

ADDITIONAL SPECIAL TERMS AND CONDITIONS

INTRODUCTION:

This facility manufactures automobile, motorcycle, engine, and automotive suspension components. This permit modification will allow the core making process to increase the hours of production from 6,000 hours per year to 8,760 hours per year. This will be consistent with the hours of operation of the associated aluminum furnace, P021.

A. EMISSION LIMITATIONS:

1. The particulate emissions from the low pressure die cast core making process (P025)

shall be controlled by venting the emissions to a venturi scrubber with a designed

control efficiency of 97%. The particulate stack emissions from the low pressure

die cast core making process shall not exceed 2.0 pound/hour, and 8.76 ton/year.

2. The formaldehyde emissions from the low pressure die cast core making process

shall not exceed 0.002 pound/hour, and 0.009 ton/year.

3. The ammonia emissions from the low pressure die cast core making process shall not

exceed 0.021 pound/hour, and 0.092 ton/year.

4. The permittee shall not cause or allow the discharge into the ambient air from any stack

associated with this emission unit any visible particulate emissions of a shade or density greater than 10% opacity, as a 6-minute average.

B. OPERATIONAL RESTRICTIONS:

1. The pressure drop across the scrubber shall be continuously maintained at a value of

not less than 5 inches of water at all times while the emissions unit is in operation.

2. The scrubber water flow rate shall be continuously maintained at a value of not less

than 22 gallons per minute at all times while the emissions unit is in operation.

C. MONITORING AND RECORDKEEPING REQUIREMENTS:

1. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and scrubber water flow while the unit is in operation. The monitoring devices shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

- (a) The pressure drop across the scrubber, in inches of water, on a once/day basis.
 - (b) The scrubber water flow rate, in gallons per minute, on a once/day basis.
 - (c) A log of the downtime for the capture (collection) system, control device, and monitoring equipment when the emissions unit is in operation.
2. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

D. REPORTING REQUIREMENTS:

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across the scrubber and the scrubber water flow rate did not comply with the allowable range specified above.

2. The permittee shall submit reports in the following manner:

- a. Reports of any required information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- If no deviations occurred during a calendar quarter, a quarterly report shall be submitted which states that no deviations occurred during that quarter. The reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall cover the previous calendar quarters.

(These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. The permittee shall submit an annual report which specify the total particulate, formaldehyde and ammonia in tons per year for each emission unit contained within this permit for the previous calendar year. These reports shall be submitted by February 1 of each year and shall address the previous calendar year.

E. TESTING REQUIREMENTS:

1. Compliance Methods Requirements: Compliance with the emission limitations established in this permit shall be determined in accordance with the following methods:

- a. Emission Limitation: Low Pressure Die Cast Core Making Process (P025)- Particulate emissions shall not exceed 2.0 pounds per hour and 8.76 tons per year.

Applicable Compliance Method: The amount of particulate emissions shall be determined by test methods specified in paragraph (B) (11) of rule 3745-17-01 of the Administrative Code. Both the controlled and uncontrolled mass rate of particulate emissions shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- (i.) The emission testing shall be conducted within 3 months after issuance of this permit.
- (ii.) The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for particulate of 2.0 pounds per hour. A particulate emissions test shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for the purpose of applying Figure II of OAC rule 3745-17-11.
- (iii.) The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air 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 tests and submitted to the

appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

- b. Emission Limitation: Low Pressure Die Cast Core Making Process (P025)- Formaldehyde emissions shall not exceed 0.002 pound per hour and 0.009 ton per year.

Applicable Compliance Method: The pound per hour emission limitation represents the potential to emit for this emissions unit and was derived by multiplying the maximum number of cores produced per hour (359) by the maximum amount of sand per core (2.93 pounds), dividing by 2,000 pounds per ton and then multiplying the resulting value by an emission factor of 0.0036 pound of formaldehyde per ton of sand. The emission factor was provided by the permittee's mold sand supplier. The ton per year emission limitation was derived by multiplying the pound per hour emission limitation by 8,760 hours per year and dividing by 2,000 pounds per ton. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with methods approved by the Ohio EPA.

- c. Emission Limitation: Low Pressure Die Cast Core Making Process (P025)- Ammonia emissions shall not exceed 0.021 pound per hour and 0.092 ton per year.

Applicable Compliance Method: The pound per hour emission limitation represents the potential to emit for this emissions unit and was derived by multiplying the maximum number of cores produced per hour (359) by the maximum amount of sand per core (2.93 pounds), dividing by 2,000 pounds per ton and then multiplying the resulting value by an emission factor of 0.0386 pound of ammonia per ton of sand. The emission factor was provided by the permittee's mold sand supplier. The ton per year emission limitation was derived by multiplying the pound per hour emission limitation by 8,760 hours per year and dividing by 2,000 pounds per ton. If required, the permittee shall demonstrate compliance with this emission limitation in accordance with methods approved by the Ohio EPA.

- d. Emission Limitation: Low Pressure Die Cast Core Making Process (P025)- Five (10%) percent opacity, as a 6-minute average.

Applicable Compliance Method: For the purpose of determining compliance with the visible particulate emission limitation specified above, visible particulate emissions shall be determined according to the test methods and procedures prescribed

in OAC
rule 3745-17-03(B)(1).