# 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 Act

Date Issued: February 2, 2017 Permit Number

First Amendment: February 23, 2017 Date Expires: February 1, 2027

G00002

**Installation Description** 

Area Source Petroleum Solvent Dry Cleaning Facility Dry Cleaning Dryer with Refrigerated Condenser NSPS – 40 CFR part 60, Subpart JJJ

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 G00002 is hereby issued and made available to persons who operate petroleum solvent dry cleaning facilities subject to the United States Environmental Protection Agency regulations found at 40 CFR Part 60 Subpart JJJ 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 60 Subpart JJJ, 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

CN-1500 RDA-1298

#### **Procedural Conditions**

G1. Only sources subject to the requirements of 40 CFR Part 60, Subpart JJJ that are not major sources 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 it has the potential to emit 100 tons per year or more of volatile organic compounds, 10.0 tons per year or more of a single hazardous air pollutant, or a combination of 25.0 tons per year of hazardous air pollutants to the atmosphere.

Tenn. Comp. R. & Regs. 1200-03-09-.06(1) and (5)

- G2. Applicability criteria for 40 CFR Part 60, Subpart JJJ: petroleum dry cleaning plants with a total manufacturers' rated dryer capacity equal to or greater than 38 kilograms (84 pounds): petroleum solvent dry cleaning dryers, washers, filters, stills, and settling tanks.
  - (a) When the affected facility is installed in an existing plant that is not expanding the manufacturers' rated capacity of its petroleum solvent dryer(s), the total manufacturers' rated dryer capacity is the summation of the manufacturers' rated capacity for each existing petroleum solvent dryer.
  - (b) When the affected facility is installed in a plant that is expanding the manufacturers' rated capacity of its petroleum solvent dryers, the total manufacturers' rated dryer capacity is the summation of the manufacturers' rated dryer capacity for each existing and proposed new petroleum solvent dryer.
  - (c) When the affected facility is installed in a new plant, the total manufacturers' rated dryer capacity is the summation of the manufacturers' rated dryer capacity for each proposed new petroleum solvent dryer.
  - (d) The petroleum solvent dryers considered in the determination of the total manufacturers' rated dryer capacity are those new and existing dryers in the plant that will be in service at any time after the proposed new source or modification commences operation.

Any facility meeting the criteria specified above that commences construction or modification after December 14, 1982, is subject to the requirements of 40 CFR Part 60, Subpart JJJ with the following exception: a dryer installed between December 14, 1982, and September 21, 1984, in a plant with an annual solvent consumption level of less than 17,791 liters (4,700 gallons), is exempt from the requirements of 40 CFR Part 60, Subpart JJJ.

Tenn. Comp. R. & Regs. 1200-03-09-.06(5) and 40 CFR §60.620

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) 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.

(b) 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(b)**.

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 Tenn. Comp. R. & Regs. 1200-03-09-.02(1) through (4) should it be deemed necessary by the Technical Secretary.

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

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 New Source Performance Standards (NSPS) federal regulations published under 40 CFR Part 60 Subpart JJJ.

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 Petroleum Solvent Dry Cleaners**

1. This facility is subject to NSPS - 40 CFR Part 60, Subpart JJJ – Standards of Performance for Petroleum Dry Cleaners, since the total summation of the manufacturers' rated dryer capacity for the facility is greater than 84 pounds and the equipment was installed after December 14, 1982.

40 CFR §60.620(a)

2. 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 §60.621

3. 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. 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.

40 CFR §60.622

4. Each dryer must be a solvent recovery dryer.

40 CFR §60.622(a)

"Solvent recovery dryer" means a class of dry cleaning dryers that employs a condenser to condense and recover solvent vapors evaporated in a closed-loop stream of heated air, together with the piping and ductwork used in the installation of this device.

40 CFR §60.621

5. The petroleum solvent filter installed shall be a cartridge filter. All cartridge filters shall be drained in their housing, for at least eight (8) hours prior to their removal from the facility.

40 CFR §60.622(b)

6. The owner or operator of an affected petroleum solvent dryer shall maintain the leak inspection and leak repair cycle information in the operating manual, and on a clearly visible label posted on each affected facility. Such information should state:

To protect against fire hazards, loss of valuable solvents, and emissions of solvent to the atmosphere, periodic inspection of this equipment for evidence of leaks and prompt repair of any leaks is recommended. The U.S. Environmental Protection Agency recommends that the equipment be inspected every fifteen (15) days and all vapor or liquid leaks be repaired within the subsequent fifteen (15) day period.

40 CFR §60.622(c)

- 7. Except for the duration of the fifteen (15) day period for repairs (as provided in **Condition 8**) immediately following discovery of a leak, at no time shall there be any perceptible leaks from any portion of the equipment. The following components, if present, shall be inspected every fifteen (15) days for perceptible leaks while the dry cleaning system is operating, including but not limited to:
  - (1) Hose and pipe connections, fittings, couplings, and valves
  - (2) Door gaskets and seatings
  - (3) Filter gaskets and seatings
  - (4) Pumps
  - (5) Solvent tanks and containers
  - (6) Water separators
  - (7) Exhaust dampers
  - (8) Diverter valves
  - (9) All filter housings
  - (10) Muck cooker
  - (11) Heating and Cooling Coil Doors
  - (12) Distillation unit
  - (13) Waste tanks and containers

Tenn. Comp. R. & Regs. 1200-03-07-.07(2)

"Perceptible leaks" means any petroleum solvent vapor or liquid leaks that are conspicuous from visual observation or that bubble after application of a soap solution, such a pools or droplets of liquid, open containers or solvent, or solvent laden waste standing open to the atmosphere.

40 CFR §60.621

The results of the fifteen (15) day inspections shall be compiled in tabular format. The permittee may use the format provided (see Attachment 1, "Fifteen Day Leak Inspection Checklist") or an alternative format, which clearly provides the same information. For fifteen day 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 fifteen day 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 onsite 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)

8. All perceptible leaks detected while conducting the inspection required under **Condition 7** shall be repaired within the subsequent fifteen (15) day period following discovery. 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 2, "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 each 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. This condition applies if the owner or operator has conducted leak inspections every fifteen (15) days for the twelve (12) months preceding the discovery of the leak as required by **Condition 7**.

Tenn. Comp. R. & Regs. 1200-03-07-.07(2) and 40 CFR § 60.622(c)

9. The owner or operator shall perform an initial test within ninety (90) days of startup to verify that the flow rate of recovered solvent from the solvent recovery dryer at the termination of the recovery cycle is no greater than 0.05 liters per minute. This test shall be conducted for a duration of no less than two weeks during which no less than 50 percent of the dry loads shall be monitored for their final recovery solvent flow rate. The suggested point for measuring the flow rate of recovered solvent is the outlet of the solvent-water separator. Near the end of the recovery cycle, the entire flow of recovered solvent should be diverted to a graduated cylinder. As the recovered solvent collects in the graduated cylinder, the elapsed time is monitored and recorded in periods of greater than or equal to one (1) minute. At the same time, the volume of solvent in the graduated cylinder is monitored and recorded to determine the volume of recovered solvent that is collected during each time period. The recovered solvent flow rate is calculated by dividing the volume of solvent collected per period by the length of time elapsed during the period and converting the result with appropriate factors into units of liters per minute. The recovery cycle and the monitoring procedure should continue until the flow rate of solvent is less than or equal to 0.05 liters per minute. The type of articles cleaned and the total length of the cycle should then be recorded.

#### 40 CFR §60.624

The initial performance test results shall be recorded and maintained in a tabular format. The permittee may use the format provided (see Attachment 3, "Flow Rate of Recovered Solvent") or an alternative format, which clearly provides the same information. For weekly recordkeeping, all data and 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 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)

#### (End of Conditions)

**Amendment 1 February 22, 2017:** Corrected formatting issues, corrected a reference to Attachment 1 in condition 7, replaced "Notice of Termination" in condition G6 with "notice of the change in status," and corrected the name of Attachment 3.

### Attachment 1

Facility Name:				Machine Type:									
Emission Source Reference Number: Machine ID:													
	FIFTEEN DAY LEAK INS	PE	CT	CIO	N	CE	ΙE	CK	LI	ST			
		1											
	first working day of quarter):uare equals a fifteen day period.	1	2	3	4	5	6	7	8	9	10	11	12
INSPEC	CTION DATES												
INDICATE INSPECTION METHOD  "I" for check using an instrument  "P" for perceptible leak check (no instrument used)													
INITIA	LS OF THE INSPECTOR												
	"✓" SIGNIFIES OK; "O" SIGNIFIES THAT A	LEAI	K HA	AS B	EEN	FO	UND	*	<u> </u>			<u>.</u>	
	Machine door gasket and seating												
	Diverter valves												
	Exhaust dampers												
LE	Heating and cooling coil doors												
DRY CYCLE	Hose and pipe connections, fittings, couplings and valves												
	Water separators												
	Filter gaskets and seating	skets and seating											
	All filter housings												
	Pumps												
Sn US	Hose and pipe connections, fittings, couplings and valves												
	Water separators												
DISTILLATION/ MISCELLANEOU	Distillation unit												
	Solvent tanks and storage containers												
	Waste tanks and storage containers												
	Muck cooker												

<sup>\*</sup>If a leak is found, it must be repaired within the subsequent fifteen (15) days of its discovery and recorded on the "Service and Repair Log".

#### Attachment 2

Facility Name:	Machine Type:
Emission Source Reference Number (found on Page 1 of this permit):	Machine ID:

## **SERVICE AND REPAIR LOG** NOTE: Person performing each action item to initial within box. **Date Repair** Parts **Date** Date **Service/Repair Description Parts Ordered/ Date Ordered Date Tagged** Received Installed Completed<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Repair shall be completed within the subsequent fifteen (15) working days after discovery of a perceptible leak.

### Attachment 3

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

	FLOW RATE OF RECOVERED SOLVENT						
Date	Operator's Initials	Time Elapsed (for recovered solvent to fill the graduated cylinder)	Volume of Solvent in graduated cylinder (liters)	FLOW RATE (Volume/Time)	Is Flow rate of solvent less than or equal to 0.05 liters/minute (see Condition 9)?	Type of Articles Cleaned	Total Length of the Cycle
					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		