

Facility ID: 0857040961 Issuance type: Draft State Permit To Operate

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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: 0857040961 Emissions Unit ID: J001 Issuance type: Draft 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>
J001 - Tank truck loading rack with carbon adsorber vapor recovery unit (VRU)	OAC rule 3745-35-07(B) (Synthetic Minor to avoid Title V permitting) OAC rule 3745-21-09(Q)	<p>Volatile organic compound (VOC) emissions shall not exceed 60.0 tons per rolling, 12-month period.</p> <p>VOC emissions from the vapor control system shall not exceed 0.29 pound of VOC per 1000 gallons (35 milligrams of VOC per liter) of gasoline (i.e., gasoline, additive, and interface/transmix) loaded into the delivery vessel.</p> <p>Facility-wide individual hazardous air pollutant (HAP) emissions shall not exceed 9.9 tons per rolling, 12-month period (see A.2.a).</p> <p>Facility-wide combined HAP emissions shall not exceed 24.9 tons per rolling, 12-month period (see A.2.a).</p> <p>The requirements specified by this rule are less stringent than the requirements established pursuant to OAC rule 3745-35-07(B).</p>

2. **Additional Terms and Conditions**
 - (a) The emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from all emissions units at this facility shall not exceed 9.9 tons/year for any single HAP and 24.9 tons/year for any combination of HAPs, as rolling, 12-month summations.

B. Operational Restrictions

1. The annual throughput of gasoline shall not exceed 315,000,000 gallons per rolling, 12-month period. The annual throughput of distillate fuels (i.e., diesel fuel, No. 2 fuel oil and kerosene) shall not exceed 180,000,000 gallons per rolling, 12-month period.
2. The loading rack shall be equipped with a vapor collection system whereby during the transfer of gasoline to any delivery vessel:
 - a. All vapors displaced from the delivery vessel during loading are vented only to the vapor collection system.
 - b. The pressure in the vapor collection system is maintained between minus 6 and plus 18 inches of water gauge pressure.
3. The loading rack shall be equipped with a vapor control system whereby:
 - a. All vapors collected by the vapor collection system are vented to the vapor control system.
 - b. Any liquid gasoline returned to a stationary storage tank from the vapor control system is free of entrained air to the extent possible with good engineering design.
4. A means shall be provided to prevent drainage of gasoline from the loading device when it is not in use or to

accomplish complete drainage before the loading device is disconnected.

5. All gasoline loading lines and vapor lines shall be equipped with fittings which are vapor tight.
6. The permittee shall not permit gasoline to be spilled, discarded in sewers, stored in open containers or handled in any other manner that would result in evaporation.
7. The permittee shall repair within 15 days any leak from the vapor collection system and vapor control system 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.
8. The maximum exhaust gas VOC concentration shall not exceed 1.75% (as propane) from the carbon adsorption vessels. [A VOC concentration that exceeds 1.75% (as propane) is not necessarily indicative of a violation of the allowable mass emission limitation (35 mg/l), but rather serves as a trigger level for maintenance and/or repair activities, or further investigation to establish correct operation.]

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:
 - a. The total throughput of gasoline, in gallons.
 - b. The total throughput of distillate fuels, in gallons.
 - c. The rolling, 12-month gasoline throughput rate, in gallons
 - d. The rolling, 12-month distillate fuels throughput rate, in gallons
 - e. The rolling, 12-month VOC emission rate, in tons.*

* See calculation methodology in Section E.2.b of this permit.
2. The permittee shall maintain monthly records of the following information for the entire facility:
 - a. The total individual HAP emissions for each HAP, in tons.*
 - b. The total combined HAPs emissions, in tons (the summation of a above for all HAPs).*
 - c. The rolling, 12-month individual HAP emission rate, in tons.
 - d. The rolling, 12-month combined HAPs emission rate, in tons.

* See calculation methodology in Section E.2.c of this permit.
3. The permittee shall perform monthly monitoring of the exhaust gas VOC concentration from both carbon adsorption vessels on the VRU using the 40 CFR Part 60, Appendix A, Method 21 procedure for open ended lines. The highest VOC concentration, as measured during the processing of vapors during the last 5 minutes of the adsorption cycle for each vessel, shall be recorded. The permittee shall maintain records of the monthly monitored VOC concentrations detected in the exhaust gases from the VRU.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:
 - a. the rolling, 12-month gasoline and distillate fuels gallon throughput restrictions of 315,000,000 and 180,000,000, respectively (for this emissions unit);
 - b. the rolling, 12-month VOC emission limitation of 60.0 tons (for this emissions unit);
 - c. the rolling, 12-month individual HAP emission limitation of 9.9 tons (for the entire facility);
 - d. the rolling, 12-month combined HAP emission limitation of 24.9 tons (for the entire facility); and
 - e. the exhaust gas VOC concentration restriction of 1.75%, as propane, from the carbon adsorption vessels serving this emissions unit.

The permittee shall submit the quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.
2. The permittee shall submit annual reports that summarize the following information:
 - a. The total actual annual VOC emissions for this emissions unit, in tons.
 - b. The total actual annual gasoline and distillate fuels throughputs for this emissions unit, in gallons.
 - c. The total actual annual individual HAP emissions for the entire facility, in tons.
 - d. The total actual annual combined HAPs emissions for the entire facility, in tons.

These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

E. Testing Requirements

1. Within twelve (12) months after the effective date of this permit and within 12 months prior to the expiration of this permit, the permittee shall conduct or have conducted an emission test(s) for this emissions unit in order to demonstrate continuing compliance with the allowable VOC emission rate of 0.29 pound of VOC per 1,000 gallons of gasoline loaded.

The emission test methods and procedures are those outlined in OAC rule 3745-21-10(E), i.e., a minimum of

one 6-hour test, during which at least 300,000 liters (79,260 gallons) of gasoline are loaded. (The test should be conducted at the maximum gasoline throughput possible.)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Regional Air Pollution Control Agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Regional Air Pollution Control Agency's refusal to accept the results of the emission test(s).

Personnel from the Regional Air Pollution Control Agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Regional Air Pollution Control Agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the RAPCA. The permittee shall include in the report the operating parameters as required in paragraph three of E.1.

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

a. Emission Limitation-
0.29 pound of VOC per 1,000 gallons of gasoline loaded

Applicable Compliance Method-

Applicable Compliance Method-

Compliance with the lb VOC/1000 gallons of gasoline loaded emission limitation above shall be based upon the results of emission tests conducted in accordance with the procedures outlined in section E.1 of this permit.

b. Emission Limitation-
60.0 tons VOC per rolling, 12-month period (for this emissions unit)

Applicable Compliance Method-

Compliance with the annual allowable VOC emission limitation above shall be determined as follows:

i. For the VRU, multiply the rolling, 12-month gasoline throughput rate, from Section C.1.a, by the VOC emission factor (lbs VOC/1000 gallons gasoline loaded), calculated based on the results of the most recent emission tests that demonstrated compliance for the VRU.

ii. For fugitive emissions from gasoline loading, multiply the rolling, 12-month gasoline throughput rate, from Section C.1.a, by the VOC emission factor (lb VOC/1000 gallons of gasoline loaded), calculated using AP-42, Section 5.2, Equation 1 (revised 1/95), and then multiply by a fugitive factor of $(1 - 0.987^*)$.

* The capture efficiency for the VRU is assumed to be 98.7%, based on the "Gasoline Distribution Industry (Stage I) - Background Information for Promulgated Standards, EPA-450/R-94-002b, November 1994, Appendix A, page A-5" document.

iii. For distillates (i.e., diesel and Jet A) loading emissions, multiply the rolling, 12-month distillate fuels throughput rate, from Section C.1.b, by the VOC emission factor (0.016 lb VOC/1000 gallons of distillate fuels loaded), calculated using AP-42, Section 5.2, Equation 1 (revised 1/95).

iv. Sum i + ii + iii, and then divide by 2000 lbs/ton.

c. Emission Limitations-

9.9 tons of individual HAP emissions/year and 24.9 tons of combined HAPs emissions/year, based upon rolling, 12-month summations (facility-wide) of the HAP emissions

Applicable Compliance Methods-

Compliance with the annual allowable HAP emission limitations above shall be determined as follows:

i. For individual and combined HAP emissions from the VRU, multiply the VOC emissions, from Section E.2.b.i above, by the HAP emission factors* obtained from "Gasoline Distribution Industry (Stage I) - Background Information for Proposed Standards, EPA-450/R-94-002a, January 1994, Table 3-2."

* The specific HAP emission factors are:

- (a) benzene - 0.009 pound of benzene emissions per pound of VOC emissions;
- (b) ethyl benzene - 0.001 pound of ethyl benzene emissions per pound of VOC emissions;
- (c) hexane - 0.016 pound of hexane emissions per pound of VOC emissions;
- (d) toluene - 0.013 pound of toluene emissions per pound of VOC emissions;
- (e) xylene - 0.005 pound of xylene emissions per pound of VOC emissions;
- (f) 2,2,4-trimethylpentane - 0.008 pound of 2,2,4-trimethylpentane emissions per pound of VOC emissions;
and
- (g) combined HAPs - 0.052 pound of combined HAP emissions per pound of VOC emissions.
 - ii. For individual and combined fugitive HAP emissions from gasoline loading, multiply the VOC emissions, from Section E.2.b.ii above, by the HAP emission factors specified in Section E.2.c.i above.
 - iii. For individual and combined HAP emissions from gasoline storage tanks, multiply the VOC

emissions from all gasoline storage tanks at the facility, as determined using USEPA's "TANKS" Program Version 4 or higher, by the HAP emission factors specified in Section E.2.c.i above.

iv. For individual and combined HAPs emissions from equipment leaks (i.e., fugitive emissions from valves, flanges, open ended lines, pumps, etc.), multiply the VOC emissions from equipment leaks at the facility, as determined using the document "Protocol for Equipment Leak Emission Estimates" (EPA-453/R-95-017), by the HAP emission factors specified in Section E.2.c.i above.

v. For individual HAP emissions from distillates loading, multiply the VOC emissions, from Section E.2.b.iii above, by the HAP emission factors derived from the HAP liquid weight percentages from the permittee's MSDS. For combined HAPs emissions from distillates loading, sum the individual HAP emissions.

vi. For individual HAP emissions from distillates storage tanks, multiply the VOC emissions from all distillates storage tanks at the facility, as determined using USEPA's "TANKS" Program Version 4 or higher, by the HAP emissions derived from the HAP liquid weight percentages from the permittee's MSDS. For combined HAPs emissions from distillates storage tanks, sum the individual HAP emissions.

vii. For individual and combined HAPs emissions from gasoline storage tanks rollovers, multiply the VOC emissions from all the gasoline storage tanks at the facility, as determined using the methodology provided by the permittee in a letter dated June 8, 2004, by the HAP emission factors specified in Section E.2.c.i above.

viii. For each individual HAP, sum i + ii + iii + iv + v + vi + vii, and then divide by 2000 lbs/ton. For combined HAPs emissions, sum all the individual HAP emissions.

iv. Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the new emission factors are mutually agreeable to the RAPCA and the permittee.

F. Miscellaneous Requirements

1. In accordance with OAC rule 3745-35-07, the following terms in this permit are federally enforceable: Sections A, B, C, D, E, and F.