AIR EMISSIONS SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for Mansfield Foundry located in Richland County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table below. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

OHIO EPA E.U. NUMBER	EMISSIONS UNIT IDENTIFICATION DESCRIPTION	BAT DETERMINATION	APPLICABLE FEDERAL & OAC RULES	PERMIT ALLOWABLE MASS EMISSIONS OR CONTROL & USAGE REQUIREMENTS
P065	5.5 TPH cold box core machine	Use of non-photochemically reactive binders, a drop-out box, wet scrubber, and compliance with the terms and conditions of this permit	3745-31-05	0.039 lb Particulate Emissions (PE)/hr, 0.17 TPY PE 0.072 lb Organic Compounds (OC)/hr, 0.31 TPY OC
			3745-17-07(A)	20% opacity as a six-minute average
			3745-17-11(B)(1)	(*)
			3745-21-07(G)	(**)

* The emissions limitations based on this applicable rule are less stringent than the limitations established pursuant to OAC Rule 3745-31-05.

** There are no applicable limits based on this rule because of the use of non-photochemically reactive binders.

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
PE	0.17
OC	0.31

ADDITIONAL SPECIAL TERMS AND CONDITIONS

INTRODUCTION:

The purpose of this Permit To Install (#03-13106) is to allow Mansfield Foundry (Title V facility) to install a cold box core machine. The permit will establish permit allowable limitations for emissions unit P065. The annual emission limitation for OC is below the threshold for which modeling is required as part of the Ohio EPA's Air Toxics Policy.

A. APPLICABLE EMISSION LIMITATIONS AND/OR CONTROL REQUIREMENTS

No additional emission limitations and/or control requirements other than those identified in the Air Emission Summary section of this permit.

B. OPERATIONAL RESTRICTIONS

1. The permittee shall use only non-photochemically reactive binders.

2. The pH and water flow rate of the scrubber that controls P065 shall be maintained at the following levels:

   a. The pH of the scrubber liquor shall be maintained at or below 4.5.

   b. The scrubber liquor flow rate shall be continuously maintained at a value of not less than 7.05 gallons per minute at all times while the emissions unit is in operation.

C. MONITORING AND/OR RECORD KEEPING REQUIREMENTS

1. The permittee shall properly install, operate and maintain equipment to continuously monitor and record the pH and scrubber liquor flow rate while emissions unit P065 is in operation. The pH monitor and recorder 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 weekly:

   a. The pH of the scrubber liquor.

   b. The scrubber liquor flow rate, in gallons per minute.

c. A log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

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, if a strip-chart recorder is employed, for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.

D. REPORTING REQUIREMENTS

1. The permittee shall submit pH deviation (excursion) reports that identify all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified in section B.3.a.

2. The permittee shall submit scrubber liquor flow rate (excursion) reports that identify all periods of time during which the scrubber liquor flow rate did not comply with the requirements specified in section B.3.b..

3. Except as otherwise may be provided in the terms and conditions for a specific emission unit, quarterly written reports of (a) 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, (b) the probable cause of such deviations, and (c) 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, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 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.)

4. The compliance status of the emissions unit shall be reported pursuant to the
annual certification required by OAC rule 3745-77-07(C)(5).

5. The actual annual emissions data for the emissions unit shall be reported pursuant

to the fee emissions report required by OAC rule 3745-78-02(A).

E. TESTING REQUIREMENTS/COMPLIANCE METHODS DETERMINATION

1. Compliance with the emission limitations listed in the Air Emission Summary of this PTI for emission unit P065 shall be determined in accordance with the following methods:

   a. Emission Limitation: 0.039 lb PE/hr, 0.17 TPY PE

      Applicable Compliance Method: Compliance with the hourly emission limitation can be shown by multiplying the particulate emissions factor of 0.35 pound of particulate emissions per ton of sand (RACM, Section 2.7, Table 2.7-1) by the maximum hourly usage rate of 5.50 tons sand and a design efficiency of 98% for the scrubber. If required, the permittee shall demonstrate compliance with the above emissions limitation pursuant to Method 5 of 40 CFR Part 60, Appendix A. Compliance with the annual limit of 0.17 TPY will be assumed if the emissions unit is in compliance with its lb/hr limit since the emissions unit can operate 8760 hrs/yr.

   b. Emission Limitation: 0.072 lb OC/hr, 0.31 TPY OC

      Applicable Compliance Method: Compliance with the hourly emission limitation can be shown by multiplying the emissions factor of 0.65 pound of VOC per ton of sand (VOC Emission Factor from OCMA for a phenolic urethane cold box) by the maximum hourly usage rate of 5.50 tons sand and a design efficiency of 98% for the scrubber. If required, the permittee shall demonstrate compliance with the above emissions limitation pursuant to Method 18, 25, or 25A of 40 CFR Part 60, Appendix A. Compliance with the annual limit of 0.31 TPY will be assumed if the emissions unit is in compliance with its lb/hr limit since the emissions unit can operate 8760 hrs/yr.

   c. Emission Limitation: 20% opacity as a six-minute average

      Applicable Compliance Method: OAC 3745-17-03(B)(1)

F. MISCELLANEOUS REQUIREMENTS

None