

Facility ID: 1318526741 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION

Facility ID: 1318526741 Emissions Unit ID: G001 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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.

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
G001 - Gasoline dispensing facility with stage II vapor control system	OAC Rule 3745-31-05 PTI #13-04396 Issued 7/29/04	4.96 tons organic compounds (OC)/year The requirements of this rule also include compliance with the requirements of OAC Rules 3745-21-09(R) and 21-09(DDD).
Gasoline storage tanks: one (1) 10000-gallon and three (3) 8000-gallon underground storage tanks	OAC Rule 3745-21-09(R)	Stage I vapor control - 90% control efficiency for volatile organic compounds (VOCs) and use of submerged fill
Gasoline dispensing operation: 8 nozzles, Stage II vapor recovery	OAC Rule 3745-21-09(DDD)	Stage II vapor control - 95% control efficiency for VOCs

2. Additional Terms and Conditions

- (a) Pursuant to OAC rule 3745-21-09 (DDD)(1)(b), the Stage II vapor control system shall be installed, operated, and maintained in accordance with the applicable certification granted by the California Air Resources Board (CARB) as described in Part II, Section F below.

Any figures or exhibits identified in this permit are available from the Cleveland Division of Air Quality (CDAQ) upon request.

The permittee shall not cause, allow, or permit the transfer of gasoline at the gasoline dispensing facility, unless the following requirements are met:

 - a. each stationary gasoline storage tank shall be equipped and filled with a submerged fill pipe; and
 - b. for any transfer of gasoline from a delivery vessel to a stationary storage tank located at the facility, the vapors displaced from the stationary storage tank shall be processed by one of the following systems:
 - i. a vapor balance system which is designed and operated to route at least 90 percent, by weight, of the VOC in the displaced vapors to the delivery vessel and which is equipped with a means to prevent the discharge of displaced vapors from an unconnected vapor line; or
 - ii. a vapor control system which is designed and operated to recover at least 90 percent by weight of the VOC in the displaced vapors.

B. Operational Restrictions

1. The permittee shall comply with the following operational restrictions for the Stage I vapor control system:
 - a. The vapor balance system shall be kept in good working order and shall be used at all times during the transfer of gasoline.
 - b. There shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers.
 - c. There shall be no leaks in the vapor lines or liquid lines during the transfer of gasoline.
 - d. The transfer of gasoline from a delivery vessel to a stationary storage tank shall be conducted by use of submerged fill into the storage tank. The submerged fill pipe(s) are to be installed so they are within six (6) inches of the bottom of the storage tank.

e. All fill caps shall be "in place" and clamped during normal storage conditions.

f. The permittee shall repair within 15 days any leak from the vapor balance system or vapor control system which is employed to meet the requirements of paragraph (R)(1) of OAC rule 3745-21-09 when such leak is equal to or greater than 100 percent of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10.

2. The permittee shall comply with the following operational restrictions for the Stage II vapor control system:

a. The vapor control system shall be installed, operated and maintained in accordance with the manufacturer's specifications and the applicable certification granted by the CARB, and shall be free of the following defects:

i. Any component, that is required to be employed at all times pursuant to the system certification granted by the CARB, is absent or disconnected;

ii. A vapor hose is crimped or flattened such that the vapor passage is blocked, or the pressure drop through the vapor hose exceeds by a factor of two or more the requirements in the certification granted by the CARB;

iii. A vacuum producing device is inoperative or malfunctioning;

iv. Pressure/vacuum relief valves, vapor check valves, or dry breaks are inoperative;

v. Any vapor recovery equipment is leaking liquid gasoline or gasoline vapors;

vi. Any other equipment defect identified in the CARB certification as one which substantially impairs the effectiveness of the vapor control system;

vii. a nozzle boot is torn in one or more of the following manners:

(a) a triangular-shaped or similar tear one-half inch or more to a side, or a hole one-half inch or more in length; and/or

(b) a slit one inch or more in length.

viii. a faceplate or flexible cone is damaged in the following manner:

(a) for balance nozzles and for nozzles for aspirator and educator-assist type systems, the capability to achieve a tight seal with a fill pipe interface is deficient for one-fourth of the circumference of the faceplate (accumulated); and

(b) for nozzles for vacuum assist-type systems, more than one fourth of the flexible cone is missing.

ix. nozzle shutoff mechanisms are malfunctioning in any manner;

x. vapor return lines, including such components as swivels, antirecirculation valves, and underground piping are malfunctioning or are blocked or restricted, such that the pressure drop through the lines exceeds, by a factor of two or more, the requirements specified in the system certification granted by the California Air Resources Board; and

xi. a vapor processing unit is inoperative or malfunctioning;

b. The vapor control system must have successfully passed the testing requirements contained in paragraph (DDD)(2) of OAC rule 3745-21-09.

c. Operating instructions for the vapor control system shall be conspicuously posted in each gasoline dispensing area. The operating instructions shall clearly describe how to properly fuel motor vehicles and shall specifically prohibit the topping off of the motor vehicle fuel tank.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the results of any leak checks, including, at a minimum, the following information:

a. Date of inspection.

b. Findings (may indicate no leaks discovered or location, nature, and severity of each leak).

c. Leak determination method.

d. Corrective action (date each leak repaired and reasons for any repair interval in excess of 15 calendar days).

e. Inspector's name and signature.

2. The permittee shall maintain records of the following information:

a. The quantity of gasoline delivered to the facility during each calendar month.

b. The results of any tests performed pursuant to the testing requirements specified in this permit.

c. A log of the date and description of all repair and maintenance work performed (including, but not limited to, work performed to meet manufacturer's specifications or CARB certification requirements), or any other modifications made to the vapor control system.

d. A copy of the most recent permit to operate application (including appendix) submitted to the Ohio EPA.

e. A copy of the most recent permit to operate issued by the Ohio EPA.

f. Proof of attendance and completion of the training required by the Ohio EPA for the operator or local manager of the gasoline dispensing facility.

g. Copies of all completed post test inspection forms.

3. The permittee shall maintain records of the annual gasoline throughput for the facility.

D. Reporting Requirements

1. Any leak from the vapor balance system or vapor control system that is not repaired within 15 days after identification shall be reported to CDAQ within 30 days after the repair is completed.
2. A comprehensive written report on the results of any tests performed in accordance with the requirements of this permit shall be submitted to CDAQ within 30 days following the completion of the tests.
3. Quarterly written reports of any deviations from a term and/or condition of this permit for this emissions unit (required by Part I of this permit), are not required for this emissions unit. Malfunctions are still required to be reported in accordance with OAC rule 3745-15-06.

E. Testing Requirements

1. The Stage II vapor control system must successfully meet all requirements regarding testing contained in OAC rule 3745-21-09(DDD)(2). In accordance with the test procedures listed in OAC rule 3745-21-10, the following tests shall be performed: static leak test and dynamic pressure performance test.

At intervals not to exceed five (5) years, the permittee shall repeat and demonstrate compliance with the static leak test requirements contained in OAC rule 3745-21-10, Appendix A (unless a greater frequency is specified in the applicable CARB certification), and the dynamic pressure performance test requirements contained in OAC rule 3745-21-10, Appendix B (unless the dynamic pressure performance test is not applicable to the specific Stage II vapor control system, as specified in the applicable CARB certification). Not later than thirty (30) days prior to any required tests, the permittee shall submit a test notification to CDAQ.

The test notification shall describe the proposed test methods and procedures, the time and the date of the tests, and the person who will be conducting the tests. Failure to submit such notification prior to the tests may result in the Ohio EPA's refusal to accept the results of the tests. Personnel from CDAQ and Ohio EPA shall be permitted to witness the tests, examine the testing equipment, and acquire data and information during the tests. After completion of any tests, the permittee shall complete and retain on site a copy of the post test inspection form contained in OAC rule 3745-21-10, Appendix C.

2. Compliance with the annual organic compound (OC) emission limit in Section A.1. of these terms and conditions shall be calculated as the sum of the OC emissions from all gasoline storage tank filling and dispensing operations and, if applicable, diesel, kerosene, and used oil tank filling operations at the gasoline dispensing facility (unless otherwise exempted pursuant to OAC rule 3745-31-03). This calculation shall be based on the annual gasoline, diesel, kerosene, and used oil throughputs for the facility using the calculation and emission factors below.
 - a. Emission Limitation: 4.96 tons OC/year.
 - b. Applicable Compliance Method: multiply the appropriate emission factor below by the gallons of gasoline, diesel, kerosene, or used oil dispensed per year and divide by 2000 lbs/ton. Repeat this calculation for each material dispensed at the facility and sum the results to yield the total annual OC emission rate.

(Emission rates (factors) are expressed in pounds (lbs) of organic compounds per 1000 gallons of gasoline throughput. Emission factors are for VOC as well as total organic compound (OC) emissions, because the methane and ethane content of gasoline is negligible.)

i. Emission factors for gasoline storage tank filling and dispensing operations:

- (a) Gasoline dispensing facility has submerged tank filling for gasoline storage tanks: OC emission factor = 20.0 lbs OC/1000 gallons.
- (b) Gasoline dispensing facility has submerged tank filling with Stage I vapor control for gasoline storage tanks: OC emission factor = 13.0 lbs OC/1000 gallons.
- (c) Gasoline dispensing facility has submerged tank filling with Stage I vapor control for gasoline storage tanks and Stage II vapor control for vehicle refueling: OC emission factor = 3.1 lbs OC/1000 gallons.

(Gasoline emission factors are from USEPA publication AP-42, Fifth Edition, Table 5.2-7)

ii. Emission factors for diesel, kerosene, and used oil tank filling operations:

- (a) Gasoline dispensing facility has submerged tank filling for diesel, kerosene, and used oil tank filling operations: OC emission factor = 0.027 lb OC/1000 gallons.

(This emission factor is the SCC emission factor for transfer operations from diesel storage tanks. It is assumed that the same emission factor applies to kerosene and used oil transfer operations.)

F. Miscellaneous Requirements

1. The Dresser/Wayne WayneVac Stage II vapor recovery system employed at this facility, including all associated underground and aboveground plumbing, shall be installed, operated, and maintained in accordance with CARB Executive Order G-70-153-ADor current effective editionwhich includes, but is not limited to, the requirements contained within this Section.
2. The permittee shall comply with the following design and installation specifications from CARB Executive Order G-70-153-AD:
 - a. The equipment approved for use with the Dresser/Wayne WayneVac system is specified in Exhibit 1 of Executive Order G-70-153-AD. Other equipment may not be used unless approved by CARB for use with the

Dresser/Wayne WayneVac system.

- b. The maximum length of the coaxial hose shall be fifteen (15) feet, and the maximum allowable length of hose which may be in contact with the top of the island block, or ground, shall be six (6) inches.
 - c. Each vent pipe shall be equipped with a CARB certified pressure/vacuum relief valve. Plumbing may be manifolded to reduce the number of relief valves needed. The vent manifold may be used as an alternative to an underground manifold only in existing installations where vapor piping is already installed.
 - d. The settings of the pressure/vacuum relief valve(s) shall be as follows:
 - i. Pressure: Three (3.0) +/- one-half (0.5) inches of water column
 - ii. Vacuum: Eight (8.0) +/- two (2.0) inches of water column
 - e. A threaded tap at least 1/8 inch NPT shall be installed in one vent pipe, at least six (6) feet above grade and not exceeding eight (8) feet above grade. This tap shall remain plugged and vapor tight except when test equipment is being connected or removed.
 - f. Coaxial Stage I vapor recovery systems shall not be used with new installations of the Dresser/Wayne WayneVac system. Coaxial Stage I systems may be used with existing installations if:
 - i. The existing coaxial Stage I system is a poppeted, CARB certified system.
 - ii. The installation of the Stage II system requires no modification of the underground storage tank(s) (UST(s)) and/or connections.
 - iii. The existing coaxial Stage I equipment is in good working order and has demonstrated compliance with Static Leak Test criteria when tested with all fill caps removed.
3. The permittee shall comply with the following operational restrictions from CARB Executive Order G-70-153-AD:
 - a. The Dresser/Wayne WayneVac system shall be maintained in accordance with the System Operating Manual approved by CARB. Any alteration of the equipment, parts, design, or operation of the system is prohibited unless approved by CARB.
 - b. The maximum dispensing rate shall not exceed ten (10.0) gallons per minute (gpm). Compliance with this condition shall be verified with only one nozzle in operation per product supply pump.
 - c. No dispensing shall be allowed when the vapor collection pump is disabled for maintenance or for any reason. Only those nozzles affected by the disabled vapor pump are subject to this condition.
 - d. The following conditions shall shut down the entire dispenser:
 - i. Failure or loss of the Dresser/Wayne WayneVac system power supply.
 - ii. Vapor pump motor failure indicated when more than power is applied for over 10 seconds with no rotation detected.
 - e. A vapor escape guard (VEG) shall be installed on each nozzle as shown in Figures 2C-1 or 2C-2 of Executive Order G-70-153-AD. Any nozzle with a VEG which is missing, or which is damaged such that at least one-eighth (1/8) of the diameter is missing, or which has a cumulative damage equivalent to at least 1/8 of the diameter, is defective and shall be immediately removed from service.
 - f. Vapor collection holes in the nozzle spout shall remain unblocked. Any nozzle with fewer than two (2) unblocked vapor collection holes is defective and shall be immediately removed from service.
 - g. Each nozzle shall be equipped with an integral vapor valve. Any nozzle with a defective vapor valve, and all nozzles at the same fueling point (dispenser side), shall be immediately removed from service and the vapor path closed as soon as possible.
4. The permittee shall comply with the following performance specification from CARB Executive Order G-70-153-AD:

The air-to-liquid ratio (A/L) shall be between 0.90 and 1.10 when tested in accordance with an A/L test procedure adopted by the Ohio EPA.

The permittee shall conduct, and pass, an air-to-liquid ratio test no later than 60 days after startup and at least once in each twelve month period thereafter.
5. The permittee shall comply with the following monitoring requirement from CARB Executive Order G-70-153-AD:

The permittee shall monitor the Stage II vapor recovery system performance and all aspects of operation to the extent necessary to ensure compliance with the conditions and specifications contained within this Section.
6. The permittee shall comply with the following testing requirement from CARB Executive Order G-70-153-AD:

In accordance with the yearly static pressure decay testing requirement specified in CARB Executive Order G-70-153-AD, the Static Leak Test contained in OAC rule 3745-21-10, Appendix A, shall be successfully conducted at least once in each twelve- consecutive-month period after the date of successful completion of the startup or most recent Static Leak Test. CDAQ shall be notified at least 30 days prior to conducting these annual tests. Test results shall be submitted to CDAQ within 30 days of testing.
7. The permittee shall comply with the following record keeping requirement from CARB Executive Order G-70-153-AD:

A log of the date and description of all repair and maintenance work performed on the Dresser/Wayne WayneVac system shall be maintained on site or otherwise provided to CDAQ and Ohio EPA field office personnel immediately upon request.