

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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Part 232

Dry-Cleaning Certificate

Renewal Booklet

Information for Individuals Renewing their §232-2.10 Perchloroethylene Dry-Cleaning Certificates

Every Owner, Manager and/or Operator of perc dry cleaning machines must take a New York State Department of Environmental Conservation (NYSDEC) approved sixteen-hour §232-2.10 environmental training program and successfully pass the respective Owner/Manager and/or Operator examination(s). As a NYS-Certified Perchloroethylene (Perc) dry-cleaning professional, it is your responsibility to know the many regulatory requirements and to make sure that your Perc dry cleaning operation is run according to the rules.

NYSDEC (the Department) has been enforcing the Part 232 requirements for more than twenty years. The regulation was revised on March 10, 2018 to update the requirements for perc dry cleaning facilities and add new requirements for alternative solvent dry cleaning equipment.

The United States Environmental Protection Agency (USEPA) lists Perc vapor as a Hazardous Air Pollutant (HAP). Perc is classified as a likely human carcinogen. Studies show that workers exposed to Perc have a slightly higher risk of developing cancer and are more likely to have reproductive problems. Long-term exposure to Perc has been shown to cause brain and nervous system damage: decreased hand-eye coordination, lower scores on vision tests, less ability to distinguish colors, decreased learning speed, and a decreased ability to memorize or pay attention. Long-term exposure can also cause liver and kidney damage.

Perchloroethylene exposure is harmful even at low concentrations. In a study of healthy people who lived in apartments near dry-cleaning shops, individuals were tested for their ability to see subtle differences in color, to pay attention and to react quickly. Their test scores were lower than healthy people who did not live near dry-cleaning shops.

The following pages outline the major regulatory requirements of 6 NYCRR Part 232, Dry Cleaning Facilities.

Overview of Dry Cleaner Regulation

There are approximately 1,590 dry cleaning facilities operating in New York State. About 1,030 of these facilities use perchloroethylene (perc) as a dry cleaning solvent, 540 use an alternative solvent and 20 use both perc and alternative solvents. The majority of these facilities are located in the New York City metropolitan area and most only use perc. All of these facilities are regulated under the newly revised Dry Cleaning Facilities regulation, 6 NYCRR Part 232, which became effective on March 10, 2018. Facilities that only use water-based cleaning processes (wet cleaning) and/or liquid carbon dioxide dry cleaning machines are exempt from this regulation.

Specific Key Requirements

Facility Registrations and Permits: Almost all dry cleaning facilities must obtain a NYS Air Facility Registration (232-1.6(a)(3)). The largest facilities must obtain a State, or Title V, Facility Permit (232-1.6(a); 232-2.8(b)(3)(iii); 232-3.6(b)(3)(iii)). Persons proposing to construct a new dry cleaning facility, make changes to an existing facility by installing new or modified perc or alternative solvent equipment or by switching dry cleaning solvents, must apply for an air permit (Air Permit Application Form) or registration (Form AFR-232 and instructions AFR-232I) and receive department approval in accordance with Part 201 before commencing construction, installation or modification. New or modified perc facilities must also submit a Notification of Compliance Status (Form 232-13) to the NYSDEC Bureau of Stationary Sources, NYSDEC Regional Office and the EPA.

Notification of Dry Cleaning Equipment Shutdown: Any person who owns an existing facility subject to this Part must submit a completed Notice of Dry Cleaning Equipment Shutdown (Form 232-14) to the department when the operation of any perc or alternative solvent dry cleaning machine is terminated and taken out of service. This completed form must be submitted to the department by means of certified mail, return receipt requested, no later than 30 days after the termination of operation. Where this form is submitted by an owner of a dry cleaning facility that has decommissioned all dry cleaning equipment and ceased operation of the facility, the air facility permit or registration will be expired and the facility will be removed from the annual fee billing list.

Posting Notices: Facility owners or operators must post notices that inform building tenants and/or customers where perc and/or alternative solvent dry cleaning chemicals are used in the facility (232-1.7(a)). Separate notices are required for both types of solvents. These posting notices state where additional information may be found about the potential health effects from exposure to dry cleaning chemicals (232-1.7(b)(4); 232-1.7(c)(2)). The notices, supplied upon request and prepared by the department with information provided by the facility owner or operator, must be posted in a conspicuous facility location that is accessible to the general public. Posting notices for the use of perc have been required since May 15, 1997 and are required under new Part 232. Posting notices for the use of an alternative solvent are required after September 6, 2018.

Perc Dry-Cleaning Machines: Subpart 232-2 regulates perc dry cleaning machines based on the installation date, machine type (3rd or 4th generation), department Model Certification or manufacturer's Statement of Compliance, facility type (co-located residential, co-located commercial or stand-alone) and by future phase-out dates (232-2.4). The use of perc dip tanks and perc transfer equipment is prohibited (232-2.3(a)(1); 232-2.3(e)(2)).

New installations: Only new compliant fourth generation perc dry cleaning machines that belong to equipment models previously certified by the department, or which have been issued a manufacturer's Statement of Compliance, may be installed and thereafter operated at stand-alone and co-located commercial facilities (232-2.4(b)(1)). No perc dry cleaning machines may

be installed in any co-located residential facilities (232-2.3(d)(3)). Used equipment may only be installed if a variance is granted by the department (232-2.2(e)). Variances will be granted to relocate any used compliant fourth generation perc machines that are less than 10 years old, from an existing permitted or registered facility to a stand-alone facility under the same ownership, if the facility meets all other applicable requirements and a new or modified air permit or registration is first obtained.

Existing installed machines: Compliant perc dry cleaning machines and external door fans may be operated at their existing locations unless future operation is prohibited (232-2.4(b)(2)). The installation of external door fans on fourth generation dry cleaning machines, which were essentially banned after September 24, 2003, are now officially prohibited after March 10, 2018 (232-2.3(d)(5)). The operation of any perc dry cleaning machine at a co-located residential location is prohibited by the federal NESHAP (40 CFR Part 63, Subpart M) and Part 232 after December 21, 2020 (232-2.3(c)(5); 232-2.3(d)(7)). After December 31, 2021, all third generation perc dry cleaning machines must be removed from service (232-2.3(c)(6)). Owners, managers or trained operators of perc dry cleaning equipment must complete weekly leak inspection and preparedness and prevention checklists (Forms 232-2P and 232-3P), a weekly maintenance log for internal carbon adsorbers (Form 232-4P), a monthly owner drum testing checklist (Form 232-5P), an occasional maintenance log for critical equipment components (Form 232-6P), a six-month operation and maintenance checklist (Form 232-7P) and a corrective action log (Form 232-8P). Additionally, facility-wide and occasional emergency response and hazardous waste shipment logs (Forms 232-9P&A and 232-10P&A) and a monthly perc usage log (Form 232-11P) must be completed.

Monthly Owner Drum Testing of Perc Machines: In addition to the required yearly machine testing by compliance inspectors (inspector drum testing), essentially all operational fourth generation perc dry cleaning machines must be tested by the owner or owner's representative at least once each month (232-2.5(i)). Testing must be conducted using a colorimetric detector tube sampling pump, or photo ionization detector, in good working order. This equipment must be purchased by the owner or owner's representative to conduct this test. Testing results must be recorded on department form 232-5P.

Vapor Barrier Rooms and General Exhaust Ventilation Systems: All co-located commercial and residential perc dry cleaning facilities must be equipped with a vapor barrier room that encloses all perc dry cleaning machines (232-2.4(a)(1)). Entry doors may only be open when a person is entering or exiting the room enclosure. Vapor barriers must be constructed of polyvinyl chloride (PVC) sheet, 22 mil thick (0.022 in.); sheet metal; metal foil faced composite board; and other equivalent materials that are impermeable to perc vapors including epoxy coatings, glass and structural plastic. All joints, seams and penetrations of the vapor barrier room must be sealed except for entry doors and outside air inlet and exhaust vents. The use of chemically compatible sealants (caulks) are important to maintain the integrity of the vapor barrier room enclosure. Vapor barrier rooms must be equipped with a general exhaust ventilation

system that is completely separate from the ventilation system(s) serving other areas of the building (232-2.4(a)(2)). The general exhaust ventilation system must be operated at all times the facility is open for business and be capable of at least one air change every five minutes.

Perc solvent deliveries: Perc process tanks must be refilled using a closed-loop delivery system (232-2.6(d)(6)).

Yearly Compliance Inspections: Every perc dry cleaning facility must be inspected, and each dry cleaning machine must be tested (inspector drum testing), at least once each year by an independent department approved Part 232 Registered Compliance Inspector (232-2.11(a) & (b)). Facility inspection reports are reviewed by regional DEC engineering/technical staff for compliance and enforcement purposes. Part 232 requires that owner/managers must provide public access to a facilities most recent Compliance Inspection report (232-2.11(k)(1)).

Alternative Solvent Dry-Cleaning Machines: Subpart 232-3 regulates alternative solvent dry cleaning machines based on the installation date, machine type (washers, extractors, dryers and dry-to-dry machines), primary control system (water cooled condenser or refrigerated condenser), age and condition of the machine and by the manufacturer's Certification of Model Compliance (232-3.3(b)).

New installations: Only new compliant machines, relocated compliant machines, or used compliant machines that are less than five (5) years old and certified by the manufacturer or their representative as being in a like new condition, may be installed in any location (232-3.3(b)(1)). Newly installed machines must be dry-to-dry, closed-loop machines that are equipped with a refrigerated condenser and meet the requirements of Part 232-3.3(a)(1)(ii). Owners of permitted or registered dry cleaning facilities may relocate from their facility any compliant alternative solvent dry cleaning machines, that are less than 10 years old, to any other dry cleaning facility under their ownership if the facility meets all other applicable requirements and a new or modified air permit or registration is first obtained (232-3.3(b)(1)(i)). After September 6, 2018, no person may sell, offer for sale, cause to be offered for sale, or lease any alternative solvent dry cleaning machine to be installed in New York State unless the manufacturer has submitted a Certification of Model Compliance to the department (232-3.7(a)(1)). A Certification of Model Compliance shall certify that the subject alternative solvent dry cleaning machine model meets the design and performance standards of Part 232-3.3. Upon submittal of a Certification of Model Compliance, the machine model certification will be posted on the department's website.

Existing installed machines: Compliant alternative solvent dry cleaning equipment installed prior to March 10, 2018 may be operated at their existing locations unless future operation is prohibited (232-3.3(b)(2)). All dryers without a primary control system, solvent dip tanks, drying cabinets and water proofing operations in any vented machine are prohibited after December 31, 2021 (232-3.2(c)). Solvent recovery dryers that have a water cooled condenser for the

primary control system are prohibited after December 31, 2026 (232-3.2(d)). Finally, the operation of any alternative solvent transfer machine is prohibited after December 31, 2031 (232-3.2(e)). Owners, managers or operators of alternative solvent dry cleaning equipment must complete weekly leak inspection and preparedness and prevention checklists (Forms 232-2A and 232-3A), a six-month operation and maintenance checklist (Form 232-7A) and a corrective action log (Form 232-8A). Additionally, facility-wide and occasional emergency response and hazardous waste shipment logs (Forms 232-9P&A and 232-10P&A) and monthly alternative usage logs (Form 232-12A) must be completed if applicable.

Approved Alternative Solvents: After September 6, 2018, dry cleaners may only use approved solvents in alternative solvent dry cleaning equipment (232-3.8(a)). Manufacturers requesting approval of an alternative solvent must submit to the department the information specified under Part 232-3.8(c) of the Dry Cleaning Facilities regulation. All alternative solvents proposed for approval will be noticed in the Environmental Notice Bulletin (ENB). After a thirty (30) day comment period, all approved alternative solvents will be posted on the department's website: <http://www.dec.ny.gov/chemical/72273.html>.

Equipment standards and specifications: Part 232 has equipment standards and specifications for both perc and alternative solvent dry cleaning equipment. Perc equipment standards and specifications are specified under 232-2.4(a)(3), (4) and (5). Alternative solvent equipment standards and specifications are specified under 232-3.3.

Leak Inspection, self-monitoring and operational and maintenance requirements: Part 232 has separate leak inspection, self-monitoring and operational and maintenance requirements for perc (232-2.5; 232-2.6) and alternative solvent (232-3.4; 232-3.5) dry cleaning equipment. New forms 232-2P, 232-3P, 232-4P, 232-5P, 232-6P, 232-7P and 232-8P are for perc dry cleaning equipment and new forms 232-2A, 232-3A, 232-7A and 232-8A are for alternative solvent dry cleaning equipment.

Hazardous Waste Management: Part 232 contains specific solid and hazardous waste disposal and record-keeping requirements (232-1.4). A record of hazardous waste shipments must be noted and maintained on Form 232-10P&A.

Wastewater treatment: Part 232 contains specific requirements for wastewater treatment and disposal (232-1.4(a)(1) & (2); 232-2.6(d)(2)(ii); 232-2.7; 232-3.5(c)(9)).

Reporting and recordkeeping: There are reporting and recordkeeping requirements for both perc (232-2.8) and alternative solvent (232-3.6) dry cleaning equipment in Part 232. All records must be kept on-site for at least five (5) years (232-1.4(a)(6); 232-2.5(a); 232-2.6(c); 232-2.8(f); 232-3.4(a); 232-3.6(e)). The department has created new Part 232 inspection and reporting forms for perc and alternative solvent dry cleaners. These new forms can be obtained from any NYSDEC office or can be downloaded from the department's website. In addition to the forms for perc and alternative solvent dry cleaning equipment, new forms 232-9P&A (Emergency Response), 232-10P&A

(Hazardous Waste Shipment Log), 232-11P (Perc Usage Log) and 232-12A (Alternative Solvent Usage Log) are facility-wide record keeping forms.

Owner/Manager and Operator Certification: Perc dry cleaning facility owners and/or managers and all perc machine operators must attend a 16-hour training course, successfully pass a DEC Certification test and hold current, valid DEC Owner/Manager and/or Operator Certificates (232-2.10(a)). Every perc dry cleaning facility must have at least one person with an Owner/Manager and Operator Certification. New Part 232 has extended the expiration date for re-certifications issued after March 10, 2018 from three (3) to five (5) years (232-2.10(f)). Although the training course is only required for owners, managers and operators of perc dry cleaning facilities, the department recommends this course for all owners, managers and operators of alternative solvent dry cleaning machines.

Manufacturer's training sessions: After any new perc or alternative solvent dry cleaning machine is installed at a facility, the manufacturer or manufacturer's representative must conduct an on-site training session for the purchaser or lessee. A minimum two-day training session is required following the installation of a new perc machine (232-2.9(a)(6)). Training sessions must include instruction on how to maintain and operate the dry cleaning machine.

Dry Cleaning Facility Inspection and Reporting Forms: The following is a list of all dry cleaning facility inspection and reporting forms. Copies of these forms may be downloaded from the Department's website at the URL list below the title or by clicking the link.

General Dry Cleaning Facility Forms:

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| AFR-232 | AIR FACILITY REGISTRATION APPLICATION for Dry Cleaners using Perchloroethylene and/or Approved Alternative Solvents https://www.dec.ny.gov/docs/air_pdf/232dcregistratnappl.pdf |
| AFR-232I | AIR FACILITY REGISTRATION APPLICATION INSTRUCTIONS for Perc and Alternative Solvent Dry Cleaning Facilities https://www.dec.ny.gov/docs/air_pdf/232idcregappinstrns.pdf |
| 232-13 | Notification of Compliance Status https://www.dec.ny.gov/docs/air_pdf/23213dcneshapstatus.pdf |
| 232-14 | Notice of Dry Cleaning Equipment Shutdown https://www.dec.ny.gov/docs/air_pdf/23214dceqmntshutdwn.pdf |
| 232-15 | Part 232 DRY CLEANING COMPLIANCE INSPECTION REPORT https://www.dec.ny.gov/docs/air_pdf/23215rciinspnform.pdf |
| 232-15I | Part 232 Compliance Inspection Report Instructions https://www.dec.ny.gov/docs/air_pdf/23215irciinspinstrn.pdf |

Perc Dry Cleaning Equipment Checklists

(Parts I, II, II(a), III, IV, V, VI, VII, VIII):

(Downloadable as a group) https://www.dec.ny.gov/docs/air_pdf/232percchkstgrp.pdf

- 232-2P Parts I, II & II(a) - WEEKLY Leak Inspection and Self-monitoring Checklists for Perc Dry Cleaning Equipment
- Part I – Weekly Leak Inspection Checklist
Part II – Weekly Self-monitoring Checklist for Refrigerated Condensers
Part II(a) - Weekly Self-monitoring Checklist for External Door Fans
- 232-3P Part III – WEEKLY Preparedness and Prevention Checklist for Perc Dry Cleaning Equipment
- 232-4P Part IV – WEEKLY Maintenance Log for Integral Carbon Adsorbers on Perc Dry Cleaning Machines
- 232-5P Part V – MONTHLY Owner Drum Testing Checklist for Perc Dry Cleaning Machines
- 232-6P Part VI – OCCASIONAL Maintenance Log for Perc Dry Cleaning Equipment
- 232-7P Part VII – SIX MONTH Operation and Maintenance Checklist for Perc Dry Cleaning Equipment
- 232-8P Part VIII - Corrective Action Log for Perc Dry Cleaning Equipment

Alternative Solvent Dry Cleaning Equipment Checklists

(Parts I, II, III, VII, VIII):

(Downloadable as a group) https://www.dec.ny.gov/docs/air_pdf/232altsolvchklstgrp.pdf

- 232-2A Parts I & II – WEEKLY Leak Inspection and Self-monitoring Checklists for Alternative Solvent Dry Cleaning Equipment
- Part I – Weekly Leak Inspection Checklist
Part II – Weekly Self-monitoring Checklist for Refrigerated Condensers
- 232-3A Part III – WEEKLY Preparedness and Prevention Checklist for Alternative Solvent Dry Cleaning Equipment
- 232-7A Part VII – SIX MONTH Operation and Maintenance Checklist for Alternative Solvent Dry Cleaning Equipment

232-8A Part VIII - Corrective Action Log for Alternative Solvent Dry Cleaning Equipment

Facility-wide Logs for Perc and or Alternative Solvent Dry Cleaning Facilities (Parts IX, X, XI, XII):

(Downloadable as a group) https://www.dec.ny.gov/docs/air_pdf/232facilitywidelogs.pdf

232-9P&A Part IX – OCCASIONAL Emergency Response Log for Perc and/or Alternative Solvent Dry Cleaning Facilities

232-10P&A Part X – OCCASIONAL Hazardous Waste Shipment Log for Perc and/or Alternative Solvent Dry Cleaning Facilities

232-11P Part XI – MONTHLY Perc Usage Log for Perc Dry Cleaning Facilities

232-12A Part XII – MONTHLY Alternative Solvent Usage Log for Alternative Solvent Dry Cleaning Facilities with Transfer Machines