

STATE OF NEW YORK

1009

2019-2020 Regular Sessions

IN ASSEMBLY

January 14, 2019

Introduced by M. of A. L. ROSENTHAL -- Multi-Sponsored by -- M. of A. PERRY -- 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:

TITLE 13

PERCHLOROETHYLENE DRY CLEANING FACILITIES

Section 19-1301. Definitions.

19-1303. Variances.

19-1305. Prohibitions.

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

19-1309. Equipment standards and specifications.

19-1311. Leak inspection and self monitoring requirements.

19-1313. Operation and maintenance requirements.

19-1315. Perc-contaminated wastewater management.

19-1317. Hazardous waste management.

19-1319. Emergency response.

19-1321. Reporting and recordkeeping.

19-1323. Equipment testing and certification.

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

19-1327. Permitting.

19-1329. Compliance inspections.

19-1331. Equivalency.

19-1333. Posting notice.

19-1335. Severability.

§ 19-1301. Definitions.

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

LBD03477-01-9

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

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

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

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

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

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

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

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

36 (8) Co-located. Sharing a common wall, floor, or ceiling with a resi-
37 dence or business.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1 the drying cycle and exhausted to the outdoor atmosphere, either direct-
2 ly or through a control device (2nd generation equipment).

3 (29) Environmental training program. An initial course or a refresher
4 course of the environmental training program, for owners and operators
5 of perc dry cleaning operations that has been authorized by the depart-
6 ment.

7 (30) Equivalent closed-loop vapor recovery system. A device or combi-
8 nation of devices that achieves, in practice, a perc recovery perform-
9 ance equal to or exceeding that of refrigerated condensers.

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

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

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

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

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

26 (36) fpm. Feet per minute.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

21 (51-a) Perc-based dry cleaning facility. All equipment, devices or
22 apparatus associated with perc dry cleaning operations, including but
23 not limited to: dry cleaning equipment; filter or purification systems;
24 waste holding, treatment or disposal systems; perchloroethylene supply
25 systems; dip tanks, pumps, gaskets, piping, ducting, fittings, valves or
26 flanges that convey perc-contaminated air; and dry cleaning control
27 systems.

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

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

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

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

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

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

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

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

52 (60) Second generation equipment. Dry-to-dry vented, unrefrigerated
53 dry cleaning machines properly vented to a control device such as a
54 carbon adsorber, or azeotropic control device plus a small carbon adsor-
55 ber, 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 his or her 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 (1st 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 4 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

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

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

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

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

14 § 19-1305. Prohibitions.

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

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

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

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

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

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

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

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

33 § 19-1307. Pre-permitting requirements for existing facilities.

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

41 (1) Vapor barriers and general exhaust ventilation.

42 (a) Stand-alone dry cleaning facilities that are designated as major
43 sources, pursuant to the National Perchloroethylene Air Emission Stand-
44 ards for Dry Cleaning Facilities under 40 CFR 63 Subpart M, and that
45 have transfer type machines should have contained all such machines
46 inside room enclosures by September twenty-third, two thousand three.
47 Each room enclosure must be:

48 (i) Constructed of materials impermeable to perchloroethylene; and,

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

51 (b) Co-located dry cleaning facilities must be equipped with a vapor
52 barrier or room enclosures and general exhaust ventilation that meets
53 the design and performance requirements established in this title by the
54 following dates:

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

1 (ii) dry-to-dry vented machines - within fifteen months of the effec-
2 tive date of this title.

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

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

7 (c) The facility owner must notify the department by mail within thir-
8 ty days of installation of the required vapor barrier and general
9 exhaust ventilation system and certify that it meets all regulatory
10 requirements. Such notification must be sent by certified mail to the
11 appropriate regional office of the department addressed to the depart-
12 ment of Environmental Conservation, Attention: Regional Air Pollution
13 Control Engineer.

14 (2) Relocation of emission points. The relocation of process venti-
15 lation emission points to the outdoor atmosphere must comply with the
16 retrofitting requirements and be completed by the deadlines established
17 under this title.

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

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

23 (5) Operation and maintenance. The facility owner must initiate all
24 operation and maintenance requirements which apply to dry cleaning
25 machines and existing emission control systems established in this
26 title, within six months of the effective date of this title. However,
27 all requirements that are already in effect pursuant to the National
28 Perchloroethylene Air Emission Standards for Dry Cleaning Facilities in
29 40 CFR 63 Subpart M, continue to be in effect.

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

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

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

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

51 § 19-1309. Equipment standards and specifications.

52 (1) Specific equipment standards and emission control specifications:

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

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

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

16 (c) Door fan/local exhaust ventilation systems:

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

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

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

29 (d) Process ventilation - interim standards:

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

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

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

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

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

53 (i) Refrigerated condensers must be capable of achieving an outlet
54 vapor temperature downstream of any by-pass of the condenser less than
55 or equal to 45°F (7.2°C) during the final cool down cycle, and achieve a

1 concentration of 8600 ppm or less perc in the drum upon completion of
2 the drying cycle.

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

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

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

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

20 (f) A secondary control system must:

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

23 (ii) be capable of reducing the perc concentration in the drum from
24 8600 ppm or greater to 300 ppm.

25 (iii) any integral carbon adsorber used as a secondary control system
26 must be sized correctly for the machine and be capable of reducing the
27 perc concentration in the drum from 8,600 ppm or greater to 300 ppm or
28 less.

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

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

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

48 In all, there are six different categories for which equipment stand-
49 ards are provided as follows:

50 1. New stand-alone facilities--Equipment requirements

51 2. Existing stand-alone facilities--Replacement or addition of equip-
52 ment

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

54 4. New mixed-use facilities--New equipment

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

56 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-one.

(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-two.

(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-one, or with a fourth generation by January first, two thousand twenty-three.

(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.

1 (A) Vapor barrier - Not required.

2 (B) General ventilation - Optional.

3 (C) Primary and secondary control system and drying sensors must meet
4 requirements specified in this section. However, for facilities that
5 purchased machines prior to the effective date of this title the follow-
6 ing provision applies:

7 If the owner/manager or operator can demonstrate that the machine is
8 operating in the best possible working condition, no action is required
9 if the measured perc concentration in the drum is less than 500 ppm. If
10 the level exceeds 500 ppm, a door fan that meets the requirements of
11 this section must be installed by January first, two thousand twenty-
12 two.

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

15 (d) New mixed-use facilities--new equipment. Only new dry-to-dry
16 fourth generation equipment is allowed in new mixed-use facilities. No
17 used or retrofitted equipment is allowed.

18 (i) Vapor barrier and general ventilation - Required as specified
19 herein.

20 (ii) Spill containment - Required as specified herein.

21 (iii) Primary and secondary control systems and drying sensor -
22 Required as specified in this section. Any machine not meeting the 300
23 ppm requirement, and, where the owner/manager or operator can demon-
24 strate that the machine is operating in the best possible working condi-
25 tion must have a door fan installed that meets the requirements of this
26 section within six months of an inspection indicating high ppm levels.

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

29 (e) Existing mixed-use facilities -- replacement or addition of equip-
30 ment. The equipment standards for new mixed-use facilities must be
31 followed.

32 (f) Existing mixed-use facilities -- retrofitting of equipment.

33 (i) Transfer machines. No emission control retrofitting is allowed.
34 All transfer machines must be removed from service on the following
35 schedule. All transfer machines are required to meet the general venti-
36 lation and vapor barrier requirement within six months after the effec-
37 tive date of the title as specified in this section.

38 (A) If the process vent is located above the roof and more than twenty-
39 five feet from all openings in nearby occupancies, and if the equip-
40 ment has been previously retrofitted to comply with the less than 100
41 ppm perc vented emission level and is operating in compliance with that
42 emission level, the equipment must be removed from service by September
43 twenty-second, two thousand twenty.

44 (B) If the process vent is not above the roof and more than twenty-
45 five feet from all openings in nearby occupancies, or if the equipment
46 has not previously been retrofitted or is not in compliance with the
47 less than 100 ppm perc emission level, the equipment must be removed
48 from service within six months after the effective date of this title.

49 (C) A vapor barrier and general ventilation are required within six
50 months after the effective date of this title as specified in this
51 section.

52 (ii) Dry-to-dry vented. Second generation.

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

55 (B) Process vent emission location.

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

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

10 (C) Emission Controls.

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

19 The retrofit of this equipment is only an interim measure, and all
20 retrofitted equipment of this type must be removed from service by Janu-
21 ary first, two thousand twenty-seven.

22 (2) Mixed-use - commercial - controlled.

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

30 (b) If the machine is equipped with either a full-sized carbon adsor-
31 ber or a refrigerated condenser with a water cooled condensing system,
32 it must be retrofitted with either an azeotropic control plus small
33 carbon adsorber, provided EPA publishes a determination that azeotropic
34 control is equivalent to a carbon adsorber, or converted to a third
35 generation machine by adding an integral or external primary refriger-
36 ated condenser (eliminating the water cooled condensing system) and a
37 door fan must be added as specified in this section by January first,
38 two thousand twenty-three. Alternatively, equipment must be replaced
39 with fourth generation equipment by January first, two thousand twenty-
40 three. The retrofit of this equipment is an interim measure only and all
41 retrofitted equipment must be replaced with fourth generation equipment
42 by January first, two thousand twenty-seven.

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

55 (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-two.

(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-two.

(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 the 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.

1 (b) All equipment referenced in paragraph (i) of subdivision 2 of this
2 section must be properly calibrated.

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

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

8 (b) door gaskets and seatings;

9 (c) filter gaskets and seatings;

10 (d) pumps;

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

12 (f) water separators;

13 (g) muck cooker;

14 (h) stills;

15 (i) exhaust dampers;

16 (j) diverter valves; and

17 (k) cartridge filter housings.

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

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

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

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

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

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

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

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

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

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

3 (ii) the facility owner and operator used reasonable preventive meas-
4 ures and acted promptly to initiate the repair;

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

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

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

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

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

15 (f) All uncontainable releases, fires or explosions must be reported
16 to the department and appropriate emergency response agencies immediate-
17 ly.

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

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

25 § 19-1313. Operation and maintenance requirements.

26 (1) Dry cleaning facilities must be maintained and operated to mini-
27 mize the release of perc to the environment.

28 (2) The operator must operate and maintain all components of the dry
29 cleaning system in accordance with the requirements of this title and
30 the conditions specified in a facility's operating permit. For oper-
31 ations not specifically addressed, the components must be operated and
32 maintained in accordance with the manufacturer's recommendations. The
33 facility operator must retain, on-site, a copy of the design specifica-
34 tions and the operating manuals for each dry cleaning system and each
35 emission control device located at the dry cleaning facility.

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

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

43 (a) Fourth generation machines.

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

46 (ii) Integral refrigerated condensers must be operated to ensure that
47 exhaust gases are recirculated until the air-vapor stream temperature is
48 45°F or less at the outlet. The difference between the temperature of
49 the air-perc gas vapor stream exiting the refrigerated condenser must be
50 greater than or equal to 20° F (11.1°C). The temperature differential
51 must be determined at least weekly with a thermometer with a temperature
52 range of from 32°F (0°C) to 120°F (48.9°C) to an accuracy of
53 ±2°F(1.1°C).

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

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

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

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

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

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

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

22 (b) Third generation machines.

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

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

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

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

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

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

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

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

1 (c) Second generation machines.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

55 (d) First generation machines. An existing facility with a transfer
56 machine operating a full-sized carbon adsorber or azeotropic control

1 system, and cartridge filters must meet the applicable requirements of
2 second generation machines.

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

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

16 (iii) Perc-contaminated wastewater treatment units.

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

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

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

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

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

30 (ii) door gaskets and seatings;

31 (iii) filter gaskets and seatings;

32 (iv) pumps;

33 (v) water separators;

34 (vi) muck cooker;

35 (vii) stills;

36 (viii) exhaust dampers;

37 (ix) diverter valves;

38 (x) cartridge filter housings;

39 (xi) drying sensors.

40 (g) Preparedness and prevention.

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

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

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

46 (C) fire control equipment.

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

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

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

55 § 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 uncontrollable release, fire or explosion, he or she 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;

1 (b) The notification procedures; and,
2 (c) The corrective actions taken.

3 § 19-1321. Reporting and recordkeeping.

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

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

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

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

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

16 (e) The date of maintenance of drying sensors;

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

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

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

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

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

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

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

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

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

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

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

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

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

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

52 (5) Each owner or operator of a dry cleaning facility must retain on
53 site a copy of the design specifications and the operating manuals for
54 each dry cleaning system and each emission control device located at the
55 dry cleaning facility.

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

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

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

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

10 (c) An estimation of the annual perc consumption;

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

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

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

16 (8) Facilities exceeding the consumption thresholds identified in 40
17 CFR Section 63.620(d), (e), or (g) must submit a compliance report with-
18 in thirty days of the compliance deadline of one hundred eighty days
19 certifying compliance with any additional federal requirements. This
20 statement must include:

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

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

24 (c) An estimation of the annual perc consumption;

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

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

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

30 § 19-1323. Equipment testing and certification.

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

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

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

51 (c) It is unlawful for any person to sell, offer for sale, cause to be
52 offered for sale, lease or represent new closed loop dry cleaning equip-
53 ment or any other machine or system described in paragraph (a) of this
54 subdivision as one which can be used by a dry cleaning facility in New
55 York state unless it has been certified by the department or its agent.

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

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

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

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

22 (a) Test program and scope. A minimum of three tests must be
23 conducted for each test program on each control system design. All
24 tests for a single test program must be conducted on a single dry clean-
25 ing machine.

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

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

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

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

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

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

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

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

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

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

49 (ii) Sampling must be conducted as follows:

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

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

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

3 (iii) The perc concentration in the drum must be determined by analyt-
4 ical methods approved by the department or its agent.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

52 (iii) when the initial testing reveals any condition that requires
53 correction or repairs by the manufacturer or vendor, the department or
54 its agent shall retest the equipment as soon as practicable after the
55 manufacturer or vendor completes whatever modifications may be needed;
56 and

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

4 § 19-1325. Dry cleaning owner/manager, operator and inspector training
5 and certification.

6 (1) No dry cleaning facility subject to this title shall be permitted
7 to operate unless said facility is under the supervision of a person
8 possessing a dry cleaning owner/manager certification; and the dry
9 cleaning machine is operated by a person holding a dry cleaning operator
10 certification. Except for the conditions established in subdivision 2
11 of this section, it is unlawful for any person to operate a dry cleaning
12 facility subject to this title unless:

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

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

17 (2) In the event that an unforeseen/unpredictable situation prevents a
18 dry cleaning facility from having a certified operator operating the dry
19 cleaning equipment, the owner/manager shall be allowed to continue oper-
20 ation of the dry cleaning machine with a non-certified operator for a
21 period not to exceed three days per occurrence. Under no circumstances
22 may an uncertified operator operate dry cleaning equipment at any facil-
23 ity for a total of more than ten days in any calendar year. If, the use
24 of an uncertified operator would cause nonperformance of required main-
25 tenance and leak detection, the facility must suspend dry cleaning oper-
26 ations until a certified operator is available. The purpose of this
27 provision is to accommodate emergency or unforeseen extenuating circum-
28 stances and must not be used to cover routine situations such as
29 vacations, or other scheduled absences.

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

34 (a) Course topics:

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

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

38 (iii) the characteristics and environmental effects of perc;

39 (iv) the health impacts of perc;

40 (v) knowledge of personal protective equipment;

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

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

47 (viii) operation of dry cleaning systems including environmental
48 control equipment and the use of perc-contaminated wastewater evapora-
49 tors;

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

52 (x) inspection and testing of dry cleaning systems for leaks and fugi-
53 tive emissions;

54 (xi) monitoring of perc levels in the air;

55 (xii) maximizing perc reclamation and mileage; and,

1 (xiii) waste handling requirements to minimize perc loss to the envi-
2 ronment.

3 (b) Administration. The course administration must include:

4 (i) testing by an independent testing organization, covering all
5 topics listed in paragraph (a) of this subdivision; and

6 (ii) procedures for revocation of certification.

7 (4) A dry cleaning operator certification may be issued by any organ-
8 ization that offers a training and testing program (including refresher
9 courses) approved by the department that includes, but is not limited
10 to, the following elements:

11 (a) Course topics:

12 (i) the characteristics and environmental effects of perc;

13 (ii) appropriate use of wet cleaning;

14 (iii) the health impacts of perc;

15 (iv) knowledge of personal protective equipment;

16 (v) state recordkeeping and reporting requirements;

17 (vi) knowledge of general and local exhaust ventilation systems;

18 (vii) operation of dry cleaning systems including environmental
19 control equipment and the use of perc-contaminated wastewater evapora-
20 tors;

21 (viii) maintenance of dry cleaning systems including spill prevention
22 techniques;

23 (ix) inspection and testing of dry cleaning systems for leaks and
24 fugitive emissions;

25 (x) monitoring of perc levels in the air;

26 (xi) maximizing perc reclamation and mileage; and

27 (xii) waste handling requirements to minimize perc loss to the envi-
28 ronment.

29 (b) Administration. The program administration must include:

30 (i) a hands on program designed to test an acceptable level of know-
31 ledge. Successful completion of the program must include a demonstrated
32 knowledge of all topics listed in paragraph (a) of subdivision 3 of this
33 section.

34 (ii) procedures for revocation of certificate.

35 (5) Individuals that inspect dry cleaning facilities, either as a
36 registered inspector or under the supervision of a registered inspector,
37 must obtain a dry cleaner owner/manager certification.

38 (6) Effective date for dry cleaning owner/manager and dry cleaning
39 operator certification. After the date of the first qualifying training
40 program approved by the department, the requirements of this subdivision
41 shall take effect and the first training and certification shall be
42 mandatory according to the following schedule:

43 (a) upon start up for all operators of new dry cleaning facilities
44 unless the facility owner/manager can demonstrate that compliance with
45 this requirement poses an unreasonable burden because of the unavail-
46 ability of scheduled training courses or testing facilities;

47 (b) three months for operators of all existing dry cleaning facilities
48 that are in mixed-use locations and that contain transfer machines;

49 (c) six months for operators of all existing dry cleaning facilities
50 in mixed-use locations that contain dry-to-dry vented machines but do
51 not contain transfer machines;

52 (d) nine months for operators of all the rest of the existing dry
53 cleaning facilities in mixed-use locations;

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

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

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

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

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

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

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

26 § 19-1327. Permitting.

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

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

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

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

54 (c) For existing facilities where dry cleaning systems must be modi-
55 fied or replaced in order to comply with equipment standards under
56 section 19-1309 of this title registration applications must be submit-

1 ted to the department at least ninety calendar days in advance of the
2 applicable compliance deadlines.

3 (3) Notwithstanding the provisions of subdivisions 1 and 2 of this
4 section, perc dry cleaning facilities that are major stationary sources
5 must comply with all requirements in the rules and regulations promul-
6 gated pursuant to this chapter with regard to obtaining a Title V facil-
7 ity permit.

8 § 19-1329. Compliance inspections.

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

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

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

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

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

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

23 (i) a licensed professional engineer;

24 (ii) a registered architect; or

25 (iii) a certified industrial hygienist.

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

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

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

38 (5) Inspections must be conducted in accordance with protocols speci-
39 fied by the department, using an inspection reporting form specified by
40 the department.

41 (6) Analysis of air samples collected by passive sampling devices or
42 the equivalent must be conducted by a laboratory certified by the Envi-
43 ronmental Laboratory Approval Program (ELAP) of the New York state
44 department of health.

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

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

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

53 (10) The owner/manager or operator must:

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

1 (b) If the inspection reveals a leak or malfunction, the facility must
2 be repaired with the timeframes established in section 19-1311 of this
3 title and reinspected within one month.
4 § 19-1331. Equivalency.

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

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

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

19 (c) Information detailing operation and maintenance requirements and
20 appropriate testing parameters consistent with sections 19-1311 and
21 19-1313 of this title;

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

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

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

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

41 (4) Any decision made by the department in accordance with subdivi-
42 sions 1, 2 and 3 of this section is contingent upon review and approval
43 by EPA.

44 § 19-1333. Posting notice.

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

51 (a) "This dry cleaning facility uses the chemical commonly called PERC
52 (also called tetrachlorethene, tetrachloroethylene or perchloroethy-
53 lene)."

54 (b) "The following potential health effects are associated with expo-
55 sure to perc emissions:

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

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

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

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

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

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

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

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

22 § 19-1335. Severability.

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

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

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