless otherwise specified.

(i) For primary control systems and secondary control systems, each test must be conducted during the cleaning of one load of materials.

(A) The machine must be filled to no less than one hundred percent of its capacity with articles for each test. At least seventy percent of the load to be cleaned must be wool or padded material.

(B) The weight of articles must be recorded for each test.

(ii) A primary control system must be tested on a closed-loop machine, or a converted machine, without a secondary control system.

(iii) A secondary control system must be tested on a closed-loop machine.

(A) An integral secondary control system must be tested with the primary control system operating normally.

(B) An add-on secondary control system must be tested independent of a primary control system and the initial perc concentration in the drum must be 8600 ppm or greater.

(c) Test method. Equipment must be tested in accordance with the following methods. For primary control systems and secondary control systems:

(i) The temperature of the air in the drum must be measured and recorded continuously during the entire drying cycle, including the operation of the secondary control system.

(ii) Sampling must be conducted as follows:

(A) For primary control systems and integral secondary control systems, sampling must begin at the end of the drying cycle and be completed within five minutes.

(B) For add-on secondary control systems, sampling must be done when the concentration of perc is 8600 ppm or greater and again when the concentration reaches 300 ppm or less.

(C) Sampling must be completed prior to the opening of the machine door and activation of any fugitive control system.

(iii) The perc concentration in the drum must be determined by analytical methods approved by the department or its agent.

(A) The person or organization conducting the test program must include the proposed analytical methods in the required test plan.

(B) All test results must be provided to the department upon request for certification of equipment.

(3) Certification of dry cleaning equipment. (a) The manufacturer or vendor of the dry cleaning equipment must submit the following to the department or its agent when requesting certification of the equipment. Separate documentation must be submitted for each dry cleaning equipment design, marketed under different names or model numbers, that the department is requested to certify.

(i) a detailed description of the dry cleaning system, and a description of the capabilities and procedures for the installation, use, maintenance, repair, and tune-up of the system, including a description of any lockout systems employed;

(ii) a description of how program updates and modifications will be made in any microprocessor software, if applicable;

(iii) a copy of the dry cleaning equipment warranty and service contracts, including a description of the servicing network and parts availability to be established to serve dry cleaning facilities within the state;

(iv) a detailed description of the proposed training program to be conducted on-site at the dry cleaning facility for the owners, operators, and employees;

(v) a copy of the operator's manual, written in plain language, covering use, maintenance, and parts and service information, that must be provided with the dry cleaning equipment; and

(vi) such other material or information as the department or its agent may require to ascertain compliance with the requirements of this title.

(b) Each manufacturer or vendor of dry cleaning equipment for which certification is requested must maintain calibrating servicing to the user facility for at least five years for any sensors or integral measuring devices that are crucial to the continued compliance with any performance standards under this title.

(c) Each manufacturer or vendor of dry cleaning equipment for which certification is requested must certify to the department or its agent that the equipment complies with all other applicable New York state and federal certification requirements. The manufacturer or vendor must submit copies of any appropriate approval or certification.

(d) The department or its agent must perform testing, in accordance with this section, for any dry cleaning equipment for which the manufacturer or vendor requests certification.

(i) the manufacturer or vendor must provide a production unit for testing at the time that the department or its agent is requested to certify the equipment;

(ii) the manufacturer must demonstrate that the unit provided for testing and certification was selected at random from the production process and is typical of all units produced by the manufacturer;

(iii) when the initial testing reveals any condition that requires correction or repairs by the manufacturer or vendor, the department or

its agent shall retest the equipment as soon as practicable after the manufacturer or vendor completes whatever modifications may be needed; and

(iv) the department or its agent shall notify the manufacturer or vendor of any deficiencies in the equipment that would prevent it from being certified.

§ 19-1325. Dry cleaning owner/manager, operator and inspector training and certification.

(1) No dry cleaning facility subject to this title shall be permitted to operate unless said facility is under the supervision of a person possessing a dry cleaning owner/manager certification; and the dry cleaning machine is operated by a person holding a dry cleaning operator certification. Except for the conditions established in subdivision two of this section, it is unlawful for any person to operate a dry cleaning facility subject to this title unless:

(a) the facility manager and/or owner has a current and valid dry cleaning owner/manager certification; and

(b) the person operating the dry cleaning machine has a current and valid dry cleaning operator certification.

(2) In the event that an unforeseen/unpredictable situation prevents a dry cleaning facility from having a certified operator operating the dry cleaning equipment, the owner/manager shall be allowed to continue operation of the dry cleaning machine with a non-certified operator for a period not to exceed three days per occurrence. Under no circumstances may an uncertified operator operate dry cleaning equipment at any facility for a total of more than ten days in any calendar year. If the use of an uncertified operator would cause nonperformance of required maintenance and leak detection, the facility must suspend dry cleaning operations until a certified operator is available. The purpose of this provision is to accommodate emergency or unforeseen extenuating circumstances and must not be used to cover routine situations such as vacations, or other scheduled absences.

(3) A dry cleaning owner/manager certification may be issued by any organization that offers a training program (including refresher courses) approved by the department that includes, but is not limited to, the following elements:

(a) Course topics:

(i) the history of dry cleaning and wet cleaning techniques including the appropriate use of each;

(ii) alternatives to perc, including greater use of wet cleaning;

(iii) the characteristics and environmental effects of perc;

(iv) the health impacts of perc;

(v) knowledge of personal protective equipment;

(vi) federal, state and local government operation, maintenance, recordkeeping and reporting requirements, including the administration and implementation of appropriate state and federal labor, health, and safety laws and regulations;

(vii) knowledge of dry cleaning systems including environmental control equipment and general and local exhaust ventilation systems;

(viii) operation of dry cleaning systems including environmental control equipment and the use of perc-contaminated wastewater evaporators;

(ix) maintenance of dry cleaning systems including spill prevention techniques;

(x) inspection and testing of dry cleaning systems for leaks and fugitive emissions;

(xi) monitoring of perc levels in the air;
(xii) maximizing perc reclamation and mileage; and
(xiii) waste handling requirements to minimize perc loss to the environment.
(b) Administration. The course administration must include:
(i) testing by an independent testing organization, covering all topics listed in paragraph (a) of this subdivision; and
(ii) procedures for revocation of certification.
(4) A dry cleaning operator certification may be issued by any organization that offers a training and testing program (including refresher courses) approved by the department that includes, but is not limited to, the following elements:
(a) Course topics:
(i) the characteristics and environmental effects of perc;
(ii) appropriate use of wet cleaning;
(iii) the health impacts of perc;
(iv) knowledge of personal protective equipment;
(v) state recordkeeping and reporting requirements;
(vi) knowledge of general and local exhaust ventilation systems;
(vii) operation of dry cleaning systems including environmental control equipment and the use of perc-contaminated wastewater evaporators;
(viii) maintenance of dry cleaning systems including spill prevention techniques;
(ix) inspection and testing of dry cleaning systems for leaks and fugitive emissions;
(x) monitoring of perc levels in the air;
(xi) maximizing perc reclamation and mileage; and
(xii) waste handling requirements to minimize perc loss to the environment.
(b) Administration. The program administration must include:
(i) a hands on program designed to test an acceptable level of knowledge. Successful completion of the program must include a demonstrated knowledge of all topics listed in paragraph (a) of subdivision three of this section.
(ii) procedures for revocation of certificate.
(5) Individuals that inspect dry cleaning facilities, either as a registered inspector or under the supervision of a registered inspector, must obtain a dry cleaner owner/manager certification.
(6) Effective date for dry cleaning owner/manager and dry cleaning operator certification. After the date of the first qualifying training program approved by the department, the requirements of this subdivision shall take effect and the first training and certification shall be mandatory according to the following schedule:
(a) upon start up for all operators of new dry cleaning facilities unless the facility owner/manager can demonstrate that compliance with this requirement poses an unreasonable burden because of the unavailability of scheduled training courses or testing facilities;
(b) three months for operators of all existing dry cleaning facilities that are in mixed-use locations and that contain transfer machines;
(c) six months for operators of all existing dry cleaning facilities in mixed-use locations that contain dry-to-dry vented machines but do not contain transfer machines;
(d) nine months for operators of all the rest of the existing dry cleaning facilities in mixed-use locations;

(e) twelve months for operators of all existing dry cleaning facilities in stand-alone locations that contain transfer machines;

(f) fifteen months for operators of all the rest of existing dry cleaning facilities in stand-alone locations that contain dry-to-dry vented machines but do not contain transfer machines; and

(g) eighteen months for operators of all the rest of existing dry cleaning facilities in stand-alone locations.

(7) A dry cleaning operator certification shall be valid for a three year period and may be renewed upon completion of a refresher course.

(8) Persons or organizations authorized to offer operator training and certification courses may not require membership in an association or purchase of a product as a prerequisite to enrollment or successful completion of the course.

(9) An authorization to offer operator training and certification courses is valid for a maximum of five years. The authorization may be renewed by filing an application provided by the department. Such application must be filed at least six months prior to the expiration of the current authorization.

(10) The commissioner shall, in conjunction with representatives of the employees, owners and operators of dry cleaning facilities in New York state, develop dry cleaning training programs to enhance employee and owner understanding of dry cleaning technologies and alternative cleaning methods as well as business and employment skills. Such programs shall be administered by the department and provided by dry cleaning employees, owners and operators. All employees, owners and operators of dry cleaning facilities shall be required to attend a training program once every two years.

§ 19-1327. Permitting.

(1) Any person proposing to construct a new perc dry cleaning facility, or make modifications to existing systems that are not required in order to comply with the equipment standards under section 19-1309 of this title, must apply for a permit and receive department approval before commencing construction or installation, except as provided for in the pre-permitting requirements for existing facilities.

(2) Any person who owns an existing facility subject to this title must take one or more of the following actions within the time periods specified below in order to inform the department of the compliance status of their facility and obtain necessary permits as of the effective date of this title. Those facilities previously exempted, and therefore not currently required to have permits to operate existing dry cleaning systems, shall be considered to be in compliance if the provisions of paragraphs (a), (b), and (c) of this subdivision are complied with.

(a) Submit to the department written notification of the termination of operation of each dry cleaning system at the facility that must be replaced as required by this title on or before the thirtieth day following the compliance deadlines established in section 19-1309 of this title. Such notification must be submitted to the department by means of certified mail, return receipt requested.

(b) For existing facilities that are in compliance with equipment standards under section 19-1309 of this title, the owner must obtain a registration in accordance with regulations to continue to operate the dry cleaning systems. Registration applications must be submitted at least sixty calendar days in advance of the applicable compliance deadline.

(c) For existing facilities where dry cleaning systems must be modified or replaced in order to comply with equipment standards under section 19-1309 of this title registration applications must be submitted to the department at least ninety calendar days in advance of the applicable compliance deadlines.

(3) Notwithstanding the provisions of subdivisions one and two of this section, perc dry cleaning facilities that are major stationary sources must comply with all requirements in the rules and regulations promulgated pursuant to this chapter with regard to obtaining a Title V facility permit.

§ 19-1329. Compliance inspections.

(1) Stand-alone dry cleaning facilities must be inspected at least annually, and mixed-use facilities must be inspected according to the following schedule:

(a) At least twice annually where any transfer or dry-to-dry vented equipment is operated; or

(b) At least annually where only non-vented equipment is operated.

(2) Such inspections must be performed by an inspector registered with the department or by an individual working under the supervision of a registered inspector.

(3) All registered inspectors must meet the requirements of paragraphs (a), (b) and (c) of this subdivision. All individuals working under the supervision of a registered inspector must meet the requirements of paragraphs (b) and (c) of this subdivision.

(a) The inspector must be one of the following:

(i) a licensed professional engineer;

(ii) a registered architect; or

(iii) a certified industrial hygienist.

(b) Must possess a dry cleaner owner/manager certification in accordance with section 19-1325 of this title and complete other appropriate training as specified by the department on topics related to inspections.

(c) Must not be engaged in the sales or marketing of dry cleaning equipment. Must not be engaged in providing services to the dry cleaning industry. Employees of trade associations may not conduct inspections, but trade associations may solicit bids for performing inspections on behalf of their members.

(4) The department must be notified of all inspections, in writing at least seven days prior to inspection, in a form acceptable to the department, by the registered inspector.

(5) Inspections must be conducted in accordance with protocols specified by the department, using an inspection reporting form specified by the department.

(6) Analysis of air samples collected by passive sampling devices or the equivalent must be conducted by a laboratory certified by the Environmental Laboratory Approval Program (ELAP) of the New York state department of health.

(7) The inspection shall verify that the department notice is posted in a conspicuous location in the facility.

(8) After the inspection is completed, the registered inspector must provide a completed inspection reporting form to the department and to the facility owner within forty-five days of the inspection.

(9) Failure of the registered inspector to comply with the above requirements may result in the removal of the registered inspector from the department's list of registered inspectors.

(10) The owner/manager or operator must:

(a) Make available upon request the most recent completed inspection reporting form to interested individuals for review on premises during normal business hours.

(b) If the inspection reveals a leak or malfunction, the facility must be repaired within the timeframes established in section 19-1311 of this title and reinspected within one month.

§ 19-1331. Equivalency.

(1) Any person requesting that use of alternative equipment or procedures be considered by the department, as equivalent to the requirements under section 19-1309 of this title, must collect, verify and submit to the department the following information to show that the alternative achieves equivalent emission reductions:

(a) Diagrams, as appropriate, illustrating the emission control technology, its operation and integration into or function with closed-loop third generation machines and dry-to-dry vented second generation machines;

(b) Information indicating the levels of vented perc emissions from dry-to-dry second generation machines during each portion of the dry cleaning cycle with and without the use of alternative emission control technology that is being tested, and information indicating the levels of fugitive emissions from all equipment;

(c) Information detailing operation and maintenance requirements and appropriate testing parameters consistent with sections 19-1311 and 19-1313 of this title;

(d) Information demonstrating that the environmental impacts are consistent with sections 19-1311 and 19-1313 of this title; and

(e) Documentation on solvent mileage (pounds of articles cleaned per gallon of solvent added) achieved with and without use of the alternative emission control technology. Solvent mileage data must be of continuous duration for at least one year under the conditions of a typical dry cleaning operation. This information on solvent mileage must be accompanied by information on the design, configuration, operation, and maintenance of the specific dry cleaning system from which the solvent mileage information was obtained.

(2) Information indicating the level of emissions required in paragraph (b) of subdivision one of this section must achieve emission reductions equal to or less than those stated in section 19-1309 of this title for comparative technology.

(3) For the purpose of determining equivalency of control of emissions to those required under this title, the department shall evaluate whether the alternative control technology has been demonstrated adequately. If the demonstration is adequate, the alternative technology shall be eligible for certification.

(4) Any decision made by the department in accordance with subdivisions one, two and three of this section is contingent upon review and approval by EPA.

§ 19-1333. Posting notice.

(1) Every perc-based dry cleaning facility shall be required to prominently post a notice prepared and supplied by the department in a conspicuous location in the dry cleaning facility which is readily accessible to all building tenants and customers. The notice shall contain the following statements and information, printed in letters at least 3/8 of an inch or larger in size:

(a) "This dry cleaning facility uses the chemical commonly called PERC (also called tetrachloroethene, tetrachloroethylene or perchloroethylene)."

(b) "The following potential health effects are associated with exposure to perc emissions:

(i) Perc has been classified by the International Agency for Research on Cancer as a 'PROBABLE HUMAN CARCINOGEN', which means there are reliable studies of human populations exposed to perc that show elevated cancer rates.

(ii) Exposure to perc causes damage to the liver, kidney and central nervous system.

(iii) Perc may be absorbed into the body after ingestion, inhalation or contact with the skin.

(iv) Perc is classified by the U.S. Environmental Protection Agency as a hazardous air pollutant."

(c) "You should contact the New York State Department of Environmental Conservation if you smell chemical odors or see liquid leaking from the dry cleaning operations at (include telephone number)."

(d) "You may request information from this dry cleaner about inspections that may have been conducted at this facility, including indoor air testing."

(e) Name of dry cleaning facility, department permit or registration number, facility address, facility owner, emergency contact telephone number.

(2) The sign must be at least eleven inches by seventeen inches in size; and yellow with black lettering.

§ 19-1335. Severability.

If any provision of this title or its application to any person or circumstance is held invalid, the remainder of this title, and the application of those provisions to persons other than those to which it is held invalid, shall not be affected thereby.

§ 2. The department of environmental conservation shall take such actions as are necessary and appropriate to have perc-based dry cleaning facilities located in residential buildings phased out within five years of the effective date of this act.

§ 3. This act shall take effect on the ninetieth day after it shall have become a law.