GENERAL PERMIT 2.2 TEMPLATE

DRY TO DRY PERCHLOROETHYLENE DRY CLEANING NON-RESIDENTIAL FACILITY THAT USES UP TO 2100 GALLONS OF PERCHLOROETHYLENE PER ROLLING, 12-MONTH PERIOD AND IS EQUIPPED WITH A CARBON ADSORBER

C. Emissions Unit Terms and Conditions

Note: The following are the terms and conditions for a General PTIO to be issued to a **non-Title V** facility

1. [Emissions Unit ID], [Company Equipment ID]

Operations, Property and/or Equipment Description:

[DAPC Description]

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05 (A)(3)	Perchloroethylene usage at this facility shall not exceed 2100 gallons per rolling, 12-month period. Emissions of perchloroethylene from this facility shall not exceed 9.36 tons per rolling, 12-month period. The requirements of this rule also include compliance with OAC rule 3745-21-09(AA) and 40 CFR Part 63, Subparts A & M.
b.	OAC rule 3745-21-09(AA)	See terms b)(2)b. and c)(1) through c)(4).
c.	40 CFR Part 63, Subparts A & M	See terms b)(2)a., b)(2)c., and c)(5) through c)(10).

(2) Additional Terms and Conditions

a. The gas-vapor stream contained within the dry cleaning machine must be routed through a refrigerated condenser and the air PCE gas-vapor stream from inside the dry cleaning machine drum must pass through a non-vented carbon adsorber before the door of the dry cleaning machine is opened. The carbon adsorber must be desorbed in accordance with the manufacturer's instructions.

b. The dryer is equipped with or vented to a refrigerated vapor condenser whereby there is no exhaust of perchloroethylene vapors to the ambient air throughout the drying cycle.

c. The permittee must comply with all of the requirements listed for an area source per 40 CFR Part 63, Subpart M.

c) Operational Restrictions

(1) The waste from any diatomaceous earth filter which has been used to filter perchloroethylene shall contain no more than twenty-five per cent (25%) by weight perchloroethylene, as determined under paragraph (J) of OAC rule 3745-21-10.

(2) The waste from any distillation operation (solvent still) which has been used to distill perchloroethylene shall contain no more than sixty per cent (60%) by weight perchloroethylene, as determined under paragraph (J) of OAC rule 3745-21-10.

(3) Any disposable filter cartridge which has been used to filter perchloroethylene shall be drained in the filter housing for at least twenty-four (24) hours before being discarded.

(4) All equipment must be maintained so as to prevent the leaking of perchloroethylene liquid and prevent perceptible vapor leaks from gaskets, seals, ducts, and related equipment. Any equipment which is leaking perchloroethylene liquid or has a perceptible vapor leak shall not be operated until the leak is repaired.

(5) The permittee shall store all perchloroethylene and wastes that contain perchloroethylene in solvent tanks or solvent containers with no perceptible leaks. The exception to this requirement is that containers for separator water may be uncovered, as necessary, for proper operation of the machine and still.

(6) The door of each dry cleaning machine shall be closed at all times except to transfer articles to and from the machine.

(7) The dry cleaning machine shall be operated and maintained according to manufacturer's specifications and recommendations.

(8) The permittee shall comply with either c)(8)a. or c)(8)b. below:

a. The gas-vapor stream temperature at the outlet of the condenser shall not be greater than 45 degrees Fahrenheit before the end of the cool down cycle while the gas-vapor stream is flowing through the condenser or;

b. The refrigeration system high and low pressure during the drying phase shall be kept within the range specified in the manufacturer's operating instructions.

(9) Perchloroethylene shall not be vented or released to the atmosphere while the dry cleaning machine drum is rotating.

(10) The machine shall be operated to prevent air drawn into the dry cleaning machine (when the machine door is open) from passing through the refrigerated condenser.

d) Monitoring and/or Recordkeeping Requirements

(1) The following components shall be visually inspected each week for perceptible leaks while the dry cleaning system is operating*:*

a. hose and pipe connections, fittings, coupling and valves;

b. machine door gaskets and seatings;

c. filter gaskets and seatings;

d. pumps;

e. solvent tanks and containers;

f. water separators;

g. filter sludge recovery or muck cookers;

h. distillation unit;

i. diverter valves;

j. saturated lint from the lint basket;

k. cartridge filters and housings;

l. stills; and

m. exhaust dampers.

Inspection with a halogenated hydrocarbon detector or PCE gas analyzer also fulfills this requirement.

Leaks are to be repaired within 24 hours after being detected. If repair parts are to be ordered, the order shall be initiated within two (2) working days after detecting the leak. The repair parts shall be installed within five (5) working days after they are received.

(2) The components listed in d)(1) shall also be inspected for vapor leaks monthly using a halogenated hydrocarbon detector or PCE gas analyzer. The inspections shall be done while the components are in operation. The analyzer shall be operated according to the manufacturer's instructions. Specifically, 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 of the periphery*.* The week in which a monthly inspection is performed shall satisfy the requirements for the weekly visual inspection for perceptible leaks for that same week as required in d)(1).

(3) The following parameters, as applicable, shall be monitored on a weekly basis*:*

a. If complying with c)(8)b., the refrigeration system high pressure and low pressure readings during the drying phase to determine if they are in the range specified in the manufacturer's operating instructions or;

b. If complying with c)(8)a., the temperature of the air-perchloroethylene gas-vapor stream on the outlet side of the refrigerated condenser shall be measured weekly with a temperature sensor. The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 45 degrees Fahrenheit to an accuracy of plus or minus 2 degrees Fahrenheit. If the outlet temperature is higher than 45 degrees Fahrenheit, prior to the end of the cool-down or drying cycle, while the gas-vapor stream is flowing through the condenser, adjustments or repairs shall be made to lower the outlet temperature to less than or equal to 45 degrees Fahrenheit. Repair parts shall be ordered within two (2) working days after detecting a violation that needs repair parts. Repair parts shall be installed within five (5) working days after they are received.

(4) The following records shall be kept on site for a period of not less than five (5) years, and shall be made available upon request:

a. Receipts of all perchloroethylene purchases.

b. The volume of perchloroethylene purchased each month as recorded from perchloroethylene purchases. If no perchloroethylene is purchased during a given month, then the entry into the log shall be zero gallons.

c. The calculation and result of the yearly perchloroethylene consumption (12-month rolling summation) determined on the first day of each month.

d. The dates of all weekly visual inspections and monthly vapor leak inspections conducted with the use of a halogenated hydrocarbon detector or PCE gas analyzer and the name or location of dry cleaning system components where leaks are detected.

e. The dates of repair and records of written or verbal orders for repair parts.

f. The date and temperature sensor monitoring or pressure gauge reading results, as required in d)(3) above.

g. A description of control equipment maintenance performed and the date.

h. The amount of fabric dry cleaned with perchloroethylene, from January 1 to December 31 of each year, in pounds.

(5) A copy of the design specifications and the operating manuals for each dry-cleaning system and each emission control device located at the dry cleaning facility shall be retained on site and shall be made available upon request.

e) Reporting Requirements

(1) The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) and the U.S. EPA (Region 5) in writing of any record from d)(4)c. showing that the perchloroethylene usage limitation of 2100 gallons per rolling, 12-month period specified in b)(1) was exceeded. The notification shall include a copy of such record and

shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) and the U.S. EPA (Region 5) within 45 days after the exceedance occurs.

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the mass emission limit listed in b)(1) of 9.36 tons of perchloroethylene per rolling, 12-month period is demonstrated by multiplying the rolling, 12-month consumption of perchloroethylene in gallons (required in d)(6)c.) by 0.66 (the percentage of perchloroethylene assumed to be emitted to the atmosphere including vent and fugitive emissions) and by 0.00675 ton/gallon (the specific density of perchloroethylene).

(2) Compliance with the annual perchloroethylene consumption limitation shall be determined using the records maintained in accordance with d)(4).

g) Miscellaneous Requirements

(1) If the total yearly consumption of perchloroethylene exceeds 2100 gallons per year, this facility becomes a major source and must comply with the requirements for a major source per 40 CFR, Part 63, Subpart M, within 180 days of the exceedance determination.