

Facility ID: 1318002740 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.

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Facility ID: 1318002740 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.

| <u>Operations, Property, and/or Equipment</u> | <u>Applicable Rules/Requirements</u> | <u>Applicable Emissions Limitations/Control Measures</u> |
|--|--------------------------------------|--|
| Truck loading rack for gasoline, distillates, Jet A, additives and interface (pipeline transmix) controlled with a carbon adsorption/gasoline absorption vapor recovery unit (VRU). The loading rack has 11 bottom loading arms in 3 bays for loading gasoline, additives and interface into the delivery vessels. Bay Number 1 has 2 gasoline and 2 interface bottom loading arms; Bay Number 2 (middle bay) has 2 gasoline and 2 interface bottom loading arms; and Bay Number 3 has 2 gasoline and 1 interface bottom loading arms. | OAC rule 3745-35-07 | Gasoline loading (i.e., gasoline, additives and interface): 0.167 pound of volatile organic compounds (VOC) per 1,000 gallons (20 mg/l) of gasoline loaded into the delivery vessel, 50.08 tons of VOC per year. Gasoline loading (fugitive losses): 0.075 pound of VOC per 1,000 gallons (9 mg/l) of gasoline loaded into the delivery vessel, 22.53 tons of VOC per year. The total annual VOC emissions from this emissions unit shall not exceed 72.61 tons per year as a rolling, 12-month summation. The total annual VOC emissions from all emissions units at this facility shall not exceed 99.2 tons per year as a rolling, 12-month summation. |

See A.2.a below.

2. Additional Terms and Conditions

- (a) The emissions of hazardous air pollutants (HAPs) from all emissions units at this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 10 tons per year for any individual HAP, and 25 tons per year for any combination of HAPs, as rolling, 12-month summations.

B. Operational Restrictions

1. Compliance with the emission limitations as specified in Section A.1 shall be achieved by restricting the annual throughput of gasoline (i.e., gasoline, distillates, Jet A, additives and interface (pipeline transmix)). The annual throughput of gasoline shall not exceed 600,000,000 gallons based upon a rolling, 12-month summation of the gasoline throughput amounts.
2. 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.

3. 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; and
 - b. the pressure in the vapor collection system is maintained between minus 6 and plus 18 inches of water gauge pressure.
4. 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; and
 - 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.
5. 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.
6. All gasoline loading lines and vapor lines shall be equipped with fittings which are vapor tight.
7. The permittee shall prohibit gasoline to be spilled, discharged in sewers, stored in open containers or handled in any other manner that would result in evaporation.
8. 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% of the lower explosive limit as propane, as determined under paragraph (K) of OAC rule 3745-21-10.
9. 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 must be open;
 - 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 temperature, 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 throughput of gasoline, in gallons;
 - b. the rolling, 12-month summation of the total gasoline throughput, in gallons (i.e., the monthly value from (a) added to the total gasoline throughput for the previous 11-month period);
 - c. the total emissions of VOC from this emissions unit, in tons;
 - d. the total emissions of VOC from all emissions units at the facility, in tons; and
 - e. the total emissions of each individual HAP and the total combined HAP emissions from 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 (PMP) for the VRU which has been approved by the Cleveland Air Pollution Control Agency. The PMP 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 the Cleveland Air Pollution Control Agency.
3. The permittee shall maintain the data required by the VRU manufacturer's recommended daily operating guidelines on a daily basis, excluding Saturdays, Sundays and holidays. The permittee shall submit a copy of the operating guidelines to the Cleveland Air Pollution Control Agency within 90 days of the issuance of this permit. Any subsequent changes to these operating guidelines shall be mutually agreeable to the permittee and the Cleveland Air Pollution Control Agency.
4. The permittee shall collect and record the following information for each day (excluding Saturdays, Sundays and holidays) for the control equipment:
 - a. a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the 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 semiannual deviation (excursion) reports which identify any exceedances of the following:
 - a. the rolling, 12-month throughput limitation for gasoline;
 - b. the rolling, 12-month emission limitation for VOC from this emissions unit;
 - c. the rolling, 12-month emission limitation for VOC from all emissions units at this facility; and
 - d. any parameter readings that are outside of the acceptable value or range for each VRU key operating parameter established in Section B.9 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 semiannual 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.
2. The permittee shall submit annual reports of the total throughput, in gallons, for gasoline and the total VOC emissions during the calendar year for this emissions unit, and the total individual HAP and combined HAP emissions and the total VOC emissions during the calendar year for all emissions units at the facility. These annual reports shall include the calculations of the emissions, shall be submitted by February 15 of each year, and shall cover the previous calendar year.

E. Testing Requirements

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

Emission Limitation:
0.167 pound of VOC per 1,000 gallons (20 mg/l) of gasoline loaded into the delivery vessel.

Applicable Compliance Method:
Compliance with this emission limitation shall be demonstrated through emission tests.

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 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 mass emission rate. This test shall be done 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 Cleveland 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, 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 Cleveland Air Pollution Control Agency's refusal to accept the results of the emission test(s).

Personnel from the Cleveland 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 emissions test(s) shall be signed by the person or persons responsible for the test(s) and submitted to the Cleveland Air Pollution Control Agency within 30 days following completion of the the test(s).
2. To calculate VOC emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following:
 - a. VOC emissions from the storage tanks shall be determined using USEPA's "Tanks Program 3.0."
 - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
 - c. The fugitive VOC emissions from gasoline truck loading shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l 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).
 - d. The VOC emissions from distillates, transmix, and/or other material loading shall be determined using AP-42, 5th Edition, Equation 5.2-1.
3. To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following procedures. 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 developed by the Shell Oil Products Company for their fuels.
 - a. The HAP emissions from gasoline truck loading and storage shall be determined using the following emission factors:
 - i. 2,2,4 trimethylpentane - 0.00560 pound of 2,2,4 trimethylpentane per pound VOC emissions;

- ii. 1,3 butadiene - 0.00004 pound of butadiene emissions per pound of VOC emissions;
 - iii. benzene - 0.00253 pound of benzene emissions per pound of VOC emissions;
 - iv. cumene - 0.00010 pound of cumene emissions per pound of VOC emissions;
 - v. ethyl benzene - 0.00086 pound of ethyl benzene emissions per pound of VOC emissions;
 - vi. hexane - 0.00663 pound hexane emissions per pound of VOC emissions;
 - vii. methyl tert-butyl ether (MTBE) - 0.01195 pound of MTBE per pound VOC emissions
 - viii. naphthalene - 0.00010 pound of naphthalene emissions per pound of VOC emissions;
 - ix. styrene - 0.00003 pound of styrene emissions per pound of VOC emissions;
 - x. toluene - 0.00604 pound of toluene emissions per pound of VOC emissions;
 - xi. xylene - 0.00333 pound of xylene emissions per pound of VOC emissions; and
 - xii. formaldehyde - 0.00001 pound of formaldehyde emissions per pound of VOC emissions.
- b. The HAP emissions from Jet A, additives, and distillates truck loading and storage and fugitive emissions shall be determined using the Shell Oil Products Company HAP Speciation Data, Oct. 1996.
- c. To determine total combined HAP emissions, sum the calculated annual emission rates for each individual HAP.
- d. 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, the Cleveland Air Pollution Control Agency and the permittee.

F. Miscellaneous Requirements

- 1. The following special terms and conditions of this permit to operate are federally enforceable requirements: A-F.

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Facility ID: 1318002740 Emissions Unit ID: T001 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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- 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> |
|---|---|--|
| Above ground storage tank with an internal floating roof. | OAC rule 3745-21-09(L) | See A.2.a through A.2.c below. |
| | OAC rule 3745-35-07 40 CFR Part 60, Subpart Kb | See A.2.d through A.2.f below. See A.2.a below. |

2. Additional Terms and Conditions

- (a) The fixed roof storage tank shall be equipped with an internal floating roof. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling. The total VOC emissions from emissions units T001 through T006 located at this facility shall not exceed 25.21 tons per year as a rolling, 12-month summation. The total annual VOC emissions from all emissions units at this facility shall not exceed 99.2 tons per year as a rolling, 12-month summation. The emissions of hazardous air pollutants (HAPs) from all emissions units at this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 10 tons per year for any individual HAP, and 25 tons per year for any combination of HAPs, as rolling, 12-month summations.

B. Operational Restrictions

- 1. The annual throughput of gasoline for emissions units T001 through T006 shall not exceed 600,000,000 gallons based upon a rolling, 12-month summation of the gasoline throughput amounts.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain records of the following information:

- a. the types of petroleum liquids stored in the tank;
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid; and
 - c. the demension of the storage vessel and an analysis showing the capacity of the storage vessel.
2. The permittee shall maintain monthly records of the following information:
 - a. the total throughput of gasoline, in gallons;
 - b. the rolling, 12-month summation of the total gasoline throughput, in gallons (i.e., the monthly value from (a) added to the total gasoline throughput for the previous 11-month period);
 - c. the total VOC emissions from emissions units T001 through T006, in tons;
 - d. the total VOC emissions from all emissions units at the facility, in tons; and
 - e. the total emissions of each individual HAP and the total combined HAP emissions from all emissions units at the facility, in tons.
 3. The permittee shall visually inspect the internal floating roof double-seal system serving this storage vessel in accordance with the procedures specified in 40 CFR Part 60.113b(a)2 or 60.113b(a)4.
 4. The permittee shall maintain a record of each inspection performed in accordance with Section C.3. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
- D. Reporting Requirements**
1. The permittee shall submit semiannual deviation (excursion) reports which identify any exceedances of the following:
 - a. the rolling, 12-month summation of the total gasoline throughput;
 - b. the rolling, 12-month emission limitation for VOC from emissions units T001 through T006; and
 - c. the rolling, 12-month emission limitation for VOC from all emissions units at this facility.

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 semiannual 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.
 2. The permittee shall submit annual reports of the total throughput, in gallons, for gasoline and the total VOC emissions during the calendar year for emissions units T001 through T006, and the total individual HAP and combined HAP emissions and the total VOC emissions during the calendar year for all emissions units at the facility. These annual reports shall include the calculations of the emissions, shall be submitted by February 15 of each year, and shall cover the previous calendar year.
 3. If any of the conditions described in 40 CFR Part 60.113b(a)2 are detected during the annual visual inspection required by 60.113b(a)2, the permittee shall submit a report to the Director (the Cleveland Air Pollution Control Agency) within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- E. Testing Requirements**
1. To calculate VOC emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following:
 - a. VOC emissions from the storage tanks shall be determined using USEPA's "Tanks Program 3.0."
 - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
 - c. The fugitive VOC emissions from gasoline truck loading shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l 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).
 - d. The VOC emissions from distillates, transmix, and/or other material loading shall be determined using AP-42, 5th Edition, Equation 5.2-1.
 2. To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following procedures. 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 developed by the Shell Oil Products Company for their fuels.
 - a. The HAP emissions from gasoline truck loading and storage shall be determined using the following emission factors:
 - i. 2,2,4 trimethylpentane - 0.00560 pound of 2,2,4 trimethylpentane per pound VOC emissions;
 - ii. 1,3 butadiene - 0.00004 pound of butadiene emissions per pound of VOC emissions;

- iii. benzene - 0.00253 pound of benzene emissions per pound of VOC emissions;
 - iv. cumene - 0.00010 pound of cumene emissions per pound of VOC emissions;
 - v. ethyl benzene - 0.00086 pound of ethyl benzene emissions per pound of VOC emissions;
 - vi. hexane - 0.00663 pound hexane emissions per pound of VOC emissions;
 - vii. methyl tert-butyl ether (MTBE) - 0.01195 pound of MTBE per pound VOC emissions
 - viii. naphthalene - 0.00010 pound of naphthalene emissions per pound of VOC emissions;
 - ix. styrene - 0.00003 pound of styrene emissions per pound of VOC emissions;
 - x. toluene - 0.00604 pound of toluene emissions per pound of VOC emissions;
 - xi. xylene - 0.00333 pound of xylene emissions per pound of VOC emissions; and
 - xii. formaldehyde - 0.00001 pound of formaldehyde emissions per pound of VOC emissions.
- b. The HAP emissions from Jet A, additives, and distillates truck loading and storage and fugitive emissions shall be determined using the Shell Oil Products Company HAP Speciation Data, Oct. 1996.
- c. To determine total combined HAP emissions, sum the calculated annual emission rates for each individual HAP.
- d. 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, the Cleveland Air Pollution Control Agency and the permittee.

F. Miscellaneous Requirements

- 1. The following special terms and conditions of this permit to operate are federally enforceable requirements: A-F.

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Facility ID: 1318002740 Emissions Unit ID: T002 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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- 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> |
|---|--------------------------------------|--|
| Above ground storage tank with an internal floating roof. | OAC rule 3745-21-09(L) | See A.2.a through A.2.c below. |
| | OAC rule 3745-35-07 | See A.2.d through A.2.f below. |
| | 40 CFR Part 60, Subpart Kb | See A.2.a below. |

2. Additional Terms and Conditions

- (a) The fixed roof storage tank shall be equipped with an internal floating roof. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling. The total VOC emissions from emissions units T001 through T006 located at this facility shall not exceed 25.21 tons per year as a rolling, 12-month summation. The total annual VOC emissions from all emissions units at this facility shall not exceed 99.2 tons per year as a rolling, 12-month summation. The emissions of hazardous air pollutants (HAPs) from all emissions units at this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 10 tons per year for any individual HAP, and 25 tons per year for any combination of HAPs, as rolling, 12-month summations.

B. Operational Restrictions

- 1. The annual throughput of gasoline for emissions units T001 through T006 shall not exceed 600,000,000 gallons based upon a rolling, 12-month summation of the gasoline throughput amounts.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain records of the following information:

- a. the types of petroleum liquids stored in the tank;
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid; and
 - c. the demension of the storage vessel and an analysis showing the capacity of the storage vessel.
 2. The permittee shall maintain monthly records of the following information:
 - a. the total throughput of gasoline, in gallons;
 - b. the rolling, 12-month summation of the total gasoline throughput, in gallons (i.e., the monthly value from (a) added to the total gasoline throughput for the previous 11-month period);
 - c. the total VOC emissions from emissions units T001 through T006, in tons;
 - d. the total VOC emissions from all emissions units at the facility, in tons; and
 - e. the total emissions of each individual HAP and the total combined HAP emissions from all emissions units at the facility, in tons.
 3. The permittee shall visually inspect the internal floating roof double-seal system serving this storage vessel in accordance with the procedures specified in 40 CFR Part 60.113b(a)2 or 60.113b(a)4.
 4. The permittee shall maintain a record of each inspection performed in accordance with Section C.3. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
- D. Reporting Requirements**
1. The permittee shall submit semiannual deviation (excursion) reports which identify any exceedances of the following:
 - a. the rolling, 12-month summation of the total gasoline throughput;
 - b. the rolling, 12-month emission limitation for VOC from emissions units T001 through T006; and
 - c. the rolling, 12-month emission limitation for VOC from all emissions units at this facility.

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 semiannual 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.
 2. The permittee shall submit annual reports of the total throughput, in gallons, for gasoline and the total VOC emissions during the calendar year for emissions units T001 through T006, and the total individual HAP and combined HAP emissions and the total VOC emissions during the calendar year for all emissions units at the facility. These annual reports shall include the calculations of the emissions, shall be submitted by February 15 of each year, and shall cover the previous calendar year.
 3. If any of the conditions described in 40 CFR Part 60.113b(a)2 are detected during the annual visual inspection required by 60.113b(a)2, the permittee shall submit a report to the Director (the Cleveland Air Pollution Control Agency) within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- E. Testing Requirements**
1. To calculate VOC emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following:
 - a. VOC emissions from the storage tanks shall be determined using USEPA's "Tanks Program 3.0."
 - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
 - c. The fugitive VOC emissions from gasoline truck loading shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l 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).
 - d. The VOC emissions from distillates, transmix, and/or other material loading shall be determined using AP-42, 5th Edition, Equation 5.2-1.
 2. To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following procedures. 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 developed by the Shell Oil Products Company for their fuels.
 - a. The HAP emissions from gasoline truck loading and storage shall be determined using the following emission factors:
 - i. 2,2,4 trimethylpentane - 0.00560 pound of 2,2,4 trimethylpentane per pound VOC emissions;
 - ii. 1,3 butadiene - 0.00004 pound of butadiene emissions per pound of VOC emissions;
 - iii. benzene - 0.00253 pound of benzene emissions per pound of VOC emissions;

- iv. cumene - 0.00010 pound of cumene emissions per pound of VOC emissions;
 - v. ethyl benzene - 0.00086 pound of ethyl benzene emissions per pound of VOC emissions;
 - vi. hexane - 0.00663 pound hexane emissions per pound of VOC emissions;
 - vii. methyl tert-butyl ether (MTBE) - 0.01195 pound of MTBE per pound VOC emissions
 - viii. naphthalene - 0.00010 pound of naphthalene emissions per pound of VOC emissions;
 - ix. styrene - 0.00003 pound of styrene emissions per pound of VOC emissions;
 - x. toluene - 0.00604 pound of toluene emissions per pound of VOC emissions;
 - xi. xylene - 0.00333 pound of xylene emissions per pound of VOC emissions; and
 - xii. formaldehyde - 0.00001 pound of formaldehyde emissions per pound of VOC emissions.
- b. The HAP emissions from Jet A, additives, and distillates truck loading and storage and fugitive emissions shall be determined using the Shell Oil Products Company HAP Speciation Data, Oct. 1996.
- c. To determine total combined HAP emissions, sum the calculated annual emission rates for each individual HAP.
- d. 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, the Cleveland Air Pollution Control Agency and the permittee.

F. Miscellaneous Requirements

- 1. The following special terms and conditions of this permit to operate are federally enforceable requirements: A-F.

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

Facility ID: 1318002740 Emissions Unit ID: T003 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> |
|---|--------------------------------------|--|
| Above ground storage tank with an internal floating roof. | OAC rule 3745-21-09(L) | See A.2.a through A.2.c below. |
| | OAC rule 3745-35-07 | See A.2.d through A.2.f below. |
| | 40 CFR Part 60, Subpart Kb | See A.2.a below. |

2. Additional Terms and Conditions

- (a) The fixed roof storage tank shall be equipped with an internal floating roof.
 - The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.
 - All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.
 - The total VOC emissions from emissions units T001 through T006 located at this facility shall not exceed 25.21 tons per year as a rolling, 12-month summation.
 - The total annual VOC emissions from all emissions units at this facility shall not exceed 99.2 tons per year as a rolling, 12-month summation.
 - The emissions of hazardous air pollutants (HAPs) from all emissions units at this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 10 tons per year for any individual HAP, and 25 tons per year for any combination of HAPs, as rolling, 12-month summations.

B. Operational Restrictions

- 1. The annual throughput of gasoline for emissions units T001 through T006 shall not exceed 600,000,000 gallons based upon a rolling, 12-month summation of the gasoline throughput amounts.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain records of the following information:
 - a. the types of petroleum liquids stored in the tank;

- b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid; and
 - c. the demension of the storage vessel and an analysis showing the capacity of the storage vessel.
2. The permittee shall maintain monthly records of the following information:
- a. the total throughput of gasoline, in gallons;
 - b. the rolling, 12-month summation of the total gasoline throughput, in gallons (i.e., the monthly value from (a) added to the total gasoline throughput for the previous 11-month period);
 - c. the total VOC emissions from emissions units T001 through T006, in tons;
 - d. the total VOC emissions from all emissions units at the facility, in tons; and
 - e. the total emissions of each individual HAP and the total combined HAP emissions from all emissions units at the facility, in tons.
3. The permittee shall visually inspect the internal floating roof double-seal system serving this storage vessel in accordance with the procedures specified in 40 CFR Part 60.113b(a)2 or 60.113b(a)4.
4. The permittee shall maintain a record of each inspection performed in accordance with Section C.3. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

D. Reporting Requirements

1. The permittee shall submit semiannual deviation (excursion) reports which identify any exceedances of the following:
- a. the rolling, 12-month summation of the total gasoline throughput;
 - b. the rolling, 12-month emission limitation for VOC from emissions units T001 through T006; and
 - c. the rolling, 12-month emission limitation for VOC from all emissions units at this facility.

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 semiannual 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.

2. The permittee shall submit annual reports of the total throughput, in gallons, for gasoline and the total VOC emissions during the calendar year for emissions units T001 through T006, and the total individual HAP and combined HAP emissions and the total VOC emissions during the calendar year for all emissions units at the facility. These annual reports shall include the calculations of the emissions, shall be submitted by February 15 of each year, and shall cover the previous calendar year.
3. If any of the conditions described in 40 CFR Part 60.113b(a)2 are detected during the annual visual inspection required by 60.113b(a)2, the permittee shall submit a report to the Director (the Cleveland Air Pollution Control Agency) within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

E. Testing Requirements

1. To calculate VOC emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following:
- a. VOC emissions from the storage tanks shall be determined using USEPA's "Tanks Program 3.0."
 - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
 - c. The fugitive VOC emissions from gasoline truck loading shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l 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).
 - d. The VOC emissions from distillates, transmix, and/or other material loading shall be determined using AP-42, 5th Edition, Equation 5.2-1.
2. To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following procedures. 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 developed by the Shell Oil Products Company for their fuels.
- a. The HAP emissions from gasoline truck loading and storage shall be determined using the following emission factors:
 - i. 2,2,4 trimethylpentane - 0.00560 pound of 2,2,4 trimethylpentane per pound VOC emissions;
 - ii. 1,3 butadiene - 0.00004 pound of butadiene emissions per pound of VOC emissions;
 - iii. benzene - 0.00253 pound of benzene emissions per pound of VOC emissions;
 - iv. cumene - 0.00010 pound of cumene emissions per pound of VOC emissions;

- v. ethyl benzene - 0.00086 pound of ethyl benzene emissions per pound of VOC emissions;
 - vi. hexane - 0.00663 pound hexane emissions per pound of VOC emissions;
 - vii. methyl tert-butyl ether (MTBE) - 0.01195 pound of MTBE per pound VOC emissions
 - viii. naphthalene - 0.00010 pound of naphthalene emissions per pound of VOC emissions;
 - ix. styrene - 0.00003 pound of styrene emissions per pound of VOC emissions;
 - x. toluene - 0.00604 pound of toluene emissions per pound of VOC emissions;
 - xi. xylene - 0.00333 pound of xylene emissions per pound of VOC emissions; and
 - xii. formaldehyde - 0.00001 pound of formaldehyde emissions per pound of VOC emissions.
- b. The HAP emissions from Jet A, additives, and distillates truck loading and storage and fugitive emissions shall be determined using the Shell Oil Products Company HAP Speciation Data, Oct. 1996.
- c. To determine total combined HAP emissions, sum the calculated annual emission rates for each individual HAP.
- d. 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, the Cleveland Air Pollution Control Agency and the permittee.

F. Miscellaneous Requirements

- 1. The following special terms and conditions of this permit to operate are federally enforceable requirements: A-F.

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

Facility ID: 1318002740 Emissions Unit ID: T004 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> |
|---|--------------------------------------|--|
| Above ground storage tank with an internal floating roof. | OAC rule 3745-21-09(L) | See A.2.a through A.2.c below. |
| | OAC rule 3745-35-07 | See A.2.d through A.2.f below. |
| | 40 CFR Part 60, Subpart Kb | See A.2.a below. |

2. Additional Terms and Conditions

- (a) The fixed roof storage tank shall be equipped with an internal floating roof.
 - The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.
 - All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.
 - The total VOC emissions from emissions units T001 through T006 located at this facility shall not exceed 25.21 tons per year as a rolling, 12-month summation.
 - The total annual VOC emissions from all emissions units at this facility shall not exceed 99.2 tons per year as a rolling, 12-month summation.
 - The emissions of hazardous air pollutants (HAPs) from all emissions units at this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 10 tons per year for any individual HAP, and 25 tons per year for any combination of HAPs, as rolling, 12-month summations.

B. Operational Restrictions

- 1. The annual throughput of gasoline for emissions units T001 through T006 shall not exceed 600,000,000 gallons based upon a rolling, 12-month summation of the gasoline throughput amounts.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain records of the following information:
 - a. the types of petroleum liquids stored in the tank;

- b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid; and
 - c. the demension of the storage vessel and an analysis showing the capacity of the storage vessel.
- 2. The permittee shall maintain monthly records of the following information:
 - a. the total throughput of gasoline, in gallons;
 - b. the rolling, 12-month summation of the total gasoline throughput, in gallons (i.e., the monthly value from (a) added to the total gasoline throughput for the previous 11-month period);
 - c. the total VOC emissions from emissions units T001 through T006, in tons;
 - d. the total VOC emissions from all emissions units at the facility, in tons; and
 - e. the total emissions of each individual HAP and the total combined HAP emissions from all emissions units at the facility, in tons.
- 3. The permittee shall visually inspect the internal floating roof double-seal system serving this storage vessel in accordance with the procedures specified in 40 CFR Part 60.113b(a)2 or 60.113b(a)4.
- 4. The permittee shall maintain a record of each inspection performed in accordance with Section C.3. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

D. Reporting Requirements

- 1. The permittee shall submit semiannual deviation (excursion) reports which identify any exceedances of the following:
 - a. the rolling, 12-month summation of the total gasoline throughput;
 - b. the rolling, 12-month emission limitation for VOC from emissions units T001 through T006; and
 - c. the rolling, 12-month emission limitation for VOC from all emissions units at this facility.

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 semiannual 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.
- 2. The permittee shall submit annual reports of the total throughput, in gallons, for gasoline and the total VOC emissions during the calendar year for emissions units T001 through T006, and the total individual HAP and combined HAP emissions and the total VOC emissions during the calendar year for all emissions units at the facility. These annual reports shall include the calculations of the emissions, shall be submitted by February 15 of each year, and shall cover the previous calendar year.
- 3. If any of the conditions described in 40 CFR Part 60.113b(a)2 are detected during the annual visual inspection required by 60.113b(a)2, the permittee shall submit a report to the Director (the Cleveland Air Pollution Control Agency) within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

E. Testing Requirements

- 1. To calculate VOC emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following:
 - a. VOC emissions from the storage tanks shall be determined using USEPA's "Tanks Program 3.0."
 - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
 - c. The fugitive VOC emissions from gasoline truck loading shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l 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).
 - d. The VOC emissions from distillates, transmix, and/or other material loading shall be determined using AP-42, 5th Edition, Equation 5.2-1.
- 2. To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following procedures. 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 developed by the Shell Oil Products Company for their fuels.
 - a. The HAP emissions from gasoline truck loading and storage shall be determined using the following emission factors:
 - i. 2,2,4 trimethylpentane - 0.00560 pound of 2,2,4 trimethylpentane per pound of VOC emissions;
 - ii. 1,3 butadiene - 0.00004 pound of butadiene emissions per pound of VOC emissions;
 - iii. benzene - 0.00253 pound of benzene emissions per pound of VOC emissions;
 - iv. cumene - 0.00010 pound of cumene emissions per pound of VOC emissions;
 - v. ethyl benzene - 0.00086 pound of ethyl benzene emissions per pound of VOC emissions;

- vi. hexane - 0.00663 pound hexane emissions per pound of VOC emissions;
 - vii. methyl tert-butyl ether (MTBE) - 0.01195 pound of MTBE per pound VOC emissions
 - viii. naphthalene - 0.00010 pound of naphthalene emissions per pound of VOC emissions;
 - ix. styrene - 0.00003 pound of styrene emissions per pound of VOC emissions;
 - x. toluene - 0.00604 pound of toluene emissions per pound of VOC emissions;
 - xi. xylene - 0.00333 pound of xylene emissions per pound of VOC emissions; and
 - xii. formaldehyde - 0.00001 pound of formaldehyde emissions per pound of VOC emissions.
- b. The HAP emissions from Jet A, additives, and distillates truck loading and storage and fugitive emissions shall be determined using the Shell Oil Products Company HAP Speciation Data, Oct. 1996.
- c. To determine total combined HAP emissions, sum the calculated annual emission rates for each individual HAP.
- d. 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, the Cleveland Air Pollution Control Agency and the permittee.

F. Miscellaneous Requirements

- 1. The following special terms and conditions of this permit to operate are federally enforceable requirements: A-F.

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

Facility ID: 1318002740 Emissions Unit ID: T005 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> |
|---|--------------------------------------|--|
| Above ground storage tank with an internal floating roof. | OAC rule 3745-21-09(L) | See A.2.a through A.2.c below. |
| | OAC rule 3745-35-07 | See A.2.d through A.2.f below. |
| | 40 CFR Part 60, Subpart Kb | See A.2.a below. |

2. Additional Terms and Conditions

- (a) The fixed roof storage tank shall be equipped with an internal floating roof. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling. The total VOC emissions from emissions units T001 through T006 located at this facility shall not exceed 25.21 tons per year as a rolling, 12-month summation. The total annual VOC emissions from all emissions units at this facility shall not exceed 99.2 tons per year as a rolling, 12-month summation. The emissions of hazardous air pollutants (HAPs) from all emissions units at this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 10 tons per year for any individual HAP, and 25 tons per year for any combination of HAPs, as rolling, 12-month summations.

B. Operational Restrictions

- 1. The annual throughput of gasoline for emissions units T001 through T006 shall not exceed 600,000,000 gallons based upon a rolling, 12-month summation of the gasoline throughput amounts.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain records of the following information:
 - a. the types of petroleum liquids stored in the tank;
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid; and

- c. the demension of the storage vessel and an analysis showing the capacity of the storage vessel.
 - 2. The permittee shall maintain monthly records of the following information:
 - a. the total throughput of gasoline, in gallons;
 - b. the rolling, 12-month summation of the total gasoline throughput, in gallons (i.e., the monthly value from (a) added to the total gasoline throughput for the previous 11-month period);
 - c. the total VOC emissions from emissions units T001 through T006, in tons;
 - d. the total VOC emissions from all emissions units at the facility, in tons; and
 - e. the total emissions of each individual HAP and the total combined HAP emissions from all emissions units at the facility, in tons.
 - 3. The permittee shall visually inspect the internal floating roof double-seal system serving this storage vessel in accordance with the procedures specified in 40 CFR Part 60.113b(a)2 or 60.113b(a)4.
 - 4. The permittee shall maintain a record of each inspection performed in accordance with Section C.3. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
- D. Reporting Requirements**
- 1. The permittee shall submit semiannual deviation (excursion) reports which identify any exceedances of the following:
 - a. the rolling, 12-month summation of the total gasoline throughput;
 - b. the rolling, 12-month emission limitation for VOC from emissions units T001 through T006; and
 - c. the rolling, 12-month emission limitation for VOC from all emissions units at this facility.

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 semiannual 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.
 - 2. The permittee shall submit annual reports of the total throughput, in gallons, for gasoline and the total VOC emissions during the calendar year for emissions units T001 through T006, and the total individual HAP and combined HAP emissions and the total VOC emissions during the calendar year for all emissions units at the facility. These annual reports shall include the calculations of the emissions, shall be submitted by February 15 of each year, and shall cover the previous calendar year.
 - 3. If any of the conditions described in 40 CFR Part 60.113b(a)2 are detected during the annual visual inspection required by 60.113b(a)2, the permittee shall submit a report to the Director (the Cleveland Air Pollution Control Agency) within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- E. Testing Requirements**
- 1. To calculate VOC emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following:
 - a. VOC emissions from the storage tanks shall be determined using USEPA's "Tanks Program 3.0."
 - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
 - c. The fugitive VOC emissions from gasoline truck loading shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l 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).
 - d. The VOC emissions from distillates, transmix, and/or other material loading shall be determined using AP-42, 5th Edition, Equation 5.2-1.
 - 2. To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following procedures. 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 developed by the Shell Oil Products Company for their fuels.
 - a. The HAP emissions from gasoline truck loading and storage shall be determined using the following emission factors:
 - i. 2,2,4 trimethylpentane - 0.00560 pound of 2,2,4 trimethylpentane per pound of VOC emissions;
 - ii. 1,3 butadiene - 0.00004 pound of butadiene emissions per pound of VOC emissions;
 - iii. benzene - 0.00253 pound of benzene emissions per pound of VOC emissions;
 - iv. cumene - 0.00010 pound of cumene emissions per pound of VOC emissions;
 - v. ethyl benzene - 0.00086 pound of ethyl benzene emissions per pound of VOC emissions;
 - vi. hexane - 0.00663 pound hexane emissions per pound of VOC emissions;

- vii. methyl tert-butyl ether (MTBE) - 0.01195 pound of MTBE per pound VOC emissions
 - viii. naphthalene - 0.00010 pound of naphthalene emissions per pound of VOC emissions;
 - ix. styrene - 0.00003 pound of styrene emissions per pound of VOC emissions;
 - x. toluene - 0.00604 pound of toluene emissions per pound of VOC emissions;
 - xi. xylene - 0.00333 pound of xylene emissions per pound of VOC emissions; and
 - xii. formaldehyde - 0.00001 pound of formaldehyde emissions per pound of VOC emissions.
- b. The HAP emissions from Jet A, additives, and distillates truck loading and storage and fugitive emissions shall be determined using the Shell Oil Products Company HAP Speciation Data, Oct. 1996.
- c. To determine total combined HAP emissions, sum the calculated annual emission rates for each individual HAP.
- d. 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, the Cleveland Air Pollution Control Agency and the permittee.

F. Miscellaneous Requirements

- 1. The following special terms and conditions of this permit to operate are federally enforceable requirements: A-F.

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

Facility ID: 1318002740 Emissions Unit ID: T006 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> |
|---|---|--|
| Above ground storage tank with an internal floating roof. | OAC rule 3745-21-09(L) | See A.2.a through A.2.c below. |
| | OAC rule 3745-35-07 40 CFR Part 60, Subpart Kb | See A.2.d through A.2.f below. See A.2.a below. |

2. Additional Terms and Conditions

- (a) The fixed roof storage tank shall be equipped with an internal floating roof. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling. The total VOC emissions from emissions units T001 through T006 located at this facility shall not exceed 25.21 tons per year as a rolling, 12-month summation. The total annual VOC emissions from all emissions units at this facility shall not exceed 99.2 tons per year as a rolling, 12-month summation. The emissions of hazardous air pollutants (HAPs) from all emissions units at this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 10 tons per year for any individual HAP, and 25 tons per year for any combination of HAPs, as rolling, 12-month summations.

B. Operational Restrictions

- 1. The annual throughput of gasoline for emissions units T001 through T006 shall not exceed 600,000,000 gallons based upon a rolling, 12-month summation of the gasoline throughput amounts.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain records of the following information:
 - a. the types of petroleum liquids stored in the tank;
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid; and

- c. the demension of the storage vessel and an analysis showing the capacity of the storage vessel.
2. The permittee shall maintain monthly records of the following information:
- the total throughput of gasoline, in gallons;
 - the rolling, 12-month summation of the total gasoline throughput, in gallons (i.e., the monthly value from (a) added to the total gasoline throughput for the previous 11-month period);
 - the total VOC emissions from emissions units T001 through T006, in tons;
 - the total VOC emissions from all emissions units at the facility, in tons; and
 - the total emissions of each individual HAP and the total combined HAP emissions from all emissions units at the facility, in tons.
3. The permittee shall visually inspect the internal floating roof double-seal system serving this storage vessel in accordance with the procedures specified in 40 CFR Part 60.113b(a)2 or 60.113b(a)4.
4. The permittee shall maintain a record of each inspection performed in accordance with Section C.3. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

D. Reporting Requirements

1. The permittee shall submit semiannual deviation (excursion) reports which identify any exceedances of the following:
- the rolling, 12-month summation of the total gasoline throughput;
 - the rolling, 12-month emission limitation for VOC from emissions units T001 through T006; and
 - the rolling, 12-month emission limitation for VOC from all emissions units at this facility.
- 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 semiannual 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.
2. The permittee shall submit annual reports of the total throughput, in gallons, for gasoline and the total VOC emissions during the calendar year for emissions units T001 through T006, and the total individual HAP and combined HAP emissions and the total VOC emissions during the calendar year for all emissions units at the facility. These annual reports shall include the calculations of the emissions, shall be submitted by February 15 of each year, and shall cover the previous calendar year.
3. If any of the conditions described in 40 CFR Part 60.113b(a)2 are detected during the annual visual inspection required by 60.113b(a)2, the permittee shall submit a report to the Director (the Cleveland Air Pollution Control Agency) within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

E. Testing Requirements

1. To calculate VOC emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following:
- VOC emissions from the storage tanks shall be determined using USEPA's "Tanks Program 3.0."
 - The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
 - The fugitive VOC emissions from gasoline truck loading shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l 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).
 - The VOC emissions from distillates, transmix, and/or other material loading shall be determined using AP-42, 5th Edition, Equation 5.2-1.
2. To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following procedures. 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 developed by the Shell Oil Products Company for their fuels.
- The HAP emissions from gasoline truck loading and storage shall be determined using the following emission factors:
 - 2,2,4 trimethylpentane - 0.00560 pound of 2,2,4 trimethylpentane per pound VOC emissions;
 - 1,3 butadiene - 0.00004 pound of butadiene emissions per pound of VOC emissions;
 - benzene - 0.00253 pound of benzene emissions per pound of VOC emissions;
 - cumene - 0.00010 pound of cumene emissions per pound of VOC emissions;
 - ethyl benzene - 0.00086 pound of ethyl benzene emissions per pound of VOC emissions;
 - hexane - 0.00663 pound hexane emissions per pound of VOC emissions;
 - methyl tert-butyl ether (MTBE) - 0.01195 pound of MTBE per pound VOC emissions

- viii. naphthalene - 0.00010 pound of naphthalene emissions per pound of VOC emissions;
 - ix. styrene - 0.00003 pound of styrene emissions per pound of VOC emissions;
 - x. toluene - 0.00604 pound of toluene emissions per pound of VOC emissions;
 - xi. xylene - 0.00333 pound of xylene emissions per pound of VOC emissions; and
 - xii. formaldehyde - 0.00001 pound of formaldehyde emissions per pound of VOC emissions.
- b. The HAP emissions from Jet A, additives, and distillates truck loading and storage and fugitive emissions shall be determined using the Shell Oil Products Company HAP Speciation Data, Oct. 1996.
- c. To determine total combined HAP emissions, sum the calculated annual emission rates for each individual HAP.
- d. 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, the Cleveland Air Pollution Control Agency and the permittee.

F. Miscellaneous Requirements

- 1. The following special terms and conditions of this permit to operate are federally enforceable requirements: A-F.

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

Facility ID: 1318002740 Emissions Unit ID: T010 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> |
|---|---|--|
| Above ground fixed roof storage tank. | OAC rule 3745-21-09(L) OAC rule 3745-35-07 | None, see A.2.a below. See A.2.b through A.2.d below. |

2. Additional Terms and Conditions

- (a) Pursuant to OAC rule 3745-21-09(L)(2)(a), this emissions unit is exempt from the requirements specified in paragraph (L)(1) of OAC rule 3745-21-09. The total VOC emissions from emissions units T010 and T011 located at this facility shall not exceed .54 ton per year as a rolling, 12-month summation. The total annual VOC emissions from all emissions units at this facility shall not exceed 99.2 tons per year as a rolling, 12-month summation. The emissions of hazardous air pollutants (HAPs) from all emissions units at this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 10 tons per year for any individual HAP, and 25 tons per year for any combination of HAPs, as rolling, 12-month summations.

B. Operational Restrictions

- 1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.
- 2. The annual throughput of interface (pipeline transmix) for emissions units T010 and T011 shall not exceed 100,800 gallons based upon a rolling, 12-month summation of the interface throughput amounts.

C. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall maintain records of the following information:
 - a. the types of petroleum liquids stored in the tank; and
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid.
- 2. The permittee shall maintain monthly records of the following information:
 - a. the total throughput of interface, in gallons;

- b. the rolling, 12-month summation of the total interface throughput, in gallons (i.e., the monthly value from (a) added to the total interface throughput for the previous 11-month period);
- c. the total VOC emissions from emissions units T010 and T011, in tons;
- d. the total VOC emissions from all emissions units at the facility, in tons; and
- e. the total emissions of each individual HAP and the total combined HAP emissions from all emissions units at the facility, in tons.

D. Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which is greater than 1.52 pounds per square inch absolute, and such tank does not comply with the requirements of paragraph (L)(1) of OAC rule 3745-21-09, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.
2. The permittee shall submit semiannual deviation (excursion) reports which identify any exceedances of the following:
 - a. the rolling, 12-month summation of the total interface throughput, in gallons;
 - b. the rolling, 12-month emission limitation for VOC from emissions units T010 and T011; and
 - c. the rolling, 12-month emission limitation for VOC from all emissions units at this facility.

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 semiannual 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.

3. The permittee shall submit annual reports of the total throughput, in gallons, for interface and the total VOC emissions during the calendar year for emissions units T010 and T011, and the total individual HAP and combined HAP emissions and the total VOC emissions during the calendar year for all emissions units at the facility. These annual reports shall include the calculations of the emissions, shall be submitted by February 15 of each year, and shall cover the previous calendar year.

E. Testing Requirements

1. To calculate VOC emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following:
 - a. VOC emissions from the storage tanks shall be determined using USEPA's "Tanks Program 3.0."
 - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
 - c. The fugitive VOC emissions from gasoline truck loading shall be determined using the most recent VOC stack test results and a vapor-lightness loss rate of 9 mg/l 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).
 - d. The VOC emissions from distillates, transmix, and/or other material loading shall be determined using AP-42, 5th Edition, Equation 5.2-1.
2. To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following procedures. 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 developed by the Shell Oil Products Company for their fuels.
 - a. The HAP emissions from gasoline truck loading and storage shall be determined using the following emission factors:
 - i. 2,2,4 trimethylpentane - 0.00560 pound of 2,2,4 trimethylpentane per pound of VOC emissions;
 - ii. 1,3 butadiene - 0.00004 pound of butadiene emissions per pound of VOC emissions;
 - iii. benzene - 0.00253 pound of benzene emissions per pound of VOC emissions;
 - iv. cumene - 0.00010 pound of cumene emissions per pound of VOC emissions;
 - v. ethyl benzene - 0.00086 pound of ethyl benzene emissions per pound of VOC emissions;
 - vi. hexane - 0.00663 pound of hexane emissions per pound of VOC emissions;
 - vii. methyl tert-butyl ether (MTBE) - 0.01195 pound of MTBE per pound of VOC emissions
 - viii. naphthalene - 0.00010 pound of naphthalene emissions per pound of VOC emissions;
 - ix. styrene - 0.00003 pound of styrene emissions per pound of VOC emissions;
 - x. toluene - 0.00604 pound of toluene emissions per pound of VOC emissions;
 - xi. xylene - 0.00333 pound of xylene emissions per pound of VOC emissions; and
 - xii. formaldehyde - 0.00001 pound of formaldehyde emissions per pound of VOC emissions.
 - b. The HAP emissions from Jet A, additives, and distillates truck loading and storage and fugitive emissions shall be determined using the Shell Oil Products Company HAP Speciation Data, Oct. 1996.
 - c. To determine total combined HAP emissions, sum the calculated annual emission rates for each individual HAP.
 - d. 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, the Cleveland Air Pollution

Control Agency and the permittee.

F. Miscellaneous Requirements

1. The following special terms and conditions of this permit to operate are federally enforceable requirements: A-F.

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

Facility ID: 1318002740 Emissions Unit ID: T011 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> |
|---|---|--|
| Above ground fixed roof storage tank. | OAC rule 3745-21-09(L) OAC rule 3745-35-07 | None, see A.2.a below. See A.2.b through A.2.d below. |

2. Additional Terms and Conditions

- (a) Pursuant to OAC rule 3745-21-09(L)(2)(a), this emissions unit is exempt from the requirements specified in paragraph (L)(1) of OAC rule 3745-21-09.
The total VOC emissions from emissions units T010 and T011 located at this facility shall not exceed .54 ton per year as a rolling, 12-month summation.
The total annual VOC emissions from all emissions units at this facility shall not exceed 99.2 tons per year as a rolling, 12-month summation.
The emissions of hazardous air pollutants (HAPs) from all emissions units at this facility, as identified in Section 112(b) of Title III of the Clean Air Act, shall not exceed 10 tons per year for any individual HAP, and 25 tons per year for any combination of HAPs, as rolling, 12-month summations.

B. Operational Restrictions

1. The permittee shall not place, store, or hold in this fixed roof tank any petroleum liquid which, as stored, has a true vapor pressure greater than 1.52 pounds per square inch absolute, unless such tank is designed or equipped in accordance with the requirements of paragraph (L)(1) of OAC rule 3745-21-09.
2. The annual throughput of interface (pipeline transmix) for emissions units T010 and T011 shall not exceed 100,800 gallons based upon a rolling, 12-month summation of the interface throughput amounts.

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information:
 - a. the types of petroleum liquids stored in the tank; and
 - b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid.
2. The permittee shall maintain monthly records of the following information:
 - a. the total throughput of interface, in gallons;
 - b. the rolling, 12-month summation of the total interface throughput, in gallons (i.e., the monthly value from (a) added to the total interface throughput for the previous 11-month period);
 - c. the total VOC emissions from emissions units T010 and T011, in tons;
 - d. the total VOC emissions from all emissions units at the facility, in tons; and
 - e. the total emissions of each individual HAP and the total combined HAP emissions from all emissions units at the facility, in tons.

D. Reporting Requirements

1. If the permittee places, stores, or holds in the fixed roof tank any petroleum liquid with a true vapor pressure which

is greater than 1.52 pounds per square inch absolute, and such tank does not comply with the requirements of paragraph (L)(1) of OAC rule 3745-21-09, the permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days of becoming aware of the occurrence.

2. The permittee shall submit semiannual deviation (excursion) reports which identify any exceedances of the following:
 - a. the rolling, 12-month summation of the total interface throughput, in gallons;
 - b. the rolling, 12-month emission limitation for VOC from emissions units T010 and T011; and
 - c. the rolling, 12-month emission limitation for VOC from all emissions units at this facility.

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 semiannual 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.

3. The permittee shall submit annual reports of the total throughput, in gallons, for interface and the total VOC emissions during the calendar year for emissions units T010 and T011, and the total individual HAP and combined HAP emissions and the total VOC emissions during the calendar year for all emissions units at the facility. These annual reports shall include the calculations of the emissions, shall be submitted by February 15 of each year, and shall cover the previous calendar year.

E. Testing Requirements

1. To calculate VOC emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following:
 - a. VOC emissions from the storage tanks shall be determined using USEPA's "Tanks Program 3.0."
 - b. The VOC emissions from fugitive emissions (i.e., valves, flanges, open ended lines, and pumps) shall be determined using EPA-453/R-95-017, "Protocol for Equipment Leak Emission Estimates."
 - c. The fugitive VOC emissions from gasoline truck loading shall be determined using the most recent VOC stack test results and a vapor-tightness loss rate of 9 mg/l 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).
 - d. The VOC emissions from distillates, transmix, and/or other material loading shall be determined using AP-42, 5th Edition, Equation 5.2-1.
2. To calculate HAP emissions for the purpose of determining compliance with the applicable emission limitations in Section A.1, the permittee shall comply with the following procedures. 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 developed by the Shell Oil Products Company for their fuels.
 - a. The HAP emissions from gasoline truck loading and storage shall be determined using the following emission factors:
 - i. 2,2,4 trimethylpentane - 0.00560 pound of 2,2,4 trimethylpentane per pound of VOC emissions;
 - ii. 1,3 butadiene - 0.00004 pound of butadiene emissions per pound of VOC emissions;
 - iii. benzene - 0.00253 pound of benzene emissions per pound of VOC emissions;
 - iv. cumene - 0.00010 pound of cumene emissions per pound of VOC emissions;
 - v. ethyl benzene - 0.00086 pound of ethyl benzene emissions per pound of VOC emissions;
 - vi. hexane - 0.00663 pound hexane emissions per pound of VOC emissions;
 - vii. methyl tert-butyl ether (MTBE) - 0.01195 pound of MTBE per pound of VOC emissions
 - viii. naphthalene - 0.00010 pound of naphthalene emissions per pound of VOC emissions;
 - ix. styrene - 0.00003 pound of styrene emissions per pound of VOC emissions;
 - x. toluene - 0.00604 pound of toluene emissions per pound of VOC emissions;
 - xi. xylene - 0.00333 pound of xylene emissions per pound of VOC emissions; and
 - xii. formaldehyde - 0.00001 pound of formaldehyde emissions per pound of VOC emissions.
 - b. The HAP emissions from Jet A, additives, and distillates truck loading and storage and fugitive emissions shall be determined using the Shell Oil Products Company HAP Speciation Data, Oct. 1996.
 - c. To determine total combined HAP emissions, sum the calculated annual emission rates for each individual HAP.
 - d. 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, the Cleveland Air Pollution Control Agency and the permittee.

F. Miscellaneous Requirements

1. The following special terms and conditions of this permit to operate are federally enforceable requirements: A-F.