Facility ID: 0812100502 Issuance type: Final State Permit To Operate

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

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

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

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Part II - Special Terms and Conditions

This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

   (a) None.

2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

   (a) None.

A. **Applicable Emissions Limitations and/or Control Requirements**

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
gasoline storage tanks: 3-8,000 gallon underground storage tanks	OAC rule 3745-21-09(R)	Stage I vapor control - 90% control efficiency for volatile organic compounds (VOCs), submerged fill
gasoline dispensing operation:12 nozzles, Stage II vapor recovery	OAC rule 3745-21-09(DDD)	Stage II vapor control - 95% control efficiency for VOCs
kerosenel storage tank: 1-4,000 gallon underground storage tank	OAC rule 3745-31-05 PTI 08-2913	Submerged fill
gasoline dispensing facility	OAC rule 3745-31-05 PTI 08-2913	2.20 tons organic compounds (OC)/year

2. **Additional Terms and Conditions**

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

   Any figures or exhibits identified in this permit are available from the appropriate Ohio EPA District Office or local air agency upon request.

B. **Operational Restrictions**

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

   a. The vapor balance system shall be kept in good working order and shall be used at all times during the transfer of gasoline.

   b. There shall be no leaks in the delivery vessel pressure/vacuum relief valves and hatch covers.

   c. There shall be no leaks in the vapor lines or liquid lines during the transfer of gasoline.

   d. The transfer of gasoline from a delivery vessel to a stationary storage tank shall be conducted by use of submerged fill into the storage tank. The submerged fill pipe(s) are to be installed so they are within six (6) inches of the bottom of the storage tank.

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

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

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

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

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

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

iii. A vacuum producing device is inoperative or malfunctioning.

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

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

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

b. The vapor control system must have successfully passed the testing requirements contained in paragraph (DDD)(2) of OAC rule 3745-21-09. These testing requirements are also specified in Part II, Section E and Part II, Section F.6.

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

C. **Monitoring and/or Record Keeping Requirements**

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

a. Date of inspection.

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

c. Leak determination method.

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

e. Inspector's name and signature.

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

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

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

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

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

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

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

g. Copies of all completed post test inspection forms.

3. The permittee shall maintain records of the annual gasoline and kerosene throughputs for the facility.

D. **Reporting Requirements**

1. Any leak from the vapor balance system or vapor control system that is not repaired within 15 days after identification shall be reported to the Director within 30 days after the repair is completed.

2. A comprehensive written report on the results of any tests performed in accordance with the requirements of this permit shall be submitted within 30 days following the completion of the tests.

E. **Testing Requirements**

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

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

Not later than thirty (30) days prior to any required tests, the permittee shall submit a test notification to the appropriate Ohio EPA District Office or local air agency.

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

2. Compliance with the annual organic compound (OC) emission limit in Section A.1. of these terms and conditions shall be calculated as the sum of the OC emissions from all gasoline storage tank filling and dispensing

operations and, if applicable, diesel, kerosene, and used oil tank filling operations at the gasoline dispensing facility (unless otherwise exempted pursuant to OAC rule 3745-31-03). This calculation shall be based on the annual gasoline, diesel, kerosene, and used oil throughputs for the facility using the calculation and emission factors below.

a. Emission Limitation: 2.20 tons OC/year.

b. Applicable Compliance Method: multiply the appropriate emission factor below by the gallons of gasoline, diesel, kerosene, or used oil dispensed per year and divide by 2000 lbs/ton. Repeat this calculation for each material dispensed at the facility and sum the results to yield the total annual OC emission rate.

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

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

(a) Gasoline dispensing facility has submerged tank filling for gasoline storage tanks: OC emission factor = 20.0 lbs OC/1000 gallons.

(b) Gasoline dispensing facility has submerged tank filling with Stage I vapor control for gasoline storage tanks: OC emission factor = 13.0 lbs OC/1000 gallons.

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

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

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

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

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

F. **Miscellaneous Requirements**

1. The Hasstech VCP-2/2A Stage II vapor recovery system employed at this facility, including all associated underground and aboveground plumbing, shall be installed, operated, and maintained in accordance with CARB Executive Order G-70-7-AD, which includes, but is not limited to, the requirements contained within this Section.

2. The permittee shall comply with the following design and installation specifications from CARB Executive Order G-70-7-AD:

a. The equipment approved for use with the Hasstech VCP-2/2A system is specified in Exhibit 1 of Executive Order G-70-7-AD. Other equipment may not be used unless approved by CARB for use with the Hasstech VCP-2/2A system. NOTE: The Hasstech VCP-2/2A system may be differentiated from the Hasstech VCP-3/3A system by the following:

i. Hasstech status panel serial number VR-00847 and lower.

ii. Processing unit (incinerator) serial number PR-00907 and lower.

b. The maximum length of the coaxial hose shall be fourteen (14) feet, and the maximum allowable length of hose which may be in contact with the top of the island block, or ground, shall be six (6) inches.

c. Each vent pipe shall be equipped with a CARB certified pressure/vacuum relief valve. Plumbing may be manifolded to reduce the number of relief valves needed. The vent manifold may be used as an alternative to an underground manifold only in existing installations where vapor piping is already installed.

d. The settings of the pressure/vacuum relief valve(s) shall be as follows:

i. Pressure: Three (3.0) +/- one-half (0.5) inches of water column

ii. Vacuum: Eight (8.0) +/- two (2.0) inches of water column

e. The horizontal distance between the pressure/vacuum relief valve(s) and the processing unit shall not be less than twenty (20) feet.

f. The audio alarm portion of the Hasstech VCP-2/2A system shall be located such that it can be heard by station personnel in the area most likely to be occupied during normal station operation (i.e., at the cash register).
g. The Hasstech VCP-2/2A system shall sound an audible alarm if the processing unit has made twenty (20) consecutive unsuccessful attempts to ignite and has shut down. The RESET button may be used to re-start the processing unit. Any observation of three (3) consecutive unsuccessful attempts of the processing unit to ignite shall be deemed a failure of the processing unit unless it occurs within two (2) hours of normal vehicle refueling operations after a bulk delivery.

h. The permittee shall provide OSHA-approvable access upon request to the collection unit (blower) and the processing unit for inspection and/or testing.

3. The permittee shall comply with the following operational restrictions from CARB Executive Order G-70-7-AD:

a. The Hasstech VCP-2/2A system shall be maintained in accordance with the System Operating Manual approved by CARB. Any alteration of the equipment, parts, design, or operation of the system is prohibited unless approved by CARB.

b. The maximum dispensing rate shall not exceed ten (10.0) gallons per minute (gpm). Compliance with this condition shall be verified with only one nozzle in operation per product supply pump.

c. Vapor collection holes in the nozzle spout shall remain unblocked. Any nozzle/hose assembly with a defective CFC-1 flow control vapor valve and all nozzle/hose assemblies associated with a CFC-1 flow control vapor valve stuck in the "open" position shall be immediately removed from service.

d. The total minutes per day that the processing unit senses the presence of a flame ("PR") divided by the total minutes per day that the collection unit is on ("CU"), shall not be less than 0.75 for more than three (3) consecutive days. NOTE: the PR and CU times are stored by the Hasstech VCP-2/2A status panel. The daily PR time, CU time, and calculated PR/CU ratio shall be recorded on the attached data sheet once per day.

4. The permittee shall comply with the following performance specification from CARB Executive Order G-70-7-AD:

The air-to-liquid ratio (A/L) shall be within the ranges specified below when tested in accordance with an A/L test procedure adopted by the Ohio EPA.

Flow Rate (gpm) Minimum A/L Ratio Maximum A/L Ratio

6 1.40 2.40
8 1.40 2.30
10 1.40 2.15

5. The permittee shall comply with the following monitoring requirement from CARB Executive Order G-70-7-AD:

The Hasstech VCP-2/2A system shall be equipped with an operable status panel. The status panel shall record and store the following information for at least a rolling total of 365 consecutive days:

i. The total minutes per day that the processing unit senses the presence of a flame.

ii. The total minutes per day that the collection unit is on.

6. The permittee shall comply with the following record keeping requirements from CARB Executive Order G-70-7-AD:

a. The processor time (PR), the collection unit time (CU), and the PR/CU ratio shall be recorded each day using the attached form and instructions. NOTE: it will be necessary to make a copy of this, or a similar data sheet for each month of the year. The data sheet shall contain, at a minimum, the specified information for at least a rolling total of 365 consecutive days and shall be MAINTAINED ON SITE.

b. A log of the date and description of all repair and maintenance work performed on the Hasstech VCP-2/2A system shall be maintained on site or otherwise provided to Ohio EPA field office personnel immediately upon request.

7. The permittee shall comply with the following reporting requirements from CARB Executive Order G-70-7-AD:

a. If the PR/CU ratio is less than 0.75 for more than three (3) consecutive days, the permittee shall provide a written notification of the malfunction to the appropriate Ohio EPA District Office or local air agency within fourteen (14) days after the date the malfunction occurred. The written notification shall include a copy of such record and shall be sent to the appropriate Ohio EPA District Office or local air agency. The appropriate Ohio EPA District Office or local air agency shall be notified pursuant to OAC rule 3745-15-06(B)(2) when the condition causing the malfunction has been corrected.

b. The permittee shall immediately notify the appropriate Ohio EPA District Office or local air agency if gasoline is dispensed while the Hasstech system is turned off or disabled for maintenance or for any other reason. Pursuant to OAC rule 3745-15-06(B)(3), the permittee shall prepare and submit a preventive maintenance and malfunction abatement plan to the appropriate Ohio EPA District Office or local air agency within two (2) months after the occurrence.

8. The permittee shall comply with the following testing requirements from CARB Executive Order G-70-7-AD:

a. In accordance with the yearly static pressure decay testing requirement specified in CARB Executive Order G-70-7-AD, the Static Leak Test contained in OAC rule 3745-21-10, Appendix A, shall be successfully conducted at least once in each twelve-consecutive-month period after the date of successful completion of the startup or most recent Static Leak Test. The appropriate Ohio EPA District Office or local air agency shall be notified at least 30 days prior to conducting these annual tests. Test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days of testing.

b. In accordance with CARB Executive Order G-70-7-AD, the dynamic pressure performance test contained in OAC rule 3745-21-10, Appendix B, is not applicable to the Hasstech VCP-2/2A system.

9. The permittee shall comply with the following maintenance requirements from CARB Executive Order G-70-7-AD:

a. The permittee shall schedule maintenance immediately in the event that the PR/CU ratio is less than 0.75 for any 24 consecutive hour period. NOTE: a daily PR/CU ratio less than 0.75 indicates that maintenance work may be needed to ensure that the Hasstech system continues to operate correctly.

b. The permittee shall conduct the following maintenance on an annual basis. These items shall be repaired or replaced as necessary:

i. Clean all screens in the vapor return system.

ii. Check the ionization detector and replace any defective electrodes.

iii. Check the CFC-1 flow control valve(s) to determine whether they are opening and closing properly and

whether they are leaking gasoline liquid or vapor.

iv. Check the collection unit for proper operation according to the manufacturer's instructions and verify that the collection unit motor runs when a dispenser is authorized.

v. Check the processing unit for proper operation by observing heat waves from the processing unit stack when the storage tank pressure is greater than two (2) inches water column.

c. The permittee shall conduct items (i), (ii), and (iii) above every six (6) months if the facility dispenses more than 75,000 gallons of gasoline per month in any given month.

d. The permittee shall replace or rebuild the collection unit motor after five (5) years or less after installation if the facility dispenses an average of more than 20,000 gallons of gasoline per month.
e. The permittee shall replace or rebuild the collection unit motor after ten (10) years or less after installation if the facility dispenses an average of less than 20,000 gallons of gasoline per month.