

1

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCE(S)

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Ohio Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code

2

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

(OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

PUBLIC DISCLOSURE

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

BEST AVAILABLE TECHNOLOGY

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

3

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies.

4

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

5

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
---	---	------------------------------	---	--

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **Dry Cleaning Operations** located in **Lucas** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>
---	--

D001	Five new dry-to-dry machines with refrigerated condensers and supple-mental carbon adsorbers.
------	---

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
---	---	------------------------------	---	--

BAT
Determination

Compliance
with OAC Rule
3745-21-09 (AA)
and NESHAP
Subprt M -
"National
Perchloroethyl
ene Air
Emission
Standards for
Dry Cleaning
Facilities".

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
---	---	------------------------------	---	--

Applicable
Federal &
OAC Rules

3745-31-05

NESHAP (40 CFR
part 63,
Subparts A and
M)

3745-21-09 (AA)

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
---	---	------------------------------	---	--

Permit
Allowable Mass
Emissions
and/or
Control/Usage
Requirements

32.5 tons per
year
perchloro-
ethylene

7,268 gallons
of
perchloro-ethy-
lene per
rolling
12-month
period.

See Additional
Special Term
and Condition
A.1.-A.3.

See Additional
Special Term
and Condition
A.4.

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
perchloroethylene	32.5 tpy

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Toledo Environmental Services Division, 348 South Erie Street, Toledo, Ohio 43602.**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Toledo Environmental Services Division, 348 South Erie Street, Toledo, Ohio 43602.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled

10

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

CONSTRUCTION COMPLIANCE CERTIFICATION

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Additional Terms and Conditions

1. The exhaust from each dry cleaning machine shall be vented through a refrigerated condenser or an equivalent control device.
2. The exhaust from each dry cleaning machine shall be vented through a carbon adsorber immediately before or as the door of the dry cleaning machine is opened.

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

3. The concentration of perchloroethylene in the dry cleaning machine drum at the end of the dry cleaning cycle shall be equal to or less than 300 ppm by volume.
4. The dryer shall be 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, except for when the dryer's door is momentarily opened during loading or unloading.

B. Operational Restrictions

1. The waste from any diatomaceous earth filter which has been used to filter perchloroethylene shall contain no more than 25 percent by weight VOC, 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 60 percent by weight VOC, 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 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 owner or operator shall store all perchloroethylene and wastes that contain perchloroethylene in solvent tanks or solvent containers with no perceptible leaks.
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.

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

8. The outlet gas-vapor stream temperature of the condenser shall be a maximum of 45 degrees Fahrenheit.
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 with a diverter valve to prevent air drawn into the dry cleaning machine (when the machine door is open) from passing through the refrigerated condenser.
11. Each carbon adsorber shall not be bypassed to vent or release any air-perchloroethylene gas-vapor stream to the atmosphere at any time.

C. Monitoring and/or Recordkeeping Requirements

1. A leak detection and repair program to inspect all dry cleaning equipment for leaks that are obvious from sight, smell, or touch shall be conducted. Pursuant to OAC rule 3745-21-09(AA)(1)(e), any equipment found to be leaking perchloroethylene liquid or vapor is not to be operated until the leak is repaired. Leaks are to be repaired within 24 hours after being found, or repair parts ordered within 2 working days after detecting a leak that needs repair parts. Repair parts shall be installed within 5 working days after they are received. In accordance with 40 CFR Part 63 Subpart M, compliance with this requirement shall be determined through weekly visual inspection of the following components 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;
 - h. distillation valves;
 - i. diverter valves;
 - j. saturated lint from the lint basket;
 - k. cartridge filters and housings;
 - l. muck cookers;

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

- m. stills; and,
 - n. exhaust dampers.
- 2. 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, adjustments or repairs shall be made to meet that value. Repair parts shall be ordered within 2 working days after detecting a violation that needs repair parts. Repair parts shall be installed within 5 working days after they are received.
- 3. The concentration of perchloroethylene in the gas-vapor mixture inside the drum at the end of the cleaning cycle shall be measured weekly with a colorimetric detector tube by inserting the tube into the open space above the articles at the rear of the drum immediately upon opening the door. The colorimetric detector tube must measure perchloroethylene at a concentration of 300 ppmv in air to an accuracy of plus or minus 75 ppmv. The colorimetric detector tube shall be used according to the manufacturer's instructions.
- 4. If any monitored concentration exceeds its allowable parameters, repairs or adjustments must be made to meet those values. Repair parts shall be ordered within 2 working days after detecting a leak that needs repair parts. Repair parts shall be installed within 5 working days after they are received.
- 5. The following records shall be kept on site in a log for a period of not less than 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 in to the log shall be zero gallons;
 - c. the calculation and result of the yearly perchloroethylene

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

- consumption (12-month rolling summation), to be determined on the first day of each month;
 - d. the results of all visual inspections, including the dates when the dry cleaning system components are inspected for leaks 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; and,
 - f. the results and dates of all equipment monitoring required by this permit.
6. The following records shall be kept for a period of not less than three years:
- a. control equipment maintenance; and,
 - b. the amount of fabric dry cleaned with perchloroethylene, from January 1 to December 31 of each year, in pounds.
7. 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 onsite and be made available upon request.

D. Reporting Requirements

1. The permittee shall submit annual reports which contain the following information:
- a. a summary of the results of all tests conducted to determine compliance with the limitations applicable to the emissions from a refrigerated condenser, a carbon adsorber (ie, the concentration of perchloroethylene in the gas-vapor mixture inside the drum at the end of the cleaning cycle), the waste from a diatomaceous earth filter, and the waste from a distillation operation (solvent still); and,

Facility Name: **Dry Cleaning Operations**

Application Number: **04-1135**

Date: **July 29, 1998**

- b. the annual usage of perchloroethylene, in gallons.

The annual reports shall be submitted by January 31 of each year.

E. Testing Requirements

- 1. Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following methods:

- a. Emission Limitation: 32.5 tpy of perchloroethylene emissions

Applicable Compliance Method: Multiply the total perchloroethylene in gallons purchased by the emission factor of 66% and the specific density of perchloroethylene (0.00675 tons/gal) to obtain the total perchloroethylene emitted in tons per year. The perchloroethylene emission factor was obtained from the Background Information Document for 40 CFR Part 63, Subpart M.

- b. Emission Limitation: 7,268 gallons of perchloroethylene per rolling 12-month period.

Applicable Compliance Method: Recordkeeping in compliance with section C.5.c. will demonstrate adequate compliance.