Facility ID: 0125040580 Issuance type: Final 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: 0125040580 Emissions Unit ID: J001 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
2-bay truck loading rack for gasoline/ethanol and distillates loading controlled by a carbon adsorption/gasoline absorption vapor recovery unit (VRU).	OAC rule 3745-21-09(Q)	Limitation applicable to the loading of gasoline (i.e., gasoline, ethanol, transmix, and additives) 0.67 pound of VOC per 1,000 gallons (80 milligrams per liter (mg/l)) of gasoline loaded into the delivery vessel.
	OAC rule 3745-35-07	Limitation applicable to the loading of distillates (diesel and kerosene): 0.019 pound of VOC per 1,000 gallons of distillates loaded into the delivery vessel. Total annual VOC emissions from gasoline and distillates loading at the loading rack (emissions unit J001) shall not exceed 66.6 tons per year (including fugitive emissions). The annual combined HAP and individual HAP emissions from this facility shall not exceed 25 tons per year and 10 tons per year, respectively.

2. **Additional Terms and Conditions**

   (a) None

B. **Operational Restrictions**

1. The vapor collection and control systems shall be kept in good working order and shall be used at all times during the transfer of any product into tank trucks.

   a. The loading rack shall be equipped with a vapor collection system whereby during the transfer of gasoline to any delivery vessel:

   i. all vapors displaced from the delivery vessel during loading are vented only to the vapor collection system; and

   ii. the pressure in the vapor collection system is maintained between minus 6 and plus 18 inches of water gauge pressure.

   b. The loading rack shall be equipped with a vapor control system whereby:

   i. all vapors collected by the vapor collection system are vented to the vapor control system; and

   ii. 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.

2. 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 connected.

3. Compliance with the emission limitations as stated in Section A.1 shall be achieved by restricting annual

throughputs of gasoline (i.e., gasoline, ethanol, transmix, and additives) and distillates (i.e., diesel and kerosene). The annual throughputs of gasoline and distillates shall not exceed 195,000,000 gallons per year and 31,600,000 gallons per year, respectively. In order to ensure federal enforceability during the first 12 calendar months of operation after issuance of this permit to operate, this emissions unit shall not exceed the following product throughput limitations:

MONTH(s)	GASOLINE (gal)	DISTILLATES (gal)
1-1	24,375,000	3,950,000
1-2	48,750,000	7,900,000
1-3	73,125,000	11,850,000
1-4	97,500,000	15,800,000
1-5	109,687,500	17,775,000
1-6	121,875,000	19,750,000
1-7	134,062,500	21,725,000
1-8	146,250,000	23,700,000
1-9	158,437,500	25,675,000
1-10	170,625,000	27,650,000
1-11	182,812,500	29,625,000
1-12	195,000,000	31,600,000

After the first 12 months of operation following the issuance of this permit, compliance with the annual gasoline and distillates throughput limitations shall be based upon rolling, 12-month summations of the gasoline and distillates throughput quantities.

4. All fuel loading lines and vapor lines will be equipped with fittings which are vapor tight.

5. The permittee shall not permit fuel to be spilled, discarded in sewers, stored in open containers, or handled in any other manner that would result in evaporation of the fuel.

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

7. Any tank truck used in conjunction with this emissions unit must comply with the requirements of OAC rule 3745-21-09(V), if applicable.

8. The following VRU parameters have been identified as key operating parameters for which acceptable operating ranges have been established. The permittee shall operate the VRU within these acceptable operating ranges:

a. to ensure proper regeneration of the carbon beds, the maximum vacuum pulled during the regeneration cycle shall be greater than or equal to 25 inches of Hg and the air purge solenoid shall also remain open during the regeneration cycle;

b. to ensure proper absorption by the absorption tower, the gasoline supply temperature shall not exceed 98 degrees F;

c. to ensure a proper flow rate from the absorption tower to the carbon bed, the absorber pressure shall be maintained between 8 psi and 15 psi; and

d. to ensure proper adsorption, the carbon bed temperatures, at all levels, shall not exceed 150 degrees F.

Operation of the VRU outside of these specified operating ranges is not necessarily indicative of an emission violation, 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:

a. the total throughputs, in gallons, of gasoline and distillates for each month;

b. during the first 12 calendar months of operation following the issuance of this permit, the cumulative total throughputs, in gallons, of gasoline and distillates for each calendar month;

c. begining after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summations of the total gasoline and distillates throughputs, in gallons;

d. the total VOC emissions for this emissions unit; and

e. the total HAP (individual and combined) emissions for all emissions units at the facility, in tons.

2. The permittee shall implement, within 90 days of the issuance of this permit, a preventive maintenance program (program) for the carbon adsorption/gasoline absorption VRU which has been approved by the Ohio EPA, Central District Office. The program shall include an annual inspection of the VRU by a qualified individual trained in the operation and inspection of carbon adsorption/absorption systems. The resultant report shall be maintained on site and shall be made available during subsequent inspections by a representative of the Ohio EPA, Central District Office.

3. The permittee shall maintain the data required by the VRU manufacturer's recommended daily operating guidelines on a daily basis. The permittee shall submit a copy of the operating guidelines checklist to the Ohio EPA, Central District Office within 90 days of the issuance of this permit. Any subsequent revisions to this checklist shall be mutually agreeable to the permittee and the Ohio EPA, Central District Office.

4. The permittee shall collect and record the following information for each day for the control equipment:

a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the

associated emissions unit was in operation;

b. during the regeneration cycle, the vacuum pressure, in inches of Hg;

c. the gasoline supply temperature, in degrees F;

d. the absorber pressure, in psi; and

e. the carbon bed temperatures, in degrees F.

D. **Reporting Requirements**

1. The permittee shall submit semi-annual deviation (excursion) reports which identify all exceedances of the following:

a. the rolling, 12-month limitations on the throughputs of gasoline and distillates;

b. for the first 12 calendar months of operation following the issuance of this permit, the maximum allowable cumulative throughput limits; and

c. any parameter readings that are outside of the acceptable value for each vapor recovery unit key operating parameter established in Section B.8 above.

The reports shall also document the cause of each exceedance and an explanation of any corrective actions which have been taken or will be taken to prevent a similar exceedance in the future.

If no deviations occurred during the 6-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that 6-month period.

These reports shall be submitted by February 15 and August 15 of each year, and shall address the data obtained during the previous 6-month calendar period (July to December and January to June, respectively).

2. The permittee shall submit annual reports of the total throughputs, in gallons, for gasoline and distillates, and the total VOC emissions during the calendar year for this emissions unit. This report shall also include the total individual HAP, and combined HAP emissions from all emissions units at the facility. The annual reports shall be submitted by February 15 of each year and shall address the data obtained for the previous calendar year (January through December).

E. **Testing Requirements**

1. Compliance with the emission limitation(s) in Section A of these terms and conditions shall be determined in accordance with the following method(s):

a. Emissions Limitation: 0.67 pound VOC per 1,000 gallons of gasoline loaded
Applicable Compliance Method: Compliance with this emissions limitation shall be demonstrated through emission tests. The emission test methods and procedures are those outlined in OAC rule 3745-21-10(E) and specify a minimum of one 6-hour test during which at least 187,500 gallons (709,688 liters) of gasoline are loaded. (The test should be conducted at the maximum gasoline throughput possible.)

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. This test shall be conducted between the months of May through September.

No later than 30 days prior to proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. 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, 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 Ohio EPA, Central District Office's refusal to accept the results of the emission test (s).

Personnel from the Ohio EPA, Central District Office 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 emissions test(s) shall be signed by the person or persons responsible for the test(s) and submitted to the Ohio EPA, Central District Office within 30 days following completion of the the test(s).

b. Emissions Limitation: 0.019 pound VOC per 1,000 gallons of distillates loaded
Applicable Compliance Method: Compliance with this emissions limitation shall be based upon emission factors from AP-42, 5th Edition, Table 5.2-5 of 0.016 pound of VOC per 1,000 gallons of kerosene and 0.014 pound VOC per 1,000 gallons of diesel.

c. Emissions Limitation: 66.6 tons of VOC per year
Applicable Compliance Method: Compliance with this emissions limitation shall be based upon the records required pursuant to Section C above.

2. Emissions Limitation: 10 tons per year for any individual HAP and 25 tons per year for any combination of HAPs
Applicable Compliance Method: For every individual HAP, multiply the following emission factors by the actual annual VOC emission rate for the year (in tons per year) for all gasoline VOC emissions from the facility, including fugitive emissions. These emission factors are based on the liquid weight percent (weight fraction) of each HAP in the gasoline. Speciated emissions were estimated based on equations found in AP-42, 5th Edition, Section 7.1.4, Hazardous Air Pollutant Speciation Methodology.

Benzene - 20.4 pounds per ton of VOC
Cumene - 0.20 pound per ton of VOC
Ethyl benzene - 2 pounds per ton of VOC
Hexane - 33.6 pounds per ton of VOC

Isooctane - 10.4 pounds per ton of VOC
Toluene - 33.2 pounds per ton of VOC
Xylenes - 11.6 pounds per ton of VOC

The HAP emissions from distillates (loading and fugitives) shall be determined using USEPA's "VOC/PM Speciation Data System", version 1.50, October, 1992.

3. VOC fugitive emissions (e.g., valves, fittings, and pumps) from the loading rack shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."

4. VOC emissions from gasoline truck loading operations shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l (0.0754 lb of VOC/1000 gallons) from the trucks. The 9 mg/l leakage emission factor is calculated using 0.5% as the average leakage from a truck passing the 3-inch pressure decay test (USEPA, 1980: Bulk Gasoline Terminals - Background Information for Proposed Standards, Table C-4).

5. VOC emissions from the storage tanks shall be determined using the USEPA's "Tanks Program," version 3.0 or newer.

6. 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 Ohio EPA, Central District Office and the Certified Oil Company.

F. **Miscellaneous Requirements**

1. Sections A, B, C, D, E and F of these terms and conditions constitute the federally enforceable portions of this permit.