

Facility ID: 0857040734 Issuance type: Final State Permit To Operate

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

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

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

Facility ID: 0857040734 Emissions Unit ID: P103 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>
P103 - CAB Brazing Deoiling Oven, 2.0 mmBtu natural gas fired w/ permanent total enclosure and thermal oxidizer	OAC rule 3745-31-05(A)(3) PTI 08-04552	The organic compound (OC) emissions from this emissions unit shall not exceed 0.70 lb/hr and 16.8 lbs/day.
		See section A.2.a for emission control requirements.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-35-07(B).
	OAC rule 3745-31-05(C) OAC rule 3745-35-07(B) (synthetic minor to avoid Title V)	The OC emissions from this emissions unit shall not exceed 3.07 tons/yr per rolling, 12-month period.
	OAC rule 3745-21-07(G)(2)	The emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(6)	The percent emission reduction specified by this rule is less stringent than the percent emission reduction established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- (a) The organic compound emissions from this emissions unit shall be controlled through the application of a permanent total enclosure with a 100% capture efficiency and a thermal oxidizer operating at a minimum of 95% destruction efficiency. The 0.70 lb/hr and 16.8 lbs/day OC emission limitations were established for PTI purposes to reflect potentials to emit for this emissions unit. Therefore, it is not necessary to develop additional monitoring, record keeping and/or reporting requirements to ensure compliance with this limitation. In order to ensure that all OC emissions are vented from the deoiling ovens to the thermal incinerator, the permittee will utilize an interlock system which will be associated with the ventilation fan's rotation rate. This approach is being utilized since the oven only has two natural draft openings (the entrance and exit of the oven) and there are no other openings that can be compromised during the operation of the emissions unit. The other openings in the oven that are used for maintenance are closed during operation of the oven and are only opened for maintenance purposes when the oven is shut down. If the ventilation fan's rotation rate drops below the minimum rotation rate established during the initial emission tests, that demonstrated that the emissions unit was in compliance (or the rotation rate established in subsequent emission tests that demonstrated that the emissions unit was in compliance), then the mechanism that feeds the oil-coated parts into the oven will be shutdown until the ventilation fan's rotation rate is restored to the appropriate rate.

B. Operational Restrictions

1. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
2. The furnace shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.007 inches of water, whenever the emissions unit is in operation. Compliance with the pressure differential requirement shall be demonstrated through a minimum fan speed in revolutions per minute (rpm), whenever this emission unit is in operation.

3. The ventilation fan's rotation rate shall not be less than the minimum rotation rate established during the initial emission tests that demonstrated that the emissions unit was in compliance (or the rotation rate established in subsequent emission tests that demonstrated that the emissions unit was in compliance) when the emissions unit is in operation. (The minimum fan speed shall be 1515 rpm until the actual fan feed is determined through emission testing)

C. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.
 - b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.
2. The permittee shall install, operate and maintain monitoring devices and a recorder which simultaneously measures and records the pressure inside and outside the deoiling oven. The monitoring and recording devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall maintain records of all three hour blocks of time during which the permanent total enclosure was not maintained at or above the minimum pressure differential of 0.007 inches of water, as a three hour average.

The permittee shall record and maintain the following information on a daily basis:

- a. The difference in pressure between the permanent total enclosure and the surrounding area(s).
- b. A log or record of operating time for the capture (collection) system, control device, monitoring equipment and the associated emissions unit.

In lieu of pressure differential monitoring and recording, the permittee can demonstrate that the permanent total enclosure associated with this emissions unit, meets the criteria established in Method 204 using an alternative method. As such, the permittee is required to demonstrate that the permanent total enclosure is not compromised, under normal plant conditions, when the emissions unit is in operation, i.e., the air flow through the permanent total enclosure to the control device is always maintained under negative pressure, even when all additional egress points (non-natural draft openings) which could affect the permanent total enclosure, are opened.

In accordance with the alternative method, the permittee is required to continuously monitor the revolutions per minute (RPM) of the fan that maintains flow to the thermal oxidizer from the controlled deoiling oven, at or above the RPM established during the most recent performance test that demonstrated compliance with Method 204.

3. The permittee shall install, operate, and maintain a continuous ventilation fan rotation rate monitor and recorder which measures and records the rotation rate of the ventilation fan when the emissions unit is in operation. Units shall be in revolutions per minute. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The ventilation fan rotation rate monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

- a. verification that the interlock system's set point (i.e., the minimum ventilation fan rotation rate that corresponds to 100% capture of the organic compound emissions) is correct;
- b. all periods of time when the interlock system was activated, when production through the oven was shut down because the furnace fan rotation rate had dropped below the required level; and
- c. all periods of time when the fan rotation rate dropped below the minimum rotation rate that corresponds to 100% capture of the organic emissions and the interlock system did not shut down operation.

The permittee shall, on a monthly basis, test the interlock system to ensure that the mechanism that feeds the oil-coated parts into the oven does shutdown when the ventilation fan's rotation rate drops below the rotation rate that corresponds to 100% capture of the organic compound emissions.

4. The permittee shall collect and record the following information each month for the purpose of determining annual OC emissions:
 - a. The total uncontrolled OC emissions from the stamping oil employed, in tons.
 - b. The calculated controlled OC emissions rate from the stamping oil, in tons. The controlled OC emission rate shall be calculated using the overall control efficiency for the control equipment as determined during the most recent test that demonstrated that the emissions unit was in compliance.
 - c. The rolling, 12-month summation of the monthly OC mass emissions rate in tons.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified above.
2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time when the fan rotation rate dropped below the minimum rotation rate that corresponds to 100% capture of the organic emissions and the interlock system did not shut down operation. The quarterly deviation reports shall be submitted in accordance with General Term and Condition A.2.
3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month OC emissions limitation, and the actual rolling, 12-month OC emissions for each such month. These reports are due by the date described in Part 1-General Terms and Conditions of this permit, under Section A.2.

E. Testing Requirements

1. Compliance Method

Compliance with the emission limitations of these terms and conditions shall be determined in accordance with the following methods:

Emission Limitation -
0.70 lb OC/hr

Applicable Compliance Method -

Compliance with the hourly allowable OC emission limitation shall be determined by multiplying the maximum pounds per hour throughput of oil by the minimum operating control efficiency of the thermal oxidizer, 95% or (1-0.95).

If required, the permittee shall demonstrate compliance with the hourly allowable OC emission limitation based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

Emission Limitation -
16.8 lbs OC /day

Applicable Compliance Method -

As long as compliance with the hourly limitation is maintained, compliance with the daily limitation shall be assumed (the daily limitation was determined by multiplying the hourly emission limitation by the maximum operating schedule of 24 hours/day).

Emission Limitation -
3.07 tons OC/year per rolling 12-month period

Applicable Compliance Method -

Compliance the annual allowable OC emission limitation shall be based upon the record keeping requirements specified in Section C.4 of this permit.

F. Miscellaneous Requirements

1. None