#### TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243



# GENERAL PERMIT To Construct/Modify/Operate

Issued Pursuant to the Tennessee Air Quality ActDate Issued:February 2, 2017Permit NumberFirst Amendment:February 22, 2017G00001Date Expires:February 1, 2027G00001

Installation Description

Area Source Perchloroethylene Dry Cleaning Facility

NESHAP – 40 CFR Part 63 Subpart M

Sources covered by this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

P1. Permit G00001 is hereby issued and made available to persons who operate perchloroethylene dry cleaning facilities subject to the United States Environmental Protection Agency regulations found at 40 CFR Part 63 Subpart M in Tennessee, with the exception of non-state owned sources located in areas issued a Certificate of Exemption from the Tennessee Air Pollution Control Board; sources subject to Tenn. Comp. R. & Regs. 1200-03-09-.02(11); and new or modified sources locating in areas designated as non-attainment for ozone by the U.S. Environmental Protection Agency or the Tennessee Air Pollution Control Board. Existing sources [as defined in Tenn. Comp. R. & Regs 1200-03-02-.02(1)(q)] located in ozone non-attainment areas are eligible for coverage under this permit if no source-specific conditions have been established due to their location in a non-attainment area. This permit authorizes the construction, operation, and modifications of all equipment subject to 40 CFR Part 63 Subpart M, and the resulting air emissions, provided all requirements of this permit and the Tennessee Air Pollution Control Regulations are met.

(Conditions begin on next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

## POST AT INSTALLATION ADDRESS

#### **Procedural Conditions**

- G1. Only sources subject to the requirements of 40 CFR Part 63, Subpart M that are not major sources, do not include transfer machines, and are not excluded in **Condition P1** of this permit are eligible for coverage under this general permit. A dry cleaning facility is a major source if:
  - (a) It has the potential to emit 10.0 tons per year<sup>1</sup> or more of perchloroethylene to the atmosphere; or
  - (b) It includes only dry-to-dry machine(s) and has a total yearly perchloroethylene consumption greater than 8,000 liters (2,100 gallons) as determined according to 40 CFR §63.323(d); or
  - (c) It includes only transfer machine system(s) or both dry-to-dry machine(s) and transfer machine system(s) and has a total yearly perchloroethylene consumption greater than 6,800 liters (1,800 gallons) as determined according to 40 CFR §63.323(d).

Tenn. Comp. R. & Regs. 1200-03-09-.06(5) and 40 CFR §63.320(g)

- G2. Applicability criteria for 40 CFR Part 63, Subpart M: perchloroethylene dry cleaning facilities.
  - (a) The dry cleaning facility uses perchloroethylene.
  - (b) It is not a coin-operated dry cleaning machine.

40 CFR §63.320

G3. This permit shall serve as both a construction and operating permit provided the provisions of **Condition G4** are met.

Tenn. Comp. R. & Regs. 1200-03-09-.06(3)

- G4. Notice of Intent (NOI) Requirements:
  - (a) Initial Coverage: Facilities desiring to be covered by this general permit shall submit an NOI to the Technical Secretary. The NOI must be made on forms available from the Technical Secretary.
  - (b) Construction and Modification
    - (1) New facilities wishing to be covered by this general permit must submit an NOI to the Technical Secretary no fewer than forty-five (45) days prior to the estimated starting date of construction. The NOI must be made on forms available from the Technical Secretary.
    - (2) If a facility presently covered by this general permit intends to modify their facility [as "modification" is defined in Tenn. Comp. R. & Regs. 1200-03], an NOI for such modification must be submitted to the Technical Secretary no fewer than forty-five (45) days prior to such modification. The NOI must be made on forms available from the Technical Secretary.

<sup>&</sup>lt;sup>1</sup> As used herein, the term "year" means an interval of twelve (12) consecutive months.

- (c) Renewal of Coverage Under the General Permit: For a facility presently covered by this general permit, an NOI shall be submitted within thirty (30) days of the effective date of the re-issued general permit. In the case of a transfer of ownership, an NOI must be submitted within thirty (30) days of the change, provided the new owner or operator does not make any changes to the stationary source that meet the definition of modification as defined in Tenn. Comp. R. & Regs. 1200-03, and the new owner agrees to abide by the terms of the permit, all provisions of these regulations, and any compliance agreements made by the previous owner. The NOI must be made on forms available from the Technical Secretary. No transfer of coverage under this general permit shall be permitted except in accordance with this **Condition G4(c)**.
- (d) If any of the contact information included in the NOI changes during the term of the general permit, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include all new information and must be signed by the responsible person. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of the Notice of Coverage limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants. TAPCR 1200-03-09-.03(8)

Tenn. Comp. R. & Regs. 1200-03-09-.06(6)

G5. Notwithstanding the provisions of this permit, the Technical Secretary may require any person to apply for and obtain a construction permit as set forth in Tenn. Comp. R. & Regs. 1200-03-09-.01(1) and an operating permit as set forth in 1200-03-09-.02(1) through (4) should it be deemed necessary by the Technical Secretary.

Tenn. Comp. R. & Regs. 1200-03-09-.06(2)

G6. Termination of Coverage: If either a source covered by a general permit or the Division determines that the source no longer qualifies for such permit, the source shall submit a notice of the change in status within thirty (30) days of such determination by the source or notification by the Division.

Tenn. Comp. R. & Regs. 1200-03-09-.06(7)

G7. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, the National Emissions Standards for Hazardous Air Pollutants (NESHAP) federal regulations published under 40 CFR 63 Subpart M.

Tenn. Comp. R. & Regs. 1200-03-09-.03(8)

G8. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application.

Tenn. Comp. R. & Regs. 1200-03-09-.02(6)

- G9. Ownership and Name Changes
  - (a) In the event of a change in ownership at a facility covered under this general permit, the new owner must notify the Technical Secretary in writing of such change and request an amendment to their Notice of Coverage to reflect said ownership change.

(b) In the event of a name change not associated with a change in ownership at a facility covered under this general permit, a responsible person (owner or officer) must notify the Technical Secretary in writing of such change. A copy of this notification must be attached to the Notice of Coverage.

Tenn. Comp. R. & Regs. 1200-03-09-.03(6)

#### **Conditions Specific to Perchloroethylene Dry Cleaners**

Section A.	Dry to Dry Machines Installed Before December 9, 1991 That Use Less Than 140 Gallons of
	Perchloroethylene per year

- A1. This facility is subject to NESHAP 40 CFR Part 63, Subpart M National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.
- A2. If this facility purchases more than 140 gallons of perchloroethylene during any period of 12 consecutive months, it must meet additional requirements of 40 CFR Part 63, Subpart M National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities. These additional requirements include, but are not limited to, the following:
  - (a) Submit written notification to the Technical Secretary within thirty (30) calendar days after the limit was determined to have been exceeded. This notification shall include the twelve-month perchloroethylene consumption in gallons and shall describe how the facility intends to comply with any newly applicable requirements under 40 CFR §63.322, §63.323 and §63.324.
  - (b) Achieve compliance with the newly applicable requirements under 40 CFR §63.322, §63.323 and §63.324 within 180 days from the date on which the limit was determined to have been exceeded.
  - (c) Submit a statement to the Technical Secretary by registered or certified mail, signed by a responsible official, within thirty (30) calendar days after the date on which compliance is achieved. This statement shall include the new perchloroethylene consumption rate for the facility and certification that the facility is in compliance with all newly applicable requirements. The submittal must also include a declaration that all information contained in the statement is accurate and true.

40 CFR §63.320

A3. The owner or operator shall keep a record of the total volume of perchloroethylene purchased on a monthly basis, and for all periods of twelve (12) consecutive months. This log shall be maintained in tabular format. The permittee may use the format provided (see Attachment 1, "Monthly Perchloroethylene Purchase Log") or an alternate format that readily provides the same information. For monthly recordkeeping, all information shall be entered into the log no later than thirty (30) days from the end of the month for which the information is required. This information must be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. This information must be retained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.324

A4. Receipts for all perchloroethylene purchased shall be maintained and kept available for inspection by the Technical Secretary or an authorized representative. These receipts must be retained for a period of not less than five (5) years following the date the receipt is received.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.324(d)

A5. The door of each dry cleaning machine shall be closed immediately after transferring articles to or from the machine and shall remain closed at all other times.

40 CFR §63.322(c)

A6. Each dry cleaning system shall be operated and maintained according to manufacturers' specifications and recommendations. Design specifications and the operating manuals for each dry cleaning system located at the facility shall be permanently retained at the source location.

40 CFR §63.322(d)

A7. All cartridge filters shall be drained in their housing, or other sealed container, for a minimum of twenty-four (24) hours before removal from the facility.

40 CFR §63.322(i)

A8. All perchloroethylene and wastes that contain perchloroethylene, including separator water, shall be stored in closed solvent tanks or closed solvent containers with no perceptible leaks. This requirement applies at all times, except when manually transferring waste from the machine. The exception to this requirement is that containers for separator water may be uncovered, as necessary per manufacturer's specifications, for proper operation of the machine and still.

40 CFR §63.322(j)

A9. The owner or operator of this facility with a total facility consumption below the applicable consumption in **Condition A2**, shall inspect the following components as identified in 40 CFR §63.22(k). The components, if present, shall be inspected biweekly for perceptible leaks while the dry cleaning system is operating. Inspection with a halogenated hydrocarbon detector or perchloroethylene gas analyzer also fulfills the requirement for inspection of perceptible leaks.

40 CFR §63.322(1)

- (a) Hose and pipe connections, fittings, couplings, and valves
- (b) Door gaskets and seatings
- (c) Filter gaskets and seatings
- (d) Pumps
- (e) Solvent tanks and containers
- (f) Water separators
- (g) Muck cookers
- (h) Stills
- (i) Exhaust dampers
- (j) Diverter valves
- (k) All filter housings

"Perceptible leaks" means any perchloroethylene vapor or liquid leaks that are obvious from: the odor of perchloroethylene; visual observation, such as pools or droplets of liquid; or the detection of gas flow by passing the fingers over the surface of the equipment.

"Biweekly" means any 14-day period of time.

The results of the biweekly inspections shall be compiled in tabular format. The permittee may use the format provided (see Attachment 2, "Biweekly/Monthly Leak Inspection Checklist") or an alternative format which clearly provides the same information. For biweekly recordkeeping, all information, including the results from inspections, shall be entered into the log no later than seven (7) days from the end of the bi-weekly period for which the information is required. This information shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. This information must be retained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

A10. The components listed in **Condition A9** shall be inspected monthly for vapor leaks while the component is in operation. The inspections shall be conducted using a halogenated hydrocarbon detector or perchloroethylene gas analyzer that is operated according to the manufacturer's instructions. The operator shall place the probe inlet at the surface of each component interface where leakage could occur and move it slowly along the interface periphery. The halogenated hydrocarbon detector or perchloroethylene gas analyzer shall be used according to the manufacturer's instructions and shall be capable of detecting vapor concentrations of 25 parts per million by volume (ppmv).

40 CFR §63.322(o)

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

The results of the monthly inspections shall be compiled in tabular format. The permittee may use the format provided (see Attachment 2, "Biweekly/Monthly Leak Inspection Checklist") or an alternative format which clearly provides the same information. For monthly recordkeeping, all information, including the results from inspections, shall be entered into the log no later than thirty (30) days from the end of the month for which the information is required. This information shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. This information must be retained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

A11. All perceptible leaks detected while conducting the inspection required under **Condition A9** and all vapor leaks detected while conducting the inspection required under **Condition A10** shall be repaired within twenty-four (24) hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within two (2) working days of detecting such a leak. Such repair parts shall be installed within five (5) working days after receipt. A log of all service and repairs shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. The permittee may use the format provided (see Attachment 4, "Service and Repair Log") or an alternative format which clearly provides the same information. All service and repair activities (including activities that are in process) shall be recorded no later

than seven (7) days following the start of the activity. This information must be retained for a period of not less than five (5) years following the date the repair or service is completed.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.322(m)

# Section B. Dry to Dry Machines Installed After December 9, 1991 and Before December 21, 2005 Equipped With Refrigerated Condenser Using Pressure Gauges and/or Temperature Sensors

- B1. This facility is subject to NESHAP 40 CFR Part 63, Subpart M National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.
- B2. If this facility purchases more than 2,100 gallons of perchloroethylene during any period of 12 consecutive months, it shall become a major source and must meet additional requirements of 40 CFR Part 63, Subpart M National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities. These additional requirements include, but are not limited to, the following:
  - (a) Submit written notification to the Technical Secretary within thirty (30) calendar days after the limit was determined to have been exceeded. This notification shall include the twelve-month perchloroethylene consumption in gallons and shall describe how the facility intends to comply with any newly applicable requirements under 40 CFR §63.322, §63.323 and §63.324.
  - (b) Achieve compliance with the requirements for a major source, as specified in 40 CFR §63.322, §63.323 and §63.324, within 180 days from the date on which the limit was determined to have been exceeded.
  - (c) Submit a statement to the Technical Secretary by registered or certified mail, signed by a responsible official, within thirty (30) calendar days after the date on which compliance is achieved. This statement shall include the new perchloroethylene consumption rate for the facility and certification that the facility is in compliance with all newly applicable requirements. The submittal must also include a declaration that all information contained in the statement is accurate and true.
  - (d) Submit to the Technical Secretary, within one (1) year from the date the limit was determined to have been exceeded, a Title V application.

#### 40 CFR §63.320

B3. The owner or operator shall keep a record of the total volume of perchloroethylene purchased on a monthly basis, and for all periods of 12 consecutive months. This log shall be maintained in tabular format. The permittee may use the format provided (see Attachment 1, "Monthly Perchloroethylene Purchase Log") or an alternate format that readily provides the same information. For monthly recordkeeping, all information shall be entered into the log no later than thirty (30) days from the end of the month for which the information is required. This information must be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. This information must be retained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.324

B4. Receipts for all perchloroethylene purchased shall be maintained and kept available for inspection by the Technical Secretary or an authorized representative. These receipts must be retained for a period of not less than five (5) years following the date the receipt is received.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.324(d)

B5. The door of each dry cleaning machine shall be closed immediately after transferring articles to or from the machine and shall remain closed at all other times.

40 CFR §63.322(c)

B6. Each dry cleaning system shall be operated and maintained according to manufacturers' specifications and recommendations. Design specifications and the operating manuals for each dry cleaning system located at the facility shall be permanently retained at the source location.

40 CFR §63.322(d)

B7. All cartridge filters shall be drained in their housing, or other sealed container, for a minimum of twenty-four (24) hours before removal from the facility.

40 CFR §63.322(i)

B8. All perchloroethylene and wastes that contain perchloroethylene, including separator water, shall be stored in closed solvent tanks or closed solvent containers with no perceptible leaks. This requirement applies at all times, except when manually transferring waste from the machine. The exception to this requirement is that containers for separator water may be uncovered, as necessary per manufacturer's specifications, for proper operation of the machine and still.

40 CFR §63.322(j)

B9. The following components, if present, shall be inspected weekly for perceptible leaks while the dry cleaning system is operating. Inspection with a halogenated hydrocarbon detector or perchloroethylene gas analyzer also fulfills the requirement for inspection of perceptible leaks.

40 CFR §63.322(k)

- (a) Hose and pipe connections, fittings, couplings, and valves
- (b) Door gaskets and seatings
- (c) Filter gaskets and seatings
- (d) Pumps
- (e) Solvent tanks and containers
- (f) Water separators
- (g) Muck cookers
- (h) Stills
- (i) Exhaust dampers
- (j) Diverter valves
- (k) All filter housings

"Perceptible leaks" means any perchloroethylene vapor or liquid leaks that are obvious from: the odor of perchloroethylene; visual observation, such as pools or droplets of liquid; or the detection of gas flow by passing the fingers over the surface of the equipment.

The results of the weekly inspections shall be compiled in tabular format. The permittee may use the format provided (see Attachment 3, "Weekly/Monthly Leak Inspection Checklist") or an alternative format which clearly provides the same information. For weekly recordkeeping, all information, including the results from inspections, shall be entered into the log no later than seven (7) days from the end of the week for which the information is required. This information shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. This information must be retained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

B10. The components listed in **Condition B9**, shall be inspected monthly for vapor leaks while the component is in operation. The inspections shall be conducted using a halogenated hydrocarbon detector or perchloroethylene gas analyzer that is operated according to the manufacturer's instructions. The operator shall place the probe inlet at the surface of each component interface where leakage could occur and move it slowly along the interface periphery. The halogenated hydrocarbon detector or perchloroethylene gas analyzer shall be used according to the manufacturer's instructions and shall be capable of detecting vapor concentrations of 25 parts per million by volume (ppmv).

40 CFR §63.322

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

The results of the monthly inspections shall be compiled in tabular format. The permittee may use the format provided (see Attachment 3, "Weekly/Monthly Leak Inspection Checklist") or an alternative format which clearly provides the same information. For monthly recordkeeping, all information, including the results from the inspections, shall be entered into the log no later than thirty (30) days from the end of the month for which the information is required. This information shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. This information must be retained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

B11. All perceptible leaks detected while conducting the inspection required under **Condition B9** and all vapor leaks detected while conducting the inspection required under **Condition B10** shall be repaired within twenty-four (24) hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within two (2) working days of detecting such a leak. Such repair parts shall be installed within five (5) working days after receipt. A log of all service and repairs shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. The permittee may use the format provided (see Attachment 4, "Service and Repair Log") or an alternative format which clearly provides the same information. All service and repair activities (including activities that are in process) shall be recorded no later than seven (7) days following the start of the activity. This information must be retained for a period of not less than five (5) years following the date the repair or service is completed.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.322(m)

B12. The air-perchloroethylene gas-vapor stream contained within each dry cleaning system shall be routed through a refrigerated condenser. Each refrigerated condenser shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating. Each refrigerated condenser shall prevent air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser.

40 CFR §63.322

- B13. The permittee shall comply with either **B13(a)** or **B13(b)** below:
  - (a) During the drying phase, the refrigeration system high pressure shall be within the specifications recommended by the manufacturer. In the event that no manufacturers' specifications or recommendations exist for the applicable dry cleaning system, the facility shall notify the Division in writing. The Division and the facility will then develop a list of specifications according to which the dry cleaning system shall be operated and maintained.

On a weekly basis, the permittee shall monitor the refrigeration system high pressure and low pressure during the drying phase to determine if they are within the ranges specified above. A log of the high and low pressure readings shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. The permittee may use the format provided (see Attachment 5, "Weekly Log Pressure or Temperature") or an alternative format which clearly provides the same information. For weekly recordkeeping, all information shall be entered into the log no later than seven (7) days from the end of the week for which the information is required. This information shall be maintained for a period of not less than five (5) years following the date the information is recorded.

(b) For each refrigerated condenser, the permittee shall measure the temperature of the air perchloroethylene gasvapor stream on the outlet side of the refrigerated condenser weekly with a temperature sensor to confirm that the temperature is equal to or less than 7.2°C (45°F). The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2°C (45°F) to an accuracy of ±1.1°C (±2°F).

A log of the temperature readings shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. The permittee may use the format provided (see Attachment 5, "Weekly Log Pressure or Temperature") or an alternative format which clearly provides the same information. For weekly recordkeeping, all information shall be entered into the log no later than seven (7) days from the end of the week for which the information is required. This information shall be maintained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.323

B14. If the pressure values monitored in **Condition B13(a)** do not meet the values specified, then adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If the monitoring required by **Condition B13(b)** shows the temperature of the air perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser to have a temperature exceeding 7.2°C (45°F), then adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. All necessary adjustments and/or repairs shall be initiated and completed within twenty-four (24) hours, unless repair parts must be ordered. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within two (2) working days of

detecting such a parameter value. Such repair parts shall be installed within five (5) working days after receipt. A log of all service and repairs shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. The permittee may use the format provided (see Attachment 4, "Service and Repair Log") or an alternative format which clearly provides the same information. All service and repair activities (including activities that are in process) shall be recorded no later than seven (7) days following the start of the activity. This information must be retained for a period of not less than five (5) years following the date the repair or service is completed.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.322(m)

#### Section C. Dry to Dry Machines Installed After December 21, 2005

- C1. This facility is subject to NESHAP 40 CFR Part 63, Subpart M National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities.
- C2. If this facility purchases more than 2,100 gallons of perchloroethylene during any period of 12 consecutive months, it shall become a major source and must meet additional requirements of 40 CFR Part 63, Subpart M National Perchloroethylene Air Emission Standards for Dry Cleaning Facilities. These additional requirements include, but are not limited to, the following:
  - a) Submit written notification to the Technical Secretary within thirty (30) calendar days after the limit was determined to have been exceeded. This notification shall include the twelve-month perchloroethylene consumption in gallons and shall describe how the facility intends to comply with any newly applicable requirements under 40 CFR §63.322, §63.323 and §63.324.
  - b) Achieve compliance with the requirements for a major source, as specified in 40 CFR §63.322, §63.323 and §63.324, within 180 days from the date on which the limit was determined to have been exceeded.
  - c) Submit a statement to the Technical Secretary by registered or certified mail, signed by a responsible official, within thirty (30) calendar days after the date on which compliance is achieved. This statement shall include the new perchloroethylene consumption rate for the facility and certification that the facility is in compliance with all newly applicable requirements. The submittal must also include a declaration that all information contained in the statement is accurate and true.
  - d) Submit to the Technical Secretary, within one (1) year from the date the limit was determined to have been exceeded, a Title V application.

#### 40 CFR §63.320

C3. The owner or operator shall keep a record of the total volume of perchloroethylene purchased on a monthly basis, and for all periods of 12 consecutive months. This log shall be maintained in tabular format. The permittee may use the format provided (see Attachment 1, "Monthly Perchloroethylene Purchase Log") or an alternate format that readily provides the same information. For monthly recordkeeping, all information shall be entered into the log no later than thirty (30) days from the end of the month for which the information is required. This information must be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. This information must be retained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.324

C4. Receipts for all perchloroethylene purchased shall be maintained and kept available for inspection by the Technical Secretary or an authorized representative. These receipts must be retained for a period of not less than five (5) years following the date the receipt is received.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.324(d)

C5. The door of each dry cleaning machine shall be closed immediately after transferring articles to or from the machine and shall remain closed at all other times.

40 CFR §63.322(c)

C6. Each dry cleaning system shall be operated and maintained according to manufacturers' specifications and recommendations. Design specifications and the operating manuals for each dry cleaning system located at the facility shall be permanently retained at the source location.

40 CFR §63.322(d)

C7. All cartridge filters shall be drained in their housing, or other sealed container, for a minimum of twenty-four (24) hours before removal from the facility.

40 CFR §63.322(i)

C8. All perchloroethylene and wastes that contain perchloroethylene, including separator water, shall be stored in closed solvent tanks or closed solvent containers with no perceptible leaks. This requirement applies at all times, except when manually transferring waste from the machine. The exception to this requirement is that containers for separator water may be uncovered, as necessary per manufacturer's specifications, for proper operation of the machine and still.

40 CFR §63.322(j)

C9. The following components, if present, shall be inspected weekly for perceptible leaks while the dry cleaning system is operating. Inspection with a halogenated hydrocarbon detector or perchloroethylene gas analyzer also fulfills the requirement for inspection of perceptible leaks.

40 CFR §63.322(k)

- (a) Hose and pipe connections, fittings, couplings, and valves
- (b) Door gaskets and seatings
- (c) Filter gaskets and seatings
- (d) Pumps
- (e) Solvent tanks and containers
- (f) Water separators
- (g) Muck cookers
- (h) Stills
- (i) Exhaust dampers
- (j) Diverter valves
- (k) All filter housings

"Perceptible leaks" means any perchloroethylene vapor or liquid leaks that are obvious from: the odor of perchloroethylene; visual observation, such as pools or droplets of liquid; or the detection of gas flow by passing the fingers over the surface of the equipment.

#### 40 CFR §63.321

The results of the weekly inspections shall be compiled in tabular format. The permittee may use the format provided (see Attachment 3, "Weekly/Monthly Leak Inspection Checklist") or an alternative format which clearly provides the same information. For weekly recordkeeping, all information including the results from the inspections shall be entered into the log no later than seven (7) days from the end of the week for which the information is required. This information shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. This information must be retained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

C10. The components listed in **Condition C9**, shall be inspected monthly for vapor leaks while the component is in operation. The inspections shall be conducted using a halogenated hydrocarbon detector or perchloroethylene gas analyzer that is operated according to the manufacturer's instructions. The operator shall place the probe inlet at the surface of each component interface where leakage could occur and move it slowly along the interface periphery. The halogenated hydrocarbon detector or perchloroethylene gas analyzer shall be used according to the manufacturer's instructions and shall be capable of detecting vapor concentrations of 25 parts per million by volume (ppmv).

40 CFR §63.322(o)

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

40 CFR §63.321

The results of the monthly inspections shall be compiled in tabular format. The permittee may use the format provided (see Attachment 3, "Weekly/Monthly Leak Inspection Checklist") or an alternative format which clearly provides the same information. For monthly recordkeeping, all information including the results from inspections shall be entered into the log no later than thirty (30) days from the end of the month for which the information is required. This information shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. This information must be retained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a)

C11. All perceptible leaks detected while conducting the inspection required under **Condition C9** and all vapor leaks detected while conducting the inspection required under **Conditions C10** shall be repaired within twenty-four (24) hours. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within two (2) working days of detecting such a leak. Such repair parts shall be installed within five (5) working days after receipt. A log of all service and repairs shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. The permittee may use the format provided

(see Attachment 4, "Service and Repair Log") or an alternative format which clearly provides the same information. All service and repair activities (including activities that are in process) shall be recorded no later than seven (7) days following the start of the activity. This information must be retained for a period of not less than five (5) years following the date the repair or service is completed.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.322(m)

C12. The air-perchloroethylene gas-vapor stream contained within each dry cleaning system shall be routed through a refrigerated condenser and pass from inside the dry cleaning machine drum through a non-vented carbon adsorber or equivalent control device immediately before the door of the dry cleaning machine is opened. Each refrigerated condenser shall be operated to not vent or release the air-perchloroethylene gas-vapor stream contained within the dry cleaning machine to the atmosphere while the dry cleaning machine drum is rotating. Each refrigerated condenser shall prevent air drawn into the dry cleaning machine when the door of the machine is open from passing through the refrigerated condenser. The carbon adsorber must be desorbed in accordance with the manufacturer's instructions.

40 CFR §63.322

- C13. The permittee shall comply with either C13(a) or C13(b) below:
  - (a) During the drying phase, the refrigeration system high pressure shall be within the specifications recommended by the manufacturer. In the event that no manufacturers' specifications or recommendations exist for the applicable dry cleaning system, the facility shall notify the Division in writing. The Division and the facility will then develop a list of specifications according to which the dry cleaning system shall be operated and maintained.

On a weekly basis, the permittee shall monitor the refrigeration system high pressure and low pressure during the drying phase to determine if they are within the ranges specified above. A log of the high and low pressure readings shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. The permittee may use the format provided (see Attachment 5, "Weekly Log Pressure or Temperature") or an alternative format which clearly provides the same information. For weekly recordkeeping, all information shall be entered into the log no later than seven (7) days from the end of the week for which the information is required. This information shall be maintained for a period of not less than five (5) years following the date the information is recorded.

(b) For each refrigerated condenser, the permittee shall measure the temperature of the air perchloroethylene gasvapor stream on the outlet side of the refrigerated condenser weekly with a temperature sensor to confirm that the temperature is equal to or less than 7.2°C (45°F). The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2°C (45°F) to an accuracy of  $\pm 1.1$ °C ( $\pm 2$ °F).

A log of the temperature readings shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. The permittee may use the format provided (see Attachment 5, "Weekly Log Pressure or Temperature") or an alternative format which clearly provides the same information. For weekly recordkeeping, all information including the results from inspections shall be entered into the log no later than seven (7) days from the end of the week for which the information is required. This information shall be maintained for a period of not less than five (5) years following the date the information is recorded.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.323

C14. If the pressure values monitored in **Condition C13(a)** do not meet the values specified, then adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. If the monitoring required by **Condition C13(b)** shows the temperature of the air perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser to have a temperature exceeding 7.2°C (45°F), then adjustments or repairs shall be made to the dry cleaning system or control device to meet those values. All necessary adjustments and/or repairs shall be initiated and completed within twenty-four (24) hours, unless repair parts must be ordered. If repair parts must be ordered, either a written or verbal order for those parts shall be initiated within two (2) working days of detecting such a parameter value. Such repair parts shall be installed within five (5) working days after receipt. A log of all service and repairs shall be maintained at the source location and made available for inspection by the Technical Secretary or an authorized representative. The permittee may use the format provided (see Attachment 4, "Service and Repair Log") or an alternative format which clearly provides the same information. All service and repair activities (including activities that are in process) shall be recorded no later than seven (7) days following the start of the activity. This information must be retained for a period of not less than five (5) years following the date the repair or service is completed.

Tenn. Comp. R. & Regs. 1200-03-10-.02(2)(a) and 40 CFR §63.322(m)

#### (End of Conditions)

**Amendment 1 February 22, 2017:** Corrected typographical error in condition G1, removed a blank page, and replaced "Notice of Termination" in condition G6 with "notice of the change in status."

## Attachment 1

# MONTHLY PERCHLOROETHYLENE PURCHASE LOG Emission Source Reference Number:

	Total Volume of	Total Volume of
Month/Year	Perchloroethylene Purchased	Perchloroethylene Purchased in 12 Months*

\* The volume of perchloroethylene (perc) purchased in twelve (12) months is the sum of perc purchased in the eleven (11) months preceding the month just completed + the perc purchased in the month just completed. For the first month of operation, this value will be equal to the total volume of perc purchased the first month. For the second month, it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed, and so on [i.e., 50 (2) represents 50 gallons purchased in two (2) months].

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Attachment 2: For Dry to Dry Machines Installed Before December 9, 1991 That Use Less Than 140 Gallons of

Perchloroethylene per year (Section A)

Emission Source Reference Number:         Machine ID;           BUVEEKLY/MONTHLY LEAK INSPECTION CHECKUST           *MONTHLY LEAK INSPECTION CHECKUST           *MONTHLY LEAK INSPECTION CHECKUST           *MONTHLY LEAK INSPECTION CHECKUST           *MONTHLY LEAK INSPECTION CHECKUST           DATE (first working day of quarter):         WEER         1         2         3         4         5         6         7         8         9         10         11         12         13           INTRA MARCHINE WORKING DETECTOR OR ALLYZER           DATE (first working day of quarter):         WEER         1         2         3         4         5         6         7         8         9         10         11         12         13           INDICATE INSPECTION METHOD           """ for preceptible lak check (no instrument used)           NUTTHAL LEAK HAS BEEN FOUND*           Machine door gasket and seating           Go 1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1         1	Facility Na	-								Machine Type:							
* MONTHLY LEAK INSPECTIONS SHALL BE CONDUCTED USING & HALOGENATED HYDROCARBON DETECTOR OR ANALYZER         DATE (first working day of quarter):       WEEK       1       2       3       4       5       6       7       8       9       10       11       12       13         INSPECTION DATES       I <td>Emission S</td> <td colspan="8"></td> <td colspan="8">Machine ID:</td>	Emission S									Machine ID:							
PERCHLOROETHYLENE GAS AVALUE           DATE (first working day of quarter):         WEEK         1         2         3         4         5         6         7         8         9         10         11         12         13           INSPECTION DATES         I																	
INSPECTION DATES INSPECTION METHOD "" for check using an instrument (hydrocarbon detector or gas analyzer) "" for check using an instrument (hydrocarbon detector or gas analyzer) "" for preceptible leak check (no instrument used) INITIALS OF THE INSPECTOR INTERSTINAT A LEAK HAS BEEN FOUND* "" SIGNIFIES OK; "O" SIGNIFIES THAT A LEAK HAS BEEN FOUND* Machine door gasket and seating Hose and pipe connections, fittings, couplings and valves Pumps Button Trap Filter housings Filter gaskets and seating Machine door gasket and seating Decodorizing and aeration valves on dryers Exhaust dampers Heating and cooling coil doors Hose and pipe connections, fittings, couplings and valves Machine door gasket and seating Decodorizing and aeration valves on dryers Exhaust dampers Heating and cooling coil doors Hose and pipe connections, fittings, couplings and valves Mater separators Limi Trap Hose and pipe connections, fittings, couplings and valves Mater separators Limi Trap Mater separators Mater separators Mater separators Mater separators Mater separators Mater separators Mater separators Mater s	* ]						FED H	IYDR	OCA	RBON	N DET	TECTO	OR O	R A			
INDICATE INSPECTION METHOD       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument (hydrocarbon detector or gas analyzer)       "" for check using an instrument used)       "" for check using and instrument used)       "" for check used)       "" for check used)       "" for check used)       "" for check used)       "" for checkuused)       "" for checkuused) <td>DATE (</td> <td>first working day of quarter): WEEK</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td>	DATE (	first working day of quarter): WEEK	1	2	3	4	5	6	7	8	9	10	11	12	13		
"T' for check using an instrument (hydrocarbon detector or gas analyzer)       Image: Section 100 and	INSPEC	INSPECTION DATES															
"P" for perceptible leak check (no instrument used)       I	INDICA	INDICATE INSPECTION METHOD															
INITIALS OF THE INSPECTOR       Image: Constraint of the instance of t																	
"* SIGNIFIES THAT A LEAK HAS BEEN FOUND*           Machine door gasket and seating         Image: Colspan="2">Image: Colspan="2" Image: Colspan="2"	"P" f																
Machine door gasket and seating         Image: Comparison of the seating of the	INITIA																
Hose and pipe connections, fittings, couplings and valves       I <td></td> <td colspan="9">"✓" SIGNIFIES OK; "O" SIGNIFIES THAT A LEAK HAS BEEN FOUND*</td> <td></td>		"✓" SIGNIFIES OK; "O" SIGNIFIES THAT A LEAK HAS BEEN FOUND*															
Yalves       valves		Machine door gasket and seating															
Filter gaskets and seatings       Image: Constraint of the seating of t	LE																
Filter gaskets and seatings       Image: Seating seati	CYCI	Pumps															
Filter gaskets and seatings       Image: Seating seati	SH (	Button Trap															
Image: state of the state	WA	Filter housings															
Deodorizing and aeration valves on dryers       Image: Constraint of the second of the s		Filter gaskets and seatings															
Deodorizing and aeration valves on dryers       Image: Constraint of the second of the s																	
Exhaust dampers       Image: Constraint of the constraint of t																	
Heating and cooling coil doors       I       <																	
Water separators       Image: Constraint of the separators	[+]	Exhaust dampers															
Water separators       Image: Constraint of the separators	CLL	Heating and cooling coil doors															
Water separators       Image: Constraint of the separators	DRY CY	· · · · · ·															
Hose and pipe connections, fittings, couplings and valves     Image: Connection of the second s	п																
valves		Lint Trap															
valves																	
Water separators       Distillation unit																	
ĔĔ	NV/ OUS	Water separators															
	A TIC ANE(	Distillation unit															
Solvent tanks and storage containers	3LL4	Solvent tanks and storage containers															
Muck cookers	ISCI	Muck cookers															
Waste tanks and storage containers	M I	Waste tanks and storage containers															

\*If a leak is found, it must be repaired immediately or tagged and recorded on the "Service and Repair Log"

Attachment 3: For Dry to Dry Machines Installed Before December 21, 2005 Equipped With Refrigerated Condenser (Sections B and C)

ility Name:							Ma	Machine Type:						
ission Source Reference Number:							Ma	achir	ne ID	:				
	WEEKLY/MONTHLY* LEAK INSPECTION CHECKLIST * MONTHLY LEAK INSPECTIONS SHALL BE CONDUCTED USING A HALOCENATED HYDROGA BRON DETECTOR OF A													
*	* MONTHLY LEAK INSPECTIONS SHALL BE CONDUCTED USING A HALOGENATED HYDROCARBON DETECTOR OR A PERCHLOROETHYLENE GAS ANALYZER DATE (first working day of quarter): WEEK 1 2 3 4 5 6 7 8 9 10 11 12 13													
DATE (first working day of quarter): WEEK			2	3	4	5	6	7	8	9	10	11	12	13
INSPECTION DATES														
INDICATE INSPECTION METHOD "I" for check using an instrument (hydrocarbon detector or gas analyzer)														
"P" for perceptible leak check (no instrument used)														
INITIALS OF THE INSPECTOR														
	"✔" SIGNIFIES OK; "O" SIGNIFIES THAT A LI	EAK	HAS	S BEI	EN F	OUN	ND*	1	1	1	-		1	
	Machine door gasket and seating													
E	Hose and pipe connections, fittings, couplings and valves													
WASH CYCLE	Pumps													
) HS	Button Trap													
WA	Filter housings													
	Filter gaskets and seatings													
	Machine door gasket and seating													
	Deodorizing and aeration valves on dryers													
더	Exhaust dampers													_
YCL	Heating and cooling coil doors													
DRY CYCLE	Hose and pipe connections, fittings, couplings and valves													
Ι	Water separators													
	Lint Trap													
DISTILLATION/ MISCELLANEOUS	Hose and pipe connections, fittings, couplings and valves													
	Water separators													-
LAT LAN	Distillation unit													
STIL	Solvent tanks and storage containers													
DI	Muck cookers													
	Waste tanks and storage containers	1												

\*If a leak is found, it must be repaired immediately or tagged and recorded on the "Service and Repair Log". Revised 09/27/06

Attachment 4: Service and Repair Log

	Machine Type:
Emission Source Reference Number: Machine ID:	mber: Machine ID:

	SERVICE AND REPAIR LOG NOTE: Person performing each action item to initial within box.											
	NOTE: Perso		g each action item to initial with									
Date	Service/Repair Description	Date Tagged	Parts Ordered <sup>2</sup> / Date Ordered	Date Received	Parts Installed <sup>3</sup>	Date Repai Completed						

<sup>&</sup>lt;sup>2</sup> Parts shall be ordered within two (2) working days of the detection of a leak or temperature exceedance. <sup>3</sup> Repair parts shall be installed within five (5) working days after receipt.

Attachment 5: For Dry to Dry Machines Installed Before December 21, 2005 Equipped With Refrigerated Condenser (Sections B and C)

Facility Name:	Machine Type:
Emission Source Reference Number:	Machine ID:

	WEEKLY LOG											
	PRESSURE or TEMPERATURE											
Date	Operator's Initials	High Pressure Reading (bar)	*Is high pressure within range, see Condition 13?	Low Pressure Reading (bar)	*Is low pressure within range, see Condition 13?	Temperature (°C or °F)	*Is temperature greater than 7.2°C (45°F)?					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					
			YES / NO		YES / NO		YES / NO					

\* If the high or low pressure readings fall outside the ranges specified in Condition B13 or C13, adjustments or repairs shall be made.

\* If the temperature is greater than  $7.2^{\circ}$ C (45°F), adjustments or repairs shall be made.

Necessary repair parts shall be ordered within two (2) working days of detection. Repair parts shall be installed within five (5) days of receipt. Documentation of all repairs shall be made on the "Service and Repair Log".